

appointed President of the Company, and Hugh Scobie, Esquire, Vice President. The position of the Company is very satisfactory; and it appeared from the proceedings that the operations are such as to ensure an early opening of the road over a portion of the line, as far as Lake Simcoe; and the full extension of it, for traffic to Lake Huron, soon thereafter. The meeting was satisfied with these favourable prospects; and we congratulate the Company on its truly prosperous condition, which must be very gratifying to all concerned, in the success of the undertaking. The beneficial influences of the work are already felt in the country through which the line passes; and will be infinitely more so when the "Iron Horse" commences to make its regular run, day by day, between broad Ontario and Huron. There is but a very short time to elapse until this great benefit to the inhabitants of the intermediate places, and both extremities, is realized.—*Colonist*.

Canadian Canals.

The total movement on the canals for 1851, and three years previous, is as follows:—

	WELLAND CANAL.		1850.	1851.
	1848.	1849.		
Tons	307,611	351,596	399,600	691,627
Passengers	2,487	1,610	1,930	4,753
Tonnage of Vessels	372,851	468,410	588,100	772,623
	ST. LAWRENCE CANAL.		1850.	1851.
	1848.	1849.		
Tons	161,627	213,153	288,103	450,400
Passengers	2,071	26,997	35,932	33,407
Tonnage of Vessels	5,618	5,118	6,169	6,931
	CHAMBLY CANAL.		1850.	1851.
	1848.	1849.		
Tons	17,835	77,216	109,010	120,720
Passengers	470	8,430	278	1,860
Tonnage of Vessels	659	1,261	2,878	1,727
The receipts of 1851 were				£76,216
Expenses				12,285
Of the gross tolls, the Welland produced				48,211
The St. Lawrence				21,276

Agricultural Products of the United States, for the year 1850:

Wheat	-	-	-	bushels	100,493,874
Indian Corn	-	-	-	do.	592,286,224
Tobacco	-	-	-	pounds	199,752,646
Cotton	-	-	-	bales	2,468,625
Wool	-	-	-	pounds	52,529,450
Wine	-	-	-	gallons	221,219
Butter	-	-	-	pounds	312,990,730
Hay	-	-	-	tons	12,739,323
Maple Sugar	-	-	-	pounds	33,880,617

FOREIGN.

Death of the Countess of Lovelace.

The Countess of Lovelace, the sole daughter of Lord Byron, died on Saturday, (Dec. 4.) Such is the brief announcement of the death of a lady whose rare endowments were worthy of her illustrious parentage, and who appears to have inherited, with much of the genius, much also of the moral daring which combined with it, to make him, as he proudly asserted, "not altogether of such clay" as that race of fellow men for whom he professed such unhappy contempt. Lady Lovelace, beside being one of the many to whom the authorship of that 'rock of offence' the Vestiges of Creation has been at one time attributed, a proof at least that her attainments in the subjects it treats of were of a high order, was the avowed author of works, of a character seldom to be found proceeding from a female pen, and particularly of a masterly translation of Chevalier Menabrea's 'Memoir of the Analytical Engine invented by Charles Babbage, Esq., (*Scientific Memoirs, vol. III.*) which she accompanied by elaborate and learned notes, considerably longer than the memoir itself, involving not only the applications of very high mathematics, but a thorough mastery in principle of one of the most difficult and complicated inventions of the human mind. This engine must not be confused by our readers with what is commonly called Babbage's calculating machine, it is one of a much higher order. The latter, or difference engine, in the words of the gifted lady we have now to deplore, could only tabulate *accurately* and to an *unlimited extent* all series whose general term is comprised in the formula,

$$u_x = a + bx + cx^2 + dx^3 + ex^4 + fx^5 + gx^6$$

and was chiefly designed for the calculation of nautical and astronomical tables; the former, or Analytical Engine, would be capable, if comple-

ted, of developing and tabulating any fraction whatever, being, so to speak, the embodiment of the *science of operations*. "Those," she writes "who view mathematical science not merely as a vast body of abstract and immutable truths, whose intrinsic beauty, symmetry and logical completeness, when regarded in their connection together as a whole, entitle them to a prominent place in the interest of all profound and logical minds, but as possessing a yet deeper interest for the human race, when it is remembered that this science constitutes the language through which alone we can adequately express the great facts of the natural world, and those increasing changes of mutual relationship which, visibly or invisibly, consciously or unconsciously to our immediate physical perceptions, are interminably going on in the agencies of the creation we live amidst; those who think on mathematical truth as the instrument through which the weak mind of man can most effectually read his Creator's works, will regard with especial interest all that can tend to facilitate the translation of its principles into explicit practical forms." In this high spirit did the translator undertake her laborious task. That talents so great and masculine, in union with purposes so noble, should sometimes come out of the retirement, often ignorantly associated, by the detractors of hereditary nobility, with no other idea than that of frivolous amusement or vapid idleness, is a thing we rejoice too much to see, to lose this occasion of paying it a passing tribute.

The Iron Trade.

The recent rise in the price of iron, and the discussion which it has caused respecting the stock of Scotch pig-iron have induced us to make some particular inquiries into the state of this trade, of which we subjoin the results. At the commencement of the present year 114 furnaces were in blast in Scotland. The price of a ton brands was 36s. per ton; but the market became more depressed and prices receded to 35s. 6d. in February; for prompt cash in exchange for store warrants l. o. b. in Glasgow. A few furnaces were soon after blown out; but large purchases having been made on speculation, at 36s. to 37s. per ton, and some English consumers having entered on large contracts, confidence was restored in the article, and with that came a demand for increased wages from the miners and iron workers, followed by improved sales of malleable iron, which, altogether, tended to advance the price of pig-iron, and secure the average quotations of subsequent months, which we subjoin. A large speculative business has been done for some time past, but upon a stronger basis than the speculations of 1845 and 1850. We are aware that at the periods in question numerous transactions occurred in pig-iron, which was not made, and was represented by the makers' engagement to deliver on demand. The present purchases are made on store-keeper's warrants, and we know that the article paid for is in existence. Since the month of February to the present time the receipts in the store-keepers' yards here have not been less than 1,000 tons daily. The production in Scotland is greatly disputed by different parties; because on that depends the question whether stocks are accumulating. Changes have been made in the construction of furnaces, and in the process of smelting during recent years, which, although not universally adopted at once in all the works, have gradually increased the aggregate make from the same number of furnaces; and the average per furnace may now be assumed at 135 to 140 tons per week. One high authority on these matters states the difference in production at from 100 tons to 180, and even 200 tons weekly per furnace. We do not think that 200 tons have been reached in many instances, or even 180; but still we think that 135 tons are probably the average production. The Scotch consumption was calculated in 1851 at 250,000 tons in all descriptions of works. The malleable works have increased their products, and the number of foundries has also increased; but, we believe, that since the recent rise in iron, as foundry goods have not gone up in an equal proportion, the supply for them has rather been contracted. The Scotch consumption during the first ten months of the present year has been estimated at 220,000 tons. A decrease of shipments during the same period of 23,000 tons has also occurred. In November the latter trade has obviously and rapidly revived; while a larger than the usual quantity now waits freight. If the present prices be permanent the production will be increased; but that cannot be done rapidly, for a number of furnaces are always out of blast. An increase of the Ayrshire furnaces is expected, but not during the currency of the present year.

The number of furnaces built at the 1st January last was	
143, and building 1	144
Of which, at that date, were in blast	114
Ditto at 1st July last	104
Ditto now	112

The annual production of 112 furnaces at an average of 130 tons