

# The Union

A WEEKLY JOURNAL.

W. & J. ANSLAW,

VOL. XII.—No. 46.

Our Country, with its United Interests.

Newcastle, N. B., Wednesday, September 10, 1879.

EDITORS & PROPRIETORS.

WHOLE No. 618.

## WAVERLY HOTEL,

NEWCASTLE, MICHIGAN, N. B.  
This House has lately been refurnished, and this possible arrangement, made to ensure the comfort of travellers.  
**LIVERY STABLES.** WITH GOOD OUTRIG, ON THE PREMISES.  
ALEX. STEWART,  
Late of Waverly House, St. John's. Proprietor.  
Newcastle, Dec. 2, 1878.

## UNITED STATES HOTEL,

NEWCASTLE, MICHIGAN, N. B.  
This Hotel is very pleasantly situated, has recently been fitted up in first class style, is in close proximity to the C. Railway Station, and the wants of travellers will be attended to promptly.  
Meals prepared at any hour. Oysters served up in every style at short notice.  
JOHN PAT, PROPRIETOR.  
Newcastle, Oct. 8, 1877.

## CANADA HOUSE,

CHATHAM, NEW BRUNSWICK.  
WM. JOHNSTON, Proprietor.  
CONSIDERABLE outlay has been made on this house to make it a first class Hotel, and travellers will find it a desirable temporary residence both as regards location and comfort. It is situated within two minutes walk of steamboat landing, the proprietor's rooms are in the public for the encouragement given him in the past, and will endeavor by courtesy and attention to merit the same in the future.  
Good Stabling on the Premises.  
May 12th, 1878.

## ROYAL HOTEL,

KING SQUARE.  
I HAVE much pleasure in informing my numerous friends and the public generally, that I have leased the Hotel formerly known as the "CONTINENTAL," and have thoroughly refurnished the same, making it as the "ROYAL" always had the reputation of being, one of the best Hotels in the Province.  
Excellent Bill of Fare, First-Class Wines, Liquors and Cigars, and superior accommodation. Blackhall's Livery Stable attached.  
THOS. F. RAYMOND.  
St. John, July 9, 1877.

## VICTORIA HOTEL,

RIVER DU LOUP,  
JOSEPH A. FOUNTAIN, PROPRIETOR.  
THIS HOUSE is situated in the immediate vicinity of the Railway Station, and is well calculated to meet the requirements of travellers, as neither price or expense have been spared to secure the comfort and convenience of guests. It affords a splendid view of the St. Lawrence and distant country.  
October 24, 1877.

## MIRAMICHI MARBLE WORKS,

WATER ST., CHATHAM.  
WILLIAM LAWLER,  
Importer of Marble & Manufacturer of MONUMENTS, TABLES, HEADSTONES, MANTELS, TABLE TOPS, &c.  
A GOOD STOCK ALWAYS ON HAND.  
GRANITE MONUMENTS made to order; CAPS and SILLIS for windows supplied at short notice. FREESTONE WORK in all its branches attended to, and satisfaction given.  
January 24, 1878.

## S. N. KNOWLES,

Manufacturer of and Dealer in Trunks, Valises, Satchels, &c.  
66 KING STREET,  
(South Side.) SAINT JOHN, N. B.  
CANVAS COVERS MADE TO ORDER.  
SAMPLE TRUNKS A SPECIALTY.  
May 5, 1879.

## WANTED.

A SHOP and OFFICE BOY—one willing to make himself generally useful.  
Apply to  
DR. FREEMAN.  
Newcastle, Sept. 7.

