

THE DAILY EXAMINER.

APRIL 5, 1887.

Editorial Notes.

The Thames Subway, described in another column, has many points of resemblance to the Northumberland Subway proposed by Senator Howland.

The Rev. Phillips Brooks declared a few days ago, that the greatest Americans of the Century are Daniel Webster, Abraham Lincoln and Henry Ward Beecher.

Major Tilton, Deputy Minister of Fisheries says that recent advices from the British Government state that they deem the attitude Canada has taken in the fisheries matter inadmissible. He says that until something is substituted for the treaty of 1818 the Dominion Government will act upon it in spite of any retaliation from the United States.

As to the effect of high licenses the following statistics are given:—

Table with 4 columns: City, Popul., No. of Saloons, Rate of License. Lists cities like Omaha, Kansas City, St. Louis, Chicago, Detroit, Philadelphia, etc.

In the four cities of Omaha, Kansas City, St. Louis and Chicago, where the rates of licenses are highest, there is an average of 34 saloons to every 10,000 inhabitants.

The following is an extract from a letter received from a Newfoundland Magistrate: "The prospect here has been gloomy in the extreme. There are at the present time some thousands of families in this and the adjacent Northern Bays who were almost on the verge of starvation."

"A Roman Catholic priest in Hoboken has the pledge of 325 young men and boys in his parish that they will abstain from intoxicating drinks and tobacco till they are 21 years old."

We clip the above from an exchange. A few years ago the Rev. George W. Hodgson established a Band of Hope in connection with St. Peter's Church. We have not heard of its members breaking that pledge, and the Band is now vigorous and flourishing.

We are indebted to E. L. Lydiard, Esq., for the following statement of exports from Queen's and King's Counties during the quarter ending 31st March, 1887:—

Table of exports for Potatoes, Oats, Meats and Poultry, Fish, Eggs, Horses, and Miscellaneous goods, listing quantities and values.

A large portion of the above went by steamers Northern Light and Neptune to Pictou.

The Dominion Government are urged to make the canals of Canada free of tolls at once; because trade is being diverted to New York through the free canals of that State.

"This is a question in which to give quickly is to give twice; indeed, if the reduction be not speedily granted, its value is very materially lessened, as contracts for the transport of grain are being entered into, and until the reduction is granted or denied, no bargains can be made by

The St. Lawrence route. Meantime, the free canal across the line are reaping the advantages of the 'laws delay,' and shipments which might come through Canada are being contracted for through the States. It is sometimes urged that the question is one which affects the shipping community only, and that therefore the claim for free canals is a purely selfish one. It certainly does affect the mercantile community as affected indirectly, and even beyond them; the farmer and our population generally have to suffer if the canals are comparatively idle.

Arbor Society.

The annual meeting of the Arbor Society was held last evening in the Stipendiary Magistrate's Court Room—His Honor the Lieutenant-Governor in the chair. The following officers were appointed for the ensuing year:—

President—His Honor Lieut.-Governor Macdonald.

Vice-Presidents—R. R. Fitzgerald, A. B. Warburton.

Secretary—H. C. Macdonald.

Committee—John Ball, Alex. McKinnon, George McLeod, S. W. Crabbe, C. C. Arthur, Newberry, Frank Carter and W. A. Weeks, C. E.

Wednesday, the 11th of May, was chosen Arbor Day for 1887.

It was decided to complete the work of planting trees and grading Prince Street. For that purpose a committee, comprising Messrs. John Ball, A. A. McLean, F. S. Moore and R. B. Norton, were appointed to see the matter carried to a successful termination, and to solicit the aid of property holders and residents on that street.

Messrs. A. B. Warburton and R. R. Fitzgerald were appointed a committee to superintend the further work to be done on Great George Street. A motion was passed appointing a committee to wait upon His Honor the Lieut.-Governor and His Worship the Mayor, to ask them to have Arbor Day proclaimed a public holiday, and also to wait upon the Superintendent of Education and the chairman of the School Board to obtain their consent to a procession of the pupils from the different city schools, the same as last year.

The meeting adjourned till 25th April inst.

Easter Cattle Show.

The Easter Cattle Show to-day was not as large in quantity as on former occasions, but the quality was very good indeed. Blake Bros' exhibit was, as usual, first-class. Worthy of special mention was their steer, under four years old, which weighed 1,760 lbs., and their cow, 1,530 lbs. The steer and heifer fed by Mr. John Dewar, of Lot 48, were in prime order and were much admired as was also the McRae heifer under three years, which tipped the scales at 1,360 lbs. The ox fed by Benj. Bunting, Rustico, and the Stock Farm cow were also greatly admired.

