

COMMUNICATION

FROM THE

SECRETARY OF THE TREASURY,

TRANSMITTING,

IN COMPLIANCE WITH A RESOLUTION OF THE SENATE OF MARCH 8, 1851,

THE

REPORT OF ISRAEL D. ANDREWS,

CONSUL OF THE UNITED STATES FOR CANADA AND NEW BRUNSWICK,

ON THE

TRADE AND COMMERCE

OF THE

BRITISH NORTH AMERICAN COLONIES,

AND UPON THE

TRADE OF THE GREAT LAKES AND RIVERS;

ALSO,

NOTICES OF THE INTERNAL IMPROVEMENTS IN EACH STATE, OF THE GULF OF MEXICO AND STRAITS OF FLORIDA, AND A PAPER ON THE COTTON CROP OF THE UNITED STATES.

WASHINGTON :

BEVERLEY TUCKER, SENATE PRINTER.

1854.

COMMUNICATION
FROM THE
SECRETARY OF THE TREASURY.

IN THE SENATE OF THE UNITED STATES.

AUGUST 26, 1852.—Ordered to lie on the table, and be printed.

AUGUST 30, 1852.—Ordered, that 5,000 copies additional for the Senate, 1,000 additional for the Secretary of the Treasury, and 500 additional for Israel D. Andrews, be printed.

AUGUST 4, 1854.—*Resolved*, That there be printed, for the use of the Senate, five thousand additional copies of the Report of Israel D. Andrews, Senate Ex. Doc. No. 112, First Session Thirty-second Congress.

TREASURY DEPARTMENT, *August 25, 1852.*

SIR: The resolution of the Senate of the 8th March, 1851, requests the Secretary of the Treasury to “communicate to the Senate, as early as possible at the next session, full and complete statements of the trade and commerce of the British North American colonies with the United States and other parts of the world, inland and by sea, for the years 1850 and 1851, with such information as he can procure of the trade of the great lakes.” In compliance therewith, I have the honor to transmit a report, by Israel D. Andrews, accompanied by numerous statistical tables, carefully compiled from official sources, with maps prepared for, and illustrative of, said report.

I am, respectfully,

THO. CORWIN,
Secretary of the Treasury.

Hon. WM. R. KING,
President pro tempore U. S. Senate.

NOTE.

In the progress of the preparation of the report, it was found necessary to change Part III to an appendix, which contains notices of the trade and commerce of Cincinnati, Louisville, St. Louis, Pittsburg, New Orleans, the steam-marine of the interior, of the inland water-routes, the increase and value of the foreign and domestic trade, navigation, &c., &c. ; as also tables showing the exports and imports of the principal Atlantic States for a series of years, and statements of the increase in the tonnage of the several States from 1836, with the per cent. increase of the total tonnage, and that of the several States.

It was conceived very desirable to publish a particular account of the inland, coasting, and foreign trade of the principal Atlantic cities, and a portion of the materials were collected for that purpose ; but, for the want of correct statistical data, it was found to be impossible to have them of a character suited to this report.

It is proper to state in this place my thanks to Mr. N. Davidson, late of the Buffalo Advertiser, for his very valuable and intelligent services in the preparation of the report, particularly in those portions relating to the trade of the lakes and the importance and value of the internal trade.

The importance of the Mississippi trade, through the Gulf of Mexico, to every portion of the Union, it is presumed, will be regarded by all as a full justification for the copious notices, in the appendix, of the Gulf of Mexico and the Straits of Florida ; and the value of the cotton crop to the whole country called for the extended and complete exposition in regard to it there inserted. Similar reasons—and to exonerate the report from the imputation of being sectional—demanded the notices of the commerce, railroads, &c., of the southern States and southern cities. It is believed no one will object that they were not within the strict literal terms of the resolution under which the report was prepared. The annexed map of the Gulf of Mexico and Straits of Florida, and Isthmus of Tehuantepec, furnished, as before stated, by the Coast Survey, is the first one of the kind ever published from authentic sources. It will be found interesting in illustration of the views taken in the paper contained in this report respecting this American sea, and generally with reference to other considerations. The labors of the Coast Survey are progressing in that quarter, and ere long their results will be published. This map is but an index of what they will be. Thorough and exact as the severest labor and the highest order of scientific skill can render them, their usefulness to our commerce will be unappreciable, and their benefits will extend through ages.

I. D. A.

WASHINGTON, 1852.

SCHEDULE OF DOCUMENTS.

- General Introductory*; comprising a review of the trade of the great lakes, internal commerce, and also of the trade and commerce of the North American Colonies.
- I. *The Sea-fisheries of British North America* on the Bay of Fundy, along the coasts of Nova Scotia, on the Grand Bank of Newfoundland, and within the Gulf of St. Lawrence.
 - II. *The Trade of the Great Lakes*; accompanied by returns exhibiting the rise and progress of that trade, and its present condition and value, with a particular description of each of the lakes, in relation to its extent, resources, tributaries, outlets, and prospective commerce.
 - III. See Appendix.
 - IV. *Review of the Canals and Railroads of the United States*, showing their influence upon, and connexion with, the trade of the Great West; accompanied by a general map of railroads and canals, American and Colonial.
 - V. *The Province of Canada*, with a general description of its physical features and resources, intercolonial trade, foreign commerce, transit trade, internal traffic, and public works; accompanied and illustrated by a map of the Basin of the St. Lawrence, prepared specially for this report.
 - VI. *The Province of New Brunswick*, with descriptions of its physical characteristics, rivers, seaports, and harbors, its forests and its fisheries, with statistical returns and observations on the free navigation of the river of St. John.
 - VII. *The Province of Nova Scotia*, with a description of its geographical position, its most striking features and various resources; as also returns in relation to its trade, commerce, fisheries and coal mines; as also special notices of Cape Breton and Sable Island.
 - VIII. *The Island Colony of Newfoundland*, with a description of its position between the Atlantic ocean and Gulf of St. Lawrence, its physical features and abundant fisheries, accompanied by returns of its trade and commerce; as also descriptions of the Labrador coast, and of the harbor of St. John, in connexion with the proposed establishment of a line of steamships from that port to Ireland, and connected by electric telegraph from thence to the United States.
 - IX. *The Colony of Prince Edward Island*; its agricultural capabilities, trade, commerce, and position, in relation to the fisheries of the Gulf of St. Lawrence.
 - X. *The Intercourse between Great Britain and her North American Colonies*; accompanied by tabular statements and returns.
 - XI. *The Trade of some of the Atlantic ports of the United States with the North American Colonies by sea*; illustrated by tables and returns, accompanied by a map of the Lower Colonies; prepared expressly for this report.
 - XII. *Review of the present state of the Deep-sea Fisheries of New England*; prepared specially for this report by Wm. A. Wellman, assistant collector of the port of Boston, under the direction of P. Greeley, esq., collector of that port, with valuable statistical statements and tabular returns.

XIII. *The French Fisheries of Newfoundland*, translated from official French documents, obtained in Paris purposely for this report.

APPENDIX :

Containing notices of the internal and domestic commerce—Tendency of Ohio commerce, Cincinnati, Pittsburg, Louisville, St. Louis—Steam-marine of the interior, New Orleans, Mobile, Gulf of Mexico, and Straits of Florida—Cotton crop of the United States—Commerce of the Atlantic States and cities, and tables of the tonnage of each State during a series of years.

INTRODUCTORY.

WASHINGTON, *August 19, 1852.*

SIR: The undersigned was personally honored with your instructions on the 28th July, 1851, to report on the following resolution of the Senate of the United States:

“That the Secretary of the Treasury be requested to communicate to the Senate, as early as possible, at the next session, full and complete statements of the trade and commerce of the British North American colonies with the United States, and other parts of the world, on land and by sea, in the years 1850 and 1851, with such information as he can procure of the trade of the great lakes.”

You directed his attention to the general importance of all the subjects embraced in the resolution, their intimate relation to many branches of national interest, and the necessity of having such report submitted to you in the most correct form, and as full and detailed, as the shortness of time would permit.

You were pleased, also, at a subsequent period, to direct the attention of the undersigned to that part of the resolution relating to the commercial interests of the great lakes, and to desire that it should receive prompt and careful attention; and that all the information obtained should be presented in tabular statements.

The undersigned was likewise informed by you, that if any subjects not specified in his instructions, of national or great local interest, germane to the spirit of the resolution of the Senate, should fall under his notice, it would not be inappropriate to submit the same for the consideration of the government.

These instructions, and the great interest now generally manifested as to the colonial and lake trade of the United States, have induced the undersigned to give careful attention to each distinctive feature of the various important subjects involved in your instructions and the resolution of the Senate.

The undersigned is fully aware that it is his duty (as it most certainly is his wish) to notice the questions under consideration in the briefest manner consistent with their proper elucidation. In justification of any notice that may be considered too much extended, it must be remembered that the weighty matters involved are not confined to any particular locality; that they affect not only the British colonies, but various and important domestic interests of the United States; that they are interwoven with all the elements of our national strength; that they bear, in an especial manner, upon the navigation and the foreign and coasting trade of this country, upon its various manufactures, and upon its commerce with *distant nations*.

In directing your attention to the first part of this report, the most important, so far as home interests are concerned, it is proper to remark, that although the statements as to the internal trade of the United States are fuller than any before presented to the government in this form, and such as could only be obtained by great labor and expense, they may be relied upon as being generally correct. They have been collected from various sources, official and unofficial; and it is due to the public to state, that it is principally owing to the different modes of conducting the inland trade of the country, that statistical returns of an official character are not made as to much of that trade.

The returns from several of the custom-house districts on the lakes are very creditable to the collectors by whom they were prepared; while the returns from others were in many respects incorrect and incomplete, causing loss of time and great trouble in rectifying and perfecting them.

The necessity for a well organized system, in order to obtain "a correct account" of the lake trade, must be obvious. The want of a law to enforce even the present imperfect system, the great increase of business, and its diversified character in nearly all the districts, and the limited clerical force allowed in some of them, are all causes of difficulty in obtaining and arranging in a creditable and satisfactory manner, full, accurate, and entirely intelligible statistics of the lake trade, and of the general internal commerce of the country.

It is proper also to state that the embarrassments now existing, will increase in a corresponding degree with the certain and almost incalculable annual increase of this trade and commerce.

This ill-arranged and imperfect system of managing the lake trade and internal commerce of the country is presented to the notice of the government, and offered as an apology why the report on this trade and commerce is not more worthy the high importance of the interests involved. If national considerations should induce a desire on the part of the government to possess other reports on the internal trade of the country, it will be necessary to provide for a more perfect system of statistical returns and to carry it out by legal requirements.

It is not intended to suggest that any novel coercive laws should be adopted, interfering with the free and unrestricted exchange of goods and productions of all kinds between different sections of the country. Free commerce, especially internal commerce, unfettered by restraints originating in sectional or local partialities, or prompted by like selfish interests, is no boon from any government to the people; it is unquestionably their natural right. There can be no doubt that a system might be easily devised, under the authority of the Treasury Department, which would meet every requirement and promote the interests of this trade.

In the style, character, and completeness of our statistical reports, we are far behind other countries, and no authority but that of Congress can supply this deficiency.

The public eye has ever been steadily fixed on the foreign commerce of the country as the right arm of national strength. This commerce has increased so rapidly, and the trade as well as the tariffs

have been so greatly changed, that new arrangements of the old returns are demanded to enable the departmental condensations to be perfect and readily intelligible. The reports on commerce and navigation now give the total tonnage of the United States, but do not state the character or class of vessels composing the mercantile marine of a country scarcely second to any in the world. It is also necessary that more complete statements of the trade and commerce of the great cities of the Atlantic seaboard and on the Gulf should be laid before Congress annually, and these improvements in their arrangement could be made, and they might be fuller in detail than those hitherto submitted, with comprehensive statistical accounts of the coasting trade and navigation, and distinguishing between steamers and other vessels.

It is proper to remark that the present arrangement of returns of the internal and coasting trade is mostly governed by the law of 1799, when the trade was in its infancy, and commerce received rather than created law.

In the discussions which have taken place in Congress of late years, in relation to great public questions, such as the public lands, or the improvement of rivers and harbors, the most meagre statistical statements have been adduced in many cases, and loose hypotheses assumed in others. This is attributable to the absence of authentic official returns, and is conceived to be a justification for presuming to bring this subject to the attention of Congress in this report.

In the absence of statistical statements, published by national authority, the value of works containing statistical returns upon which reliance can be placed is greatly enhanced; and this opportunity is embraced of commending, as one source of valuable information in making this report, the publications called "Hunt's Merchants' Magazine," "De Bow's Review," the "Bankers' Magazine," and the "American Railroad Journal," as the most valuable in this country.

The undersigned is fully aware of its having been asserted by those who have limited means of forming a correct opinion, that the value of the lake trade has been everywhere overstated. It is true that in some cases approximations, from the want of official data, are, of necessity, resorted to; but that is not the fault of those who have the matter in charge.

The basin of the great lakes, and of the river St. Lawrence, is fully delineated on the map attached to the report on Canada. Its physical features, and the influence it must exercise on future moral developments, are without parallel and historical precedent. It is an American treasure; its value to be estimated less by what it has already accomplished, than by what it must achieve in its progress.

The attention of the civilized world has been directed with great interest to the constant and progressive emigration from the Old World to the New. In former times, hordes of men changed their country by means of long and toilsome journeys by land; but never until the present age have multitudes, and, in some instances, communities, been transferred from continent to continent, and from one hemisphere to the other, by such means as are now afforded in the New York packets, clipper ships, and ocean steamers. These vehicles but represent the

genius of an era destined in future times to be designated as the "*age of enterprise and progress.*"

That portion of the "Great West" at the western extreme of the basin of the St. Lawrence has received a larger share than any other portion of our country of the valuable addition to our national riches arising from the industry, intelligence, and wealth, of the hundreds of thousands of foreigners who, within a comparatively brief period, have landed upon our shores. It is, therefore, impossible to estimate the enormous and continuous accumulation of wealth, having its basis on the ample resources and natural riches of that great western region, over which the star of American empire seems now to rest.

In connexion with an unequalled increase of population in the Great West, the growth of the lake trade has been so extraordinary and so rapid, that but few persons are cognizant of its present extent and value.

In 1841 the gross amount of the lake trade was sixty-five millions of dollars. In 1846 it had increased to one hundred and twenty-five millions. In 1848, according to the estimate of Colonel Abert, of the topographical engineers, the value of the commerce of the lakes was one hundred and eighty-six millions. Owing to various causes, but particularly to the great influx of foreigners, and the opening of new and extensive lines of intercommunication, it has recently increased still more largely, until, in 1851, it amounted to more than three hundred millions. And these estimates do not include the value of the property constantly changing hands, nor has any notice been taken of the cost of vessels, or the profits of the passenger trade.

It is not within the scope of this report, nor is it practicable therein, to attempt a *full* exposition of the trade and commerce of the Mississippi, the Missouri, or the Ohio, flowing through that great valley, unsurpassed in all the elements of wealth by any region in this or the Old World. This trade and commerce is worthy of the particular and earnest attention of American statesmen. And it is here proper to state, that one great cause of the growth of the lake trade is the fact that a cheap and expeditious route from the Atlantic to the Great West is afforded by the internal communications, by railroads and canals, opening the way through the great lakes and through the Alleghanies, instead of being restricted to the rivers flowing southward.

The following facts in relation to the trade of the Erie canal are presented as confirming the above, and justifying farther and full official investigation as to the entire internal trade of the West :*

In 1835 there left the lakes by the Erie canal for tide-water, 30,823 tons of wheat and flour. In 1851 there left the same points, on the same canal, 401,187 tons of similar articles.

In 1851 the total amount of wheat and flour which reached tide-

* The facts hereinafter stated with respect to the trade and commerce of the Mississippi and its tributaries, and of the States and cities on their shores, and on the Gulf of Mexico, and connected with them, are important not only in regard to that specific trade and commerce, but for their relation to that of the lakes, and, inland, by canal and railroad to the Atlantic seaboard. It has been found in some degree necessary to refer to the former in full elucidation of the latter. The great interests of the southwestern and southern States demand, however, a fuller and more perfect notice than the resolution calling for this report, and limiting it to other sections, will allow to be now made.

water by the New York canals, was 457,624 tons; showing that while between the lakes and tide-water the State of New York furnished 97,729 tons, or over 75 per cent. of the whole quantity delivered, in 1851 it only furnished 56,437 tons, or about 11 per cent. of the whole quantity, the remaining 89 per cent. having been received from the West, and from the territory of Canada on the lakes.

The total tonnage ascending and descending on all the New York canals in 1836 was 1,310,807 tons, valued at \$67,634,343, and paying tolls amounting to \$1,614,342; while in 1851 it amounted to 3,582,733 tons, valued, ascending and descending, at \$159,981,801, paying tolls amounting to \$3,329,727.

The traffic on the Erie canal, and the principal routes from the interior to the Atlantic, has such an important relation with the whole trade of the nation, that it was conceived that this part of the report would be incomplete without a proper reference to the trade of such routes; which will be found attached to part IV, with a reference to the commerce of some of the principal Atlantic and interior ports and comparative statements.

The great lakes are not a straight line of water, but present a zigzag course. Their surplus waters all find their way to the ocean by one great outlet, the noble St. Lawrence. Notwithstanding the opinions that may be entertained adverse to that mighty river as a channel of communication between the West and the Atlantic, it is nevertheless certain to be more used, and to increase in importance, in proportion to every material stride in the prosperity and advancement of the country bordering on the lakes.

Stretching down into New York, as if for the especial accommodation of a comparatively southern region, is Lake Erie; while extending far into the regions of the northwest, to meet the requirements of that region, Lake Superior spreads his ample waters. An examination of the map prepared by Mr. Keefer, and attached to this report, under the head of Canada, will prove that nature has provided the great lakes for all the different and distant portions of this continent, and that the St. Lawrence is their natural outlet to the sea.

There are those who maintain that the improvement of the navigation of the St. Lawrence, and the widening and deepening of the Welland and St. Lawrence canals, so as to allow vessels of a larger class than at present ingress and egress, with their cargoes to the ocean, and the extension by the British government, to the United States, of the free use of both, would cause a commercial city to grow up on the banks of that river which would successfully rival New York in European trade; but important as the results doubtless would be to the interests of the Canadas, and especially of Lower Canada, and greatly as those interests would be promoted by such measures, there is little cause for believing that such anticipations of injury to New York or to any of our Atlantic cities would be realized. Their trade would not be decreased, whilst that flowing down the new outlet would be increased. New resources would be created by the new stimulants thus given.

Although the subject of harbors has been referred to in the report which follows the lake trade, yet its great importance demands some

farther notice. While the commercial connexion between the East and the West by canals, steamboats, and railroads, is increasing with such rapidity under the combined influence of enterprise and necessity, it is quite evident that provision must soon be made for adequate harbor accommodation on the lakes, to meet the necessities of their commerce, already rivalling that on the Atlantic.

It is a remarkable fact that there are but few natural harbors on the lakes, the shores differing in that respect from the seacoasts of the United States, and of the northern colonies, which are amply provided with the finest harbors.

While the commerce of Chicago, Buffalo, Oswego, and other lake ports, is of more value than the commerce of any of the ports on the Atlantic, except New Orleans, Boston, and New York, the harbors of the lake ports, even whilst their commerce is yet in its infancy, are wholly inadequate to the number of vessels already on the lakes. The numerous disasters in consequence of the insecurity of these harbors, call loudly for the improvement of such havens as can be made secure and convenient by artificial means.

The commercial and navigating interests in that section have from the outset been sensible of the drawbacks arising from the absence of security to life and property, and have unceasingly presented their claims for the artificial improvement of their harbors to the consideration of the State and Federal governments.

At a public meeting held at Milwaukie, in 1837, with reference to the improvement of harbors, it was "*Resolved*, That we will not desist from memorializing and petitioning Congress, and presenting our just rights and claims, until we have finally accomplished our object." The spirit of this resolution, it cannot be doubted, is the prevailing sentiment throughout the entire West, connected by its trade with the lakes.

It is not presumed, in any part of this report, to argue the question of the constitutionality of such improvements by the federal government; but it is unquestionably due to that great interest, and to the preservation of life and property, to state that a great and pressing necessity exists for the construction of harbors on the lakes by some authority, State or Federal and by some means; and whether these should be public or private, enlightened statesmen must decide. The work should be done. If the government of the United States, sustained by the patriotic affection of the people, is restrained by the constitutional compact from doing things undeniably needed for the promotion of important national interests and the security of its citizens and their property, some other means of relief should be devised. If it does possess adequate constitutional power, it should be exercised.

The past action on this subject has paralyzed, rather than aided, many improvements. Harbors and havens, the construction of which was commenced by government, have not been completed, and are in a state of dilapidation; and while the public have waited for farther aid, many valuable lives and great amounts of property have been lost. It is extremely doubtful (even if there were sufficient local wealth, and if we could allow the expectation of that unity of action in the vicinity of the lake coast necessary to secure the construction of any one of the many harbors and havens their lake commerce now so

absolutely requires) whether they could be completed without Federal aid.

The undersigned begs leave to call the attention of the honorable Secretary of the Treasury to the necessity of having marine hospitals in the large commercial ports upon the lakes. The casualties of that navigation are little different from those of the sea; and while the "fresh-water sailor" contributes, from his monthly wages, to the same "hospital money," as he who "goes down upon the great deep," equal justice demands equal expenditure for the benefit of both.

It is not enough to say that these hospitals would be beneficial; they are imperatively demanded by the mariners and the ship-owners of these "inland seas." There is every year much suffering, especially at the large towns of Buffalo, Oswego, Cleveland, Sandusky, Toledo, Detroit, Chicago, and Milwaukie, all of which have a large steam and sailing marine, and are rapidly taking rank among our leading commercial cities. At these ports a large number of sailing vessels and steamers pass the winter; the number of sailors needing relief from suffering is thus increased. Some of these sailors are now often let out on hire, by the collectors of customs, to those wanting labor. No censure is intended of those officers; such course is forced upon them by the necessities of the case, but such a state of things ought not to continue. That these seamen could be comfortably provided for at a trifling cost to the government, by the expenditure of no more than the monthly contributions received from those engaged in the lake trade, if proper hospitals were erected, cannot be doubted.

One link in the chain of communication through the great lakes is yet to be supplied. This will be effected by the construction of a ship canal around the Falls of St. Mary, which will open to the lower lakes a navigation of fully a thousand miles. Our shipping will have an uninterrupted sweep over waters, which drain more than three hundred thousand square miles of a region abounding in mineral and agricultural resources. They may be water-borne nearly half way across the continent. The inexhaustible elements of wealth on the shores of Lake Superior will then become available. These, as yet, have hardly been touched, much less appreciated. Its fisheries are exhaustless. Nature has developed its mineral treasures upon a scale as grand as its waters. Its copper mines, the most extensive and productive in the world, furnishing single masses of the unparalleled weight of sixty tons, supply half of our consumption, from localities where, ten years since, the existence of a single vein was unknown. The iron mines near the shores of this lake surpass those of Sweden or Russia in extent, and equal them in the excellence of their materiel. It is predicted by acute metallurgists that its silver mines, though as yet undeveloped, will one day vie with those of Mexico.

While we behold with wonder the munificence of the gifts which Providence has showered upon this extensive region, thousands of miles in the interior from the ocean, we may also look forward with hopeful pride to achievements in art, and to commercial enterprise, commensurate in grandeur to those gifts, for their distribution throughout our country and the world. Reflection upon these bounteous gifts leads us to the conception of the means necessary to be adopted for their ade-

quate use and enjoyment. When the Caughnawaga canal shall have been finished by the Canadian government, uniting the St. Lawrence and Lake Champlain by a ship canal, thus completing the judicious and successful improvements on the St. Lawrence, so creditable to the enterprise and national views of that government; and when a ship canal shall be constructed from Champlain, by way of Whitehall, to the Hudson river—and commercial necessities will not be satisfied with less—when the waters of Superior thus flow into the Hudson, and the shipping of New York can touch upon the plain in which, with their branches interlocking, the Mississippi and the St. Lawrence both have their origin, it will be a stride equivalent to centuries for the nation. A boundless field of commerce, and a vast expansion of transportation, will thereby be opened, and a development of wealth, such as the world has never witnessed, afforded.

The commercial results anticipated will not alone belong to those whose labor and enterprise may primarily effect them. Commerce, external and internal, by steamships on the oceans or on the lakes, by railroads over, or canals through, the land, is the advance guard of civilization. Whenever true commerce receives any new impulse, its beneficial effects accrue not only to the country from which it springs, but to the world. Its advancement is therefore one of the highest duties not only of enlightened statesmanship, but of philanthropy.

Although this report may have been elaborated more than might seem to have been designed by the resolutions or instructions under which it has been prepared, it is believed that no apology is necessary for thus devoting a few pages to the evidences of the rising wealth of this broad empire. So complete is the dependence of one section of the country upon another—so varied are the productions furnished in the different degrees of latitude embraced within the present bounds of the confederacy, and yet so admirably are the channels for transportation supplied by nature and art, that the prosperity of each section overflows into the other. This diffusion of prosperity, produced by community of interests and sympathies, freedom of trade and mutual dependence, is a sure pledge that our political union can never be broken.

