

cannot or will not see the inevitable result which must follow the carrying out of their theories. Under such a system as theirs, every country would become a "Japan," producing what it could within itself, and going without everything else. Commerce would languish and ultimately die, while the distress and misery that would ensue is frightful to contemplate. Free Traders, however, have confidence in the justice and truth of their principles and faith to believe that they will ultimately prevail. The cause has made wonderful advances during the last few years, and although circumstances have enabled the manufacturers of the United States to lay the whole Union under contribution for their especial benefit, yet there is every indication that their selfish policy has carried them too far, even for their own immediate interests, and the time is not far distant when the reaction will be felt.

N. B.

THE FLAX INDUSTRY.

The following notice of the Johnstone Flax Mills, near Paisley, Scotland, the property of Messrs. Finlayson, Bousfield & Co., will be of interest to many of our readers. It will not lose in interest, when it is known that these manufacturers are prepared to become purchasers of all the flax suitable for their purposes, that may be brought here for sale. The account is from the *Paisley and Renfrewshire Gazette*:

"There is probably no branch of industry which has made so much progress during the last half-century as the manufacture of linen fabrics and thread. The application of machinery to the dressing and preparation of flax has been carried out in every stage of its progress, from the raw material to the finest form it assumes. Every visitor to the North of Ireland who has had an opportunity of witnessing the operations in the flax mills there must have seen this; but our present purpose is briefly to describe a visit paid to the Johnstone Flax Mills, near Paisley, where a large quantity of Irish produce is annually utilised. These mills, which are the property of Messrs. Finlayson, Bousfield & Co., consist of two departments—one for dressing and the other for spinning purposes. The first place the visitor is shown is the store-house where the raw material is stored, all the different qualities of flax being classified; but this store is only auxiliary to the great stores of the Peckland Mills, and the Johnstone Trades Hall, which are used for storage by the firm. After the store-room we next entered the 'ruffing' department, where the flax is prepared in the 'hackers.' This is a process of cleaning, the flax being drawn through a series of iron spikes placed close together. This is, perhaps, the most unhealthy department of the works, and we were glad to notice that everything which could be done in the way of proper ventilation has been effected. From this department the flax is taken to the hackling machines, and here the extraordinary self-acting power of machinery is shown to wonderful advantage. The flax goes in at one end of the machine in quantities a mile in size to what our grandmothers placed upon the distaff of their spinning wheels. It is sorted between iron plates by boys, and put into the machine, and carried through the huckles to the other end, where boys again take it out, greatly purified. The finest portion of the refuse (tow) is taken to a different department of the works, and spun into yarn, while the interior stuff is sold to paper manufacturers just as it leaves the hackling machines. Nothing could be more suggestive than a comparison of this dirty-looking stuff with the material form which it ultimately assumes. The rapidly with which the hackling machines go, and the quantity of flax which is sifted in a day, is marvellous. In this department there are also cutting machines, worked by girls, where the rough ends of the flax are taken off. From the hackling machines the flax goes up to the sorting department—a further process of refining by means of drawing it through very delicate hackles. This is done by the hand, and considerable taste and judgment are shown by the men in their work. Here we were shown several different classes of flax after it had been sorted, and were struck with the beauty of its fibre. Although there are believed to be upwards of ninety different kinds of flax, the most commonly used is of Irish, French, and Dutch growth. After leaving the sorters, the flax is tied up in quantities, and conveyed to the larger mill, where the operations of spinning and finishing are carried on. In these works upwards of 1,500 hands are employed. The flax, in its sorted form, is first taken to the preparing flat, where it goes through three different kinds of machines, technically known as 'spreading,' 'drawing,' and 'roving.' In the spreading machine the flax is put together and formed into a continuous length, to the unlimited apparently on the same principle as is adopted in the preparation of cotton for the spinning. From the spreading it goes to the drawing machines, when a further process of lengthening is carried on, and thence to the roving machine, where it is spun on to bobbins, and prepared for the spinners. After leaving the roving machine, the flax first approaches its final shape. From this department, the thread, for so we may now call it, goes to the spinning flat, where it assumes a still finer form. Here we find ourselves bewildered with the magnitude of the flat, which is literally crowded with a forest of belts, pulleys, and shafts. Everything, however, is arranged in the most perfect order, and great care is taken, to

