THE NEWS.

A. W. James has opened a lumber yard in Cornwall,

 $M_{\rm ff}$. Nicholl, of Lindsay, is fitting up a shingle mill at ence, Ont.

S. Bown, of Bracebridge, Ont., purposes putting in hall saw mill plant.

his stated that the Rathbun Company's mill at Lind-

J. P. Middleton, of Staples, has purchased a small mill near London, Out.

C. Smons, of Ruscom, Ont., is making preparations builds saw mill on his farm.

Want of snow is deterring the hauling out of logs the local mills at Lancaster, Ont.

The residence of W. E. Fillion, lumber inspector, entral, was destroyed by fire last month.

James White, of Alexander, contemplates starting a ming mill and sash and door factory at Carberry, Man.

Whitem Evans and Thomas Samson have formed a menship at Hampton, N.B., to conduct a lumber business.

John Thacker has submitted a proposition to the med of Teeswater, Ont., to erect a large carriage and ages factory.

Mosses, Leclaw & McDonald are running their mill North Lancaster, Ont., Mr. Barney Gafferney being charge of the levers.

Mr. CounReid, of Bothwill, has put in a Stafford Timer Gage, manufactured by the Lancaster Machine orks, Lancaster, Ont.

Anew gang mill was recently put into operation at Fest Northfield, Lunenburg county, N. S., by Brum Lothers. The mill is first-class in every respect.

Listannounced that the Hastings Shingle Manufacturg Company of Vancouver, B.C., will erect a large hingle mill on Lake Hatcom, in Washington territory.

The Cathing Lumber Company have recently comleted a new saw mill at Carling, in the Parry Sound Estrat the mill having a capacity of 30,000 feet per day. —Nr. Owen Fortune, of the Gilmour Company, of Traton, Ont., is receiving the congratulations of his feeds upon his recent marriage to Miss Morris, a poplar kdr of Belleville.

Mr. Carl Zeidler, Canadian Agent for Boech & Pollitser, scensed whatfingers and forwarding agents, London, England, has removed his office to the Imperial Bank Buking, No. 2 Leader Lane, Toronto.

In is stated that the Royal City Planing Mill Company, of Vancouver, B.C., contemplate putting in machbery for the manufacture of sash and doors. The Enanger of this company is Mr. A. E. Woods.

The estate of the late John Bryson, the rich lumbersing, who represented Pontiac in the House of Commons, and who died in January 1896, is now the subject of litigates. It is probable that the case will be fought in the Septeme Court.

The Jenekes Machine Company, of Sherbrooke, farefr maked and installed at the mills of the Chicoutimi Pup Company, two Reployle Relay Returning Governors, for regulating the Grinder Wheels. The Governors do the fact very effectively.

The Callerin Lumber Company, of Calhoun, N. B., seeking memoration. The applicants are: Josiah Woods, of Westmoreland: H. N. Wood, of Sackville, J. R. Calhoun, of Calhoun Mills: J. C. Calhoun, of Albert; and N. G. Teed, of Dorchester.

The June Veneer Works, of Orillia, Ont., has endergone a change of ownership, as we learn that Meses. N. James & Son took control on February ist. They propose to add some new machinery, which all enable then to turn out up-to-date work.

-Over 700 men are engaged on the construction of the Religiosche and Western Railway, which will extend from Campbe, ten to Grand Forks, N.B., a distance of 110 mes. It was pass through a country rich in forest resources, and not provide a short line to American points.

The Rest gouche Boom Company, of Campbellton, N. R., now incorporated by the legislature of New Brunswak, will appear at the next session of parliament for a Dominion charter, with power to take over the assets of

the original company and to operate in Quebec and other provinces.

—In a letter to the CANADA LUNDERMAN, A. L. Cope & Sons, manufacturers of lumbermen's wooden supplies, pike poles, etc., state that they are building a water power mill at Wilberforce, Ont., which they expect to have completed this spring. Attention is directed to their advertisement on another page.

-Mr. R. B. Goddard, of Westmeath, Ont., is moving his saw mill up to Crow River in the Coulonge district, having secured a contract for sawing from Mr. A. Fraser of Ottawa. The lumber is to be used for building lumber camps, slides and dams. Mr. Goddard intends runing his mill night and day, so as to get through before the ice breaks up in the spring.

—Messrs. A. & P. White, of Pembroke, Ont., are enlarging their mill considerably by putting in two large boilers, one circular saw frame, one double edger, one set of trimmers, one set of live rolls, one log cauter and one large grip pulley for circular saw. This will increase the capacity considerably. The machinery was purchased from the Waterous' Engine Works Company, of Brantford, Ont.

—V. L. Emerson, of Baltimore, is said to have demonstrated the feasibility of converting the sawdust deposits at the bottom of the Ottawa river into gases which can be used as smelting fuel. He has devised a plan by which this deposit can be pumped out, converted into gas, and conveyed by a pipe line under pressure to smelting furnaces at the mines in the Ottawa vicinity, at a cost of about one-tenth that of coke.

—A change has taken place in the management of the Ontario Lumber Company at French River, Ont. Mr. Hancock has been succeeded by Mr. J. F. Gillies, who for a number of years has been manager for the Ontario Boom Company. It is learned that the Company's mill will 's started early in the spring, and will be kept at worl, throughout the season. Four large gangs of men are in the woods getting out logs.

—George St. Pierre & Company, of Rivere du Loup, Que., advise us that they have recently purchased two saw mills, one at St. Cyprien, Temiscouata county, and the other at Humqui, Rimouski county. In addition to the output of hardwood and spruce lumber, they will have in operation this year five shingle machines. It is probable that their mill at St. Honore will be removed to Rivere du Loup, where they have sufficient timber to stock the mill for fifteen years.