The undersigned is not without hope that the facts presented in this report may tend to promote the struggling railroad interests of the West. That section needs capital, and greater facilities for transportation; the former creating the latter. The magnificent systems of railroads in course of construction, or projected, for the transportation of various productions from the country bordering on the Mississippi, so far south as St. Louis, must become important channels of trade. The political and moral benefit of railroads as bands of union and harmony between the different sections of this broad empire, can only be measured by our posterity.

The securities issued the United States and on account of many of the railroads projected and in process of construction in the West, are seeking a market among the capitalists throughout the world. Ignorance of the resources of the country which will support the roads, and of the progress of the regions through which they pass, causes the depression of these stocks far below their value. The large amount of

money required to complete the works already contemplated, makes it a matter of high importance, which has not been lost sight of in this report, that such information should be given to the financial world as may remove some of the obstacles encountered by the great interests of the West, owing to ignorance of their true condition and resources which prevails in the money markets of Europe.

This ignorance is not confined to foreigners, but exists among a portion of our countrymen. The former cannot understand how railroads can be built, and made to pay, in comparatively new countries; the latter, living near the banks of great rivers, and on the Atlantic coast, where alone surplus capital, as yet, abounds, cannot appreciate the necessity existing for the constant creation of these iron lines. Commerce depends for its existence and extension upon channels afforded as its outlets. Primarily it follows what may be termed the natural routes, which are often not convenient ones.

Modern commerce has sought, and is constantly creating, at great expense, artificial channels; and this is so true of the United States, that such channels have, in a great degree, superseded the natural routes; for the reason that the direction of the American internal commerce is between the *agricultural and the commercial and manufacturing* districts, which are *not* connected by the two great outlets, the Mississippi and the St. Lawrence rivers. Produce leaving Burlington, Iowa, following its natural outlet, is landed at New Orleans; or, leaving Detroit, and following its natural course, at Quebec. By the changing influence of artificial channels, it is now easily borne to New York, Philadelphia, Boston, or Baltimore.*

These are the facts which give so great consequence to the leading artificial lines of communication, such as the Erie canal, Erie railroad, Western railroad, the Pennsylvania railroad, the Baltimore and Ohio railroad, the Mobile and Ohio railroad, the Virginia works in progress for connecting the seaboard of that State with the western States; the South Carolina railroad; the several works in Georgia, and other roads and canals alluded to in the report.

Many portions of the country are without even natural outlets, by which to forward their products to the great leading or national routes of commerce. Their products are comparatively valueless, on account of the cost of transportation to market. The wheat and corn grown in the central portions of Kentucky, Illinois, and Missouri, will not, on the spot, command one quarter their value in New York or the other markets on the Atlantic coast.

This difference in value, between the points of production and consumption, is owing to the cost of transportation. Hence the necessity of local as well as national channels to the development of our re-

* From New Orleans to New York.....	4,290 miles.
“ “ to Philadelphia.....	4,054 “
“ “ to Baltimore.....	3,648 “
“ “ to Boston.....	4,898 “
“ Quebec to Boston.....	2,696 “
“ “ to New York.....	3,304 “
“ “ to Philadelphia.....	3,540 “
“ “ to Baltimore.....	3,976 “
“ “ to New Orleans.....	7,594 “

sources, and to the further creation and wider extension of inland commerce. Efforts to construct channels of commerce suited to its wants are now engrossing the energies and capital of the whole country. We have already constructed thirteen thousand miles of railroads, and have at least thirteen thousand more in progress. Our roads completed have cost four hundred millions; those in progress will cost at least two hundred and sixty millions more—making an aggregate of six hundred and sixty millions. These roads are indispensable to keep alive and develop the industry of the country.

The cost of these roads will not be less than twenty thousand dollars per mile, requiring an annual outlay of about eighty millions for works in progress.

The capital of the country is not equal to this demand, without creating embarrassment in the ordinary channels of business; and unless we can avail ourselves of foreign capital, a portion of our works will be retarded, or we shall be involved in financial trouble.

We could borrow from England, Holland, and France, at comparatively low rates, the money needed for our works; and it is believed by statesmen that by a judicious extension of our commerce with other parts of Europe to which hitherto less attention has been paid than it deserves, inducements could be created for the investment of a portion of their large surplus capital in profitable works of internal improvement in this country, yielding high rates of interest, provided the foreign capitalists could be made to fully understand our condition, the necessity that exists for these works, and the prospect of their yielding a remunerating traffic. As it is, our works are mainly carried on by aid of foreign capital; but we have to pay, at times, exorbitant rates for the use of money, simply because so little is known of the objects, value, and productiveness of our works.

One course adopted by many of those who are constructing the roads in progress is to raise money upon what are called *road bonds*. These bonds are based upon the whole cost of the road, and are consequently perfectly safe investments. They are, notwithstanding, sold, on an average, as low as 85 or 87 cents on the dollar, and the capitalist is alone benefited by the advance.

One object which the undersigned has had in view in the preparation of this report, is to diffuse information that will secure an active demand for our sound securities at the best rates, so that the public-spirited companies who are struggling under heavy burdens may receive what their securities are actually worth, and may not be compelled to heavy sacrifices. Our companies during the present year will be borrowers in the market for fifty millions, to be raised, in a great degree, on these railroad bonds. This amount will be borrowed mostly from European capitalists, at a discount of 12 to 15 per cent., making an aggregate loss of six to seven millions.

These bonds bear 7 per cent. interest. The above discount brings the rate of interest on a bond having ten years to run to about $8\frac{1}{2}$ per cent. per annum.

These bonds are sold at the above rates, because so little is known of the projects, or of the real strength of the country. The purchasers demand a premium in the nature of insurance, and as soon as it is

found there is no risk, they demand and receive a premium equal to a perfect security.

It is no part of this report to advocate, in any way whatever, any particular railroad, or any particular route of commerce; but in view of the unquestionable necessity that exists for more knowledge on these points, both at home and abroad—in view of the somewhat surprising fact that we have no published documents which contain any information in reference to our public works, calculated to throw light upon the subject, the undersigned has felt it his duty to meet, as far as possible, the wants of that great interest, although the shortness of time allowed, and the difficulty of obtaining materials, has rendered the work much less perfect than he could have wished. The accompanying report on the railroads and canals of the United States, prepared with the assistance of Mr. Henry V. Poor, the editor of the *American Railroad Journal*, New York, with his map annexed, to which reference has been made, may, it is hoped, prove to be of value not only to the railroad interest, but to the country generally, and important at this period to American and European capitalists.

The undersigned conceives that the position of our internal commerce, as illustrated in this report, may well be a subject of national pride. For the last few centuries, the attention of the world has been given to maritime commerce, created by the discovery of America and the ocean path to the East Indies. The world entered upon a new epoch when the great maritime powers struggled for dominion on the high seas. As an eloquent American writer* has said: "Ancient navigation kept near the coasts, or was but a passage from isle to isle; commerce now selects, of choice, the boundless deep.

"The three ancient continents were divided by no wide seas, and their intercourse was chiefly by land. Their voyages were like ours on Lake Erie—a continuance of internal trade. The vastness of their transactions was measured not by tonnage, but by counting caravans and camels. But now, for the wilderness, commerce substitutes the sea; for camels, merchantmen; for caravans, fleets and convoys."

Our time presents another epoch in commercial history. Internal trade resumes in this country its ancient dominion. Commerce now avails itself of lakes and rivers, as well as of the sea, and often substitutes the former for the latter. For merchantmen, it now substitutes steamboats; for fleets and convoys, canal boats and freight trains on railroads. Upon this commerce that of the sea depends. Its prosperity is the surest foundation of national power. As has been said by a philosophical historian,† "An extensive and lively commerce would most easily, and therefore the soonest, be found on the banks of large rivers running through countries rich in natural productions. Such streams facilitate the intercourse of the inhabitants; and a lively trade at home, which promotes national industry, is always the surest foundation of national wealth, and consequently of foreign trade. The course of the latter depends in a great measure upon exterior circumstances and relations, which cannot always be controlled; but internal commerce, being the sole work of the nation, only declines with the nation itself."

* Bancroft.

† Heeren.

THE TRADE, COMMERCE, AND NAVIGATION OF THE BRITISH NORTH AMERICAN COLONIES.

In conformity with your personal directions, and pursuant to your written instructions, the undersigned has diligently prosecuted certain inquiries with reference to the British North American colonies, more especially as regards their foreign, internal, and intercolonial trade, their commerce and navigation, and their fisheries. Having procured some new and special information on these several points, of much interest to citizens of the United States, he submits the same without delay, in the briefest possible form, to the consideration of the government.

Since his appointment as consul at St. John, New Brunswick, in 1843, the undersigned has had the honor, on several occasions, of calling the attention of government to the extent, value, and importance of the trade and navigation of the British North American colonies, and of pointing out the necessity of action on the part of the general government, to meet the important commercial changes which have taken place within the last few years. He has also had the honor of suggesting the necessity of wise and liberal legislation in relation to this important and valuable trade, with the view of securing its profits and advantages to citizens of the United States, in whose immediate neighborhood it exists, and to whom, under a fair and equal system of commercial intercourse, it may be said to appertain.

In the beginning of this report, the undersigned has replied to one part of the resolution of the Senate in relation to the trade and commerce of the great lakes; and in the latter portion he has the honor to submit a number of documents and statistical returns in relation to the British North American colonies, made up to the latest possible moment. He most respectfully, but earnestly, solicits the attention of the government, and of the whole commercial community, to the documents and returns herewith submitted, and requests a particular examination of the separate reports on each colony, respectively, and of the special reports on the British colonial and French fisheries of North America; which, at this time, will be found to possess much interest.

The undersigned also invites particular attention to the sketch of the early history, and present state of our knowledge of the geology, mineralogy, and topography, of Nova Scotia and New Brunswick, prepared expressly for this report, by one of our most distinguished geologists, Dr. Charles T. Jackson, who, in conjunction with Mr. Alger, of Boston, first brought to public notice the important mineral resources of these provinces.

That full confidence may be placed in the statements relating to trade and commerce of the colonies embraced in this report, it may be proper to state that each colony has been visited—the three following: Canada, Nova Scotia, and New Brunswick—several times in person by the undersigned, and that the returns have been carefully compiled not only from official documents, but from trustworthy private resources; and in this connexion the undersigned gratefully expresses his obligations

to Thomas C. Keefer, esq., Montreal, for his contributions respecting the resources, trade, and commerce of Canada.

The possessions of Great Britain in North America, exclusive of the West India Islands, are, the united provinces of Canada East and Canada West, the province of New Brunswick, the province of Nova Scotia, which includes the island of Cape Breton, the island colonies of Newfoundland and Prince Edward Island, Labrador, and the wide-spread region (including Vancouver's Island, the most important position on the Pacific ocean) under the control of the Hudson's Bay Company, extending from Labrador to the Pacific, and from the northern bounds of Canada to the Arctic ocean, except the districts claimed by Russia.

These possessions, viewed merely with reference to their vast superficies, which exceeds four millions of geographical square miles, comprise a territory of great importance, more especially when the manifold advantages of their geographical position are taken into consideration. But their importance should be estimated less by their territorial extent than by the numerous resources they contain; their great capabilities for improvement; the increase of which their commerce is susceptible; and the extensive field they present for colonization and settlement.

The British North American provinces, to which these reports and documents are more especially confined, occupy comparatively but a small portion of the aggregate superficies of the whole of the British possessions on this continent; yet they cover a wide extent of country, as will be perceived by the following statement of their area:

Canada East, (acres)	128,659,680	
Canada West.....	31,745,539	
	<hr/>	160,405,219
New Brunswick.....		22,000,000
Nova Scotia (proper).....	9,534,196	
Cape Breton.....	2,000,000	
	<hr/>	11,534,196
Newfoundland		23,040,000
Prince Edward Island.....		1,360,000
		<hr/>
Total area British North American provinces.....		<u>218,339,415</u>

In 1830 the population of all these provinces was stated at 1,375,000 souls. The census returns at the close of the year 1851, give the following as their present population:

Canada, East and West	1,842,265
New Brunswick.....	193,000
Nova Scotia and Cape Breton.....	277,005
Newfoundland.....	101,600
Prince Edward Island.....	62,678
	<hr/>
Total.....	<u>2,476,548</u>

The following table is an abstract from the late Canadian census :

Origin.	Lower Canada.	Upper Canada.	Total.
Natives of England and Wales.....	11,230	82,699	93,929
Scotland.....	14,565	75,811	90,376
Ireland.....	51,499	176,267	227,766
Canada, French origin.....	669,528	26,417	795,945
" not of French origin.....	125,580	526,093	651,673
United States.....	12,482	43,732	56,214
Nova Scotia and Prince Edward.....	474	3,785	4,259
New Brunswick.....	480	2,634	3,114
Newfoundland.....	51	79	130
West Indies.....	47	345	392
East Indies.....	4	106	110
Germany and Holland.....	159	9,957	10,116
France and Belgium.....	359	1,007	1,366
Italy and Greece.....	28	15	43
Spain and Portugal.....	18	57	75
Sweden and Norway.....	12	29	41
Russia, Poland, and Prussia.....	8	188	196
Switzerland.....	38	209	247
Austria and Hungary.....	2	11	13
Guernsey.....	118	24	142
Jersey and other British Islands.....	293	131	424
Other places.....	830	1,351	2,181
Born at sea.....	10	168	178
Birth-place not known.....	2,446	889	3,335
Total population.....	890,261	952,004	1,842,265

Taking the average ratio of increase of these colonies collectively, it has been found that they double their population every sixteen or eighteen years; yet, various causes have contributed to render the increase smaller in the last twenty-one years, than at former periods.

But the commercial freedom which Great Britain has recently conceded to her dominions, both at home and abroad, has caused these North American colonies to take a new start in the race of nations, and in all probability their population will increase more rapidly hereafter than at any previous period.

The swelling tide of population in these valuable possessions of the crown of England, great as has been its constant and wonderful increase, will scarcely excite so much surprise as a consideration of the astonishing growth of their trade, commerce, and navigation within a comparatively brief and recent period.

In 1806, the value of all the exports from the whole of the British North American colonies was but \$7,287,940.

During the next quarter of a century, after 1806, these exports were more than double in value, for in 1831 they amounted to \$16,523,510.

In the twenty years which have elapsed since 1831, the exports have not merely doubled, but have reached an increase of 116 per cent. During the year 1851 the exports of the British North American colonies amounted to no less than \$35,720,000.

Equal with this constant increase in the value of exports has been the increase of shipping and navigation.

The tonnage outward, by sea, from all the ports of these colonies, in 1806, was but 124,247 tons.

In 1831, the tonnage outward, by sea, amounted to 836,668 tons, exhibiting an increase of 67 per cent. in the quarter of a century which had then elapsed.

So large an increase as this could not be expected to be maintained; yet the increase which has taken place during the twenty years since elapsed has been nearly as remarkable. In 1851, the tonnage outward, by sea, from the North American colonies amounted to 1,583,104 tons, or nearly double what it was in the year 1831.

At an early period after their first settlement the inhabitants of the North American colonies directed their attention to ship building. The countries they occupy furnish timber of great excellence for this purpose, and are possessed of unrivalled facilities for the construction and launching of ships. This branch of business has steadily increased, until it has attained a prominent position as principally employing colonial materials wrought up by colonial industry. At first the colonists only constructed such vessels as they required for their own coasting and foreign trade, and for the prosecution of their unequalled fisheries; but of late years they have been somewhat extensively engaged in the construction of ships of large size, for sale in the United Kingdoms. New ships may therefore be classed among the exports of the British North American colonies to the parent State.

The new ships built in these colonies in 1832 amounted, in the aggregate, to 33,778 tons. In 1841, the new vessels were more than three times as many as in 1832, and numbered 104,087 tons. In 1849, the tonnage of new ships increased to 108,038 tons. In 1850, there was a still further increase, the new ships built in that year numbering 112,787 tons.

That the colonies have great capacity for the profitable employment of shipping is demonstrated by the steady increase of their mercantile marine. From those periods in their early history, when each colony owned but one coaster, their vessels, year by year, without a decrease at any period, and without a single pause or check, have regularly swelled in numbers and in tonnage, up to the present moment, when their aggregate exceeds half a million of tons, now owned and registered in the colonies, and fully employed in their trade and business.

The rate of this steady and continual increase of the tonnage of the colonies may be gathered from the following statement of the tonnage owned by the colonies at various periods since the commencement of the present century.

Aggregate tonnage of the provinces of Canada, New Brunswick, Nova Scotia, Newfoundland, and Prince Edward Island, at various periods since 1800:

	Tons.
1806	71,943
1830	176,040
1836	274,738
1846	399,204
1850	446,935

The commerce of the colonies may be said to have had its beginning within the past century. Without entering upon details of its rise and extraordinary progress, which can be clearly traced in the documents

attached to this report, and to the report which I had the honor of submitting to you in 1850, it will be of great interest to notice its present extent and importance.

The tonnage entered inward, by sea, at the several ports of the North American colonies amounted in 1851 to an aggregate of 1,570,663 tons.

The tonnage cleared outward in that year from the same ports amounted to 1,583,104 tons.

Commensurate with this large amount of tonnage, employed in a commerce which may be said to have had its beginning since 1783, has been the extent of colonial trade during the year just past.

The value of this trade is exhibited in the condensed statements which follow.

The total exports of Canada for 1851, made up from United States and Canadian returns for this report, give a different but a more correct result, as will be seen by the following statements :

The total exports from Canada for 1851, as per returns..	\$13,262,376	
Of which Quebec exported.....	\$5,622,388	
" Montreal.....	2,503,916	
" Inland ports.....	5,136,072	
		<u>13,262,376</u>
Exported to Great Britain.....	\$6,435,844	
" United States.....	4,939,300	
" British North American colonies..	1,060,544	
" Other countries.....	826,688	
		<u>13,262,376</u>

The character of the above, and the comparative value of the chief material interests of the colony, may be seen by the following table:

Mines.....	\$86,752
Sea.....	249,296
Forest.....	6,063,512
Agricultural.....	817,496
Vegetable food.....	3,766,396
Other agricultural products.....	38,028
Manufactures.....	55,124
Unenumerated.....	2,115,772
	<u>13,262,376</u>

Imports into Canada by river St. Lawrence, giving only the principal articles and values, for the year 1851.

Articles.	Values.
Tea.....	\$168,084
Tobacco.....	18,924
Cotton manufactures.....	3,018,332
Woollen manufactures.....	2,301,816
Hardware manufactures.....	1,627,208
Wooden ware.....	11,612
Machinery.....	6,852
Boots and shoes.....	6,868
Manufactures of leather.....	53,156
Hides.....	1,164
Tanned leather.....	46,440
Oil, not palm.....	135,708
Paper.....	65,228
Rice.....	12,396
Sugar.....	712,408
Molasses.....	60,968
Salt.....	25,980
Glass.....	78,260
Coal.....	101,176
Furs.....	90,032
Manufactures of silk.....	407,492
Manufactures of India rubber.....	233,324
Dye stuffs.....	38,916
Coffee.....	13,632
Fruit.....	54,304
Fish.....	71,260
Unenumerated.....	5,855,776
	15,217,316

This includes the imports in transit for the United States, and those under bond for Upper Canada.

Exports from Canada to other countries, (principally Great Britain,) giving the principal articles and values, for the year 1851.

Articles.	Values.
Apples.....	\$2,404
Ashes, pot.....	86,900
Ashes, pearl.....	37,372
Ash timber.....	14,900
Barley.....	408
Battens.....	1,960
Beef.....	5,268
Birch timber.....	18,468
Biscuit.....	4,376
Butter.....	26,596
Deals, pine and spruce.....	937,480
Elm timber.....	196,124
flour.....	570,876
Handspikes.....	900
Lard.....	2,256
Lath-wood and fire-wood.....	32,080
Masts.....	67,100
Meal, corn and oat.....	9,976

Exports from Canada, &c.—Continued.

Articles.	Values.
Oak timber	\$189,308
Oars	4,536
Oats	2,276
Peas and beans	8,960
Pine timber, red and white	1,974,760
Pork	30,424
Shingles	260
Spars	44,640
Staves	382,136
Tamarac wood and sleepers	6,096
Furs and skins	12,208
Total from Quebec	4,671,048
Value of similar articles from Montreal	2,060,156
Unenumerated from other ports	1,401,212
Total exports by the St. Lawrence	8,132,416

As nearly as can be ascertained, the following statements exhibit the natural products, domestic manufactures, and foreign goods imported into the colonies from the United States for 1851.

	Natural products.	Domestic manufactures.	Foreign goods, &c.
Canada	\$2,024,188	\$3,471,685	\$2,712,675
New Brunswick	869,683	335,515	325,702
Newfoundland	803,946	115,397	34,923
Nova Scotia	817,361	415,943	157,160
Prince Edward Island	77,858	.....	.....

Aggregate of colonial imports from Great Britain, United States, and other countries, for the year 1851.

	Great Britain.	United States.	Other countries.
Canada	\$12,876,823	\$8,936,236	\$1,447,376
Nova Scotia	2,133,035	1,390,965	2,003,640
New Brunswick*	2,292,390	1,654,175	954,935
Newfoundland	1,600,750	998,735	1,655,695
Prince Edward Island	279,898	41,603	305,974
Total	18,878,706	12,678,279	6,191,405

* New Brunswick returns for 1851 show an increase in exports of about 15 per cent., and of 19 per cent. in the imports, greater than in any other colony.

Aggregate of colonial exports to Great Britain, United States, and other countries, for the year 1851.

	Great Britain.	United States.	Other countries.
Canada.....	\$6,731,204	\$4,939,280	\$1,035,538
Nova Scotia	142,245	736,425	2,663,640
New Brunswick.....	2,909,790	415,140	535,190
Newfoundland	2,162,755	99,970	2,538,680
Prince Edward Island.....	84,966	55,385	184,638
Total	11,568,925	6,218,060	6,877,831

COLONIAL TRADE IN 1851.

CANADA.

Imports—sea	*\$15,324,348	
inland	8,681,680	
		\$24,006,028
Exports—sea	8,081,840	
inland	†3,259,888	
		35,347,756
Add for value of new ships built at Quebec, and sent to England for sale, \$1,000,000; and a farther large sum for under-valuation of exports—making in the whole		\$40,000,000

NEW BRUNSWICK.

Imports	\$4,852,440	
Exports	3,780,105	
	8,632,545	
New ships, 45,000 tons.....in all		10,000,000

NOVA SCOTIA.

Imports	\$5,527,640	
Exports	3,542,310	
	9,069,950	in all 10,000,000

NEWFOUNDLAND.

Imports	\$4,609,291	
Exports	4,276,876	
	8,886,167	in all 9,000,000

* This amount includes goods *in transitu*.

† By United States returns, \$4,928,888.

PRINCE EDWARD ISLAND.

Imports	\$630,475		
Exports	360,465		
		<u>990,940</u>	in all \$1,200,000
New shipping, 15,000 tons.			
		Grand total	<u>70,200,000</u>

Although it appears by this statement, that, as in most new countries, the amount of imports greatly exceeds the estimated value of the exports, yet it must be taken into account that the apparent balance of trade against the colonies is fully overcome by the low price at which their exports are valued at the places of shipment, as compared with the prices obtained abroad; the value of new ships sold in England; the freights earned by these ships while on their way to a market; and the large freights earned by colonial ships in transporting the bulky products of the colonies to foreign countries; all of which profits, sales, and earnings, accrue to the colonial merchant, and render the trade of the colonies, at the present time, healthy and prosperous.

After presenting the preceding statements the undersigned does not deem it necessary to discuss in an elaborate manner the many interesting questions which they will, on examination, unquestionably present to the statesmen of England and America; more especially as the question of reciprocal free trade between the United States and the British North American Colonies is now before Congress, and received especial attention in a previous report of the undersigned submitted to yourself, and printed as Executive Document No. 23, 31st Congress, 2d session.

From 1794 to 1830 the trade of the colonies was a subject of much negotiation between the two governments, and was always considered by John Quincy Adams as one of great consequence to the United States. This protracted and almost useless negotiation produced no other results than a contraction of the trade of the colonies, and an estrangement between the people of both countries.

It is well known to the Department of the Treasury that Mr. McLane's arrangements with England, in 1830, in relation to this trade, were most unsatisfactory to the commercial community, and called forth, from that interest, urgent remonstrances against their partial character. Time has, however, proved their beneficial operation upon the general interests of the American and colonial trade, thus furnishing another proof that profitable commerce can only exist in perfect freedom.

Although the convention of 1830, upon the whole, had a beneficial influence, yet it still left the trade of the United States with the colonies subject to many onerous and unnecessary restrictions, which have had a very injurious effect upon it. Until near the year 1840, that trade did not rapidly increase; but then it suddenly expanded. From that period to the present time there has been a constant increase, but by no

means to the extent which would have unquestionably taken place if the trade had been wholly unfettered, and allowed to flow freely in its natural course.

It is somewhat singular, that, notwithstanding the geographical position of these colonies with reference to the United States, and the national importance of the various relations with them, no change has taken place in the policy of this country toward them for nearly a quarter of a century, (while so much that is wise and great has been accomplished during the same period for the benefit of commerce in this and other countries,) except the drawback law of 1846, which has increased the export of foreign goods from \$1,363,767, in 1846, to \$2,954,536, in 1851. For many years after the Revolution, under a wise and sagacious policy, the colonial trade received a very considerable share of attention, and efforts were made to place it on an equitable, if not a liberal basis; but it unfortunately became involved with questions embracing the whole foreign policy of the country, which prevented the adoption of permanent measures of a liberal character.