## RUBBER BELTING.

EXTRA Stretched and Patent Smooth Surface Rubber Belting. In Stock—various widths in 2, 4, 6 and 8 Piles.  
**LEATHER BELTING.**  
"Hoyt's" Celebrated Patent Stretched and Riveted Oak Tanned Leather Belting (double and single).  
SAWS! SAW! "Diston's" Mill, Circular, Rotary, Cross Cut, Hand and Jig Saws. MACHINERY OILS. Lard, Olive, Seal, West Virginia and Cylinder Oils. MILL SUPPLIES. Lacing Leather, Flies, Emery-wheels, Belt Patches, Rivets, Saw Swages, &c., &c.  
ESTY, ALLWOOD & CO.,  
(Successors to Z. G. Gable),  
Prince Wm. St., St. John, N.B.  
may 21

## TEAS, Sugar and Rice.

By Steam via Halifax from London and Liverpool.  
**150 HALF CHESTS FINE CON-60.**  
6 Hds. No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 Bags RICE. Daily expected.  
BERTON BROTHERS.  
In Store—10 Hds. Dried CURRANTS; 20 Ds. Dried APPLES.  
aug 20

## Law and Collection Offices

ADAMS & LAWLOR,  
Barristers and Attorneys at Law, Solicitors in Bankruptcy Conveyancers, Notaries Public, &c., Real Estate, & Fire Insurance Agents.  
CLAIMS Collected in all parts of the Dominion.  
OFFICES:  
NEWCASTLE AND BATHURST.  
M. ADAMS. R. A. LAWLOR.  
July 18th, 1878.

## SAMUEL THOMSON,

Barrister and Attorney-at-Law,  
Solicitor in Bankruptcy,  
NOTARY PUBLIC &c.  
LOANS Negotiated, Claims Promptly Collected, and Professional Business in all its branches, executed with accuracy and despatch.  
OFFICE—PUBLIC BUILDINGS,  
NEWCASTLE, MIRAMICHI, N. B.  
July 17, 1878.

## WILLIAM A. PARK,

Barrister & Attorney at Law,  
SOLICITOR,  
NOTARY PUBLIC, &c.  
OFFICE—Over the Store of William Park, Esq.  
Castle Street, - - - NEWCASTLE.  
May 1, 1877.

## L. J. TWEEDIE,

ATTORNEY & BARRISTER  
AT LAW,  
NOTARY PUBLIC,  
CONVEYANCER, &c.,  
CHATHAM, - - - N. B.  
OFFICE—Snowball's Building.  
May 12, 1878.

## JOHN McALISTER,

ATTORNEY-AT-LAW,  
NOTARY PUBLIC,  
CONVEYANCER, &c.,  
CAMPBELLTON, N. B.  
May 5, 1879.

## A. H. JOHNSON,

BARRISTER AT LAW,  
SOLICITOR, NOTARY PUBLIC,  
&c., &c.,  
CHATHAM, N. B.  
July 10, 1877.  
WILLET & QUICLEY,  
Barristers, Attorneys,  
NOTARIES PUBLIC, &c.,  
Princess St., Ritchie's Building, (up stairs.)  
ST. JOHN, N. B.  
John Willet,  
Richd. F. Quicley, LL.B., B.C.L.,  
Commissioner for Massachusetts.  
CARD.

## DR. H. A. FISH,

Has commenced Practice in Newcastle, and can be consulted at his Office.  
Mrs. Fowler's Building—two doors above Masonic Hall.

## OFFICE HOURS—10 to 12,

2 " 5,  
7 " 10.  
June 16, 1879.

## HERBERT T. DAWSON, M.D.,

PHYSICIAN & SURGEON,  
NEWCASTLE, N. B.  
OFFICE—In Mr. John Dalton's House;  
RESIDENCE.  
At Mr. Wm. Gremley's, opposite Office.  
Newcastle, March 26, 1877.

## DR. McDONALD,

PHYSICIAN and SURGEON.  
OFFICE:  
At Mrs. HALEY'S, next door to the Post Office, Newcastle.  
RESIDENCE:  
At MR. THOMAS MALTBY'S.  
Newcastle, March 26, 1879.