have all the machines protected, so that one can pass through the whole of the flat without fear of experiencing the embrace of a couple of revolving pulleys. The manufacture of different kinds of thread up to this time, has had to go through the same process; but here we must divide the flax thread from that of the shoemaker's, and follow, in the first place, the former through its future operations. From the spinning flat it goes to the 'twisting' when the thread assumes its final form. It is then taken to the reblers, and formed into certain lengths, and thence to the 'bleaching and drying.' From the douching the thread is taken to the stove, and from thence to the 'finishing' house, where it receives a kind of polish. The system of polishing and finishing the thread which is carried on in this work, we believe, unique and peculiar in itself. 'Certainly no firm sends out a finer quality of thread either for "strength, taste, and neatness," to quote the words of the prize medal of the London Exhibition of 1851, awarded to the firm. From this polishing, the thread goes to the "skeining" department, where it is put up into a certain number of skeins per pound, and a certain number of "laps" per pound. This is all done by children, and the rapidity with which the little things go through their work is marvellous. Having finished our notice of the manufacture of shoemaker's thread at the spinning department we shall now briefly refer to its future progress. It is taken from the spinning to the rebler, and thence to the dyeing and bleaching, where it goes through the same process as the tailoring thread; thence to the winders, who run it on to bobbins, preparatory to being made up in balls. The "balling" is a very ingenious process, requiring great care and attention on the part of the girls who do the work. They have no guide but experience and habit to let them know when to stop their machine on the ball being at its weight. The balls are then transferred to the warehouse, where they are tied up in parcels, and made ready for the market. After leaving the manufacturing department we were shown into the engine-house, which is unrivalled in the country for beauty and cleanliness. There has been no attempt to lavish a great deal of expense on the decoration of the place, but it nevertheless is constructed on an excellent plan, and is kept in extremely good order. There are here two high-pressure condensing horizontal engines, 600 horse power. There are other two smaller engines connected, of 280 horse power, and from these facts our readers will form some idea of the great amount of work which is done through at these works. We shall now say a few words touching the reading-room, friendly society, and school connected with this great establishment. The reading and recreation rooms are, during leisure hours, always crowded by the employees. There is an excellent bagatelle table, which is so much frequented that a person who wishes a game requires to enter his name on a slate, and he is admitted to the table in his turn. The loser of the game forfeits a half penny, which is put in a box, and goes to the support of the reading-room. Upwards of 24 different papers and publications are taken in, and an excellent library is open to all. The workers' subscription is only a penny a week. The Friendly Society connected with the works has been found to work admirably, and is of great value to the workers. The girls pay a penny a week, and the men twopenny, for which they receive medical attendance. If any man is disabled for working, he receives 6s per week, and a girl 3s. If a man dies, his wife receives 12s, and if a girl, the nearest relative receives 12s. There are upwards of 250 children partially employed in the works, who, according to the Factory Act, are at a school one half of the day. In such a small place as Johnstone, the education of 250 children is no small matter, and it is to be sincerely hoped the flax mills will long continue to flourish.

Under the heading of "Agriculture and Flax-growing in Ireland," in the recently issued work—"The Speeches, Poems, &c., of the Earl of Carlisle," compiled by Mr. J. J. Gaskin—the following appears in reference to the Messrs. Finlayson—

"From the fibre of this valuable plant, linen, cambric lawn, lace, threads, &c. are produced, and it may be said to the fitness of silk. Previous to the events alluded to above, the cultivation of flax in Ireland was confined to the province of Ulster—Belfast being the principal emporium of the flax and linen trade. The necessity having arisen for extending the cultivation of flax, to supply the unlimited demand now existing, determined the other provinces to embrace the opportunity, and so to participate in the rapidly extending prosperity of the North of Ireland, by a more general cultivation of flax. Skilled teachers were engaged to give proper instructions for preparing the fibre for market. Lord Fernoy and most of the noblemen and landed proprietors in the various districts of the country amply contributed to the erection of the requisite 'cutting mills and machinery. The finer qualities of the material are purchased throughout the country by the agents of the Messrs. Finlayson and Bousfield, the eminent and enterprising flax spinners of Johnstone, Glasgow."

ST. JOHN TRADE REPORT.

ST. JOHN, N. B. March 2, 1867.

SOME slight improvement has been manifested in the business of the week, as compared with those immediately preceding. This may be ascribed in a great measure to the improvement in travelling which has taken place, and enabled country purchasers to get to market, rather than to any other cause. The money market still continues tight, and great difficulty is experienced in obtaining the necessary bank accommodation which manufacturers and others require to enable them to carry on their business at this season of the year.

The shipping arrivals of the week have been more

numerous than for some time past. With the exception of the weekly steamer from Portland, there has, however, been but one arrival with cargo, the remainder being entirely in ballast. A company is in course of formation for the purpose of constructing a steel railway from St. John to Indian Cove, the point of departure and arrival of the St. John river steamers. A considerable amount of stock has already been subscribed, and there appears every prospect of the work being commenced at an early period.