Soon after the imperial act of 1846, which had such a disastrous effect upon colonial trade, delegates were sent from Canada to this country to arrange the terms of a reciprocal free trade in certain specified articles. The proposition was favorably received by Mr. Polk's administration, and was ably supported in Congress by leading gentlemen of both parties. A bill was introduced in 1848 for reciprocal free trade with Canada in certain articles, which passed the House of Representatives, and would probably have passed the Senate, but for the great pressure of other important matters.

This bill of 1848 was considered by a portion of the people of the United States as strictly a colonial measure, for the benefit of the colonists only; especially, it was supposed that it might prove prejudicial to the agricultural interests of this country, as Canada for a few years has been an exporter of wheat to a small extent; but the subject having since been discussed, it has exhibited itself in a new light, and is now considered by many as one of equal interest to the United States and to the colonies.

The agriculture of a country is well considered as its most valuable interest. It was natural therefore, that the first question raised as to the policy of reciprocal trade, should have related to the effects of free Canadian consumption upon our agricultural interests. The accompanying tables, showing the total production of wheat, rye, and corn, in the United States, for the year 1850, with the quantity of agricultural produce in Canada, show that nothing is to be feared from Canadian consumption.

Agricultural Abstract—Upper and Lower Canada, 1851.

Lands, produce, live stock, and domestic manufactures.	Lower Canada.	Upper Canada.	Total.
Number of persons occupying lands.....	94,449	99,860	194,309
Of whom those held 10 acres and under.....	13,261	9,976	23,237
10 to 20	2,701	1,889	4,590
20 to 50	17,409	18,467	35,876
50 to 100	37,885	48,027	85,912
100 to 200	18,608	18,421	37,029
Over 200	4,685	3,080	7,765
Number of acres held by the above.....	8,113,915	9,823,233	17,937,148
“ “ under cultivation.....	3,605,517	3,697,724	7,303,241
“ “ “ crops in 1851.....	2,072,953	2,274,586	4,347,539
“ “ “ pasture.....	1,502,355	1,367,649	2,870,004
“ “ “ gardens and orchards.....	30,209	55,489	85,698
“ “ wild or under wood.....	4,508,398	6,125,509	10,633,907
“ “ under wheat.....	427,111	782,115	1,209,226
“ “ “ barley.....	42,927	29,916	72,843
“ “ “ rye.....	46,007	38,968	84,975
“ “ “ peas.....	165,192	192,109	357,301
“ “ “ oats.....	590,422	421,684	1,012,106
“ “ “ buckwheat.....	51,781	44,265	96,046
“ “ “ maize.....	22,669	70,571	93,240
“ “ “ potatoes.....	73,244	77,672	150,916
“ “ “ turnips.....	3,897	17,135	21,032
“ “ “ other crops, fallow and idle.....	649,703	600,151	1,249,854
Produce in bushels—Wheat.....	3,075,868	12,692,852	15,768,720
“ “ Barley.....	668,626	625,875	1,294,501
“ “ Rye.....	341,443	479,651	821,094
“ “ Peas.....	1,182,190	2,873,394	4,055,584
“ “ Oats.....	8,967,594	11,193,844	20,161,438
“ “ Buckwheat.....	530,417	639,384	1,169,801
“ “ Maize.....	400,287	1,606,513	2,096,800
“ “ Potatoes.....	4,456,111	4,987,475	9,443,586
“ “ Turnips.....	369,909	3,644,942	4,014,851
“ “ Clover and grass seeds.....	18,921	42,460	61,381
“ “ Carrots.....	82,344	174,895	257,239
“ “ Mangel wurtzel.....	103,999	54,226	168,225
“ “ Beans.....	23,602	18,109	41,711
“ lbs. Hops.....	111,158	113,064	224,222
“ tons. Hay.....	965,653	681,682	1,647,335
“ lbs. Flax or hemp.....	1,867,016	50,650	1,917,666
“ “ Tobacco.....	488,652	764,476	1,253,128
“ “ Wool.....	1,430,976	2,639,764	4,130,740
“ “ Maple sugar.....	6,190,694	3,581,505	9,772,199
“ galls. Cider.....	53,327	701,612	754,939
“ yards. Fulled cloth.....	780,891	527,466	1,308,357
“ “ Linen.....	889,523	14,955	904,478
“ “ Flannel.....	860,850	1,169,301	2,030,151
Live Stock—Bulls, oxen, and steers.....	111,819	193,982	305,801
Milch cows.....	294,514	296,924	591,438
Calves and heifers.....	180,317	254,988	435,305
Horses.....	236,077	203,300	439,377
Sheep.....	629,827	968,022	1,597,849
Pigs.....	256,219	569,237	825,456
Pounds of butter.....	9,637,152	15,976,315	25,613,467
“ cheese.....	511,014	2,226,776	2,737,790
Barrels of beef.....	68,747	817,746	886,493
“ pork.....	223,870	528,129	751,999
“ fish.....	48,363	47,589	95,952

The grain crops in Lower Canada are all taken in the minim and not in the bushel, excepting the townships.

Beef and pork are very incorrectly given in both parts of the province.

The fish in Lower Canada is exclusive of the Gaspé and Bonaventure fisheries, of which there is a separate report.

W. C. CROFTON,
Secretary Board of Registration.

Abstract of the cereal produce of the United States in 1851.

State.	Wheat, bushels of.	Rye, bushels of.	Indian corn, bushels of.
Maine	296,259	102,916	1,750,056
New Hampshire.....	185,658	183,117	1,573,670
Vermont.....	535,955	176,233	2,032,396
Massachusetts.....	31,211	481,021	2,345,490
Rhode Island.....	49	26,409	539,201
Connecticut.....	41,762	600,893	1,935,043
New York.....	13,121,498	4,148,182	17,858,400
New Jersey.....	1,601,190	1,255,578	8,759,704
Pennsylvania.....	15,367,691	4,805,160	19,835,214
Delaware.....	482,511	8,066	3,145,542
Maryland.....	4,494,680	226,014	11,104,631
District of Columbia.....	17,370	5,509	65,230
Virginia.....	11,232,616	458,930	35,254,319
North Carolina.....	2,130,102	229,563	27,941,051
South Carolina.....	1,066,277	43,790	16,271,454
Georgia.....	1,088,534	53,750	30,080,099
Florida.....	1,027	1,152	1,996,809
Alabama.....	294,044	17,261	28,754,048
Mississippi.....	137,990	9,606	22,446,552
Louisiana.....	417	475	10,266,373
Texas.....	41,689	3,108	5,926,611
Arkansas.....	199,639	8,047	8,893,939
Tennessee.....	1,619,381	89,163	52,276,223
Kentucky.....	2,140,822	415,073	58,675,591
Ohio.....	14,487,351	425,718	59,078,695
Michigan.....	4,925,889	105,871	5,641,420
Indiana.....	6,214,458	78,792	52,964,363
Illinois.....	9,414,575	83,364	57,646,984
Missouri.....	2,981,652	44,268	36,214,537
Iowa.....	1,530,581	19,916	8,656,799
Wisconsin.....	4,286,131	81,253	1,988,979
California.....	17,328	.....	12,236
TERRITORIES.			
Minnesota.....	1,401	125	16,725
Oregon.....	211,943	106	2,918
Utah.....	107,702	210	9,899
New Mexico.....	196,516	.....	365,411
	100,503,899	14,188,639	592,326,612

Wheat, average price per bushel.....	80 cents.
Rye.....do.....do.....	50 "
Corn.....do.....do.....	45 "

TOTAL.

Wheat.....	100,503,899 bushels.....	value..	\$80,403,119
Rye.....	14,188,639.....do.....do.....	.....do.....	7,094,319
Corn.....	592,326,612.....do.....do.....	.....do.....	266,546,975
			<u>354,044,413</u>

The total quantity and value of the above, exported to all countries, is seen by the following table :

Wheat	1,026,725 bushels.....	value..	\$1,025,733
Flour	2,202,335 barrels	do...	10,524,331
Corn.....	3,426,811 bushels.....	do...	1,762,549
Indian meal.....	203,622 barrels	do...	622,866
Other grain, bread, &c.....	.....		520,758
			<hr/>
Total.....	.....		<u>14,456,236</u>

It is gratifying to notice that the agricultural interests of the United States are increasing in a ratio proportionate to its other material interests, and that we are now exporters and not importers of agricultural produce. It is affirmed that the prices of grain in Mark Lane control the prices of grain in our exporting markets. The following table is therefore subjoined to show the quantity of grain imported into England, our principal market in Europe, from the United States and other foreign countries.

An account for the years 1849 and 1850, respectively, of the number of quarters of wheat, barley, and oats, and of the number of sacks and barrels of flour, imported into England, Ireland, and Scotland, severally, from the United States of America, from Canada, from France, and from all other parts of Europe, distinguishing the quantity of those articles sent from each country, respectively; also stating the number of quarters of wheat to which the entire number of sacks and barrels of flour from each country are all equivalent.

Articles, &c.	YEAR 1849.					
	Quantities imported from—					
	The U. States of America.	Canada.	France.	All parts of Europe, except France, including the Asiatic parts of Turkey.	All other parts.	Aggregate of the importation from all parts.
Wheat imported—	<i>Quarters.</i>	<i>Quarters.</i>	<i>Quarters.</i>	<i>Quarters.</i>	<i>Quarters.</i>	<i>Quarters.</i>
Into England.....	103,172	6,747	362,091	2,251,101	95,050	2,818,161
Scotland.....	2,872	3,551	10,705	445,050	21,532	488,710
Ireland.....	2,097	.....	78,535	419,906	42,969	543,507
the United Kingdom.....	108,141	10,298	451,331	3,116,057	159,551	3,845,378
Wheat flour (actual weight) imported—	<i>Cwt.</i>	<i>Cwt.</i>	<i>Cwt.</i>	<i>Cwt.</i>	<i>Cwt.</i>	<i>Cwt.</i>
Into England.....	1,506,733	258,326	759,455	91,468	16,638	2,632,560
Scotland.....	164,829	192,512	133,311	6,846	1,449	498,947
Ireland.....	97,545	5,755	113,492	1,534	6	218,332
the United Kingdom.....	1,769,107	456,593	1,006,258	99,738	18,093	3,349,839
Wheat flour (reduced to its equivalent in quarters of wheat) imported—	<i>Quarters.</i>	<i>Quarters.</i>	<i>Quarters.</i>	<i>Quarters.</i>	<i>Quarters.</i>	<i>Quarters.</i>
Into England.....	430,495	73,808	216,987	26,117	4,754	752,161
Scotland.....	47,094	55,003	88,089	1,956	414	142,576
Ireland.....	27,870	1,644	82,426	438	2	62,380
the United Kingdom.....	505,459	130,455	287,522	28,511	5,170	957,097
Aggregate of wheat and wheat flour imported—						
Into England.....	533,667	80,555	579,078	2,277,213	99,804	3,570,322
Scotland.....	49,966	58,554	48,794	447,076	21,946	626,266
Ireland.....	29,967	1,644	110,961	420,344	42,971	605,887
the United Kingdom.....	613,600	140,753	738,833	3,144,568	164,721	4,802,475
Barley imported—						
Into England.....			82,513	991,697	3,596	1,077,806
Scotland.....			.....	234,363	.....	234,363
Ireland.....			4,054	64,780	.....	68,834
the United Kingdom.....			86,567	1,290,845	3,596	1,381,008
Oats imported—						
Into England.....			1,142	1,181,409	192	1,182,743
Scotland.....			.....	74,376	.....	74,376
Ireland.....			190	9,791	7	9,983
the United Kingdom.....			1,332	1,265,576	199	1,267,107

Account of wheat, barley, and oats imported into England, &c.—Continued.

Articles, &c.	YEAR 1850.					
	Quantities imported from—					
	The U. States of America.	Canada.	France.	All parts of Europe, except France, including the Asiatic parts of Turkey.	All other parts.	Aggregate of the importation from all parts.
Wheat imported—	<i>Quarters.</i>	<i>Quarters.</i>	<i>Quarters.</i>	<i>Quarters.</i>	<i>Quarters.</i>	<i>Quarters.</i>
Into England	98,751	6,045	465,608	1,748,661	172,795	2,491,855
Scotland	1,948	2,729	21,612	440,591	28,232	495,142
Ireland			108,110	565,766	78,122	751,998
the United Kingdom	100,699	8,774	595,355	2,755,018	279,149	3,738,995
Wheat flour (actual weight) imported—	<i>Cwt.</i>	<i>Cwt.</i>	<i>Cwt.</i>	<i>Cwt.</i>	<i>Cwt.</i>	<i>Cwt.</i>
Into England	1,397,797	121,012	1,524,512	97,960	8,379	3,149,660
Scotland	116,992	121,841	201,889	10,061	784	451,067
Ireland	12,369	2,939	198,774	4,608	23	218,713
the United Kingdom	1,527,158	245,292	1,925,175	112,629	9,186	3,819,440
Wheat flour (reduced to its equivalent in quarters of wheat) imported—	<i>Quarters.</i>	<i>Quarters.</i>	<i>Quarters.</i>	<i>Quarters.</i>	<i>Quarters.</i>	<i>Quarters.</i>
Into England	399,371	34,574	435,575	27,959	2,394	899,908
Scotland	33,426	34,669	57,682	2,875	224	128,876
Ireland	2,534	840	56,793	1,816	6	62,489
the United Kingdom	436,331	70,083	550,050	32,180	2,624	1,091,263
Aggregate of wheat and wheat flour imported—						
Into England	498,122	40,619	901,178	1,776,650	175,189	3,391,758
Scotland	35,374	37,398	79,324	443,466	28,456	624,018
Ireland	2,534	840	164,903	567,082	78,128	811,487
the United Kingdom	537,030	78,857	1,145,405	2,787,198	281,773	4,830,263
Barley imported—						
Into England			31,299	746,849	10,515	788,593
Scotland			53	191,054		191,107
Ireland			1,711	52,835	1,657	56,208
the United Kingdom			32,993	990,738	12,172	1,035,908
Oats imported—						
Into England			2,920	1,044,927	66	1,047,913
Scotland			5	91,881		91,886
Ireland			1	14,673		14,674
the United Kingdom			2,926	1,151,481	66	1,154,474

Abstract consumption of foreign grain for four years, from 1847 to 1850.

	Quantity in quarters.	Value.
Wheat.....	14,238,313 at 51s. 9d. sterling....	\$184,208,170
Other grains.....	25,031,823 at 31 5 ..do.....	197,123,110
Totals	39,276,136.....	381,331,280
Yearly average..	9,817,534.....	95,332,820

Abstract of grain imported for five years, from 1846 to 1850.

	Quantity in quarters.	Value.
Wheat.....	16,452,555 at 52s. ½d. sterling....	\$210,769,750
Other grains.....	27,485,078 at 33 0 ..do.....	225,251,885
Totals	44,067,533.....	436,021,635
Yearly average..	8,813,526.....	87,204,375

Table exhibiting the flour and wheat exported from Canada in 1850 and 1851—year ending January 1.

Exported to and through—	1850.		1851.	
	Flour.	Wheat.	Flour.	Wheat.
	<i>Barrels</i>	<i>Bushels.</i>	<i>Barrels.</i>	<i>Bushels.</i>
Buffalo.....	19,244	66,001	10,860	101,655
Oswego.....	260,872	1,094,444	259,875	670,202
Ogdensburgh.....	32,999	.....	30,609	18,195
Lake Champlain.....	90,988	192,918	11,940	626
Total exported inland to the United States.....	404,103	1,353,363	313,284	790,678
*Montreal and Quebec.....	280,618	88,465	371,610	161,312
Total exported.....	684,721	1,441,828	684,894	951,990
Decrease in inland export to the United States.....			90,819	562,695
Increase in sea export Canada.....			90,992	72,847

Total quantity imported into the United States from Canada,† for the year ending June 30, 1852.

Wheat, bushels.....	870,889.....	value,	\$609,681
Flour, cwt.....	496,201.....		1,008,928
Rye, oats, &c., &c.....	.....		203,570
			1,802,179

*Exported by sea via Montreal and Quebec.

† All from Canada except \$63,703.

Of the above, there was exported to England, viz:

Wheat, bushels	427,615.....	value,	\$455,204
Flour, cwt.....	343,533.....		924,079
			<hr/>
			1,379,283

To the British North American colonies other than Canada, viz:

Wheat, bushels.....	24,259.....	value,	\$23,132
Flour, cwt.....	139,661.....		346,895
			<hr/>
			370,027
			<hr/>
			1,749,310
			<hr/>
			<hr/>

Total domestic flour, &c., exported from the United States to the British North American colonies.

TO CANADA.

Wheat.....	208,130 bushels.....	value,	\$150,288
Flour.....	51,176 barrels.....		191,750
Corn.....	88,306 bushels.....		39,158
Other grain.....			6,911
			<hr/>
			388,107
			<hr/>
			<hr/>

TO OTHER BRITISH N. A. COLONIES OTHER THAN CANADA.

Wheat.....	261,971 bushels.....	value,	\$220,319
Flour.....	200,664 barrels.....		945,387
Corn.....	101,169 bushels.....		66,199
Meal, Indian.....	57,273 barrels.....		173,537
Meal (rye) and other grains.....			172,187
			<hr/>
			1,577,629
			<hr/>
			<hr/>

It will be easily seen by these tables that the whole of the Canadian wheat, &c., imported in bond, is re-exported to England and the colonies; and also, in addition, that the export to Canada and the colonies, for their consumption, is nearly two millions of breadstuffs the produce of the United States

The upper province, generally known as Canada West, has a greater interest in a free intercourse with the United States than Lower Canada or Canada East. The origin, language, and other distinctive features of the inhabitants of Lower Canada, make their affinities with the United States much less than those of the Upper Canadians. Moreover, the geographical position of Upper Canada makes New York a more convenient, while it is at the same time a larger and more secure market for her produce, than Montreal or Quebec. The various lines

of railway, leading from the Atlantic to the lakes, give to the inhabitants of the upper province facilities of communication with New York, during a part of the year when access to Quebec is extremely difficult.

The canal tolls levied by the State of New York on Canadian produce passing through her canals toward tide-water, amounted, in two years, 1850 and 1851, as near as could be ascertained, to over six hundred thousand dollars; and property passing through the same channels from tide-water, for the same period, probably paid half as much more; making about four hundred and fifty thousand dollars annually contributed by the Canadian trade to New York canals.

Imports into Canada from the United States, giving the principal articles and values, for the year 1851.

Articles.	Values.
Tea	\$893,216
Tobacco	403,860
Cotton manufactures.....	565,124
Woollen manufactures.....	439,260
Hardware manufactures.....	318,844
Wooden ware.....	53,724
Machinery	85,768
Boots and shoes.....	42,592
Manufactures of leather.....	47,388
Hides.....	89,204
Tanned leather.....	126,232
Oil, not palm.....	47,804
Paper.....	32,996
Rice.....	19,920
Sugar.....	278,468
Molasses.....	19,296
Salt.....	79,816
Glass.....	18,828
Coal.....	38,652
Furs.....	44,264
Manufactures of silk.....	80,768
Manufactures of India rubber.....	53,960
Dye stuffs.....	12,680
Coffee.....	116,988
Fruit.....	81,144
Fish.....	17,544
Unenumerated.....	4,780,372
	8,788,712

Exports from Canada to the United States, giving the principal articles and values, for the year 1851.

Articles.	Values.
Ashes.....	\$65,992
Lumber.....	766,628
Shingles.....	20,732
Cattle of all kinds and sizes.....	140,176
Horses.....	185,848
Wool.....	41,896
Wheat.....	491,760
Flour.....	1,181,484
Barley and rye.....	75,596
Beans and peas.....	41,588
Oats.....	135,708
Butter.....	38,004
Eggs.....	38,008
Unenumerated.....	1,705,664
	<u>4,929,084</u>

As can be seen by referring to table No. 9, in Canadian returns, the dutiable and free goods are thus stated for the year 1851:

Dutiable imports into Canada from the United States. . . . \$7,971,380
 Free imports into Canada from the United States. 1,147,388

*9,118,768

Amount of duties collected on \$7,971,380 is \$1,166,144, or about 14 $\frac{3}{4}$ per cent.

The active character of the inland trade between Canada and the United States may be seen by the following statement of the tonnage inward and outward:

	INWARD.		OUTWARD.		TOTALS.	
	American.	British.	American.	British.	Inward.	Outward.
Steam.....	1,224,523	845,589	753,318	564,089	2,070,112	1,317,407
Sail.....	139,867	202,039	153,670	206,361	341,906	360,031
Total.....	1,364,390	1,047,628	906,988	770,450	2,412,028	1,677,438

Inward and outward.

Steam—American	\$1,977,841
British.....	1,409,678
	<u>\$3,387,519</u>
Sail—American	293,537
British.....	408,400
	<u>701,937</u>
Grand total, inward and outward.....	<u>4,089,456</u>

* The discrepancy between this and other amounts is explained in a note in table No. 9.

The total amount imported from Canada into the United States for the three years ending June, 1851, is, by commerce and navigation report, \$11,156,342—on which the following amount of duty has been collected, as will herewith appear :

Statement of revenue collected in the different districts of the United States bordering on Canada, from 1849 to 1851, inclusive, (three years.)

Districts.	Gross revenue.	Expenses of collection.	Net revenue.	Excess of expenses.	Mem.	
					Over.	Under.
Vermont.....	\$181,915 02	\$27,472 47	\$154,442 55	.....	1	
Champlain.....	133,326 68	22,965 22	*109,751 44	.....	2	
Oswegatchie.....	42,842 41	16,002 22	26,840 19	.....	3	
Cape Vincent.....	22,410 78	14,222 58	8,188 20	.....	4	
Sackett's Harbor.....	16,603 54	27,000 95	.....	\$10,397 41	.....	1
Oswego.....	273,173 92	38,210 43	†234,947 50	.....	5	
Genesee.....	45,324 66	13,368 47	†31,722 66	.....	6	
Niagara.....	44,076 44	21,277 69	22,798 75	.....	7	
Buffalo.....	148,740 03	49,601 19	¶98,885 78	.....	8	
Erie, (Presque Isle)....	1,155 26	31,924 35	.....	30,769 09	.....	2
Cuyahoga.....	126,677 24	13,228 71	113,448 53	.....	9	
Sandusky.....	34,018 44	5,927 49	28,090 95	.....	10	
Miami.....	244 54	2,470 40	.....	2,225 86	.....	3
Detroit.....	47,935 42	32,868 22	15,067 20	.....	11	
Michilimackinac.....	1,797 42	4,535 02	.....	2,737 60	.....
Chicago.....	10,670 41	10,360 73	§154 75	.....	12	
	1,130,912 21	331,436 14	844,338 50	46,129 96		

The first proposition for reciprocal free trade was confined to Canada alone, and limited to certain natural products of either country; but the question has since taken a wider range. It is now believed that an arrangement can be effected and carried out for the free interchange between the United States and the colonies, of all the products of either whether of agriculture, of mines, of the forest, or of the sea, in connexion with an agreement for the free navigation of the rivers St. Lawrence and St. John, the concession of a concurrent right with British subjects to the sea fisheries near the shores of the colonies, and the remission of the export duty levied in New Brunswick on timber

* After deducting \$610 02—moiety of sales merchandise distributed per act April 2, '44, s. 3.
 † “ “ 15 99—duties on merchandise refunded.
 ‡ “ “ 233 53—expenses attending prosecutions.
 ¶ “ “ 253 06—moiety of sales merchandise distributed per act April 2, '44, s. 3.
 § “ “ 154 93—duties on merchandise refunded.

Total.....1,267 53—deducted from net revenue.

RECAPITULATION.

Gross revenue.....	\$1,130,912 21	Net revenue.....	\$844,338 50
Expenses.....	331,436 14	Excess of expenses.....	46,129 96
			793,208 54
		Add amount deducted.....	1,267 53
			799,476 07

and lumber cut within the limits of the United States, and floated down the river St. John, for shipment to American ports.

The free navigation of the St. Lawrence was a prominent subject of discussion during the administration of John Quincy Adams. At this time it is greatly desired by all those western States bordering on the great lakes, as their natural outlet to the sea.

The free navigation of the St. John has been rendered absolutely necessary by the provisions of the treaty of Washington, and it would be a great advantage to the extensive lumber interest in the northeastern portion of the Union. The repeal of the export duty on American lumber floated down the St. John to the sea would be but an act of justice to the lumbermen of that quarter, upon whom it now presses severely, and who have strong claims to the consideration of the government.

At present there are no products of the colonial mines exported to the United States, except a small quantity of coals from New Brunswick, and a larger quantity from the coal fields of Nova Scotia and Cape Breton. A notice of these coal fields, and a statement of the quantity of coals exported from them to the United States, will be found under the head of Nova Scotia.

A free participation in the sea fisheries near the shores of the colonies is regarded as the just prescriptive privilege of our fishermen. Without such participation, our deep-sea fisheries in that region will become valueless.