## Leather & Shoe Findings.

THE Subscriber returns thanks to his numerous customers for past favors, and would say to all that he keeps constantly on hand a full supply of the best quality of goods to be had at lowest prices for cash. Also, S. R. Foster & Son's Nails and Tacks of all sizes, and Clarke & Son's Boot Trees, Lasts, &c. English Tops as well as home made. To order, of the best material. Wholesale and Retail.  
No. 65 King St., St. John, N. B.  
April 29, 1879.

## JAMES G. McNALLY,

Wholesale and Retail Dealer in Furniture, Crockery & Glassware, LAMPS, TABLE CUTLERY, Silverware and Fancy Goods,  
FREDERICTON, N. B.  
April 30, 1879.

## PETER LOGGIE,

Wood Moulding & Planing MILL,  
Near the Ferry Landing,  
CHATHAM.  
EVERY DESCRIPTION OF FINISHING for House or Ship Work, manufactured to order.  
Venetian Blinds, Doors and Sashes, Pine and Walnut Mouldings, Jig Sawing and Planing, a Specialty.  
Estimates and Specifications furnished on application.  
Orders attended to with despatch.

## P. LOGGIE,

A. D. SHIRREFF,  
AUCTIONEER AND COMMISSION MERCHANT,  
Life, Fire & Marine Insurance  
AND  
GENERAL AGENT,  
Chatham, N. B.  
August 29, 1878.

## To Mill Owners and Mechanics.

THOS. B. PEACE,  
MANUFACTURER OF ALL KINDS OF SAWS,  
Is prepared to fill orders from any part of the country. His saws are now being widely used, are made of the very finest quality of English Steel, and are warranted to be equal to the best English or American manufacture. A fair trial will prove the correctness of these statements.  
All kinds of Repairing Done.  
References By Permission:  
HON. WM. MURHEAD, Chatham;  
J. B. SNOWBALL, Esq.,  
D. & J. RITCHIE & Co., Newcastle;  
J. FLETCHER, Nelson;  
BAKER & Co., North Esk.  
SHOP—Water Street, Chatham, N. B.  
September 18, 1878.

## Carriage Repairing.

The Subscriber has erected a shop on the property lately owned by Dr. J. S. Benson, and is prepared to attend to the Making and Repairing of  
CARRIAGES, HEAVY FARM AND LUMBER WAGGONS, &c.  
Prompt attention given to all orders. Good Work guaranteed.  
ANGUS McLEAN.  
Newcastle, July 23, 1878.

## Lamps, Oils, &c.

CHANDLERS,  
TABLE and HAND LAMPS,  
Chimneys, Wicks, &c.,  
AMERICAN & CANADIAN OILS.  
WHOLESALE & RETAIL.  
J. R. CAMERON,  
"KENNIS & GARDNER BLOCK,"  
Prince William Street,  
St. John, May 7, 1878.

## DENTISTRY.

Dr. Freeman,  
will attend to DENTISTRY in his various Branches, as his other engagements will permit.  
Having procured every appliance and the most recent improvements, Dr. F. guarantees all operations and gives special attention to the insertion of  
ARTIFICIAL TEETH,  
Either on Rubber or a new and improved Base called Celluloid.  
Dr. F. is a resident in the County his patients will find no difficulty in having every guarantee made good.  
Newcastle, April 18, 1878.

## DR. W. W. JOHNSON,

DENTIST,  
HAS ARRIVED  
and may be found at the  
"Waverly Hotel," Newcastle,  
and is now prepared to attend to DENTAL WORK in all its branches.  
As his stay will probably be short an early call is solicited.  
June 30, 1879.

## WILLIAM WYSE,

GENERAL DEALER,  
Auctioneer & Commission Merchant,  
CHATHAM, MIRAMICHI, N. B.  
Merchandise and Produce received on Commission.  
Liberal Advances made on Consignments.  
NO CHARGE FOR STORAGE.  
AUCTION SALES, and all Business in connection with the same, attended to promptly.  
July 15, 1879.