The meeting adjourned till 25th April inst.

Blake Bros.—Ox, 1,760 lbs., cow, 1,520 lbs., cow, 1,127 lbs., cow, 1,360 lbs., cow, 1,115 lbs., cow, 1,020 lbs., cow, 990 lbs., ox, 1,060 lbs., cow, 1,010 lbs., fed by John Dewar; ox, 1,505 lbs., heifer, 1,077 lbs., fed by John Dewar; ox, 1,490 lbs., fed by P. Duffy; cow, 1,665 lbs., fed by F. Gates; ox, 1,320 lbs., fed by Bunting; cow, 1,020 lbs., fed by Stock Farm.

Saunders & Campbell.—Ox, 1,400 lbs., fed by Mrs G. Lewis; ox, 1,317 lbs., fed by Hugh McMillan; ox, 1,042 lbs., fed by Mr. Orr; cow, 1,005 lbs., fed by Saunders & Campbell; ox, 1,525 lbs., ox, 1,240 lbs., ox, 1,207 lbs., fed by Daniel McKinley; cow, 1,312 lbs., fed by Mr. Proctor; cow, 1,380 lbs., fed by Horace Beer.

John Drake.—Cow, 1,647 lbs., fed by B. Wright; heifer, 1,222 lbs., heifer, 1,045 lbs., fed by S. Wheatley; cow, 1,180 lbs., fed by S. Drake.

A. L. Bridges.—Cow, 975 lbs., fed by G. Lewis; cow, 1,305 lbs., fed by C. Palmer, Esq.

Henry McGregor.—Cow, 1,412 lbs., fed by David Mutch; cow, 1,315 lbs., fed by Oliver Mason.

G. Thorne.—Ox, 1,122 lbs., fed by George Seller.

Henry Woods.—Cow, 1,310 lbs., fed by Alex. McRae; heifer, 1,010 lbs., fed by Ronald McDonald.

William Seller.—Heifer, 1,367 lbs., fed by John Bell; cow, 1,207 lbs., fed by H. Chowan; ox, 1,000 lbs., fed by Arthur Wright.

Alex. McMillan.—Cow, 1,300 lbs., cow, 1,170 lbs., fed by A. McMillan.

At two o'clock a sale of stock conducted by Blake Bros, for \$83, the Oxford sheep for \$11.50 by Campbell & Saunders and the Percheron stallion Norman Chief by George Essory, Royalty, for \$50.

The New Underground Railway.

A VISIT TO THE NEW THAMES TUNNEL.

(Pall Mall Gazette.)

A Parliamentary committee has had under consideration a bill for the extension of the Metropolitan Underground Railway, which is at present in course of construction. In many respects it is a remarkable work, and may lead to a revolution both in the construction of subways, Thames and other, and the carriage of passengers in crowded cities. The approved line extends from the monument at London Bridge to the Elephant and Castle, and the proposed extension will carry it to the Swan at Stockwell. The tunnel has been carried right across the bed of the Thames in an incredibly short period, and at small cost, and our representative the other day was conducted through it, and had the method of working explained by the courteous engineer, Mr. G. H. Greathead, C. E.

THE FEATURES OF THE ROUTE.

One striking feature of the new Subways is their depth. They run right down underneath water and gas mains and sewers, and almost wholly keep to the line of the public thoroughfares, so that the projectors are not handicapped by heavy compensations, at one point only having payment being made. The depth under the roadways range from 40 feet to 45 feet, and under the Thames it is about 15 feet. Starting from the terminus, which will have a commanding corner position immediately above the Monument, the tunnels extend across the road, and passing down Swan Lane they enter the river bed at the Swan Pier, about fifty yards above London Bridge. There are two independent tunnels, one for the up and the other for the down traffic, and as Swan Lane is very narrow, there was no space to place them side by side without encroaching on the contiguous property. The Engineer has overcome the difficulty by running one over the other, with about five feet of earth between, and gradually the lower one is raised until they run parallel but separated by about five feet.

IN THE TUNNEL

The work is being carried on from a temporary shaft sunk at the Swan Pier, with a depth of 60 feet to the first tunnel and 75 feet to the second, and having a diameter of 13 feet. Down this shaft were severing and at the bottom we found ourselves in a long iron cylinder 10 feet in diameter. At present it is dimly lighted with gas lamps, but we could see ahead for a considerable distance, the tunnel taking a straight line. A temporary tramway for the removal of the excavated material and for carrying forward the iron plates with which the cylinder is built up, runs along the whole length of the subway. We found the path somewhat treacherous, for the passage of the greasy clay has made the boards very slippery. We arrived at the extremity, however, without mishap, and in a slightly heated atmosphere watched operation.