With reference to this important subject, the undersigned feels that he would be wanting in his duty to the government if he did not earnestly call its attention to the critical state of the colonial fishery question, which, owing to a recent demonstration of imperial and colonial policy, has assumed a very threatening aspect.

Since the Fishery Convention of 1818, by which this government, on behalf of American citizens, renounced forever their right to fish within three marine miles of the seacoast of New Brunswick, Nova Scotia, and Prince Edward Island, many of the hardy and industrious fishermen of our country have been compelled to pursue their adventurous calling (the importance of which cannot be over-estimated) near the shores of these colonies, in a manner by no means creditable to the standing or character of the people of the United States.

The files of the State Department furnish abundant evidence of the losses sustained by our citizens in consequence of their vessels having been seized and confiscated for alleged violations of the fishery convention, to which the necessities arising from the nature of their pursuit compelled them.

For several years past, the colonists have constantly urged the imperial government to station an armed force on their shores, "to protect the fisheries from the unjustifiable and illegal encroachments of American fishermen." The force hitherto provided has not been such as the colonists desired, having usually been limited to three or four vessels, under the command heretofore of discreet officers of the Royal Navy, who have generally exercised the powers with which they were invested with liberal discretion.

With the view of bringing matters to a crisis, the colonial legisla-

tures have lately renewed their appeals to the imperial government for aid to drive American fishermen from their shores, and compel them to follow their calling in places where fish are not so plentiful or so easily caught. And in order to show their own determination, the provinces of Canada, New Brunswick, and Nova Scotia have entered into an agreement to provide a certain number of small cruisers, at their own expense, to be stationed at various places agreed upon, to assist in effecting the object they desire.

The last appeal of the colonial authorities has been viewed favorably by the new administration of Earl Derby. A change has taken place in the British policy with reference to this fishery question; and a circular letter has been sent to the governors of the several colonies, announcing that her Majesty's government has resolved to send a small force of armed vessels and steamers to North America, to protect the fisheries against foreign aggression. The colonial governments have fitted out six cruisers, fully manned and armed, which have sailed for the best fishing grounds, and there is imminent danger of a collision. The colonial cruisers threaten to make prize of every vessel "fishing or preparing to fish," within certain limits, which the colonial authorities contend are within three marine miles beyond a line drawn from headland to headland, and not three miles from the shores of the coast, which our citizens contend is the true reading of the convention.

Our fishermen generally entertain the conviction that the threatened exclusion by the British and colonial governments is a violation of rights, accruing to them under the laws of nations applicable to this subject and to that region, fortified by former use, till it has well nigh created a right by prescription; and many regard such threatened exclusion as an illiberal and uncalled for measure at this period, doing the British or the colonies no good, while it injures them seriously. In such a state of feeling it is next to impossible to prevent difficulties and collisions between them and the British authorities, and wrongs may be done on both sides. Every dictate of prudence and of wise policy, and just protection to our citizens against an uncalled for interference by imprudent subordinates, therefore, imperiously demands that the Federal government should, as soon as practicable, dispatch to those waters, and maintain there, a respectable naval force, under command of discreet officers. It may be here not inappropriately observed, that ships-of-war bearing the American flag is a rare spectacle in the waters of Maine, while British armed vessels often visit our coast and harbors.

In conclusion, the undersigned would respectfully state, that, although the returns and statements herewith submitted furnish gratifying evidences of the commercial intercourse between the United States and the British North American colonies, and although those returns may be deemed perfectly correct, having been derived from official sources, yet it is proper for him to remark, that they do not represent the whole value of the trade.

It is well known that in many instances colonial produce is entered at prices much below its real value; and on the northeastern and north western frontiers of the United States there is ever an active barter trade carried on with the neighboring colonies, of which no account can be taken by the public officers on either side. It is therefore perfectly

within bounds to estimate the entire exports of the United States to the British North American colonies as now amounting to eighteen millions of dollars annually.

It is universally admitted that it would be much better to place this border trade on a different basis, and under the influence of a higher principle. This would enable us to mature and perfect a complete system of mutual exchanges between the different sections of this vast continent; an achievement not only wise and advantageous, but worthy of our high civilization.

It has been remarked by a learned writer, (Lord Lauderdale, on Public Wealth,) that "Those trades may be esteemed good which consume our products and manufactures, upon which the value of our land and the employment of our poor depend; that increase our seamen and navigation, upon which our strength depends; that supply us with such commodities as we absolutely want for carrying on our trade, or for our safety, or carry out more than they bring in, upon which our riches depend."

The trade with the colonies fulfils all these considerations. It takes from us largely of those products and manufactures which enhance the value of our soil, and give profitable employment to the labor of our people. It greatly increases our ships and the numbers of our seamen, giving us the means of maintaining our navy, and adding materially to our strength as a nation. It supplies us cheaply with those commodities we absolutely require for conducting our foreign trade, and supplying the necessities of home consumption. And lastly, it carries out infinitely more than it brings in, and so adds vastly to our individual and national riches.

The undersigned has the honor to be your obedient servant,

I. D. ANDREWS,

United States Consul.

HON. THOMAS CORWIN,

Secretary of the Treasury, Washington.

PART I.

THE DEEP-SEA FISHERIES

IN

The Bay of Fundy, along the coast of Nova Scotia, on the Grand Bank of Newfoundland, and within the Gulf of St. Lawrence.

In connexion with the pending question of commercial reciprocity between our country and the British North American provinces, and as concerning the interests of a large and valuable class of citizens in the fishing towns of New England, the fisheries on the Atlantic coast of Nova Scotia, as also those within the Gulf of St. Lawrence, near the shores of Cape Breton, Prince Edward Island, New Brunswick, and that part of Canada known as Gaspé, occupy a prominent position.

It is sufficient at this moment to state that, except near certain portions of the coasts of Newfoundland and Labrador, and around the Magdalen islands, our citizens are not permitted to fish, save at the distance of three marine miles from the land.

It has been contended by the provincial authorities, acting under the opinion of the law-officers of the Crown in England, that these three miles are to be measured from headland to headland, and not from the bays or indents of the coast. Under this construction of the convention of 1818, our vessels have been sometimes seized and confiscated; but the imperial government has inclined to the opinion that this construction of the convention was too strict, and that our vessels might enter bays, straits, or estuaries, the entrances to which were more than six miles wide.

But even this modified construction of the convention bears hardly upon our industrious fishermen in a variety of ways, as I now proceed to show.

The fishing grounds to which our vessels principally resort are in the bay of Fundy; along the Atlantic coast of Nova Scotia; around Sable island; on the Grand Bank of Newfoundland; and everywhere within the Gulf of St. Lawrence, as far north as the entrance to Davis's Straits, beyond the straits of Belleisle.

Our vessels principally fish for cod and mackerel, although they also take herrings at the Magdalen islands, or on the coast of Labrador. It is true that they have a concurrent right of fishing on the west coast of Newfoundland with the fishermen of England and France, and a joint right of fishing, with British subjects, on the coast of Labrador and at the Magdalen islands; as also the right of landing at such places on those coasts as are uninhabited, for the purpose of curing and drying

their fish; but this privilege is seldom, if ever, exercised, because it is of no practical value to our fishermen.

Those portions of the coasts of Nova Scotia, Cape Breton, Prince Edward Island, and New Brunswick, on which it would be advantageous for our fishermen to land for purposes connected with the fishery, are prohibited by reason of their settlement and actual occupation, while they are shut out from the best fishing grounds by reason of the convention of 1818, which excludes them from taking fish within three marine miles of the coast, within which distance the best fish are often found in greatest abundance.

The limits claimed by the British authorities under that convention, if strictly enforced, would exclude our fishing vessels from the bay of Chaleur, the bay of Miramichi, the straits of Northumberland, and George's bay, within which the greatest quantities of the best mackerel are now taken annually.

If an arrangement could be made by which our fishermen would have the right to fish within three miles of the land, wheresoever they pleased, on the shores of the provinces, and also the right to land on those shores anywhere—first agreeing with the owner or occupant of the soil for the use of the necessary ground for fishing stations—it would tend greatly to increase the quantity of fish taken, would furnish the market with a well-cured article, enhance the profits of fishing voyages, and lead to a considerable extension of the number of vessels and men now employed.

The codfish caught in the Gulf of St. Lawrence, by our fishermen, are pickle-salted in bulk, on board the vessels, as they are caught, and are thus brought home to be afterwards dried and cured. A liberal supply of salt is used, in which the fish first caught lie four months, and the last caught, one month. The *vitality*, so to speak, of the meat—its strength and flavor—is quite destroyed. When unladen from the vessel, the fish are found to be of a dead, ashy color, instead of the bright, wholesome hue which good fish should have; and so brittle as scarcely to bear handling—with hardly any smell or taste, except that imparted by salt. The home consumption of such an unpalatable article is gradually diminishing, while the inferiority of the cure deprives us of the advantages of foreign markets, for which these fish are wholly unsuited.

The mackerel taken in the gulf by our fishermen are split, salted, and dressed while the vessel is under way; and it often happens that a full fare is made in four or five days, when these fish are plentiful. In such case the vessel, being full, must leave the fishing when at its best, and make a long voyage to her port of return, in the northern States, in order to discharge; and before she can again reach the ground the chances are that the fish have disappeared, or that the season is over.

If our mackerel fishers could remain upon the fishing ground during the whole season—touching at some convenient station occasionally, to land the fish on board, and thus keep their vessels in good sailing trim—five or six fares could be made in each season, instead of the two fares, which they rarely exceed at present. The right of fishing within three marine miles of the land is very important, as regards the mack-

erel fishery ; because the best and fattest fish are generally found in the largest *schulls*, in close proximity to the shore.

To the cod-fisher the right to dry and cure his fish on shore would also be important. The vessel could be kept in better trim, and fresh bait could be more readily procured ; the fish would be more perfectly cured and fitter for food than under the present mode of salting and curing. A superior quality of this description of fish would open to us not only the market of California, but also several foreign markets from which our fish are now excluded, by reason of their imperfect cure.

Immediately after the disappearance of the ice in the Gulf of St. Lawrence, every spring, vast quantities of herrings draw near the shores, in order to deposit their spawn. Our fishermen cannot participate in this fishery, because they are unable to enter the gulf so early. The quantity of ice passing out by Cape Breton prevents their doing so until the season for this prolific fishery has passed. If our fishermen could land and set up fishing stations on the coasts within the Gulf of St. Lawrence, they might send home the season's catch by freighting vessels, and winter their boats and part of their vessels there. In such case they would be ready to participate in the early herring fishery the moment the ice left the shores ; and, having procured a sufficient quantity for curing, they would also be furnished with an ample supply of bait for the early cod-fishing, which is excellent. As the herrings approach the shores they are naturally followed by the cod, which feed upon them. In the early part of May the cod are found in great abundance within half a mile or a mile of the land, in very shoal water ; of course, they may be taken with perfect ease, and therefore with much profit.

Instead of returning to their port of ownership with the fares of herring and cod which might thus be taken before our vessels are now able to enter the gulf, these cod would be dried and cured in the best manner by shore crews, and rendered fit for any market. The vessels and their fishing crews might at the same time be constantly and profitably occupied in pursuing closely the several fisheries, as they succeed each other, throughout the entire season, securing the best fish of every description in the largest quantities. By leaving some of the boats and vessels on the coast, the fisheries, especially that for mackerel, might be prosecuted until some time after the period when our vessels are now obliged to leave the gulf on their homeward voyage, at which late period the finest fall mackerel are always taken.

Permanent fishing stations within the gulf, with boats and vessels always there, would render the fishing season considerably longer for our fishermen. They would then share in the early spring and late fall fisheries, from both which they are now excluded by the existing arrangements.

It is only necessary to advert to the frightful loss of life and property which occurred in the Gulf of St. Lawrence last October, to show how advantageous it would be to our citizens if, instead of remaining at sea through the heavy gales which frequently occur in the gulf, their fishing vessels had each some convenient fishing station, well sheltered, to

which they could resort at all times, and where the crews could be rendered useful on shore during the continuance of bad weather at sea.

NAVIGATION OF THE ST. LAWRENCE.

In connexion with the right to land and cure fish on the shores of the gulf, the free navigation of the river St. Lawrence becomes a matter of much importance.

The fish caught by our fishermen in the gulf, instead of being sent by the long and dangerous voyage around Nova Scotia, in order to reach some port in the Union from whence to be sent into the interior, might, when ready for market, be shipped in our own vessels from the fishing stations on the coast, and these vessels, proceeding up the St. Lawrence, might reach any or all of the ports or places on the great lakes, where a supply of sea-fish is highly prized.

The numerous and constantly increasing body of consumers in the great West, even to its remotest extremity, would thus be furnished with good fish at reasonable rates, caught and cured by our own hardy fishermen, and transported in our own vessels.

FRENCH FISHERIES AT NEWFOUNDLAND.

The recent movements in France with regard to bounties on fish caught at Newfoundland, and exported to foreign countries, are singularly interesting at the present time, because it will be found, from what follows, that the changes which take place during the present year in the allowance of those bounties are calculated to exercise a powerful effect on the deep-sea fisheries of the United States.

Hereafter we are to have fish caught and cured by citizens of France, entering our markets under the stimulus of an extravagant bounty, to compete with the fish caught and cured by our own citizens.

This altogether new and unexpected movement on the part of France has already attracted attention, and excited much interest and uneasiness among the fishermen of the eastern States. The matter at present stands thus:

The law of France which granted bounties to the sea fisheries being about to expire, the project of a new law was submitted to the National Assembly on the 20th December, 1850, by the government. An able report on these fisheries was at the same time submitted, which, among other things, sets forth that the bounties paid by France during the nine years from 1841 to 1850, inclusive, for the cod-fishery only, had amounted to the mean annual average of 3,900,000 francs; the number of men employed annually in this fishery amounting to 11,500 on the average. The annual expense to the nation was therefore 338 francs per annum for each man. France, it is said, thus trains up able and hardy seamen for her navy, who would cost the nation much more if they were trained to the sea on board vessels of war.

* Translations of recent legislative documents of the National Assembly of France are appended to this report, and to these reference is made for full particulars. For these and other valuable documents the undersigned is indebted to Hon. Abbott Lawrence, minister at the court of St. James, to whom his best acknowledgments are justly due, and are respectfully tendered.

A committee of the National Assembly reported at length upon the proposed law, and the state of the deep-sea fisheries. From this report, it appears that these fisheries, although enjoying large bounties and privileges, were languishing, owing to the great distance at which they are conducted, and a farther increase of bounties on exportation was recommended, in order to stimulate their drooping energies. Upon this elaborate report, the National Assembly passed the proposed law on the 22d July, 1851. It provides that, from the first day of January, 1852, until the 30th June, 1861, the bounties for the encouragement of the cod fishery shall be as follows :

BOUNTIES TO THE CREW.

1. For each man employed in the cod fishery, with drying, on the coast of Newfoundland, at St. Pierre, and Miquelon, or on the Grand Bank, 50 francs.
2. For each man employed in the fisheries in the seas surrounding Iceland, without drying, 50 francs.
3. For each man employed in the cod fishery on the Grand Bank, without drying, 30 francs.
4. For each man employed in the fishery on the Dogger Bank, 15 francs.

BOUNTIES ON THE PRODUCTS OF THE FISHERIES.

1. Dried cod of French catch, exported directly from the place where the same is caught, or from the warehouse in France, to French colonies in America or India, or to the French establishments on the west coast of Africa, or to *transatlantic countries, provided the same are landed at a port where there is a French consul*, per quintal metrique, (equal to 220½ pounds avoirdupois,) 20 francs.
2. Dried cod of French catch, exported either direct from the place where caught, or from ports in France, to European countries or foreign States within the Mediterranean, except Sardinia and Algeria, per quintal metrique, 16 francs.
3. Dried cod of French catch, exported either to French colonies in America or India, or to transatlantic countries, from ports in France, without being warehoused, per quintal metrique, 16 francs.
4. Dried cod of French catch, exported direct from the place where caught, or from the ports of France, to Sardinia or Algeria, per quintal metrique, 12 francs.

BOUNTY ON COD LIVERS.

5. Cod livers which French fishing vessels may bring into France as the product of their fishery, per quintal metrique, 20 francs.

From the foregoing scale of bounties, it will be seen that there are some grounds for the fears entertained by the fishermen of New England, that the dried cod caught and cured by the French at Newfoundland, will be introduced into the principal markets of the United States,

with the advantage of a bounty very nearly equal to two dollars for each American quintal—a sum almost equal to what our fishermen obtain for their dried fish when brought to market. It must not be overlooked, either, that, besides this excessive bounty on fish exported to transatlantic countries, the French fishermen will enjoy also the bounty of fifty francs (almost ten dollars) per man for each of the crew, a farther bounty of twenty francs per quintal metrique on the cod-oil which he lands in France; and farther, an almost entire remission of the duties on salt used at Newfoundland.

With competition at hand so encouraged and stimulated, it will soon be necessary to give our fishermen every facility and advantage for pursuing their business which by any possibility can be procured for them.

By the treaty of Paris of 1824, the French were restored to the fisheries at Newfoundland. They in a short time took possession of the west coast and the northeast coast, and under the high stimulus afforded by their heavy bounties, they nearly drove the British fishermen off of those coasts, and competed successfully with them in the foreign markets they had previously supplied.

PART II.

THE TRADE OF THE LAKES.

In obedience to your instructions, the following detailed report is submitted on the condition, history, and prospects of the trade and commerce of the great lakes of America; the character, nature, quality, and value of their imports, exports, and coastwise shipments; the places where originated, and whether on the increase or decrease; the present enumeration of their entrances, clearances, tonnage, and crews, whether progressive or retrogressive; with comparative statements of the present and past years; the facilities and obstructions to their free navigation and the transportation of goods; the internal improvements completed, under way, projected, or imperatively required; the character for productiveness, whether of agricultural or mineral wealth, or of that arising from fisheries or the forest of the circumjacent districts; the growth, prospects, and present condition of the harbors, light-houses, beacons, piers, and other works indispensable to secure navigation; and, lastly, the farther works of construction, removal of obstacles, and general improvements of navigation, requisite for the development and exploration to the fullest extent of the inestimable resources of these noble waters, and the vast territories surrounding them.

It has been difficult to obtain much information and full detailed statements on some of these points, owing, it is believed, to the absence of proper legal requirements and authoritative departmental instructions in that respect, and the want of means (except at the private expense of the officers and others) of furnishing such statistical data. Most of the officers of the customs on the lake frontier are attentive, and are desirous of furnishing all the statistical and general information in their power, and many of the citizens engaged in trade and commerce, and in the shipment and transportation of produce and merchandise, and especially incorporated companies or associations, have frequently furnished the public with useful information on the lake trade and commerce.

The interests of those engaged in such business are ordinarily advanced by expositions of such data. But full and authentic data, in proper form for ready compilation and condensation into intelligible tabular statements, especially those for comparison, cannot be obtained without legal provision to such end, and particular departmental instructions presenting *uniform* abstracts. Funds are also necessary, to compensate the time and labor devoted to such important service. Several of the most valuable revenue officers on the lake and inland frontier now receive inadequate compensation for their faithful and

onerous services. And with respect to federal officers, *punctuality* should be enforced by legal enactments. The organization of a statistical office, the duties of which should include the decennial census, as a permanent bureau attached to the proper department at Washington, to which full information and data from all the departments and offices at the seat of government and throughout the Union, and from all our officers abroad, should be rendered, and which could obtain like information from the State governments and other trustworthy sources, and from foreign governments likewise, might prove eminently useful.

Properly established, and conducted by intelligent, accurate, industrious persons, it might easily collect quarterly all the requisite data of our trade and commerce with foreign countries, of our internal trade and commerce, of our internal improvements and internal transportation, of our growing resources in every quarter, and of our coastwise trade. And all statistical data that might be wanted, could be advantageously published in advance of every session of Congress. That such information would be invaluable to the statesmen of this country who seek to legislate upon national principles, no one can deny. That vigilant detector, the public press, would then be enabled to expose errors or fallacies in time to prevent their causing inconvenience.

Other governments, less liberal than ours, seek such information to enable them to find new objects for *taxation*. It would be especially important to ours as enabling it to abolish indirect or direct restrictions and burdens upon the advancement of every branch of industry, as it might then do without danger of mistake as to the facts. The paramount duty of this government is to relieve the people from all unnecessary *taxation*, and this measure would tend to further such object. Congress would not then, as is now too often the case, be compelled to legislate on such subjects in the dark, by conjecture, or, what is infinitely worse, upon the false data and incorrect and deceptive statistics furnished by interested persons.

Notwithstanding the difficulties now existing, it is believed that an approximation, sufficiently near the realities of the case to convey an adequate understanding of the subject, has been attained in the following pages; and that the results, as shown, will be alike gratifying to the enlightened and patriotic statesman, as displaying the immense development and incalculable prospects of the resources of his country, and astonishing to the casual observer, who has, it is probable, never regarded the lake trade of the West as the right arm of the nation's commerce, or its area as the cradle of national wealth, prosperity, and progress.

For the convenience of reference and comparison, as well as from regard to historical and geographical propriety, the matter collected on this subject has been thus divided and arranged.

A review, general and detailed, of each of the lake districts of collection, seventeen in number, commencing from the Vermont district to the eastward as the first, and among the first constituted, and thence proceeding westward to the head of Lake Superior.

To each of these districts is attached a synopsis of such commercial and custom-house statistics as were attainable, and found to be to the

point ; also, a general synopsis of the lakes, severally, with their trade and back countries ; and, added to these, detailed statistical tables in reference to the whole of the great St. Lawrence basin.

To enter in this place on a discussion to prove what is so generally admitted as the advantages accruing to a country from a various and extensive commerce, would be superfluous ; but, nevertheless, so little appears to be known, and such limited interests to be felt, in relation to our own internal commerce, and to its bearing on the trade and prosperity of the country at large, that a few words on its nature, past history, present requirements, and bearing on our commercial, social, and political condition, will not, it is presumed, appear entirely impertinent.

In the first place, the general self-gratulation of the people and their legislators at the fact that within scarcely a century's lapse our foreign commerce has grown up to be second only to that of Great Britain, and to threaten it also with rivalry, appears to have blinded them to a perception of the difference of the circumstances attending maritime and inland navigation ; of the reasons why the latter requires aid from the public to effect what in the former is safely left to the means and enterprise of individual communities ; and, lastly, of the preponderating influence of the latter on the former branch of national prosperity. It appears, moreover, to have led casual observers to the opinion that, because our maritime commerce has experienced so wonderful an increase under circumstances somewhat untoward, it could have made no greater or further progress if liberally fostered by the hand of government ; and, secondly, that because one branch of commerce has so succeeded, all other branches can so succeed.

To these propositions it may be replied briefly :

First. That the maritime commerce merely exports to foreign markets the surplus productions of our country, whereby to purchase imports from the same or similar markets.

That this maritime commerce is sustained for the most part by opulent commercial communities, on whom no burdens rest, at farthest, but the construction of their own harbors and their maintenance.

That without a supply of produce for exportation, the foreign commerce would be carried on under such an adverse balance of trade as would be injurious rather than profitable.

That, for the present, the preponderance of our foreign exportations must be of raw material, as agricultural produce, produce of the forest, the fisheries, and the field.

That even when this ceases to be the case, and our articles of export shall be more largely manufactures and articles of luxury, in lieu of raw produce, the necessity of raw produce to the seaboard and the large commercial cities will still exist and increase, from the necessity of supplying material and subsistence for the commercial or manufacturing population.

That of those articles of raw material which are neither shipped as foreign nor used as domestic provision, such as minerals and metals, every ton native, brought into the domestic market and manufactured at home for home use, supplants so much of foreign raw material or

manufacture, and tends thereby so far to change the balance of trade in our favor.

It is contended by some political economists, that of nations engaged in commercial pursuits, the largest exporters and the smallest importers must be the gainers, since a large excess of importation must cause a drain of the precious metals to pay for such excess. It does not follow that if this be true as to foreign or maritime commerce, it is equally so as to inland or interior trade.

The former cannot exist but by means of the latter; the latter may exist, and in some sort flourish, without the aid of the former.

Again, for articles of bulk and weight, no means of transportation can compete with water carriage, especially for great distances. It is the best and the cheapest.

This, then, is the position of our inland and maritime navigation and commerce; the former is the feeder of the latter, the source of its greatness; for at such a vast distance do our granaries and storehouses of agricultural and mineral wealth lie from our marts and workshops, that but for the network of lakes, rivers, and artificial improvements with which our country is so wonderfully intersected, they could never be rendered available for exportation or home consumption on the seaboard, and in the old and thickly settled districts.

These considerations show the interest which the external or maritime commerce has in the advancement of the lake trade and navigation; and establish that the maritime commercial communities, and the commonwealth, should, as a matter of justice and duty, as well as of expediency, aid liberally all improvements which may facilitate the prosecution of business, the cultivation and exploitation, and yet more the transportation, of that produce which is necessary to the existence of the one, and the well-being of the other. The lake trade is obliged to effect much more by its own means than the foreign, and it has infinitely less means whereby to effect it.