## DYE STUFFS!

ANNATTO, Cochineal, Cudbear, Hyperic, Indigo Paste, Peachwood, Nutgalls, Sumac, Red Saunders, Copal, Camwood, Fustic, Indigo, Logwood, Madder, Polish Bichromate, Muriate of Tin, Turmeric.  
WHOLESALE and RETAIL, BY  
T. B. BARKER & SONS,  
St. John, July 28.

## FIRST IMPORTATION!

FALL—1879.  
We have the pleasure of advertising the receipt-to-day of seven cases LONDON GOODS, selected by our Mr. Allison.  
Hats, Bonnets, Hat and Bonnet Shapes, Ribbons, Flowers, Feathers, Birds, Ornaments, Wings, Velvets, Satins, Striped Silks, Striped Velvets, Brocade, Battons, Flannels, Corsets, Oxford Shirtings, Ladies' Scarfs, Gentlemen's French and Made-Up Scarfs, &c., &c., &c.  
Manchester, Robertson, & Allison,  
St. John, N. B., August 20.

## G. A. BLAIR,

Merchant Tailor,  
CHATHAM, N. B.  
Always on hand a large and select assortment of  
BROADCLOTHS, Doeskins, Cassimeres, Beavers, Meltons, &c.  
SCOTCH, ENGLISH, & CANADIAN TWEEDS.  
Velvet and other Fancy Vestings.  
Gentlemen's APPAREL,  
Made up promptly, and in the best and most Fashionable Styles.  
Orders from a distance will receive Especial Attention.

## LATEST FASHIONS

ALWAYS ON HAND.  
Remember the Stand.  
Stone Building, adjoining Dr. Pallen's Water Street, Chatham.  
June 25th, 1878.

## CUSTOM TAILORING.

THE Subscriber has opened a FIRST CLASS TAILORING ESTABLISHMENT in the Shop formerly occupied by Mr. P. H. Anslow, and owned by the Hon. William Mulholland, near Letson's Scales, Water Street, Chatham.  
Gentlemen wanting clothes made to order for  
SPRING AND SUMMER  
will do well to examine his splendid assortment of  
ENGLISH & CANADIAN CLOTHS  
to select from.  
GENTLEMEN'S GARMENTS made up under the general supervision of a First Class Cutter.  
Cloth Purchased elsewhere will be made up on the premises.  
W. S. MORRIS.  
Chatham, April 30, 1877.

## FREDERICTON

Custom Tailoring & Clothing ESTABLISHMENT.  
James R. Howie,  
MARBLE HALL, QUEEN ST.  
DESIRE to return his thanks to his many patrons in the North and elsewhere, for the generous patronage extended to him, and would assure them that no pains will be spared to retain their custom, as it is his aim to have all work performed in a satisfactory and workmanlike manner. Particular attention is given to all orders from the country.  
Now in hand, a  
FINE STOCK OF CLOTHS  
SUITABLE FOR  
Spring & Summer Wear,  
which will be made up in the latest styles.  
Orders respectfully solicited.  
A good fit guaranteed in every case.  
I keep on hand a full Stock of READY-MADE CLOTHING and GENTS' FURNISHING GOODS, which will be sold at "Half Price."  
JAMES R. HOWIE.  
Fredericton, May 12, 1879.