MAKING A HOLE AND PUTTING IRON ROUND IT.

The principle on which the tunnel is made was exactly pictured by the Irishman who, when describing the manufacture of a gun, said a hole was first made, and then iron was put round it. A hole is cut into the clay, and then piece by piece the cylinder is built up. And in this connection it may be noted that the London clay through which the subway will run its whole course is admirably adapted for the work, but at the same time sand and other loose clay can also be tunnelled with a slight change in the machinery and method. First of all a small heading is driven into the clay and supported by timbers. With pick and shovel about eighteen inches of the soil to the extent of the tunnel's circumference is next taken out and then the "shield," as it is termed, begins to work. This might be likened to the cap of a telescope, the telescope itself representing the tunnel, in which the men are at work. Steel cutters are fixed round the outer edge of the cap (to maintain the semicircle) and hydraulic pressure (500 pounds to the square inch) is brought to bear upon it from within, driving it into the clay. The hole which was thus partially made by hand labor is thus rounded off, and the "shield" has been pushed forward, in less than a quarter of an hour, eighteen inches. The cap is not wholly of the telescope however. A plate of iron fixed to the "shield" covers the space bored until another section of the tunnel is added. Thus section after section is built up as the progressive movement is effected.

THE FORMATION OF THE CYLINDER.

The circle is made up of six pieces with a key-piece at the top. They are eighteen inches wide and one inch thick, with flanges through which they are securely bolted together and weigh about 4½ cwt. each. The metal is cast iron which will not corrode. The tube fits exactly to the shape of the hole which the "shield" has cut, less the thickness of the iron plate which the cap of the telescope typifies in the description. As the shield goes forward this hollow is filled with "grout" or liquid lime which is forced through a hole in the iron plate by pneumatic pressure, and it very soon solidifies. There can thus be no risk of instability by the subsidence of the soil. In the matter of strength the engineer gave it as his opinion when the bill was before Parliament the question of weakening the foundations of London Bridge having been raised, that forty London bridges piled on the top of each other would not damage the cylinder.

THE RATE OF PROGRESS AND COST.

Something like ten feet can be driven each day, and in sixteen weeks the Thames was tunneled. The contrast with the ancient methods is amazing. The first Thames tunnel occupied about eighteen years, and though recent works have been more expeditiously completed they have been much more prodigal of time than the one under review. The cost also—can bear no comparison. £200,000 is regarded as the ultimate cost, and including stations, land, and indeed every outlay, the authorized line of 1½ miles will be completed for £300,000. Hydraulic lifts will raise and lower the passengers at the stations, of which there are to be three, the intermediate one being at St. George's Church in the borough where the car traffic for the city is emptied. If the extension beyond the Castle and Elephant is approved stations will be placed at Kennington Park, Kennington Oval and the terminus at Stockwell. This would add 1½ miles to the

line, which would mean an additional outlay of £250,000, or £550,000 in all for 3½ miles.

THE METHOD OF WORKING THE LINE.

All the details of working the line are not complete, but trains of three or four carriages somewhat after the style of a train or Pullman car will be run, the motive power being the endless cable. The cars will be more roomy than omnibuses, or even ordinary railway carriages. A driver and conductor will be in charge of each train, which will carry about one hundred passengers. The carriages will be about six inches from the top of the tunnel, and about one foot six inches, measured from the centre, at the sides. They will start every two or three minutes, and the distance over the first section will be covered in six or seven minutes. The speed will be about double that of road conveyances. The machinery for working will be placed at the Elephant and Castle. With respect to ventilation, the engineer anticipates no difficulty. There will be no foul smoke from engines, as in the case of the Underground, and, as the trains in each tunnel will always be running in one direction, they will create a current of air.

WILL IT PAY?

The promoters of the line, of course, believe it will pay. They are going in for cheap fares and fast conveyance, and with the enormous traffic to and from the City they have no fear of the result. A penny will be the fare on the first section, to the Elephant and Castle, and another penny will carry to Stockwell. When the full distance is covered the company will have over three miles, and they will require one and a half million passengers per mile per annum to pay all working expenses and 5 per cent. on the capital. As the Metropolitan Railway, including its country lines, carries three and a quarter millions per mile, there should be no difficulty in securing the numbers stated.