It is well known that this inland or lake trade is in the hands of new States, peopled, for the most part, by emigrants, whose chief possession is their industry, swelling the coffers of the older and wealthier communities. The latter now virtually demand that these infant States shall not only produce, but transport produce, and clear the way for that transportation, for their benefit, at their own expense. Hence the expediency and justice of lending, under these circumstances, federal aid to the new States, so far as removing or surmounting such obstacles in free channels of trade open to all or any States, as are offered by the flats of the Lake St. Clair, the rocks and shoals of Lake George, or the Sault St. Marie, is, it is considered, incontestable.

The details of the districts, and the general synopsis of the lakes and lake country, will undoubtedly suffice to establish the facts and show the realities of the vast extent of the existing trade, its past growth, and its gigantic future. But a brief glance at its general features may be useful for the concentration of ideas and ready perception of results.

The coast line embraced in this report include both shores of Lake Champlain, with which it commences (discharging its waters into the St. Lawrence by the Sorel or Richelieu river,) the southern bank of the river

St. Lawrence, Lake Ontario, the Niagara river, and Lake Erie, to the dividing line between New York and Pennsylvania; thence the southern coast of Lake Erie to the Pennsylvania and Ohio line; thence the southwestern coast of the same lake to the Michigan line; and thence the whole southern banks of the Detroit river, St. Clair lake and river, the western coast of Lake Huron, along the southern peninsula of Michigan, the whole coasts of Lake Michigan, including the shores of Illinois, Ohio, Wisconsin, and Michigan, and all the southern and southwestern coast line of Lake St. George, the river St. Mary's, and Lake Superior, including the shores of northern Michigan, Wisconsin, and Minnesota, to the frontier of the British possessions at the outlet of Rainy lake and Lake of the Woods into the waters of Lake Superior. The extent of the whole line exceeds three thousand miles in length, and embraces portions of the following States, several of them the wealthiest of the entire Union: Vermont, New York, Pennsylvania, Ohio, Michigan, Indiana, Illinois, Wisconsin, and the Minnesota Territory, on the one side; while the lakes open to our commerce on the other a coast line of nearly equal extent, and in some parts of hardly inferior fertility, on the Canadian shore. The lakes themselves, with their statistics of measurement, are as follows:

Lakes.	Greatest length.	Greatest breadth.	Mean depth.	Elevation.	Area.
	<i>Miles.</i>	<i>Miles.</i>	<i>Feet.</i>	<i>Feet.</i>	<i>Sq. miles.</i>
Superior	355	160	900	627	32,000
Michigan	320	100	900	578	22,000
Huron	260	160	900	574	20,400
Erie	240	80	84	565	9,600
Ontario	180	35	500	232	6,300
Total	1,555	.....	.....	.....	90,000

These lakes are estimated to drain an entire area of 335,515 square miles, and discharge their waters into the ocean through the river St. Lawrence, which is rendered navigable from Lake Erie downward to all vessels not exceeding 130 feet keel, 26 beam, and 10 feet draught, and the free navigation of which for American bottoms may, it is anticipated, be acquired by the concession of reciprocity of trade to the Canadian government.

The whole traffic of these great waters may be now unhesitatingly stated at \$326,000,000, employing 74,000 tons of steam, and 138,000 tons of sail, for the year 1851; whereas, previous to 1800 there was scarcely a craft above the size of an Indian canoe, to stand against an aggregate marine, built up within half a century, in what was then almost a pathless wilderness, of 215,000 tons burden. It may be interesting to state that the first American schooner on Lake Erie was built at Erie, Pennsylvania, in 1797, but she was lost soon afterward, and the example was not followed.

Another point should be here mentioned in regard to this vast augmentation of maritime force and tonnage, which is, that the increase of business is most inadequately represented by the increase of tonnage;

since, by the increased capacities of the vessels, their speed while under way, their dispatch in loading and unloading, and the substitution of steam as a motive power, both for sail on the waters and for human labor at the dock, the amount of traffic actually performed by the same amount of tons in 1851, as compared with that performed in 1841, is greater by ten-fold.

To illustrate this position, it is worthy of notice that, in 1839, the twenty-five largest steamers on these lakes had an average of 449 tons burden, the largest being of 800 tons. In 1851 the average of the twenty-five largest fell little short of 1,000 tons, and the average of the whole steam fleet, consisting of 157 steamers and propellers, was 437 tons. Ten years since, from a week to ten days was allowed to a first-rate steamer for a voyage from Buffalo to Detroit and back. In 1851, three days only were required by first-rate steamers, and four to five by propellers.

These facts show that four times as much business is transacted in 1851 by ten steamers as was effected by the same number in 1841. The substitution of steam for sail in the same period has, it is evident, effected a yet greater increase in the speed of transit and celerity of transshipment; and this substitution is hourly on the increase; in proof of which, of 7,000 tons of shipping now on the stocks at Buffalo, 250 only—one brig—are sail; all the remainder steam or propellers.

Of this latter species of vessels the increase is so great and so regular, and so rapidly are they growing into favor, that there can be but little doubt that they are destined ultimately to supersede vessels propelled by sail only, especially for voyages of moderate length, and in localities where fuel is abundant and easily to be procured. In no region of the globe are these two conditions, on which rests the availability of screw-steamers, more perfectly complied with than on the lakes, where the longest voyages do not exceed three weeks, at an extreme calculation, and where bituminous coal of a very fine quality can be procured at an average price of three dollars and a half per ton, and at many points at two and a half on the docks.

The following table, taken from a very valuable report by Messrs. Mansfield and Gallagher, of the statistics and steam marine of the United States for 1851, will show the comparative force of the steamers employed in the oceanic and the lake trade, and will exhibit a result sufficiently surprising to readers unacquainted with the business of the interior :

Description of vessels.	Number.	Tonnage.	Officers & crews.
Ocean steamers.(coast)	96	91,475	4,548
Ordinary steamers.do.	382	90,738	6,311
Propellersdo.	67	12,245	542
Steam ferry boats.do.	80	18,041	369
Total cost.	625	212,500	11,770
Ordinary steamers, lake and river.	663	184,262	16,576
Propellers.do.	52	15,729	817
Steam ferry boatsdo.	50	4,733	214
Total lake and river.	765	204,725	17,607
Steam marine, coast.	625	212,500	11,770
Do.inland.	765	204,725	17,607
Total.	1,390	417,226	29,377
Excess of lake and river.	140	7,775 dim.	5,837

The distribution of steamers in the basin of the lakes is as follows :

District of Burlington	11
Plattsburgh	6
Ogdensburgh.	4
Sackett's Harbor	1
Oswego	9
Rochester	2
Niagara	1
Buffalo.	42
Presque Isle	7
Cleveland	13
Sandusky.	1
Toledo	4
Detroit.	47
Michilimackinac	12
Chicago	4

The number on each lake is—

Champlain.	17
Ontario	17
Erie	114
Straits	12
Michigan	14

The entire number of vessels and crews of the interior trade amounts to 140 bottoms, and 5,837 men, in excess of the whole ocean and coast navy, though the tonnage employed in the former is smaller by 7,775 tons.

It is for this wealthy commerce of the interior that all the Atlantic cities are now striving, in earnest competition, by the creation of new outlets and avenues, for its transaction; and this very competition is good evidence that all the eastern or New England and middle States are, in some sort, more or less affected by it.

The great system of exchange between the cities of the ocean seaboard and the entire West is transacted through the lakes, and the channels connected with them; and it is not uninteresting to observe that the increase of the population in the Atlantic States, and that of the tonnage of the West, have kept even pace with each other.

Table of population and tonnage.

Years.	N. E. States— population.	Per ct. increase.	Middle States— population.	Per ct. increase.	N. W. States— population.	Per ct. increase.	Tonnage of lakes
1790	1,009,823	.....	958,632	958.6	None.	.....	None.
1800	1,233,315	22.1	1,401,070	46.15	50,240	.....	.....
1810	1,471,891	19.3	2,014,695	43.79	272,324	442.04	.....
1820	1,659,808	12.8	2,699,845	34	792,719	191.09	3,500
1830	1,954,717	17.7	3,587,664	32.88	1,470,018	85.43	20,000
1840	2,234,822	14.3	4,526,260	26.16	2,967,840	101.89	75,000
1850	2,728,106	22.07	5,898,735	30.32	4,721,430	59.08	215,787

In this scheme it must be observed that the six New England States, Maine, New Hampshire, Vermont, Rhode Island, Massachusetts, and Connecticut, possess an area of 63,326 square miles, with a population of 2,728,106, being 43.09 persons to the square mile.

The Middle States, New York, New Jersey, and Pennsylvania, possess an area of 100,320 square miles, with a population of 5,898,735, or 58.80 persons to the square mile; while the northwestern States, Ohio, Indiana, Illinois, Michigan, Iowa, Wisconsin, and the Minnesota Territory, have an area of 373,259 square miles, with a population of 4,721,430, or 12.70 persons to the square mile.

When this last division shall have become as densely populated as the Middle States now are, it will contain a population, directly tributary to the trade of the lakes, of 22,000,000 of souls; and there is every reason to believe that the increase of population will be as rapid, until that result shall be fully attained, as it has been since 1800. How wonderful and grand a spectacle will it then be to many, doubtless, of those now born, when, at the commencement of the twentieth century, this lake country shall be seen supporting a population of so many millions! And what will then be the amount and value of that trade, and the aggregate tonnage of that marine, which has sprung up, in less

than forty years, from nothing to two hundred thousand tons of steam and shipping!

It is stated that the entire amount of appropriations made by government, for the benefit of all rivers and harbors, since its first organization, has been \$17,199,233, of which only \$2,790,999 were devoted to the lakes, the balance being all for the Atlantic coast and rivers; and that, too, in face of the facts, that in consequence of several unavoidable disadvantages, in the present condition of the lake coasts and harbors, there is a greater proportional loss of life on these waters than on the ocean itself and all its tributary seas.

It may be well to note here the loss of property and life by marine disasters on the lakes, which are not only in themselves most lamentable, but which become far more deplorable when it is considered that at a small outlay the navigation could be rendered as safe, at the least, as that of any other waters.

The disadvantages alluded to above are to be found in the facts, that while the lakes are exposed to squalls, gales, and tempests, as violent as those of the ocean, they have not sufficient sea room to allow of a vessel scudding before the weather, since, if the gale were of any duration, she would soon run from one end to the other of the lake, on which she might be caught, and so incur fresh and perhaps greater danger. In like manner, the breadth of these basins is so comparatively diminutive, and so much beset with dangerous reefs and rocky islands, that a vessel cannot long lie to, in consequence of the terrible and insidious drift which is ever liable to drive her to unforeseen destruction.

The following table will exhibit the loss of life and property incurred during the four last succeeding years, which are surely disastrous enough to plead trumpet-tongued with government for the extending some means of security and protection to the navigators of those perilous seas of the interior.

Years.	Property.	Lives.
1848.....	\$420,512	55
1849.....	368,171	34
1850.....	558,826	395
1851.....	730,537	79
Total of four years.....	2,078,046	563

The excess of lives lost in 1850 was occasioned by the explosion of the boilers on board two steamers, and the burning of the third, which had on board a large number of emigrants; this may be, therefore, in some degree deemed accidental and extraordinary, as such catastrophes are of rare occurrence on the lakes. The great preponderance, however, of the year 1851 over those of 1848 and 1849, has no such palliation, since they were the effect of heavy gales, the absence of harbors necessary for the protection of mariners, and the obstruction of the mouths of such as do exist, by bars, on which a terrible surf breaks, and which entirely preclude the possibility of entering the place to which

they have in vain fled for refuge. It is of little benefit to the mariner that the government has expended comparatively inconsiderable amounts in the erection of piers and light-houses at the entrance of a few bar-mouthed rivers and harbors.

The total of the losses on the Atlantic, Gulf of Mexico, and Pacific coasts, in the year 1851, amounted to 328 vessels, and many hundred lives, out of a total marine measuring 3,556,464 tons, being a loss of one vessel to every 10,844 tons of shipping.

The lake losses of the same year were 42 vessels and 79 lives, out of a marine measuring 215,975 tons, being a loss of one vessel to every 5,142 tons of shipping. The proportion of vessels lost on the lakes is therefore much in excess of the losses on the ocean coasts, and that of lives still more so.

In this point of consideration it is worthy of remark that a single powerful government steam-dredge could be kept continually in commission, and employed during seven months of the year, which could, with perfect ease, remove the obstructions on the flats of Lake St. Clair and Lake St. George, open the bars, and deepen the beds of all the harbors, from one extremity of the lakes to the other, in the course of a very few years, and keep them unobstructed thenceforth to the end of time, by an annual appropriation of one-fourth the amount of the augmented compensation recently granted to the Collins line of steamers, and, of course, two such vessels, materially lessening the duration of the work, for one-half that appropriation.

Nor does it appear that the opening an area so vast to the enterprise and efficiency of our inland commerce, giving perfect protection to so important a branch of the national marine as that employed in the navigation of the lakes, is an end less worthy than the furthering and encouraging any system of post office transportation, and ocean steam-marine, however incomparable its deserts; and this without regarding the preservation of what is generally held invaluable among earthly things—the life of human beings.

The expediency and justice are thus shown of extending some meed of protection and encouragement to the regions, with their ports, harbors, and marine communications, which are the theatre of a commerce so valuable as that for which all the Atlantic cities are contending; and to perfect the internal and inland communications of which, by canals and railroads, the young States, in which that theatre is placed, are making so great efforts.

The policy of doing so cannot but be seen on considering the effect which the construction of railways, the opening of canals, and the facilitation by all means of transportation and intercommunication, has upon the growth of cities, the population, cultivation, wealth, and prosperity of districts, which actually seem to grow and expand in arithmetical progression to the ratio of their improved accessibility, and the number of their outlets and avenues for commerce and immigration.

It may not, therefore, be now impertinent to examine the operation of these influences on the unparalleled increase of the West, which can, in fact, be traced directly to these causes.

It has been shown already that, however remote the period of the discovery, exploration, and partial colonization of these wilds and

waters, anything like practical navigation of them for commercial purposes was unattempted until after the commencement of this century. In 1679 a French craft indeed was launched at Erie, Pennsylvania, for the expedition of the celebrated and unfortunate La Salle ; but this, which was an experiment for a special purpose, wholly unconnected with trade, was not followed up. In 1797, as has been before stated, the first American vessel was launched on the lakes. In 1816 the first steamer was built on the waters of Lake Ontario, and the first on Lake Erie in 1818. For some considerable time the first vessels put in commission on Lake Erie, were used merely for facilitating the movements and operations of the Indian traders, carrying westward supplies and trinkets for the trade, and returning with cargoes of furs and peltries. In 1825 the Erie canal was completed, and its influence began at once to be felt through the western country. The western portion of the State of New York immediately began to assume an air of civilization and to advance in commercial growth. This influence continued still to increase until the Welland canal and the Ohio canals were completed. The tonnage, which had then increased to about 20,000 tons, found at this time full employment in carrying emigrants and their supplies westward, which continued to be their principal trade till 1835, when Ohio began to export breadstuffs and provisions to a small extent. In 1800 Ohio had 45,000 inhabitants ; in 1810, 230,760 ; in 1820, 581,434 ; in 1830, 937,903.

During this year a portion of the canals was opened, and during the ten years next ensuing after 1830 some five hundred miles of canals had been completed, connecting the lakes by two lines with the Ohio. Under the influence of these improvements the population of the State augmented to 1,519,467 individuals. In 1835 she exported by the lakes the equivalent of 543,815 bushels of wheat. In 1840 her exports of the same article over the same waters were equivalent to 3,800,000 bushels of wheat, being an increase, in the space of five years, in the articles of wheat and flour, of what is equal to 3,300,000 bushels of wheat, or nearly six hundred per centum. These articles are selected, as being the most bulky, in order to illustrate the effect of canals upon lake commerce. At this period, 1840, there were not completed over two hundred miles of railway in the State, and this distance was composed of broken portions of roads, no entire route existing as yet across the length or breadth of the State. In 1850, there were in operation something over four hundred miles of railroad, and rather a greater length of canals, while the population had increased to 1,908,408, and her exports, by lake, of wheat and flour, were equivalent to 5,754,075 bushels of wheat, and that, too, in spite of the fact that the crop of 1849 was almost an absolute failure throughout the West.

In 1851 the exports of wheat and flour, by lake, were equivalent to no less than 12,193,202 bushels of wheat ; and the cost of freight and shipping charges on this amount of produce falls little, if any, short of \$510,000 ; nearly the whole amount having reached the lakes via the canals and railways of Ohio.

Similar sketches of the other northwestern States, during their rise and advancement to their present condition of prosperity, and influence on the confederation, might be adduced in this place, all equally flat-

tering to the energy and enterprise of the western people, and to the influence of internal improvement on commerce ; but this narrative of the eldest State of the group will suffice to illustrate the subject, and give some idea of the unexampled progress of the whole.

Westward of Ohio, the Wabash canal brings the vast productions of Indiana to the lakes, passing through a small portion of Ohio, from the port of Toledo to the junction, thence to Evansville, on the Ohio river, and traversing the entire length of the Wabash valley, one of the finest wheat and corn countries in all the West. This canal is four hundred and sixty-four miles in length, and is one of the most important of recent improvements.

It is worthy of note here that, in addition to its vast commercial business by the great lakes, Ohio, and more particularly its commercial capital, Cincinnati, the largest, wealthiest, and finest city of the West, and the great emporium of that region, has an immense commerce, both in exports and imports, by the rivers Ohio and Mississippi; and it appears that a larger portion of groceries are imported for the use of the interior, into Cincinnati, by the river, than to the lake-board, via the lakes; and farther, that while a much larger portion of the trade in cereal produce goes by the lakes, a majority of the live stock and animal provisions is sent by the rivers or otherwise. No ill effect is produced, however, on either commercial route, by this competition, but rather the reverse, there being times when either route alone is closed to navigation—the lakes during the winter by the ice, and the Ohio by the failure of its waters during the summer droughts. There is, moreover, commerce enough amply to sustain both channels; and while the State, its beautiful capital in particular, is a great gainer, no port or place of business is a loser by this two-fold avenue and outlet for commercial transportation.

The southern Michigan and northern Indiana railway terminates both at Toledo, Ohio, and at Monroe, Michigan, on the lakes, and runs westward, through the northern counties of Michigan and the northern counties of Indiana, to Chicago, at the head of Lake Michigan, on the eastern border of Illinois. This road passes through some of the most fertile portions of these States, and, being recently completed through its entire length, may be confidently looked to as sure to add greatly to the commerce of the lakes at its termini.

Farther to the northward, on the Detroit river, the central Michigan railway communicates across the peninsula, from the city of Detroit, with new Buffalo and the lake; and, having been open some years, has done more to develop the matchless resources of this State, and to urge it forward to its present commanding position, than any one other route. Cities, villages, and large flouring mills are springing into existence everywhere along the line of this road, depending upon it as the avenue of their business to the lakes.

The Pontiac railway and many plank roads connect various other points of the interior, and are vastly beneficial to the commerce of the lakes.

Following the line of the lakes westward, Lake Huron may be passed over, as presenting no internal improvements worthy of note. One of the principal of those which are already projected is the exten-

sion of the Pontiac railroad to Saginaw, touching at a point on the St. Clair river, opposite to Sarnia, Canada West, where it is destined to communicate with a branch of the great western railway from Hamilton, on Lake Ontario, to Lake Huron. Another road is also projected in Canada, from Toronto, across the peninsula, by Lake Simcoe, to Penetanguishine, on the great Georgian bay, which will shorten the route to the Sault Ste. Marie by many hundred miles, and, should the much demanded and long proposed ship canal around the Sault be now at last effected, will tend more largely than any other improvement to develop and bring to a market the incalculable mineral resources of Lake Superior.

Southward of Lake Superior, and bordering on the western shore of Lake Michigan, lies the upper or northern peninsula of Michigan, and the northern portion of Wisconsin, little known as yet, except to lumber-men, trappers, traders, and voyageurs, and naturally hitherto the theatre of no internal improvements tributary to the commerce of the lakes.

Passing southward, however, to Green bay, and its sources in the interior of Wisconsin, there are lately completed some improvements in the internal navigation of that State, which are, perhaps, of more importance to the future growth of the lake commerce than any yet perfected in any part of the State. These are the works on the Fox river, and the canal connecting the waters of that stream with the Wisconsin, which opens the steam navigation of the lakes to river craft, and *vice versa*, although it is scarcely probable that the same vessels which navigate the lakes will pass through the rivers. This, in fact, is by no means necessary to the success of the project, the importance of which is found in the fact, that by it the steam route from the Atlantic to the upper valley of the Mississippi is incredibly shortened; and thereby the whole trade, springing into existence throughout that vast upper country, is, in a great degree, rendered tributary to the lakes.

The junction of the Wisconsin and Mississippi rivers is, in fact, by this route brought nearer to the lakes than to St. Louis; and the transportation of goods being by an uninterrupted line of steamboat navigation throughout the whole chain of lakes and across the State of Wisconsin, the trade to be one day transacted by this route will be enormous.

The richness of the soil of Wisconsin in the valleys of the rivers, and on the borders of the Lake Winnebago, is rarely surpassed or equalled, and towns containing from one to three thousand inhabitants are everywhere springing into existence through her territories, which are probably destined to become, in a few years, great commercial cities.

Southward of this route there are no very important channels of communication tributary to the lakes until we reach Chicago, where Lake Michigan is connected with the Illinois river by a canal of 100 miles in length, opening to that lake the vast wealth and traffic of the richest corn valley in the known world.

Railroads are also projected from Milwaukie, one of which is completed some forty miles to the westward, which is destined to extend to the Mississippi. There are also plank roads from many points, more or less useful as avenues of commerce to the lakes; at present, how-

ever, the only communication between the northern and southern routes is by the Illinois and Michigan canal. This was originally intended to be a ship canal, connecting Chicago with Peru, on the Illinois river, but was only constructed equal to the admission of ordinary canal boats, which can, on reaching the latter point, be towed by steam down the river to St. Louis, and return thence laden with sugar, hemp, tobacco, flour or grain, and thence by horse power to Chicago.

Whether the original plan of this canal will ever be carried out, is at best very problematical, since there are obstacles in the periodical shallowness of the waters of the Illinois which would frustrate the only object of the improvement, to wit, the through-navigation of the works by lake craft.

This canal was opened in May, 1848, and the first section of the Chicago and Galena railroad in March, 1849. In 1847, the year previous to the opening of the canal, the real estate and personal property in Cook county, of which Chicago is the capital, was valued at \$6,189,385, and the State tax was \$18,162. In the year following, when the canal had been one season in operation, the valuation rose to \$6,986,000, and the State tax to \$25,848. In 1851 this valuation had risen yet farther to the sum of \$9,431,826, and the State tax to \$56,937. In 1840 the population of Chicago was 4,479, and the valuation of property not far from \$250,000; while in 1851 the population was about 36,000 and the assessed valuation of real and personal property was \$8,562,717. In 1847 the population, according to the city census, was 16,859; in 1848 it was 20,023; in 1849, 23,047; and in 1850, according to the United States census, 29,963; having increased twice more rapidly than before, since the completion of the canal. The population of Chicago at this time—August, 1852—is nearly, if not quite, 40,000.

In regard to this train of argument, and to this view of the effect of internal improvements on the growth of the West, and on the commercial condition of that portion of the country, it will be well to follow up the same train of examination in relation to the growth of certain points to the east of the great lakes, such as Buffalo, New York, Oswego, Boston, and other cities directly affected by the same commerce, through the internal channels of communication in New York and Massachusetts.

In 1800, the city of New York, with its suburbs, had a population of.....	63,000	—in 1850, of.....	700,000
Boston	38,000	“	212,000
Philadelphia city and co.	73,000	“	450,000
Cincinnati	750	“	115,436
Buffalo	—	“	42,260
Oswego	—	“	12,205
Albany	5,349	“	50,763
Chicago.....	—	“	29,963
St. Louis.....	2,000	“	77,860

Hence it appears, that between the years 1800 and 1850 the population of New York and its suburbs doubled itself once in every 16 years; Boston, once in every 25½; Philadelphia, in every 20; Cincinnati, in every 6½; Albany, in every 15; St. Louis, in every 9½ years.

This covers a term of half a century; but from 1810 to 1850, a

period of forty years, the population of New York doubled itself once in every 15 years; Philadelphia, in $18\frac{1}{2}$; Boston, in $18\frac{1}{2}$; Albany, in 16; Cincinnati, in 7; St. Louis, in $9\frac{1}{2}$; Buffalo, in $8\frac{1}{2}$; and Detroit, in $8\frac{1}{2}$.

From 1820 to 1850, a period of thirty years, the population of New York doubled once in 13 years; Philadelphia, in 16; Boston, 15; Albany, $15\frac{1}{2}$; Cincinnati, $7\frac{1}{2}$; St. Louis, 7; Buffalo, $6\frac{1}{2}$; Detroit, 8.

From 1830 to 1850, a period of twenty years—the term of duplication—this being the first census taken after the opening of the Erie canal, but before its influence had been much felt on the seaboard, owing to the non-completion of the Ohio and lateral canals—was, in New York, 15 years; Philadelphia, $17\frac{1}{2}$; Boston, 20; Albany, 20; Cincinnati, $8\frac{1}{2}$; St. Louis, $5\frac{1}{2}$; Buffalo, $8\frac{1}{2}$; Detroit, 6; Cleveland, 5; and Sandusky 5. And from 1840 to 1850—a period of ten years, during which nearly the whole western population had become exporters by means of the Ohio, New York, and Philadelphia canals, and the various lines of railway—the effect of these influences on the period of duplication in the cities of Boston, Philadelphia, and New York, has been truly astonishing; but the same influence, reacting and reflected from the East upon the western cities, is yet more wonderful.