## CUSTOM TAILORING.

T. M. STEWART,  
(OF ST. JOHN, N.B.)  
late Cutter for W. S. Morris, Esq., wishes to announce to the people of Newcastle and surrounding Districts, that he has commenced business over James W. Davidson's store, where with all the rest of his ideas in cutting, and the latest New York Fashions, he is prepared to make up Clothes equal to any in the country.  
THE PEN IS MIGHTIER THAN THE SWORD.  
You leave him satisfied with those sonorous platitudes still sounding in your ears, and never give a thought to the medium which alone has rendered pen and printing press useful to mankind, to the paper which has transmitted their impression abroad. The active principle, as usual, bears away the credit; the silent, passive agency taken for granted. But it is still there; the locomotive requires the rails, the common wealth its unwritten code, the man a future hope, all silent yet indispensable, just as our philosopher's pen requires a passive material to perfect their usefulness. The material is paper, and of paper we are about to write. Three thousand years ago, so far as we know, the human race first attempted to write, and like all beginners went heavily into details, to the destruction of the general effect. The attempt was to engrave their writing on flat stones, but from this they soon passed to clay tablets, which were impressed while soft and afterwards dried and hardened in the sun or in kilns, such as are our bricks. (Now St. Austin, British Ambassador in Turkey) whose researches in the buried cities of the long gone Assyrian empire first made him know, found among these remains  
HUNDREDS OF CLAY TABLETS  
turned to stone by the lapse of years. Such means of writing alone seen to have been known to the Assyrians, but it is certain that about the same time many other methods were practised; a species of paper was made from intestines, and human skins sometimes. Steel or ivory plates, scored with a graving-pen, are still extant. But the Egyptians, whose strange civilization grasped all things, even to the properties of the world's end, which, according to some, are embodied in the pyramids, could not rest content with such barbarous inventions; and first produced the papyrus which has given its name to our modern substitute for it. Two thousand four hundred years ago papyrus began its career, to last at the same time both interesting and useful.

## VEGETINE.

A Home in the Celestial City.  
MINNEAPOLIS, MINN., Dec. 15, 1878.  
H. R. STEVENS, BOSTON:  
About nine and a half years ago I had a fever; the doctor gave me some poisonous medicine, drove the disease into my leg, and it broke out, and has been from two to ten running sores ever since. I could not sleep a fourth of a night once in six months, and a great many nights was compelled to get up and take opium—a piece as large as a pea—to deaden the pain. I have tried everything I could hear of, in fact, I have paid out hundreds of dollars, and found no relief until I commenced taking Vegetine, and now I can go to bed at eight o'clock at night and sleep until morning, and have no occasion to be wakened from pain. I was used up, perfectly dead inwardly, and frequently when I would get up, I would be dizzy, and have to put my hand on something to keep from falling; but since I commenced taking Vegetine, I feel like a new man. My honest conviction is that it will cure my leg entirely, from the present time. I consider Vegetine one of the best medicines I have ever known, and I would take Vegetine, and recommend it to all whom I come across; and I hope the man who introduced Vegetine into the United States will have some in the Celestial City.  
Yours most sincerely,  
W. S. LEACH.  
Mr. Leach is a gentleman well known here and is the owner of the celebrated Turbine Water Wheel.

## Druggists take Vegetine and Recommend it.

H. R. STEVENS, BOSTON:  
I have been selling Vegetine ever since it came into existence, and have recommended it to my customers. I have tried it myself, and it is a great blood purifier and renovator of the system.  
M. M. SALMON, Druggist,  
Aug. 22, 1878.  
Burlington, Iowa.  
W. Hippe, M. D., Says.  
I have sold your Vegetine for over a year, and have heard every person who has used it speak in terms of its good effects.  
W. HIPPE, M. D., Druggist,  
Sept. 10, 1878.  
Des Moines, Iowa.

## Dr. W. Ross Writes.

SCROFULA, LIVER COMPLAINT, DYSPEPSIA, RHEUMATISM, WEAKNESS.  
H. R. STEVENS, BOSTON:  
I have been practicing medicine for 25 years, and as a remedy for Scrofula, Liver Complaint, Dyspepsia, Rheumatism, Weakness, and all diseases of the blood, I have found your Vegetine one of the best and most reliable preparations now in the market.  
I have been practicing medicine for 25 years, and as a remedy for Scrofula, Liver Complaint, Dyspepsia, Rheumatism, Weakness, and all diseases of the blood, I have found your Vegetine one of the best and most reliable preparations now in the market.  
J. H. WHETSTONE, Druggist,  
Sept. 16, 1878.  
Iowa City, Iowa.