Imports.—The exports of the week have been very moderate, consisting of one vessel for Liverpool with timber and deals; one for Cardenas with shooks; one for An. Cayes with boards and shingles, and one for Port-au-Prince with sleepers. Prices are but little changed. Deals are quoted at \$10.00 per M., but this quotation must be regarded as to some extent nominal; the quantity on hand being quite small, and in few hands. Shipping pine boards \$11.60 to \$15.00, common to \$13, laths \$1.60 to \$2.00, sugar box shooks 55c to 60c each. The trifling advance in West India freights noticed last week, has not been maintained, and the few transactions of the week show a decline on previous rates. Charters for Liverpool have been effected at 60s 61s 3d. per standard for deals, and at 23c for shooks to north side of Cuba.

Exports of lumber from the Port of St. John, for the month of February, 1867, as compared with the corresponding month of 1866.

Articles	1867	1866
Deals and Deal ends, s. f.	2,000,000	1,500,000
Boards scantling and planks, s. f.	1,500,000	1,500,000
Timber, pine, tons.	100	100
Shingles, M.	20	20
Laths, M.	1,000	1,000
Shingles, M.	100	100
Sleepers	2,500	2,500
Shooks	61,316	37,174

The miscellaneous exports of the month are as follows—60 casks vinegar, 113 bbls. manganese ore; 400 sewing machines, 112 bars iron; 200 kegs nails; 111 hhds and 54 cases hardware, 48,000 bricks; 65,574 feet sash and blind stuff, 3572 bedstead slats; 4845 cedar posts, 280 pieces spruce piling, 112 boxes spool blocks; 90 maple logs; 20 casks matches, 15 bbls kerosene oil, 4 casks brandy, 1 whiskey, 4 hhds and cases of fresh fish, 873 boxes lettuce, 5 bbls shad; 367 bbls potatoes, 14 firkins butter, 1 crates sheep skins; 7 bbls eggs, 12 bbls and 6 bags flax seed, 4 boxes building stone.

Flour, &c.—The trade of the past week has been more active than for some little time past. There are no large transactions, but the demand for retail purposes keeps steady, and a considerable number of small lots have been taken for country trade. The receipts of the week have only amounted to 100 bbls of flour from Portland, and under these circumstances the previously large stock is rapidly working off. Prices remain without any material change. We quote, Strong superfine, 25 1/2 to 26 1/2, ordinary brands do, 25 1/2 to 26 1/2. For extra there is but little demand, and prices range from 26 1/2 to 27 1/2.

We notice the arrival of a cargo of 400 bushels of corn from New York, which is held at \$1.05 per bushel. Provisions, &c.—This department of business still continues dull, and transactions are very limited. The only change we have to report is in the article of lard, which has declined, and is now quoted at 12c to 13c, with very small demand.

Brig Derby Cause from Galveston, for Rio Janeiro, with 152 emigrants, was totally wrecked on the morning of the 11th inst., on the coast of Cuba about 25 miles West of Mariel, who lost 100. The D was 255 tons register, rated A, built at Blue Hill, Me., in 1855, and owned in St. John.

Brig John Geddes, with 100 passengers, from St. John, loaded with salt went ashore at Kendrick's Island, Shag Harbour, on the night of Tuesday, the 5th inst., and will be a total wreck. Crew saved.

PHILADELPHIA, Feb. 20.—Ship Lancaster, at this port today from Liverpool, reports having lost her foretopmast, along the 5th inst., at 48 1/2, on 63 09 W. passed alongside of the bark Alice, of London, waterlogged, hatches burst open, main and mizzenmast gone by the deck, and abandoned.

Research, from Quebec, at the Clyde, 5th inst., experienced very heavy gales, Nov. 29, during which she lost rudder, bulwarks and sails, and had decks swept, house stove in, and was obliged to throw part of cargo overboard.

Ship Martha, King from Liverpool for Mobile was totally lost on the 11th inst. five miles east of Cape Corrientes, coast of Cuba. The crew, numbering 10 men, were landed at Havana and on the 16th by British bark Acadia, bound to London. She registered 956 tons, rated A2, and was built at St. John, N. B. in 1857, where she was owned.

Brig. Bloomrang, Edgett, hence for Havana, 18th Dec. experienced a succession of westerly gales, sprung a leak and waterlogged; was driven to the westward and intended to run into St. Thomas for repairs; spoke a vessel 23rd Jan., who reported cholera raging there; bore up for Antigua, where she arrived 27th Jan.—[My letter to owners.]

It seems that as far as regards any articles for exhibition, New Brunswick will be entirely unrepresented.