According to the ratio of their increase during these ten years, New York would double her population in 12 years; Boston, in 12; Philadelphia, in $12\frac{1}{2}$; Baltimore, in $13\frac{1}{2}$; Albany, in $16\frac{1}{2}$; Cincinnati, in 6; St. Louis, in 4; Buffalo, in $8\frac{1}{2}$; Detroit, in 9; Cleveland, $6\frac{1}{2}$; Sandusky, $5\frac{1}{2}$; Chicago, 4; Milwaukee, $3\frac{1}{2}$; Toledo, 6; Oswego, 8.

Hence it appears, that every new improvement is bound by inevitable laws to pay its tribute to some great channel of internal commerce. The existence of such a channel has indirectly created the necessity for the improvement; and the same law which called it into existence as necessarily requires it, by a reactionary impulse, to indemnify its creator.

Before the present century shall have passed away, the United States will undoubtedly present to the world a spectacle unequalled in past history. More than fifty millions of republican freemen, all equal citizens of a confederacy of independent States, united by congenial sympathies and hopes; by a devotion to the principles of political and religious freedom, and of self-government; bound together by a common language and harmonious laws, and by a sacred compact of union, will also be firmly cemented with one another by indissoluble bonds of mutual dependence and common interests. The remote sections of the confederacy will be made near neighbors by means of canals. Railroads will chain all the several parts each to each; the whole people from the Pacific to the North Atlantic ocean, from the great lakes to the Gulf of Mexico, cultivating the arts of peace and science, and incited by a genuine rivalry for the accomplishment of the real mission of the American people.

THE LAKE DISTRICTS,

WITH A DESCRIPTION OF EACH:

STATISTICAL STATEMENTS OF THE CANADIAN AND DOMESTIC TRADE,
AND A GENERAL SUMMARY.

No. 1.—DISTRICT OF VERMONT.

Port of entry, Burlington; latitude $44^{\circ} 27'$, longitude, $73^{\circ} 10'$; population in 1830, 3,525; in 1840, 4,271; in 1850, 6,110.

This, which is the easternmost of all the lake districts, comprises the whole eastern shore of Lake Champlain, from its southern extremity at Whitehall to its northern termination, excepting only a few miles at the head of Missisquoi bay, which fall within the Canadian line; and embraces all those portions of the State of Vermont which are subject to custom-house regulations.

Lake Champlain is about one hundred and five miles in length, and varies in breadth from one to fifteen miles; it contains several islands, principally toward the upper end, of which the largest are North and South Hero, and La Motte island; and, in addition to all the waters of Lake George, its principal affluent, the outlet of which enters it at Ticonderoga, receives nine considerable streams: the Otter creek, the Onion river, the Lamoile, and the Missisquoi, from Vermont to the north and eastward; the Chazy, the Saranac, the Sable, and Boquet rivers on the west, and Wood creek on the south, from the State of New York. It discharges its own waters into the St. Lawrence by the Sorel or Richelieu river, in a northeasterly course; the navigation of which has been improved by the works of the Chambly (Canadian) canal, so as to afford an easy communication for large vessels to the St. Lawrence, and thereby to the great lakes. From its southern extremity it is connected by the Champlain canal with the Mohawk river and the Erie canal, at the village of Waterford, where the united works enter the Hudson, and thus form a perfect chain of inland navigation from the lakes of the far northwest to the Atlantic seaboard. The whole length of the Champlain canal, including about seventeen miles of improved natural navigation on Wood creek and the Hudson river, is about sixty-four miles. It is forty feet wide on the surface, twenty-eight at the bottom, and four deep. The amount of lockage is eighty-four feet. On account of this artificial line of intercommunication, Lake Champlain is included, not improperly, in the great chain of American lakes; although, to speak strictly, it is not one of them, having no natural outlet directly into them, and so far from being the recipient of any of their waters, serving, like them, itself as a feeder to the St. Lawrence.

The lake is bordered on its eastern shore by lands composing this district, with a coast line of considerably more than a hundred miles, including its many deep, irregular bays and inlets, of great productiveness and fertility, especially adapted to grazing and dairy farms, and to the cultivation of the northern fruits. Its western shores are, for the

most part, high, wild, and barren, soon rising into the vast and almost inaccessible ridges of the Adirondack mountains, lying within the counties of Hamilton, Herkimer, and Essex, in New York, a region the wildest and most rugged, the least adapted to cultivation or the residence of man, of any to the eastward of the great American desert; and still the haunt of the deer, the moose, the cariboo, the otter, and the beaver, the wolf, the panther, and the loup-cervier, which still abound in this fastness of rock, river, lake, and forest, almost within sound of great and populous cities.

By its means of communication with the St. Lawrence, and its outlet to the Hudson, this lake has become the channel of a large and important trade with Canada, especially in lumber, employing nearly two hundred thousand tons of craft and shipping, counting the aggregate of entries and clearances, and giving occupation, to speak in round numbers, to twelve thousand men.

The opening of the Ogdensburg and Vermont railroads, connecting New York and Boston more directly with the lakes, has, it is probable, in some degree affected this trade; at least, the returns of 1851 exhibit a falling off in the Canadian trade of Lake Champlain. It does not, however, appear that the opening of new channels of trade is wont usually to affect the interests of those already existing, but, on the contrary, by increasing facilities and consequently augmenting demands, adds to the liveliness and vigor of business, and is ultimately beneficial to all. Hence, there appears no just cause for apprehending any permanent decrease or deterioration of the shipping interests, connected with Lake Champlain.

Burlington, the port of entry of this district, is the largest town in the State of Vermont, containing about ten thousand inhabitants. It is beautifully situated on a long, regular slope of the eastern shore, ascending gradually from the head of Burlington bay, on the southern side of the debouchure of the Onion river into the lake, and is the capital of Chittenden county, and by far the most considerable commercial place of the State. It has, moreover, a fine agricultural back country, of which it is the mart and outlet. Burlington is distant from New York, by railway, about three hundred miles; from Boston two hundred and thirty-five; and from Montreal one hundred. By its possession of a central position, with the advantages of both land and water steam facilities, alike for travel and transportation to the grand emporia of Canada, New England, and New York, it is making rapid advances in wealth and population; and now, with railroad communications open on either side of the lake, can scarcely fail to improve and increase, in a ratio commensurate with that of the improvements in its vicinity.

The only method, within our reach, of arriving at the aggregate amount of the lake commerce and traffic, is by taking the accounts of the canal office at Whitehall, which exhibit the amount and value of merchandise delivered at the lake, and the quantity and value of produce received from the lake; and then by estimating the coasting trade of the lake above Whitehall, which does not reach the canal. By deducting from the aggregates of these, the Canadian trade of the districts of Vermont and Champlain, we arrive at the gross amount of the

aggregate coasting trade of the whole lake, as comprising both the collection districts; but owing to this compulsory mode of procedure, no definite understanding of the proportion of commerce attaching to each separately, of the two districts, can be reached.

The amount of assorted merchandise delivered into Lake Champlain in 1851 was 125,000 tons, at \$1 75 per ton.

Average valuation as on Erie canal.....	\$21,875,000
Amount of produce received from the lake.....	3,515,895
Add for coasting above the canal.....	1,000,000
Total commerce of the lake	<u>26,390,895</u>

The Canadian trade of Vermont district, for the years 1850 and 1851, was as follows:

	1850.	1851.
Exports of domestic produce.....	\$651,677	\$458,006
“ foreign merchandise.....	294,182	309,566
Total exports.....	945,859	767,572
Total imports.....	607,466	266,417
Total.....	1,552,325	1,033,989
Subtract total of 1851.....	1,033,989	
Decrease of 1851.....	<u>519,336</u>	

The tonnage in the Canadian trade for the two years was as follows:

Year.	No.	Tons.	No.	Tons.
1851.....	788	94,235	695	91,967
1850.....	818	122,813	731	105,359
Decrease in 1851	30	28,578	36	13,390

The aggregate shipping of Lake Champlain, both foreign and coastwise, is represented to have numbered 3,950 entrances, measuring 197,500 tons, and employing 11,850 men, with a corresponding number of clearances of the same measurement and crews.

The enrolled tonnage of this district in June, in 1851, was 3,240 tons of steam, and 692 tons of sail.

Tonnage.

		Tons.
Inward.—American	166 steam.	56,421
	338 sail.	17,490
	504	<u>73,911</u>

		Tons.
British.....	122 steam.	9,566
	162 sail.	10,758
	284	20,324
Outward.—American.....	147 steam.	58,024
	318 sail.	17,020
	*565	75,044
British.....	119 steam.	9,321
	111 sail.	7,602
	230	16,923
Value of produce imported from Canada in bond.....		\$311,512
Value of imports from Canada.....		251,211
Value of goods of domestic produce and manufacture ex- ported to Canada.....		458,006
Value of foreign goods.....		108,712
Value of goods of foreign produce and manufacture ex- ported to Canada in bond.....		200,854
Value of property cleared at Whitehall for the South.....		3,515,895

No. 2.—DISTRICT OF CHAMPLAIN.

Port of entry, Plattsburgh; latitude 44° 42', longitude 73° 26'; population in 1830, 4,913; in 1840, 6,416; in 1850, 5,618.

This district, which is situate on the western side of Lake Champlain, over against that last described, including the peninsula at the lower end between the waters of that lake and lake George, with the thriving town of Whitehall and the outlet by the Champlain canal, has a coast-line of equal extent, though less indented by bays, than the opposite district of Vermont.

It has two principal harbors—Whitehall, situate on both sides of Wood creek, at its entrance into the lake, in a beautiful and romantic site, with considerable water power, through which passes the very great majority of the whole export and import trade for Canada, and which is a singularly flourishing and improving village; and Plattsburgh, near to the upper extremity of the lake, at the head of a fine and spacious bay at the debouchure of the Saranac river, by which it is connected with the mineral and lumbering regions of the interior, and with the recesses of the Adirondack chain. The village is well laid out, and contains the United States barracks, and several prosperous manufactories on the river. This district has little or no back country, the mountains rising abrupt and precipitous from the very verge of the lake in many places, and leaving a narrow strip of shore only, with a few villages scattered along the road to Plattsburgh, beyond which all is howling wilderness as far as to the valley of the Black river. Little

* The Canadian trade of this district, principally, is in American vessels.

dependence can, therefore, be placed on these regions for agricultural produce, although their forest and mineral wealth compensates, in some measure, for the sterility and ruggedness of their soil.

Plattsburgh is the port of entry of this district, although Whitehall is the larger commercial depot. The only railroad which touches it is that of Ogdensburg, crossing Missisquoi bay and the narrows of the lake at Rouse's Point, and opening, at the town of Ogdensburg, a perfect inland intercommunication between the great lakes and the Atlantic ocean at Boston. It is on the water communications, therefore, afforded by the lake, that the population of this district for the most part rely for the prosecution of their commercial enterprises and the transportation of their produce.

There are five daily steamers running during the season from Whitehall, touching at Burlington and Plattsburgh, for St. John, Canada East, and for St. Alban's, Vermont.

The Canadian trade of this district during the years 1850 and 1851 was as follows:

	1850.	1851.
Exports of domestic produce.....	\$322,378	\$375,549
foreign merchandise.....	316,843	373,453
	<hr/>	<hr/>
Total exports.....	639,221	749,002
Total imports.....	435,383	294,484
	<hr/>	<hr/>
Total commerce.....	1,074,604	1,043,286
	<hr/>	<hr/>
	1,043,286	<hr/>
	<hr/>	<hr/>
Decrease in 1851.....	31,318	<hr/>

Years.	No.	Tons entered.	No.	Tons cleared.
1851.....	598	123,229	598	123,229
1850.....	788	120,294	754	116,931
	<hr/>	<hr/>	<hr/>	<hr/>
Difference..	190	2,935	156	6,298
	<hr/>	<hr/>	<hr/>	<hr/>

The decrease of the year 1851, it will be observed, affects the number of entries and clearances only, the comparative tonnage being an increase on the preceeding twelve months.

The tonnage enrolled in this district, June 30, 1851, was—steam, 917 tons; sail, 3,291 tons.

Canadian trade.

Imports in American vessels.....	\$1,019,039
Exports in American vessels.....	24,246

Tonnage.

Inward.	Tons.	Outward.	Tons.
American, steam.....	90,436	American, steam.....	90,436
sailing.....	8,139	sailing.....	8,135
	<hr/>		<hr/>
Total.....	98,571		98,571
	<hr/>		<hr/>

Inward.	Tons.	Outward.	Tons.
British, steam.....	3,899	British, steam.....	3,899
sailing.....	20,759	sailing.....	20,759
	<u>24,658</u>		<u>24,658</u>
Duty collected on imports in American vessels.....			\$46,639
Do. do. British vessels.....			<u>5,210</u>
Total duty.....			<u>51,849</u>
Imported from Canada in American vessels.....			\$228,241
Do. do. British vessels.....			<u>24,246</u>
			252,487
Amount imported in bond.....			27,994
Amount of free goods.....			<u>13,802</u>
Total.....			<u>294,283</u>
Value of domestic goods exported.....			<u>\$375,549</u>
Foreign goods exported.....			\$267,587
Foreign goods entitled to drawback.....			<u>105,866</u>
			<u>373,453</u>

No. 3.—DISTRICT OF OSWEGATCHIE.

Port of entry, Ogdensburg; latitude $44^{\circ} 41'$; longitude $75^{\circ} 32'$; population in 1830, not defined; in 1840, 2,526; in 1850, 7,756.

This district extends along the southern shore of the St. Lawrence, from the point where the boundary line of New York and Canada strikes the great river— $43^{\circ}, 73^{\circ} 20'$ —to Alexandria, nearly opposite to Gananoque, on the Canada side, and the thousand isles of the St. Lawrence. The extent of this coast line is about eighty miles, trending in a southwesterly direction; it includes the considerable commercial depot and improving town of Ogdensburgh, besides the smaller ports of Massena, Louisville, Waddington, Morristown, and Hammond, and it has become the theatre of a very large and increasing trade with Canada, and coastwise, particularly since the opening of the Ogdensburg railroad.

This important line was opened from Ogdensburg to Rouse's Point, where it combines with the eastern and southeastern routes, in the autumn of 1850; and from this point passengers and freight crossing Lake Champlain have easy expedition, either to the New England States by railroad, or to New York, via Lake Champlain and the Hudson river, or by the new lines of railroad down the valley of the latter great thoroughfare. There being no line of transportation whatever through this district from the Canadas, except the above-mentioned road, and previous to the opening of that way none of any kind—the

district itself being, moreover, a mere strip of ten miles' width between the river shore and the Adirondack highlands—the effect of this road has been very great on the general commercial prosperity, and particularly on that of Ogdensburg, which monopolizes the Canadian transportation business, for the other ports mentioned are merely river harbors, doing a small coasting business, and driving some small traffic with their neighbors across the water. In consequence of these advantages large quantities of freight find their way into this port from all parts of the upper lakes and of Canada, for transmission to various marts on the Atlantic seaboard; and large amounts of merchandise, both foreign and domestic, are thence distributed through the different lake ports, both of Canada and the United States, from New York and Boston.

The following statistics will show the comparative coasting trade of Ogdensburg in some of the principal articles during the past five years, the results for 1849 being made up only to the 1st of October of that year.

Imports coastwise.

Articles.	1847.	1848.	1849.	1850.	1851.
Flour .....barrels.	5,000	4,500	3,800	158,600	375,000
Whiskey .....do...	1,217	1,157	865	452	1,291
Pork .....do...	3,000	2,500	1,800	2,612	2,887
Beef .....do.....				2,758	6,034
Sugar .....hogsheads.	325	375	300	37	43
Pig iron .....tons..	300	350	275	300	100
Coal .....do.....	3,000	3,054	2,500	490	371
Wheat .....bushels.	15,000	25,000	18,000	149,310	377,725
Corn .....do....	3,000	4,000	3,500	31,934	82,458
Salt .....barrels.	10,000	15,000	10,000	10,369	14,287
Tea chests.	10,000	15,000	10,000	78	44
Coffee tons..	320	320	320	Included in merchandise.	
Tobacco .....boxes.	2,000	2,000	1,200	15	37
Sundry merchandise, value	\$2,366,200	\$2,482,925	\$2,106,450	\$1,612,668	\$426,927

The above statistics clearly demonstrate that the opening of the railway has created a complete revolution in the trade of Ogdensburg, a large demand having suddenly sprung up for coastwise imports of produce, to be exported seaward by railroad, while the call for foreign merchandise, formerly imported coastwise for home consumption, has been entirely superseded, goods of that description being now largely introduced by railway from the seaboard, for distribution through Canada and all the lake regions.

By this change, the mercantile prosperity and activity of this town and district has, it will appear, been increased fifty-fold, and the trade matured from a mere home-consumption business to an immense forwarding, foreign importing, and domestic exporting traffic; nor, in view of the incalculable hourly increase of western productiveness and consumption, can any one pretend to assign any limits to the future improvement of this branch of commerce.

The coastwise exports during the same period, of a few leading articles, were as follows :

Articles.	1847.	1848.	1849.	1850.	1851.
Whiskey .....barrels.	142	120	140	408	135
Starch.....pounds.	193,600	180,000	190,000	5,900	18,600
Ashes.....barrels.	3,758	3,400	3,800	4,544	615
Shingles.....M.	6,669	4,000	3,000	4,841	1,757
Lumber.....M ft.	7,182	5,000	4,000	2,052	199
Pig iron.....tons.	311	250	100	660	776
Cheesc.....pounds.	1,099,280	990,000	800,000	1,332,300	40,200
Flour.....barrels.	3,267	500	100	1,158	129
Rye.....bushels.	5,688	5,000	3,000	420	1,447
Wool.....pounds.	18,000	20,510	10,000	28,000	27,800
Hops.....bales.	187	200	150	57	6
Sheep's pelts.....No.	20,000	20,000	15,000	140	700
Nails.....kegs.				796	6,394

The estimated value of the imports and exports for the years above named, is as follows :

	1847.	1848.	1849.	1850.	1851.
Coastwise imports.....	\$2,804,150	\$2,988,015	\$2,482,695	\$2,463,648	\$2,424,145
Coastwise exports.....	389,325	341,933	311,084	359,933	918,587
Foreign imports.....		49,831	48,395	205,815	214,520
Foreign exports.....		81,844	32,685		618,648
Total commerce...	3,193,475	3,461,623	2,874,859	3,029,396	4,175,900

The report of inward and outward bound vessels is as below, for the last two years :

Years.	Number of entries.	Tons.	Men.	Number of clearances.	Tons.	Men.
1851.....	1,002	351,427	19,538	973	359,287	19,341
1850.....	669	242,780	12,464	655	242,931	12,218
Increase.....	333	108,647	7,074	318	116,356	7,123

From the above figures it will be readily perceived, independent of the general increase of commerce in the district consequent on the opening of the railroads, that the returns for the years previous to 1850 are in round numbers, and are probably very far from accurate, whilst those for 1850 and 1851 are in detail, and the merchandise is valued at a very low rate; so much so, that if the valuation of assorted merchandise were made according to the rates adopted in other districts, it would raise the gross amount to a sum higher, by at least a million of dollars, than that exhibited above.

The tonnage enrolled and licensed in the district is 1,985 tons of

steam, 576 tons of sail—employing 125 men. The original cost of the above tonnage was \$208,300.

Abstract of the number of vessels, tonnage, and men employed upon the same, which entered and cleared from the port of Ogdensburg, district of Oswegatchie, New York, distinguishing American from British, during the years 1850 and 1851.

Years.	INWARD.						OUTWARD.					
	AMERICAN.			BRITISH.			AMERICAN.			BRITISH.		
	No.	Tons.	Crew.	No.	Tons.	Crew.	No.	Tons.	Crew.	No.	Tons.	Crew.
1850 ..	414	179,339	7,941	255	63,441	4,523	413	180,980	7,924	242	61,951	4,294
1851 ..	598	253,808	11,266	404	97,619	8,272	583	263,274	11,226	390	96,013	8,115

J. C. BARTER, *Collector.*

COLLECTOR'S OFFICE, DISTRICT OF OSWEGATCHIE, N. Y.,
Ogdensburg, December 31, 1851.

Canadian Trade in 1851.

Imports and exports in American vessels.....		\$332,420
Do do British vessels.....		500,747
Exported foreign goods entitled to drawback—		
In American vessels	\$74,367	
In British vessels.....	193,807	
		268,174
Goods not entitled to drawback.....		98,424
		<u>366,598</u>
Domestic produce and manufactures—		
In American vessels.....	52,369	
In British vessels.....	199,681	
		252,050
Total exports.....		<u>618,648</u>
Imports paying duty—		
In American vessels	18,305	Duty collected. 3,732
In British vessels.....	63,727	13,742
On the sea.....	9,425	1,893
		<u>19,367</u>
Produce imported in bond.....	115,286	
Free goods.....	7,775	
		<u>123,061</u>
Total imports.....	214,518	

No. 4.—DISTRICT OF CAPE VINCENT.

Port of entry, Cape Vincent; latitude $44^{\circ} 06'$, longitude $76^{\circ} 21'$; population in 1830, not defined; in 1840, not defined; in 1850, 3,044.

This district, commencing at Alexandria, on the southwestern border of Oswegatchie, extends about eleven miles southwesterly up the St. Lawrence, to the outlet of Lake Ontario, and Black river bay, on which Sackett's Harbor is situated. Cape Vincent, owing to the sinuosities and irregularities of its shores, has a coast line of nearly thirty-eight miles, and embraces the shipping ports of Cape Vincent, Clayton, and Alexandria, which are for the most part mere stopping places for the lake steamers plying between Montreal, Ogdensburg, and the ports of Lake Ontario, which touch at these landing-places to procure wood, vegetables, milk, and other necessaries. To this fact is owing the very considerable amount of tonnage entering and clearing from these little ports, though it is at once evident that no indication is thereby afforded of the actual business transacted in the district. It has some small trade with Canada, carried on principally in skiffs across the St. Lawrence and among the thousand islands; but, if there be any coasting traffic at all, it is so slender that no returns of it appear to have been, at any time, regularly kept.

Cape Vincent, the port of entry, is some twelve to thirteen miles from Kingston, C. W.; the distance being about four miles over the main channel of the St. Lawrence from Kingston to Long Island, then between seven and eight miles across the island, and then a mile over the channel on the American side to Cape Vincent.

The imports from Canada, 1851.....	\$61,358
The exports to Canada, 1851.....	33,188
	<hr/>
Total Canadian commerce, 1851.....	94,546
	<hr/>
Imports from Canada, 1850.....	\$50,756
Exports from Canada, 1850.....	69,284
	<hr/>
Total Canadian commerce, 1850.....	120,040
Do do do 1851.....	94,546
	<hr/>
Decrease.....	25,494
	<hr/>

The Canadian commerce of this district previous to these years was of the following values:

Total Canadian commerce of 1849.....	\$90,484
Do do do 1848.....	91,597

The enrolled tonnage of the district amounts to 2,496 tons, all sail.

Years.	Entries.	Tons	Crew.	Clearances.	Tons.	Crew.
1851	749	430,930	19,207	749	439,930	19,207
1850	708	329,545	14,548	708	329,545	14,545
Increase	41	110,385	4,659	41	110,385	4,659

Canadian Trade.

Imports in American vessels.	\$61,358	duty, \$1,370
Exports, domestic produce and manufactures.		32,389

Tonnage inward.

In American vessels, 696 sail.	427,457
In British vessels, 53 sail.	12,473
Same outward.	

No. 5.—DISTRICT OF SACKETT'S HARBOR.

Port of entry, Sackett's Harbor; latitude $43^{\circ} 55'$, longitude $75^{\circ} 57'$; population of township in 1850, 4,136.

This district is composed of that portion of the coast of Lake Ontario which runs almost in a due southerly direction from Tibbit's Point, round Chaumont bay, Black river, and Henderson's bay, terminating at Stony Point, and embracing a coast line estimated at one hundred miles, following the sinuosities of its very irregular and deeply indented shores. It includes the shipping places of Three-Mile bay, Chaumont bay, Point Peninsula, Dexter, Sackett's Harbor, and Henderson.

Sackett's Harbor, the principal commercial place and port of entry of the district, is situated on the southwest side of a deep inlet known as Black River Bay, at about eight miles distance from the lake. Its bay and harbor are well situated for shelter and defence. The harbor is by far the best on Lake Ontario for ship-building, and as a naval and commercial depôt. A crescent of land stretches off from the lower part of the village, forming an inner and outer harbor. The latter has a depth of water sufficient for the largest ships-of-war within two fathoms of the shore. The same depth of water extends to Black river, where there is another excellent position for ship-building.