—The extensive business of Alexander Gibson & Sons, of Maryville, N.B., will hereafter be controlled by the Alexander Gibson Railway and Manufacturing Company, in accordance with an act passed at the last session of the legislature. The company is composed of English and Canadian capitalists, who have secured control of the Canada Eastern Railway, 200,000 acres of timber lands on the Nashwaak river, half a dozen saw mills in York and Northumberland counties, the Gibson cotton mills, at Maryville, and other assets. The entire property is valued at \$7,000,000.

—The second lecture in the Teachers' Lecture Course, at the High School, Ottawa, was given recently by Professor John Macoun, botanist of the Geological Survey of Canada, the subject being "Forest and Forest Resources of Canada." The lecturer enumerated, by the aid of a map the large valuable forest areas in the Dominion yet untapped, awaiting but the coming of the railway to yield a rich and bountiful harvest. The growing importance of the pulp industry was commented upon, and the lecturer closed by exhibiting some interesting lantern slide views of native trees.

-Mr. E. C. Grant, manager of the Ottawa Lumber Company, was in New York last month attending the meeting of the Board of Trustees of the National Wholesale Lumber Dealers' Association. At this meeting it was decided to hold the next annual meeting at Boston, Mass., on March 1st, 1899. Mr. Grant extended to the Association an invitation to meet in Ottawa in the year 1900, and it is probable that the invitation will be accepted. The Association, Mr. Grant states, has established a Bureau of Information similar to Bradstreet's, a strong legal department, and a department for the securing of better freight rates, etc. The insurance question is also engaging the attention of the trustees. From figures submitted it was shown, that, whereas \$2,500,000 had been paid in premiums, but \$1000,000 had been recovered as compensation for losses sustained.

WOOD PULP ~9 6~ DEPARTMENT

THE PROCESS OF MANUFACTURING MECHANICAL WOOD PULP.*

By W. A. HARE.

PART 1.—THE DEVELOPMENT OF THE WOOD PULP INDUSTRY IN CANADA.

WITHIN the past two or three years there has been a marked impetus given to the pulp and paper industry in Canada. When one considers the vast resources we have at hand, coupled with the splendid waterways and canals for transportation, and other facilities for the building up of this great and important industry, he is apt to wonder why these conditions were not taken advantage of before. Changes occur in existing avenues contrade very slowly, and though the condition of the industry is at present in its infancy, Canadians may be expected to take full advantage of their opportunities in the near future.

Wood pulp will, for many years to come, be used to supply the world's demand for a filler in the manufacture of paper, in many of the coarser grades of which it is the only constituent. Its use is more likely to widen than to be curtailed. A very large amount of paper is made today from linen rags, esparto grass, etc., and for the manufacture of the finer grades of paper these materials may be expected to find a ready market. In the manufacture of news paper wood pulp is used altogether, and as long as it can be produced cheapenough, there is little danger of a substitute being found. It is not confined, however, to the manufacture of paper alone, but is made into many useful articles of daily service, the market for which is increasing rapidly.

There is no reason to doubt that Canada will have a prosperous future, as far as this industry is concerned; and if the efforts put forth during the last two or three years are any forecast of the future, we will, in a few years, have good reason to be proud of the position this country will occupy as a producer for the world's markets. It is estimated that in the United States there are 1,200 pulp mills in operation, turning out an annual product of 1,500,000 tons of pulp, which requires the consumption of 2,000,000 cords of wood. There is an ever-increasing amount of this wood supplied from Canada year by year, which goes to show that the mills in the United States cannot obtain an ample supply from their own forests. There is no country in the world that is so emine ofly fitted for the establishment and expansion of this industry as Canada.

Any country, to be pulp producing to any extent, must possess three things which are factors in the development of this industry, i. e., water powers, spruce forests, and shipping facilities. Canada, fortunately, is ahundantly favored in respect to these. Of the three, the first two are natural advantages, while the third is artificial to some extent. In water powers we have all that could be desired. The rivers of the Maitime provinces and Quebec have numerous falls and rapids, and those of Ontario are no exception, especially in the western part.

exception, especially in the western part.

Our share of the black and white sprace forests of the world is larger than that of any other country, producing the finest raw material known for the manufacture of wood pulp. Coupled with these two natural advantages, is that of our transportation facilities, which are not surpassed in the world. The Maritime provinces are directly on the sea coast, Quebec enjoys the use of our great national waterway, the St. Lawrence, while Ontario is intersected with canals and rivers, which afford easy and cheap communication to tide water. By our system of canals and waterways we can transport pulp long distances by water, and in this way those long bauls by rail, which are comparitively so expensive, are obviated.

With regard to markets, it may be mentioned that Great

With regard to markets, it may be mentioned that Great Britain imported in 1897, 330,000 tons of wood pulp, three-fourths of which came from Norway. Canada supplied less than 3,000 tons. Here is a good market for some time to come, for all the pulp that can be manufactured in Canada. Our great competitors in the British market are Scandanavia and the United States. From the latter country we have nothing to fear, as their wood supply is almost exhausted, and the mills now in operation there are dependent to a great extent upon our forests—so much so that if an export duty were placed on Canadian pulpwood their exportations would cease.

pulpwood their exportations would cease.

Even the great forests of Norway and Sweden are showing signs of depletion; and it will only be by the enactment of strict forest regulations that the export trade will be kept up. It is a significant fact that the Scandinavian

^{*} Paper read before the Engineering Society of the School of Practica Science, Toronto, and published by permission.