## VEGETINE,

Prepared by  
H. R. STEVENS, Boston, Mass.  
Vegetine is Sold by All Druggists and Wholesale by T. B. Barker & Son, St. John, N. B.  
[From the Montreal Family Herald.]  
PAPER MAKING IN CANADA.

## Introductory—Paper and Paper-Making—Rise and Progress.

The industries of a country are always of interest to its people. No apology, therefore, is needed for the following account of paper manufacture, an account bearing particularly on its development in Canada. To make the story of general interest and usefulness, a brief introductory reference to its salient points is given. As a philosopher what has caused the wonderful progression of the human race in the past three hundred years, and he who has made it his business to the present day, has been the invention of the printing press. Ask him again why the most literary nations have ever been the most advanced and powerful, and he will tell you that the locomotive requires the rails, the common wealth its unwritten code, the man a future hope, all silent yet indispensable, just as our philosopher's pen requires a passive material to perfect their usefulness. The material is paper, and of paper we are about to write. Three thousand years ago, so far as we know, the human race first attempted to write, and like all beginners went heavily into details, to the destruction of the general effect. The attempt was to engrave their writing on flat stones, but from this they soon passed to clay tablets, which were impressed while soft and afterwards dried and hardened in the sun or in kilns, such as are our bricks. (Now St. Austin, British Ambassador in Turkey) whose researches in the buried cities of the long gone Assyrian empire first made him know, found among these remains  
HUNDREDS OF CLAY TABLETS  
turned to stone by the lapse of years. Such means of writing alone seen to have been known to the Assyrians, but it is certain that about the same time many other methods were practised; a species of paper was made from intestines, and human skins sometimes. Steel or ivory plates, scored with a graving-pen, are still extant. But the Egyptians, whose strange civilization grasped all things, even to the properties of the world's end, which, according to some, are embodied in the pyramids, could not rest content with such barbarous inventions; and first produced the papyrus which has given its name to our modern substitute for it. Two thousand four hundred years ago papyrus began its career, to last at the same time both interesting and useful.

## FORM WHAT IS CALLED PAPER.

As before stated, the first mill mentioned in the annals of the New World was established in 1690. As the Yankee was an unknown species in the annals of the world, and of course, as established by one; and that honor belonged to a Dutchman, William Rittinghuyzen. Rittinghuyzen built his mill at Roxborough, near Philadelphia, upon a little stream which is known to this day by the name of "Paper-mill Run," but the Dutchman's mill has long disappeared and we know now of it and of him only through the trail product which he probably looked on with a certain contempt for its unsuitability. But that single mill was the forerunner of a vast army of factories, and it is believed that the paper now produced in the United States and Canada yearly equals that manufactured throughout the rest of the world. Of course Canada claims but a comparatively small portion of this annual output, but

## THE YIELD OF HER MILLS

is still very great. There are many establishments scattered throughout the Dominion whose appliances and products equal those of any in the world. Among the most advanced of these in almost every respect, are the mills of the Canada Paper Company at Windsor and at Sherbrooke, in the Eastern Townships, through the courtesy of whose President an investigation into the processes employed in the manufacture was permitted. As already remarked, the description of these processes is difficult, but it is at the same time both interesting and useful.

Empire superseded, and the paper of the European twelfth century mills destroyed it. The Nile, which made Egypt, made also papyrus. In its waters grew a great plant, ten or twenty feet in height; the stem three-cornered, soft, and built of almost imperceptible layers of thin material. Cutting down these stems the Egyptians separated the layers by pointed poush-shells, or by less romantic pins, and spread a series of them upon a table sprinkled with the Nile water. Across this series was laid transversely another row and the double thickness flooded with water again, after which a heavy pressure was put on the sheet. Polished finally by some hard substance