The first settlement of this place was made in 1801; it advanced little until the commencement of the last English war, when it became a considerable naval and military depôt; but, since the promulgation of peace in 1814, it has made little comparative improvement, other points possessing superior advantages of position as regards artificial routes, by railroads and canals, having diverted from it a portion of its business, although it still maintains its commercial character. The adjacent country is a fine agricultural region, and its abundant water-power renders it well adapted to the growth of manufacturing enterprise, while Watertown, a few miles inland, is a flourishing town, well situated on the Black river. Still, in spite of these advantages, the commerce of Sackett's Harbor has been on the decline for some years; whether on account of the exhaustion of lumber resources, or the diversion of supplies for the inland home consumption, and of agricultural produce for export, from the coast trade to canal and railroad transportation, does not sufficiently appear. At all events, the declared value of the commerce of the district has materially declined, as will be seen from the following table, since 1846.

The other small towns, mentioned above, are used to a trifling extent

as landing-places for imported merchandise, and for shipment of produce, by the surrounding inhabitants, to the extent of their own wants and conveniences, but not in such amounts as to render them worthy of any notice as commercial depôts.

	Declared values for 1846.	Declared values for 1847.	Declared values for 1851.
Coastwise imports.....	\$1,550,909	\$1,257,823	\$497,809
Foreign imports.....	1,851	3,891	56,118
Coastwise exports.....	1,106,986	841,478	303,258
Foreign exports.....	75,345	38,253	21,980
Total.....	2,735,091	2,141,445	879,165

Some portion of the above deterioration may be, perhaps, ascribed to a discrepancy in the valuation of articles; but it is hardly probable that the result, as a whole, can be attributed to such a cause; nor is it necessary to seek far for reasons, since the experience of every day teaches us that the places which possess the greatest facilities of transmission and transportation of produce and merchandise, and the most numerous inlets and outlets for articles of commerce in the shape of internal improvements and intercommunications, will necessarily attack and take at disadvantage those which rely solely on external trade.

It is not to be doubted, therefore, that Ogdensburg and Oswego have attacked Sackett's Harbor, and diverted from it a portion of its coastwise traffic; while it is as certain that some of the agricultural produce which formerly sought a market, via the lakes, now seeks the same ultimate destination inland, via canal and railroad.

Such are the revolutions, in some sort, of commerce, and such the progress of the times; the result being, that those places which are content to be stationary, and do not endeavor to keep up with the movement, enterprise, and energy of the times, must needs retrograde; nor can any natural advantages insure to them a long monopoly of prosperity and success.

The following table will be sufficient to convey some idea as to the operation of the changes alluded to above, and the class of articles affected thereby:

Exports coastwise for 1847 and 1851.

Articles.	1847.	1851.
Lumber.....thousand feet.	4,406	2,896
Staves.....thousand	919	25
Shingles.....do.	371	57
Ashes.....barrels	420	366
Pork.....do.	339	145
Oats.....bushels	37,583	34,068
Barley.....do.	80,678	62,895
Corn.....do.	41,624	42,581
Wheat.....do.	4,926	5,402
Peas and beans.....do.	3,553	7,173
Potatoes.....do.	1,850	970
Flour.....barrels	788	169
Indian meal.....do.	4,141	
Butter.....pounds	850,000	161,500
Cheese.....do.	9,706	1,344
Wool.....do.	64,800	11,400
Pig iron.....tons	2,021	732
Leather.....pounds	17,600	1,500
Domestic spirits.....gallons	36,240	63,240
Do. woollens.....yards	56,250	
Do. cottons.....do.	334,000	
Total estimated value.....	\$841,478	\$303,258

For the same years the importations of some few articles of coastwise trade were as follows; and beyond this there is no more to be stated concerning this district, unless it be to point out that in 1847 the exports to Canada consisted of barley, oats, corn, vegetables, cheese, machinery, and manufactures; while in 1850 and 1851, flour wheat, and vegetables were imported from that country, together with animals. The Canadian trade has augmented somewhat, while the coasting trade has decreased.

Coastwise Importations.

Articles.	1847.	1851.
Fruit.....barrels	1,369	1,501
Salt.....do.	11,984	7,851
Flour.....do.	1,166	1,630
Wheat.....bushels	15,265	37,890
Cotton.....bales	351	147
Wool.....do.	231	331
Gypsum.....do.	430	
Coal.....do.	340	1,280
Hides.....pounds	25,150	33,960

The steam tonnage enrolled in the district, June 30, 1851, was 343 tons, and sail tonnage 6,768.

Years.	Entries.	Tons.	Crews.	Clearances.	Tons.	Crews.
1851.....	684	348,438	14,706	679	347,394	14,650
1850.....	737	328,126	13,624	751	332,433	13,670
Difference....	53	20,312	1,082	72	14,961	975

Canadian Trade in 1851.

Imports—American vessels..... \$56,118 ; duty, \$16,399
 Exports—American vessels..... 21,980

Entrances and clearances, District of Sackett's Harbor, New York, during the year 1851.

	No. vessels.	Tons.	Men.	Boys.
FOREIGN TRADE.				
Entered—American vessels.....	200	163,816.56	6,835	349
British.....do.....	31	2,994.00	193	
Cleared—American.....do.....	207	162,760.91	6,834	340
British.....do.....	31	2,994.00	193	
COASTING TRADE.				
Entered—Number of vessels.....	453	181,626.61	6,982	347
Cleared—...do.....do.....	441	181,639.45	6,936	347

No. 6.—DISTRICT OF OSWEGO.

Port of entry, Oswego ; latitude 43° 25', longitude 76° 37' ; population in 1830, 2,703 ; in 1840, 4,665, ; in 1850, 12,205.

The district of Oswego has eighty miles of coast-line, from Stony Point to the western shore of Sodus bay, and embraces the ports of Texas, Salmon river, or Port Ontario ; Sandy Creek, Oswego, Little Sodus, and Sodus Point. None of these ports, with the exception of Oswego, although they are all-important to the accommodation of their own immediate neighborhoods, for the shipment of produce and the introduction of merchandise of all kinds, can be said to be valuable in regard to the facilitation of trade and the centralization of commerce, as connected with distant portions of the country.

Possessing advantages, both for coastwise and Canadian commerce, rarely equalled and never surpassed, this port of entry has by rapid strides, within the last few years, attained an importance among the great business marts of the lakes, which guaranties an indefinite increase of its commercial and maritime power, until the whole territories of the British and American northwest shall have become densely populated ; their fertile soil advanced to the highest state of cultivation ;

the fisheries of their lakes prosecuted to their utmost capacity ; and their unfathomable mineral resources penetrated and developed, so far as science and enterprise may effect.

These advantages are of a threefold nature. First, an easy and rapid communication, both by canal and railway, with New York and Boston, via Albany, and by lake, canal, and railway with Ogdensburg; secondly, a harbor which could at a small expense be rendered perfectly secure and accessible, at the nearest point on the lakes to tide-water ; and, thirdly, a direct communication by lake with the most thickly settled portions of Canada, and by lake and the Welland canal with the whole western and northwestern lake-country.

The city of Oswego, port of entry, and capital of Oswego county, New York, lies 160 miles WNW. of Albany, 373 from Washington ; was incorporated in 1828 ; and is situate on both sides of the Oswego river, connected by a bridge 700 feet long. It extends to the lake shore.

The harbor, next to that of Sackett's Harbor, is the best on the southern side of Lake Ontario. It is formed by a pier or mole of wood, filled with stone, 1,259 feet long on the west side of the harbor, and 200 feet on the east side, with an entrance between them. The water within the pier has a depth of from 12 to 20 feet. The cost of this work was \$93,000. It is among the earliest improvements of lake harbors undertaken by the government, having been commenced in 1827.

The protection anticipated from these works has not fallen short of what was expected ; but the piers, being built of cribs of timber, filled with stone, began to decay so early as 1833. Some steps were taken in the year 1837 to replace the old work with permanent structures of masonry, but these were soon discontinued, and what remains is rapidly going to ruin, with the exception of 500 feet of the west pier, which is well built of stone and is in good condition.

It is calculated that for the moderate sum of \$207,371 these works can be secured and improved in the following manner, so as to render the harbor perfectly secure and of easy access to the largest class of vessels in use on the lakes :

1. By rebuilding the whole pier-line in substantial solid masonry.
2. By enlarging and strengthening the west, or light-house, pier-head, and defending it by a five-gun battery.
3. By removing the gravel and deposits within the piers, which have become a barrier to the entrance of the inner and outer harbors. It is an original deposit by the *littoral* currents of the lake, not *caused* or *increased* by the piers. Once removed, it can never return while the piers stand.

The principal harbor-light is on the pier-head on the west side of the entrance. The tonnage of the port in 1840 was 8,346 tons ; by comparing which with the present tonnage, as given below, the general increase of the port will be readily seen.

The population of the town is about 13,000 persons.

The Oswego canal, formed principally by improvement of the natural course of the river, passes through the great salt districts of the State at Salina and Liverpool, to Syracuse, where it connects with the Erie canal from Albany to Buffalo. Oswego is, therefore, the great outlet for the western exportation of domestic salt. The Syracuse and Os-

wego railway connects the city with Syracuse, and thence with Albany, Buffalo, New York, and Boston. It is distant from Rochester, by lake, 55 miles, and from Sackett's Harbor 40 miles. The rapid increase of the commerce of Oswego is aptly illustrated by the following table, exhibiting the traffic in some of the leading articles of importation by lake during three years :

Articles.	1849.	1850.	1851.
Flour.....barrels..	317,758	302,577	389,929
Wheat.....bushels..	3,615,677	3,847,384	4,231,899
Corn.....do....	383,230	426,121	1,251,500
Barley.....do....	65,286	120,652	194,858
Rye.....do....	31,426	86,439	106,518
Oats.....do....	133,697	113,463	175,984
Peas and beans.....do....	24,012	25,068	63,634
Pork.....barrels..	35,098	26,262	27,950
Beef.....do....	20,375	6,789	15,854
Ashes.....do....	10,872	11,435	4,479
Lumber.....feet....	51,101,432	67,586,985	83,823,417

The annexed figures will show what portions of some of the above articles were received from Canada during the same period :

Articles.	1849.	1850.	1851.
Flour.....barrels..	198,623	260,874	259,875
Wheat.....bushels..	623,920	1,094,444	670,202
Rye.....do....	16,044	7,499	53,950
Oats.....do....	55,700	90,156	78,771
Peas.....do....	16,322	22,380	60,335
Potatoes.....do....	6,648	10,372	11,496
Lumber.....feet....	44,137,287	50,685,682	62,527,843
Ashes.....barrels..	2,235	1,580	584
Butter.....pounds..	115,759	225,087	75,000
Wool.....do....	97,141	77,941	82,908

Of the above amount of 4,231,899 bushels of wheat, only 1,676,213 were forwarded by-canal; and, while there were received by lake only 389,929 barrels of flour, there were forwarded by canal 888,131 barrels, showing that of the remaining 2,555,686 bushels of wheat there were manufactured by the Oswego mills, and sent forward by canal, 498,200 barrels of flour, while probably 13,000 barrels of flour in addition were absorbed by local consumption.

According to this calculation, the capacity of the Oswego flouring mills cannot fall short of 511,000 barrels of flour per annum. The value of the Canadian commerce of this district is estimated, for 1851, as follows :

Imports paying duty.....	\$435,153
Imports bonded and free.....	1,349,259
Total foreign imports.....	1,784,412

Exports of foreign merchandise.....	\$915,900
Exports of domestic merchandise.....	2,291,911
Total exports to Canada.....	\$3,207,811
Total foreign commerce.....	<u>4,992,223</u>

This, it should be observed, amounts to very nearly one-half the entire Canadian commerce with the United States. Owing to the large proportion of Canadian produce entered in bond, the amount of duties collected is comparatively small, when contrasted with that received in other districts; but this fact renders the trade none the less valuable to Oswego.

The whole amount of duties collected in Oswego, in 1851, was \$89,760, while there was assessed and secured on the property entered in bond the further sum of \$226,937, making a total of \$356,697 duties assessed on property entered at the port of Oswego during the year.

The coastwise imports at the port of Oswego, for the year

1851, amounted to.....	\$6,083,036
Coastwise exports of 1851.....	11,471,071
Total coastwise.....	17,554,107
Add foreign commerce.....	4,992,223
Total 1851.....	<u>22,546,330</u>

The enrolled and licensed tonnage of the district amounts to 21,942 tons sail, and 4,381 tons steam, being an aggregate of 26,323 tons.

The whole number of entrances and clearances for the year are as below :

Years.	Entrances.	Tons.	Men.	Clearances.	Tons.	Men.
1851.....	3,318	721,383	28,157	3,198	685,793	26,029
1850.....	3,004	656,406	24,032	2,771	604,159	23,548
Increase.....	314	64,977	4,125	427	81,634	2,481

The enrolled tonnage for 1840 was 8,346; for 1846, 15,513; for 1847, 18,460; for 1848, 17,391; and for 1851, 26,323 tons.

The value of the commerce of Oswego, for several years, has been declared as follows: In 1846, \$10,502,980; in 1847, \$18,067,819; and in 1851, \$22,546,330.

CANADIAN TRADE IN 1851.

Imports.

In American vessels—

In bond	\$197,040	
Paying duty.....	174,212	
Free	9,513	
	<hr/>	\$380,765

In British vessels—

In bond	1,137,308	
Paying duty	260,941	
Free.....	5,398	
	<hr/>	1,403,647

Total imports 1,784,412

Exports foreign produce and manufactures.

	Entitled to drawback.	Duty collected.	Not entitled to drawback.
In American vessels..	\$90,532	\$36,381	\$287,288
In British vessels	170,603	53,379	367,477
	<hr/>	<hr/>	<hr/>
	261,135	89,760	*654,765
	<hr/>	<hr/>	<hr/>

* In this are included—

Tea.....	825,606 pounds, value	\$423,057
Coffee.....	359,512 pounds, value	37,220
		<hr/>
		460,277
		<hr/>

Exports domestic produce and manufactures.

In American vessels.....	\$1,190,048
In British vessels	1,100,863
	<hr/>
	2,291,911
	<hr/>

Imports at the District of Oswego, coastwise, during the year ending December 31, 1851.

Articles.	Quantity.	Value.
Fish.....barrels.....	335	\$2,345
Ashes—pot and pearl...casks.....	3,895	97,375
Lumber.....feet.....	21,295,574	213,000
Staves and heading.....M.....	1,799	8,995
Laths.....M.....	1,179	4,716
Shingles.....M.....	1,423	3,557
Wheat.....bushels.....	3,561,697	2,849,358
Flour.....barrels.....	130,054	520,216
Barley.....bushels.....	171,347	102,808
Rye.....do.....	52,568	26,284
Oats.....do.....	97,213	29,164
Corn.....do.....	1,251,306	625,653
Potatoes.....do.....	4,874	2,437
Peas and beans.....do.....	3,202	2,402
Apples.....barrels.....	3,327	4,159
Peaches.....baskets.....	451	564
Butter.....packages.....	4,029	48,348
Cheese.....do.....	3,888	38,880
Pork.....barrels.....	27,950	419,250
Hams and bacon.....casks.....	10,666	175,000
Lard.....packages.....	22,208	266,496
Beef.....barrels.....	15,940	159,400
Tallow.....do.....	447	9,834
Hides.....number.....	7,090	21,270
Sheep-pelts.....bundles.....	272	20,400
Wool.....pounds.....	42,400	12,720
Eggs.....barrels.....	702	7,020
Beeswax.....do.....	67	2,680
Horses.....number.....	50	5,000
Cattle.....do.....	15	400
Grass-seed.....casks.....	406	4,872
Hemp.....bales.....	266	7,980
Hops.....do.....	377	18,850
Malt.....bushels.....	7,955	4,773
Tobacco.....hhds.....	282	25,380
Broom-corn.....bales.....	300	4,500
Whiskey.....barrels.....	2,619	26,190
Ale and porter.....do.....	200	1,200
Dry goods.....boxes.....	251	25,100
Furniture.....packages.....	245	12,250
Paper and books.....bundles.....	355	38,300
Leather.....rolls.....	1,108	44,320
Paint.....barrels.....	1,275	8,928
Saleratus.....casks.....	132	1,960
Glass.....boxes.....	2,305	5,763
Starch.....do.....	303	606
Oil cake.....tons.....	633	25,320
Lard Oil.....barrels.....	2,433	72,990
Candles.....boxes.....	685	2,740
Iron (pig and scrap).....tons.....	550	16,500
Nails.....kegs.....	279	1,116
Grindstones.....number.....	1,300	6,500
Coal.....tons.....	799	3,196
Limestone.....do.....	640	1,280
Corn-brooms.....dozen.....	126	252
Platform scales.....number.....	300	6,000
Sundries.....		36,532
Total.....		6,083,036

Exports, coastwise, from the district of Oswego, during the year ending December 31, 1851.

Articles.	Quantity.	Value.
Fish.....		\$70,752
Oil.....casks.....	525	13,125
Lumber.....feet.....	148,300	1,668
Flour.....barrels.....	2,727	10,908
Wheat.....bushels.....	2,500	2,000
Corn.....do.....	7,500	3,750
Apples.....barrels.....	6,616	8,317
Rice.....tierces.....	603	15,075
Horses.....number.....	150	12,000
Pork.....barrels.....	595	8,925
Hams and bacon.....casks.....	1,014	20,280
Lard.....packages.....	144	1,296
Wool.....pounds.....	15,495	3,409
Hides and skins.....do.....	100,581	12,189
Cotton.....do.....	111,873	10,069
Tobacco.....do.....	97,125	11,655
Spirits.....casks.....	650	26,100
Spirits of turpentine.....barrels.....	1,350	20,250
Candles.....boxes.....	550	2,200
Starch.....pounds.....	195,285	11,717
Furniture.....		29,250
Pianos.....number.....	43	8,900
Wagons and carriages.....do.....	98	13,360
Tobacco.....boxes.....	850	34,000
Snuff.....jars.....	495	1,900
Ground gypsum.....barrels.....	5,498	4,811
Water lime.....do.....	16,101	16,101
Salt.....do.....	376,601	328,941
Leather.....pounds.....	150,000	30,000
Boots and shoes.....		30,000
Hats.....		16,000
Drugs, &c.....		16,000
Glass, glass-ware, and earthenware.....		147,139
Railroad iron.....tons.....	43,429	1,737,160
Bar and other iron.....do.....	3,117	249,360
Pig and scrap iron.....do.....	1,267	37,997
Steel.....pounds.....	415,400	62,310
Nails and spikes.....do.....	3,593,631	143,745
Stoves and castings.....tons.....	1,376	11,080
Hardware.....		16,300
Tin.....boxes.....	1,050	6,300
Sugar.....pounds.....	9,961,000	677,270
Molasses.....		98,112
Tea.....chests.....	1,440	43,200
Coffee.....pounds.....	3,380,799	338,080
Coal.....tons.....	3,213	16,065
Books and paper.....		18,500
Sundries.....		7,073,525
Total.....		11,471,071

No. 7.—DISTRICT OF GENESEE.

Port of entry, Rochester; latitude 43° 08', longitude 77° 51'; population in 1830, 9,207; in 1840, 20,191; in 1850, 36,403.

The Genesee district has a very limited commerce except with Canada; with eighty miles of coast it has but one shipping place, which is situated at the mouth of the Genesee river, at a distance of about three miles from Rochester city. The passage of the Erie canal

and a parallel line of railroad through the entire length of the district, but a few miles distant from the coast, offering better facilities for the transportation of passengers and merchandise, whether eastward or westward, than the lake can afford, confines the commerce of the port entirely to Canadian trade. Rochester is well situated on the falls of the Genesee, which are three in number, with an aggregate descent of 268 feet within the city limits, affording almost unbounded resources in the shape of water-power, applicable to most manufacturing purposes, and applied largely to the flouring business; the greater part of the wheat shipped by canal from Buffalo being floured and reshipped by canal to its ulterior destination.

It occupies both sides of the river, and had a population, in 1820, of 1,502 individuals. In 1830 it had increased to 9,269; in 1840 to 20,191, and in 1850 to 36,403. In 1812 it was laid out as a village, and incorporated in 1817. It was chartered as a city in 1834, and the city limits now occupy an area of 4,324 acres, well laid out with a good regard to regularity. Rochester has three bridges across the Genesee river, besides a fine aqueduct over which the canal passes, traversing the heart of the city, and adding much to its prosperity, as well as to the rapidity of its growth.

The Canadian commerce of this district was, for

1851. Imports	\$49,040
Exports	913,654
Total.....	<u>962,694</u>
1850. Imports	\$95,283
Exports	326,899
	<u>422,182</u>
In 1851.....	\$962,694
1850.....	422,182
Increase	<u>540,512</u>

The amount of tonnage entered and cleared from this port was :

Year.	Entrances.	Tons.	Men.	Clearances.	Tons.	Men.
1851	487	212,794	7,997	487	212,794	7,997

There are enrolled in this district 429 tons of steam and 57 of sail shipping.

Exported to Canada.

In British vessels, foreign goods.....	\$335,708
In British vessels, domestic goods entitled to drawback...	445,967
In British vessels, foreign goods entitled to drawback.....	131,979
	<u>913,654</u>

Imported from Canada.

		Duty collected.
In American vessels	\$8,456	\$1,765
In British vessels	40,584	8,773
	<hr/>	<hr/>
	49,040	10,538
	<hr/>	<hr/>

No. 8.—DISTRICT OF NIAGARA.

Port of entry, Lewiston; latitude $43^{\circ} 09'$, longitude $79^{\circ} 07'$; population in 1830, 1,528; in 1840, 2,533; in 1850, 2,924.

This district embraces all the lake coast of Ontario, from the Oak Orchard creek to the mouth of the Niagara, and thence up that river to the falls on the American side, and includes the ports of Oak Orchard Creek, Olcott, and Wilson, on the lake shore, Lewiston and Youngstown on the river, and an office of customs at the suspension bridge which crosses the Niagara, at three miles distance below the falls.

There is a very considerable trade from Buffalo passing through this district to Canada, across the suspension bridge; especially in the winter season, at which time it is by far the better route, on account of the railroad communication from the falls, which were, in former years, generally considered as the head of navigation.

At that time the trade of the Niagara district was of the greatest importance; but since arts and science have opened new channels of communication on either side of that great natural obstacle, the field of its commercial operations has been narrowed down to the supply of the local wants of the circumjacent country.

Lewiston, the port of entry and principal place of business, as well as the largest town of the district, is situated on the east side of the Niagara river, seven miles above its mouth, opposite to Queenstown, Canada, with which it is connected by a ferry. It has a population of about 3,000 persons, and communicates with Buffalo and Lockport by railways, and with Hamilton, Toronto, Oswego, and Ogdensburgh, during the summer season by daily steamers. It carries on some valuable traffic with Canada.

The district is, as yet, rather barren of internal improvements, having for their object the connecting the circumjacent regions with the lake and river; for there is but one railway passing through it, which has Buffalo and Lockport for its respective *termini*. One or two other roads, however, are in process of construction, designed to connect Rochester and Canandaigua with the great western railway through Canada, as it is intended, by means of a second suspension bridge across the Niagara, near Lewiston.

It is, however, a question with many minds whether it will be possible to construct a bridge upon this principle sufficiently steady and firm to admit of the passage of a locomotive with a heavy train. But, be this as it may, there will be no difficulty, it is probable, in making the transit in single cars, by horse-power. It seems somewhat remarkable that, while the success of railroad communication by means of suspension is so entirely problematical, no attempt should have been made,

or even proposed, to throw a permanent arched bridge across the river near the mouth of the Chippewa creek, which could be effected, one would imagine, by means of stone piers and iron spans, without great risk or difficulty. Should the suspension plan, however, prove unfeasible, it is probable that the iron tubular bridge system, so triumphantly established in Great Britain on the Conway and Menai straits, will be adopted. So that it may be almost confidently predicted that the Niagara district will very shortly be brought into the line of a great direct eastern and western thoroughfare, which will add greatly to its Canadian commerce overland, and materially increase the size and progress of Buffalo.

In former days, all freight coming up Lake Ontario, destined for consumption, was transported by land from Lewiston across the portage around the falls of the Niagara. The noble river itself affords an excellent harbor at Lewiston, being far below the rapids and broken water, which extend to some distance downward from the whirlpool. Youngstown, a few miles lower down the stream, is also a good landing place for steamers.

A line of fine mail-steamers plies regularly between these places and Ogdensburg and Montreal daily. The other ports above mentioned are mere local places for shipment of domestic country produce, and the receipt of merchandise. No definite returns have been made of their business, so that it is not possible to enter upon this branch of the subject in detail.

The returns of the commerce of this district prove it to be as follows :			
Imports from Canada during the year 1851.....	\$103,985		
Imports coastwise " " " "	236,684		
		<u>340,669</u>	\$340,669
Total imports.....			
Exports to Canada, foreign	\$150,023		
" " domestic produce.....	426,023		
" " coastwise.....	433,634		
		<u>1,019,418</u>	1,019,418
Total exports.....			
Grand total			<u>1,360,087</u>
Total foreign commerce.....			\$689,769
Total coastwise commerce.....			670,318
			<u>1,360,087</u>
Total commerce of the district.....			