Jas. Paton & Co.

offer the following Goods at Very Low Prices during APRIL:—

- Carpets, Oilcloths, Room Papers, Sheetings, Pillow Cottons, Tickings, Gray Cottons, White Cottons, Print Cottons, Table Linens, Towels, Scotch Tweeds, Worsteds, Gents' Furnishings, Christy's London Hats,

and a few pair of Gilray's Patent Lace CURTAIN STRETCHERS. Ladies should see these.

Jas. Paton & Co.,

MARKET SQUARE. Ch'town, April 5, 1887—dy wky

Horses, Carriages, Sleighs, Robes, Harness, &c. &c.

AT Auction, at Rooms, FRIDAY, 15th April, inst., at 2 o'clock, p. m.:

- 4 First-class Horses, 3 Top Buggies, 2 Single Waggons, 1 Double Phaeton, 3 Single and 1 Double Sleighs, 5 Sleigh Robes, 5 Carriage Wraps, 5 Sets Single and 1 set Double Harness, 1 Water Cart, 1 Carriage Pole and a lot of Stable Utensils (a first-class lot) and under, each; over \$5, four months credit, six months on sleighs and robes. Approved joint notes will be required. A. H. B. MACGOWAN, Auctioneer.

April 5, 1887—21.9 11 wky 21

Freehold Farms FOR SALE.

THE Subscriber offers for sale the whole of his property, situated between Norwood and Union Roads, in the Borough of Charlottetown, three miles from the City, containing Two Hundred Acres of Land, known as BEECH HILL FARM, and formerly owned by Hon. J. C. Pope. This Farm is well watered, having a clear stream running through it, which makes it very desirable for pasture. There is also a new and comfortable Dwelling House on the premises, besides stabling for fifty head of horned cattle and four horses, and also houses sufficient to contain all the grain and hay that can possibly grow on the whole property. There are over forty acres of land plowed on the premises, and mostly cross-plowed, manure being ploughed in it. There is also in the barn yard sufficient stable manure to cover fifteen acres. All this preparation now ready for present crop. Immediate possession given, if required.

—ALSO—

That other Farm, known as STONE PARK FARM, formerly occupied by late Hon. George Coles, containing Two Hundred Acres of Land, and is situated less than two miles from the City. A large portion of it joins the Government Model Farm. There are on it for present crop: Forty-eight acres plowed, cross-plowed and manured, and in the barn-yard sufficient manure to cover sixteen acres, available for present crop. On this Farm there is sufficient stable room for fifty head of horned cattle and ten horses, also a large barn, granary and other buildings, sufficient to hold all the grain and hay grown on the Farm. Immediate possession given, if required.

OWEN CONNOLLY, Ch'town, April 5, 1887.—2aw wky 1 mo

Carpets, Oilcloths, AND HOUSE-FURNISHINGS.

WE offer the Largest Assortment in the City in these goods, and at prices very low during March.

28 BALES ROOM PAPER NOW READY.

See our Sample Books before buying elsewhere.

- Sheetings, Table Linens, White Cottons, Pillow Cottons, Towels, Prints, Tickings, Gray Cottons, Gingham, SEERSUCKERS.

A very large assortment of LADIES' CORSETS, at extremely low prices.

JAMES PATON & CO., MARKET SQUARE.

Ch'town, March 12, 1887.—dy wky

LONDON HOUSE.

House-keeping Goods, New White and Gray Cotton, New Printed Cottons, Bleached Sheetings, Unbleached Sheetings, Pillow Cottons, Table Linens, Towels, Toweling.

THESE goods have just been opened for Spring Sale, and having been bought before the recent advance in Cottons, will be found extra value.

CARPETS! CARPETS!

Brussels, Tapestries, Hems, Floor Cloths, Matting, Hearth Rugs, Door Mats, Lace Curtains.

Tailoring Department.

A lot of Spring Tweeds just opened.

HARRIS & STEWART, SUCCESSORS TO GEO. DAVIES & CO.

Ch'town, March 7, 1887.—wky

NOTICE.

Intending to move back to my own store first of April, I will sell the remaining stock on hand at a sacrifice. J. B. McDONALD.

Ch'town, March 21, 1887.—dy & wky

BRITISH WAREHOUSE

83

QUEEN STREET.

EXTENSIVE CASH SALE!

I have decided to close out the whole of my stock of Staple and Fancy Dry Goods, commencing December 15th, 1886, and continuing until the whole is disposed of, at LARGE DISCOUNTS FOR CASH.

A. L. BROWN.

Ch'town, Dec. 14—wky