## THE MAKING OF THE PAPER

was completed; and from its native soil it migrated to all ends of the recognized world, comparatively not very far distant, any of them. Upon the process just described the Romans greatly improved, and under their rule Alexandria became the great paper mart of the now enlarged civilized earth. But the use of parchment was never discontinued by the stern rulers of the world. There seems not to have been one single step taken in the march of European progress which was not anticipated by the Egyptians or, still more, by the Chinese. That peculiar people—inventors of gunpowder, printing, of canals, of steam-engines—were also the first to discover the art of making paper from fibrous matter reduced to a pulp in water. At any rate, they used such a paper eighteen hundred years ago; our British ancestors did not then possess even the rags from which to make such a material. However, the Chinese did not use rags much, for the chief constituent of their article was the inner bark of the bamboo and mulberry trees, which were put through an elaborate fifteen days' process, and did not afford a remarkably good paper after all. The operations of the Japanese hardly resulted more satisfactorily, although they have anticipated the notions of our present manufacturers by turning their paper to strange uses, among other things making waterproof clothing from it. On the other side of Asia the Arabians

## EARLY BEGAN TO MAKE PAPER,

obtaining the idea from China; and shortly after the death of Mahomet, and while his followers were ravaging the world, a manufactory of the substance which was to revolutionize it was started in Samarcand. This date, A. D. 705, is the first in the history of paper, the second occurs in the eleventh century, when a mill was started in the limits of the Greek Empire. The Arabs early carried the art of paper-making to the west, and it spread over all Europe, and after the invention of printing rose to huge dimensions. The first mill was built in England in 1588; the first in America in 1640. The first in Canada was built at Quebec in 1785, and has been the most extraordinary substance have been tested and abounded, the one after the other. Cotton, stalks, cabbage stems, and the like, and even horse's nests; ivory shavings and lime, seaweed and oakum have all had their chance and are but a tithe of the materials tried. But, until lately, little addition was made to the resources of the manufacturers, and the direction in which the only material advance was effected was in the improvement of the machinery. This however was wonderfully rapid; in less than fifty years the hand-mill has been replaced by the vast establishments and

## PONDEROUS MACHINERY OF THE PRESENT

DAT,  
and twenty years ago the annual product of the world's paper manufacturers was over half a million tons. No reliable statistics of later date are readily obtainable, but the increase must since that have been great. To turn, however, to the manufacture itself, there is in all paper-making one principle—the rendering consistent and homogeneous a thin watery pulp. Yet the principle is given, however, underlies the most interesting to witness, is complex and hard to describe without plates; the reader will understand this when the making is reached. The principle is given, however, underlies the most interesting to witness, is complex and hard to describe without plates; the reader will understand this when the making is reached.

## WATER POWER TO RUN THE MILLS.

Formerly, the water-power held good all the year round, except, perhaps, during a couple of weeks in the hottest part of the year; but of late, as the land along the banks of the stream has been cleared and the forests thinned out, the supply of water has gradually failed, and is now insufficient during nearly a third of the time. Steam is consequently used as an auxiliary. The buildings of the establishment are very numerous, and, as they are built apart so much as circumstances will permit, in case of fire cover several acres of ground. They comprise an office, storehouses, saw-mill, furnaces, machine shop, finishing house, and the like. The "liquor house" and the manufacturing establishment proper. This array of shops is explained by the fact that the company depends entirely on itself for everything connected with the manufacturing processes. The ominous term

## LIQUOR HOUSE

is applied to the department in which is made the caustic liquor required in the reduction of the wood. Crossing the St. Francis from the river, is a long and substantial wooden bridge erected by the Company for convenience of access to one of their wood-yards, but which has also proved very welcome to travellers. This bridge is some 500 feet in length, and cost the bridge company \$10,000. For some time the sole return was all in the Paper Company's business, but of late the tolls have given a percentage on the capital after standing all necessary outlay for repairs. The toll is not a very heavy one, but has, nevertheless, afforded some amusing instances of the parsimony of the country folk. Teams are charged five cents each passage, and foot-travellers three cents; and this distinction caused the following stratagem on the part of a farmer and his wife living on the opposite side of the river, from Windsor. They were accustomed to drive over to the village every week with butter, eggs, &c., and their toll was accordingly ten cents across and back.

## THIS WAS EXORBITANT,

and therefore for some time past the worthy couple have alighted and hitched their horses at the far end of the bridge, laden themselves with the contents of their cart, and trudged across down to Windsor on foot about half a mile. This saves them four cents, as each of them pays three cents for crossing. Still they seem to consider it all right, although curiously enough the market days are usually either blaring hot or favored with rain and thunder-storms. Another public bene-

## The Mills of the Canada Paper Company—Reduction of the Rags—Of the Wood.

The Windsor Mills are situated about fourteen miles from Sherbrooke, in a triangle formed by the St. Francis river and the Windsor river, a little stream, which comes down from the high land bordering the valley of the St. Francis. This stream referred to tumbles into a ravine opening on the larger river in a series of broken and picturesque falls about sixty feet in height. But the term "little" applies to the stream only in the summer; in the spring a flood of black water roars over the cliff and down the ravine in great strength. Behind the mills the high land rises perhaps a hundred feet up to the second terrace of the river valley, and conceals the little village of Windsor from sight. When the mills were established fifteen years ago, in 1864, there was not a house outside of a very small village within three miles, except here and there that of an isolated farmer; but Windsor now contains a population of five and six hundred inhabitants, and there are besides, many cottages scattered over the hills. From the high ground near the village is obtained

## ONE OF THE MOST PICTURESQUE VIEWS

in the valley of the St. Francis; and no one who has travelled in summer over the railroad east from Richmond, can have helped noting the quiet beauty of the scenery in this valley. Looking down upon the St. Francis, the stream emerges close by from behind a projection of the hill upon which you are standing, and winds onward around bluff knolls and through fringes of trees and foliage, varied here and there by greenward, until its glitter is broken by a solitary steeply rising bank, and rests upon a basin in the amphitheatrical hills into which the river abruptly expands after suddenly appearing from behind a bluff. Immediately opposite the slopes are very steep, and the water back as the eye can reach, and this district supplies the manufactory with the

## THOUSANDS OF CORDS OF WOOD

annually required. The company owns on both sides of the river some 1000 acres of land, all of which is forest; but as a rule, they leave this untouched when practicable and obtain their wood from the neighboring districts. It is in winter that the cutting of the wood is done, and the scene is one not easily forgotten. The proper weather is the bright and cold time of middle and late winter, when the frozen snow admits of teaming. Everything is, for the time, in a whirl of activity, and the high woodlands resound with the blows of axes and the crashing of trees and shouts of men; there are usually between three and four hundred men, with more than a hundred teams employed in the work. From the forest the wood is teamed to the great yards near the river and there piled. The manufactory possesses a saw mill of its own, driven by the water of the stream emptying into the St. Francis. To secure the saw mill and upper buildings of the establishment from danger during the spring freshets, the company were compelled to erect a strong bulkhead across the course of the stream; and just above this bulkhead is the dam necessary in the late summer to collect sufficient

## CONSTANT STREAM OF FRESH WATER,

which, after circulating through and cleaning the pulp, is removed in its dirty state by a water-lifting arrangement of wire screws and buckets. The bin also contains an arrangement of knives which completes the decomposition of the rags. This washing and beating process is made in making the finer qualities of pulp of a beautiful white color, and soft and velvety to the touch. In appearance indeed, it resembles ice-cream more than anything else, and is as clean as snow. The pulp seems to be a wholesale preparation for Sunday school picnics. Only the very fine rags, however, can be brought to this creamy whiteness, and then only after a long and tedious process. From the bleaching-works the pulp is flooded into the "drainers," where it lies for a while for the double purpose of bleaching and allowing the chlorine liquor to be drained off for use again, after which a second washing makes it ready for addition to the wood-pulp and the final preparatory treatment. To recap