The tonnage employed in this district for the following years, was :

Years.	Entrances.	Tons.	Men.	Clearances.	Tons.	Men.
1851	990	427,968	21,188	990	427,968	21,188
1850	903	358,048	16,950	903	358,048	16,950
Increase....	87	69,920	4,238	87	69,920	4,238

The enrolled and licensed tonnage of this district for 1851, was :

Steam	100 tons.
Sail	505 "
Total tonnage	<u>605</u> "

The increase in this district will be seen by a glance at the following tables :

Enrolled shipping for the year 1838.....	119 tons.
" " " " 1843.....	112 "
" " " " 1848.....	730 "
" " " " 1851.....	605 "

The foreign commerce for the years 1847, 1850, and 1851, compare as follows :

	1847.	1850.	1851.
Exports, domestic.....	\$166,541	\$260,074	\$426,761
" foreign.....			
Imports from Canada.....	18,015	353,954	103,985
	<u>184,556</u>	<u>679,492</u>	<u>689,767</u>

Canadian trade in 1851.

	Imports.	Duty collected.
In American vessels.....	\$42,115	\$7,854
In British vessels.....	61,870	12,102
	<u>103,985</u>	<u>19,957</u>

Exports—foreign goods.

	Entitled to drawback.	Not entitled to drawback.
In American vessels.....	\$24,722	\$32,052
In British vessels.....	75,242	28,007
	<u>99,964</u>	<u>60,059</u>

Exports—domestic produce and manufacture.

In American vessels.....	\$212,924
In British vessels.....	213,837
	<u>426,761</u>
Total exports and imports in American vessels.....	\$311,813
Total exports and imports in British vessels.....	378,956
	<u>690,769</u>

Statement of men and tonnage employed in the Canadian trade with this district.

American steamboats.....	2,968	men.	424	boys.
“ sail vessels.....	66	“	1	boy.
	<u>3,034</u>	“	<u>425</u>	<u>boys.</u>
Total Americans in foreign trade....	<u>3,034</u>	“	<u>425</u>	<u>boys.</u>
Foreign steam vessels.....	9,209	men.	491	boys.
“ sail vessels.....	130	“	54	“
	<u>9,339</u>	“	<u>545</u>	“
Total in foreign vessels.....	<u>9,339</u>	“	<u>545</u>	“

Statement of crews on board coasting vessels.

	No. entries.	Tons.	Men.	Boys.
Steam vessels.....	282	203,120	6,930	818
Sail vessels.....	19	1,695	80	17
	<u>301</u>	<u>204,815</u>	<u>7,010</u>	<u>835</u>
Total.....	<u>301</u>	<u>204,815</u>	<u>7,010</u>	<u>835</u>

No. 9.—DISTRICT OF BUFFALO CREEK.

Port of entry, Buffalo; latitude 42° 53', longitude 68° 55'; population in 1830, 8,668; in 1840, 18,213; in 1850, 42,261.

This district has a coast-line one hundred miles in extent, commencing at the great falls on the Niagara river, and thence extends southward and westward, embracing the ports of Schlosser, Tonawanda, and Black Rock, on the river; Buffalo, on Buffalo Creek, at the foot of Lake Erie; and Cattaraugus Creek, Silver Creek, Dunkirk, Van Buren harbor, and Barcelona, on the southern shore of Lake Erie; being all the ports between the Falls of Niagara and the eastern State line of Pennsylvania.

“Buffalo Creek” has a commerce larger than that of any other lake district in the United States, amounting to nearly one-third of the whole declared value of the lake trade, and showing the astonishing increase, in the single year 1851, of \$19,087,832. This increase may partly be attributed to the opening, in May, 1851, of a new avenue of trade to one point of the district, in that noble work, the New York and Erie railroad. The commencement of operations on this route necessarily increased the competition for the “trade of the lakes;” and, while an excellent share of business has fallen to the lot of the new enterprise, it would appear that the old-established lines have been gainers rather than losers by its opening.

Within the boundaries of this district, and, in some sort, all serving as the feeders and receivers of its lake commerce, are the terminations of the following great avenues to the seaboard: the Albany and Buffalo railway, the New York City and Buffalo railway, the New York City, Corning, and Buffalo railway, the Buffalo, Canandaigua, and New York City railway, the Buffalo and Niagara Falls railway, the Buffalo and

State Line railway, extending to Erie, Pa., through Dunkirk; the New York and Erie railway, extending from the port of New York to Lake Erie at Dunkirk; and last, not least, the Erie canal, intercommunicating between the lakes and the Atlantic tide-water.

The three Buffalo and New York roads, and the State Line road, have been put into operation since the commencement of the present year—1852—and cannot, of course, be taken into account as operating upon the commerce of this district previous to that date.

Of the ports above named, as being embraced in this district, the city of Buffalo is by far the most important; of the others, Dunkirk and Tonawanda, only, have any actual claims to consideration. Schlosser, being situated three miles only above the falls, where the current is already so rapid as to be almost dangerous, enjoys few commercial advantages, and is remarkable only as a landing-place for pleasure parties, and the seat of a small Canadian trade, carried on by means of skiffs across the river.

The Niagara, to this point, is navigable for steamers and other vessels of the largest lake-class; but, the channel being difficult and the current perilously strong, vessels of any magnitude rarely venture themselves so near the falls. The Canadian port of Chippewa is nearly opposite this point; and, during the summer season, a small steamer plies regularly twice a day between Chippewa and Buffalo, entering the Niagara from the Chippewa creek, by means of a cut, and thence proceeding up the river to the Buffalo harbor.

Tonawanda is more eligibly situated for trade, on the Tonawanda creek—a fine navigable stream—the Niagara, and the Erie canal; the river and creek forming an excellent harbor. It is twelve miles north from Buffalo, on the canal; and, owing to its facilities for the transshipment of produce saving twelve miles' tolls, its business has increased rapidly during the last three years. This business is principally transacted by Buffalo houses, and the commercial transactions of Tonawanda are, for the most part, made in the Buffalo markets, to which easy access is had by means of the Buffalo and Niagara Falls railway.

The commerce of this port in 1850 was valued at \$1,205,494, and in 1851 at no less than \$3,782,086, consisting of \$1,692,423 exports by lake, and \$2,089,663 imports; showing an aggregate increase, over the value of the business of 1850, of \$2,576,592.

Black Rock, the next port in order, is similar in situation to the last described; being situate on the Niagara river and Erie canal, only two miles distant from Buffalo.

The returns of the trade and commerce of the lakes at this point are usually included, by the collector, with those of Buffalo. In 1850 and 1851, they were, however, made distinct, and are as follows: in 1850, \$1,947,693; in 1851, \$2,349,334; showing an increase on the year of \$401,641. The principal commerce of Black Rock consists in a traffic carried on with Canada, by means of a ferry, which plies constantly between the opposite banks of the river, and in the manufacture of flour, for which purpose several mills have been established at this point.

Silver creek, Cattaraugus creek, Van Buren harbor, and Barcelona,

are, each of them, convenient landing places for supplies, and for the shipping of the produce of the neighborhood; but the value of their commerce has not been made up or returned, as the small-class vessels, which ply in the trade between Buffalo and these ports, rarely extend their trips beyond the limits of the district, in which case they are not required to report their cargoes at the custom-house. Their imports consist of all kinds of merchandise, and their exports of butter, cheese, pork, wool, lumber, and vegetables, the country behind and adjacent to them being one of the richest and most fertile portions of the whole State of New York.

Dunkirk is situate on Lake Erie, about 45 miles west of Buffalo, with which it is connected by railway. It has a fine harbor, with an easy access for vessels of light draught of water, and communicates with New York by the Erie railroad, 464 miles in length. There are some slight obstructions at the harbor mouth, as is the case with most of the lake ports, which if removed, would make navigation perfectly free for vessels of light draught; but the bottom being of rock, it cannot readily be deepened.

The commerce of Dunkirk, which previously was merely nominal, amounted in 1851, after the opening of the Erie railway, to the sum of \$9,394,780, being of exports \$4,000,000, of imports \$5,394,780. The Buffalo and State Line railway, which connects that city with Dunkirk, also connects it with Erie, Pa.

The city of Buffalo, the port of entry of this district, had a population in 1810, of 1,508 persons; in 1820, of 2,095; in 1830, of 8,668; in 1840, of 18,213; and in 1850, of 42,261; showing an increase of 113 per cent. from 1830 to 1840, and of 132 per cent. from 1840 to 1850. This would lead to the conclusion, on the average rate of increase on the last ten years, that on the 1st of January, 1852, its population did not fall far short of 50,478 persons.

Buffalo occupies a commanding business situation at the western terminus of the Erie canal and the eastern terminus of Lake Erie, constituting, as it were, the great natural gateway between the marts of the East and the producing regions of the West, for the passage of the lake commerce. It is distant from Albany, on a straight line, 288 miles—by canal 363, and by railroad 325. From Rochester, 73 miles; from Niagara Falls 22, SSE.; from Cleveland 203, ENE.; from Detroit 290, E. by N.; from Mackinaw 627, SE.; from Green Bay 807, ESE; from Montreal, Canada East, 427, SW.; and from Washington, D. C., 381, NW.

The harbor of Buffalo is constituted by the mouth of Buffalo creek, which has twelve to fourteen feet of water for the distance of a mile from its mouth, with an average width of two hundred feet; and is protected by a fine, substantial stone pier and sea-wall jutting out into the lake, at the end of which there is a handsome light-house twenty feet in diameter, by forty-six feet in height; there is, however, a bar at the mouth preventing the access of any vessels drawing above ten feet of water. A ship-canal seven hundred yards long, eighty feet wide, and thirteen deep, has been constructed into the place as a further accommodation for vessels and for their security when the ice is running; yet the harbor, which is perfectly easy of access in all weathers, is very

far from being adequate to the commerce of the place, and is often so much obstructed by small craft and canal-boats, especially when forced in suddenly by stress of weather, that ingress or egress is a matter not easily or rapidly effected. The extension of the Erie canal a mile to the eastward of its original terminus, and the construction of side-cuts into it for the refuge of boats, will do something to relieve this pressure; and much has been effected by the enterprise of the city authorities, who have already expended large sums in the excavation of ship-canals inside the sea-wall, on which warehouses for the storing of goods and facilitating the transshipment of merchandise are in progress of erection.

Two very large canal basins are also in progress, under the auspices of the State, for the better and safer accommodation of canal-boats. This will tend to attract them from the main harbor, and will materially increase its capacity for lake shipping. One of the above named basins is being constructed near the mouth of the harbor, and the other something more than a mile distant, easterly. The two, being in the immediate vicinity of the creek and communicating with it, and also with each other by canal, will afford ample facilities for transshipment to both sides of the city.

More than this, however, is required, to meet the demands of the large and daily increasing commerce of the place, and it is contemplated to open a new channel from the lake to the creek, at above a mile's distance from its mouth, across the isthmus, which is not above two hundred and fifty yards in width; and this improvement, with the erection of a new breakwater, would render it sufficiently capacious for the computed increase of shipping for many years to come.

Buffalo is a handsome and well built city, with streets, for the most part, rectangular and rectilinear, and many handsome buildings. It is the terminus of that stupendous State work, the Erie canal; of three lines of railway connecting it directly with New York; and of one communicating, through Albany, with both the cities of New York and Boston. It is also the eastern terminus of the Buffalo and State Line railway, which is destined to extend westward, by means of the south shore railways, to Toledo, Detroit, and Chicago. A railroad is also projected hence to Brantford, in Canada West, which will open to the city the whole trade of the rich agricultural valley of the Grand river, with the adjacent lumbering districts, and is destined to connect with the great western road, and thence, via Detroit, with all the West, and by Lake Huron with the mineral regions of Lake Superior. It has a dry-dock of sufficient capacity to admit a steamer of sixteen hundred tons burden, and three hundred and twenty feet length, with a marine railway to facilitate the hauling out and repairing of vessels. There is also near the same ship-yard in which these are to be found, a large derrick for the handling of boilers and heavy machinery. In short, it appears that this city is resolved to keep fully abreast with the progress of the times, and not to lose the start which she took by force of her natural advantages through any want of energy or exertion.

As being the oldest port on Lake Erie, and having taken, and thus far held, the lead in the amount and value of her lake commerce, the commercial returns of Buffalo are fuller than those of most other ports; and as the history of her commercial progress is little less than the

history of the rise and advancement of all the commerce west of it, no apology will be necessary for entering somewhat fully into the history of the lake commerce of Buffalo, and its details, at this time.

This commerce dates its actual commencement from the year 1825, the year in which the canal was finished and opened, so as to connect the waters of Lake Erie with the Atlantic; though the first craft which navigated those inland waves was built many years anterior to that date. The first American vessel which navigated the waters of Lake Erie was the schooner Washington, built near Erie, in Pennsylvania, in 1797. The first steamer on this lake was constructed at Black Rock, in 1818. In 1825, however, the whole licensed tonnage of all the lakes above the Falls of Niagara consisted of three steamers of 772 tons, and 54 sailing craft of 1,677 tons, making an aggregate of steam and sail tonnage entering the port of Buffalo of only 2,449.

In 1830	this had increased to	16,300
In 1835	“ “	30,602
In 1841	“ “	55,181
In 1846	“ “	90,000
In 1851	“ “	153,426

It will be observed that the ratio of increase, during this series of years, was, from 1825 to 1830, 113 per cent. per annum.

1830 to 1835,	18	“	“
1835 to 1841,	13½	“	“
1841 to 1846,	12	“	“
1846 to 1851,	14	“	“

Astonishing and unprecedented as is this increase, it yet gives no adequate idea of the increase of business transacted by it; for the changes which the last quarter of a century has wrought in the construction and models of vessels—adapting them to greater speed and capacity for burden, together with the improvement in the modes of shipping and discharging cargoes—have increased the availability of the same amount of tonnage more than tenfold. In order to ascertain the real augmentation of the commerce of Buffalo, during the period above mentioned, recourse must be had to the quantities of the articles transported. In 1825, and for many subsequent years, all the grain cargoes were handled in buckets, and from three days to a week were consumed in discharging a single cargo, during which time the vessel would, on an average, lose one or two fair winds; whereas the largest cargoes are now readily discharged by steam, in fewer hours, than in days at that time.

Again: steamers now require but twelve hours to make trips for which three days were then, at the least, necessary.

Up to the year 1835 the trade consisted principally of exports of merchandise to the West. During that year, however, Ohio commenced exporting breadstuffs, ashes, and wool, to some extent. The following table exhibits the quantities of several leading articles of western produce, during the various periods from 1835 to 1851:

Articles shipped eastward from Buffalo by canal.

Articles.	1835.	1840.	1845.	1850.	1851.
Flour .....barrels..	86,233	633,700	717,406	984,430	1,106,352
Wheat .....bushels..	95,071	881,192	1,354,990	3,304,647	3,668,005
Corn .....do....	14,579	47,885	33,069	2,608,967	5,789,842
Provisions ....barrels..	6,502	25,070	68,000	146,836	117,734
Ashes.....do....	4,419	7,008	34,602	17,504	25,585
Staves.....number..	2,565,272	22,410,660	88,296,431	159,479,504	75,927,659
Wool .....pounds..	140,911	107,794	2,957,007	8,805,817	7,857,907
Butter } Cheese } do....	1,030,632	3,422,687	6,597,007	17,534,981	11,102,282
Lard }					

The figures above are taken from the canal returns for the several years, and of course do not embrace the whole imports of the lakes, but are given as the best attainable standards of the increase of lake commerce, up to the date when the statistics of that commerce began to be kept in a manner on which reliance might be reposed.

The table next ensuing will give a fuller and more satisfactory idea of the actual increase of the trade, as well as of the various kinds of articles received at Buffalo, during a series of consecutive years. In this table all packages of the same article are reduced to a uniform size; and for this reason, probably, some articles will be found to vary in quantity, for the year 1851, from the figures contained in the report made up at the collector's office, and furnished by Mr. Wm. Ketchum, the collector, showing the receipts at Buffalo, Dunkirk, and Tonawanda, by lake, together with their tonnage, their value at each point, and their aggregate for all the points combined.

The following table was made up from day to day, during the several seasons, and will be found substantially correct. By reference to the official tables, following this report, some details will be found very curious and interesting at this juncture, for reasons which will be ad-duced hereafter :

Articles.	1848.	1849.	1850.	1851.
Flour.....barrels..	1,294,000	1,207,435	1,088,321	1,216,603
Pork.....do....	66,000	59,954	40,249	32,169
Beef.....do....	53,812	61,998	84,719	73,074
Bacon.....pounds..	included in pork	5,193,996	6,562,808	7,951,500
Seeds.....barrels..	22,020	21,072	9,674	11,126
Lumber.....feet...	21,445,000	33,935,768	53,076,000	68,006,000
Wool.....bales...	40,024	49,072	53,443	60,943
Fish.....barrels..	6,620	5,963	10,257	7,875
Hides.....No....	70,750	62,910	72,022	48,430
Lead.....pigs...	27,953	14,742	17,991	28,713
Pig iron.....tons..	4,132	3,132	2,881	2,739
Coal.....do....	12,950	9,570	10,461	17,244
Hemp.....bales...	865	414	421	3,023
Wheat.....bushels..	4,520,117	4,943,978	3,672,886	4,167,121
Corn.....do....	2,298,100	3,321,661	2,504,000	5,988,775
Oats.....do....	560,000	362,384	347,108	1,140,340
Rye.....do....	17,809	5,253	50	10,652
Lard.....pounds..	5,632,112	5,311,037	5,093,532	4,798,500
Tallow.....do....	1,347,000	1,773,650	1,903,528	1,053,900
Butter.....do....	6,873,000	9,714,170	5,298,244	2,343,900
Ashes.....casks...	9,940	14,580	17,316	13,509
Whiskey.....do....	38,700	38,753	30,189	66,524
Leather.....rolls..	3,313	3,870	8,282	8,186
Staves.....No....	8,091,000	14,183,602	19,617,000	10,519,000

At the present moment the official documents, alluded to above as following this report, merit something more than ordinary attention, as they display the character, quantity, and estimated value of each article passing over the lakes eastward, in pursuit of a market, and the places of shipment on the lake indicating, with sufficient accuracy, the regions where produced. Thus it will be observed that the small amount of cotton received came via Toledo, which may be held to signify that it reached that point by canal from Cincinnati, to which place it had been brought from the southward by the Ohio river. The same remarks will apply to tobacco, and in some sort to flax and hemp. The latter, however, arrive in nearly equal quantities by this route, and by the Illinois river, the Illinois and Michigan canal, and by lake from Missouri.

Nothing can be more interesting or instructive, as connected with the lake trade, than statistics like these, showing whence come these vast supplies, and what superficies of country is made tributary to this immense commerce.

The recapitulation of the tables, referred to, shows the commerce of Buffalo to have been—

In 1851, of imports, 731,462 tons, valued at.....	\$31,889,951
“ exports, 204,536 “ “	44,201,720

Making an aggregate of.....	76,091,671
In 1850 it was.....	67,027,518

Increase on 1851.....	9,064,153
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Of the trade there were, in 1851, imports from Canada...	\$507,517
" " " exports to Canada.....	613,948
Total Canadian trade of 1851.....	1,121,465
Of the trade there were, in 1850, imports from Canada...	\$307,074
" " " exports to Canada.....	220,196
Total Canadian trade of 1851.....	527,270
Increase of Canadian trade on 1851.....	\$594,195

It is, perhaps, proper here to observe that much of the property purchased in Buffalo for the Canadian market passes over the Niagara Falls railway to the suspension bridge, where it is reported as passing into Canada from the Niagara district, and is as such reported as the trade of that district.

The tonnage of this port exhibits an increase no less gratifying than that of the commerce.

Tonnage for 1851.

	Crews, total.	BRITISH.		AMERICAN.	
		Vessels.	Tons.	Vessels.	Tons.
Arrivals.....	7,227	601	72,212	170	30,100
Clearances.....	7,486	693	71,241	205	31,927
Aggregate.....	14,713	1,194	143,453	375	69,027
Do. of 1850.....		939	149,537	528	56,048
Increase and decrease.....		inc. 255	dec. 5,084	dec. 153	inc. 12,979
Aggregate increase for 1851.....				255	5,084
From and to foreign ports.....				102	7,895

Coasting trade for 1851.

	No.	Tons.	Men.
Outward.....	3,719	1,448,772	60,374
Inward.....	3,762	1,433,777	59,705
Total coasting.....	7,481	2,882,049	120,079
Total coasting and foreign.....	9,050	3,087,530	134,792
Do. do. do. 1850.....	8,444	2,713,700	125,672
Increase of 1851.....	606	373,830	9,120

This array of tonnage would suffer little by comparison with that of any of our Atlantic ports. It is composed of 107 steamers and steam-

propellers, and 607 sailing vessels, varying in size from steamers of 310 feet length and 1,600 tons burden, to the smallest class of both steam and sailing vessels. It is a significant fact, that out of nearly 7,000 tons of vessels building at Buffalo on the 1st of January, 1852, there was but one sailing vessel—of 230 tons—the remainder consisting of steamers and propellers; showing conclusively that steam is daily growing more rapidly into favor in a trade so admirably adapted to its successful application as that of the western lakes.

The present population of Buffalo, as stated above, is estimated at 50,000 persons; the principal part of the inhabitants being employed in occupations more or less closely connected with the commerce of the lakes and canals.

There is, moreover, much manufacturing successfully carried on in this place, more especially in leather, iron, and wood.

In the above calculation of the commerce of Buffalo, no estimate has been made of the enormous passenger trade, or of the value of the many tons of valuable goods and specie transported by express over the railways and on board the steamers. But were it possible to arrive at the value of such commerce, it cannot be doubted that it would swell the aggregate amount of the trade, by many millions of dollars.

The enrolled and licensed tonnage of this district is 22,438 tons, of steam measurement; and 23,619 tons of sail, enrolled.

Statement of property shipped westward from the principal ports in the district of Buffalo Creek, New York, during the year ending December 31, 1851.

Class of property.	Shipped at Buffalo.		Shipped at Dunkirk.		Shipped at Tonawanda.		Total from the District.	
	Tons of 2,000 pounds each.	Value.	Tons of 2,000 pounds each.	Value.	Tons of 2,000 pounds each.	Value.	Tons of 2,000 pounds each.	Value.
Products of the forest.....	181	\$5,406	.....	.....	2	\$3,909	183	\$9,315
Product of animals.....	234	33,138	.....	.....	None.	.....	234	33,138
Vegetable food.....	118	3,554	.....	.....	None.	.....	118	3,554
Other agricultural products..	999	491,626	.....	.....	7	3,471	1,006	495,097
Manufactures.....	11,795	512,618	.....	.....	1,000	112,876	12,795	625,494
Merchandise.....	169,519	42,234,896	.....	\$5,394,780	3,234	1,551,329	188,621	49,181,005
Other articles.....	21,689	920,482	.....	.....	794	20,838	22,483	941,923
	204,535	44,201,720	15,867	5,394,780	5,038	1,632,423	225,440	51,288,923

DISTRICT OF BUFFALO CREEK, NEW YORK.
Custom-house, Buffalo, February 19, 1852.

WM. KETCHUM, Collector.

Statement of property, moving eastward, received at Buffalo, coastwise and from Canada, for the year 1851: showing the kinds of property, and quantities of each kind, from each American port and Canada.

Ports.	Ashes.		Ale.		Alcohol.		Barley.		Bart.				Beef.			Beeswax.			Bacon and hams.				
	Casks.	Barrels.	Dozen.	Casks.	Bushels.	Barrels.	Boxes.	Bags.	Packages.	Bundles.	Barrels.	Tierces.	Casks.	Barrels.	Casks.	Boxes.	Boxes.	Barrels.	Boxes.	Barrels.			
Silver Creek																							
Dunbart																							
Barcelona																							
Eric.	296			81	4,688																		
Coast	66	1																					
Ashabula	113								6														
Madison Dock																							
Black River	478																						
Verenille	72																						
Cleveland	1,515				440																		
Huron	536				100																		
Sandusky	1,038																						
Point	292	17			340																		
Toledo	3,590	5			255																		
Mercer	772																						
Gibbslar									17	27	21												
Detroit									6														
Trenton	2,843																						
St. Clair																							
Saginaw																							
McKinnaw																							
Green Bay	11																						
Beaver Islands																							
Grand Haven	209																						
St. Joseph's	2																						
Sheboygan	579																						
Milwaukee	507				88,564																		
Racine	21				17,719																		
Kenosha	42				18,579																		
Waukegan					6,368																		
Chicago	376				10,365																		
Michigan City	16																						
Canada	13,458	62			146,573				23	44	21			3	38	54,414	6,222	356	253	9	82	286	4,215
	263				19,615																		
Total	13,721	62	39		166,188				23	44	21		3	38	54,414	6,222	356	257	9	82	286	4,215	

Statement of property, moving eastward, received at Buffalo, &c.—Continued.

Ports.	Bacon and hams.			Brooms.		Broom corn.		Books.		Boots and Bladders.		Butter.				Beer bot- tles.	
	Tierces.	Casks.	Hhds.	Tons.	Dozen.	Bales.	Tons.	Boxes.	Barrels.	Kegs.	Frkins.	Barrels.	Casks.	Hhds.			
Silver Creek		5															
Dunkirk																	
Burlington																	
Erie					13	172		11							149	81	1,600
Conneaut		2			71			1							82	31	
Ashabula					197										89	42	4
Madison Dock		2													10	22	
Fairport															40	5	
Black River															52	5	
Vermilion						1,382									667	14	8
Cleveland	126	1,832		12	314	345		74	30						569	5	
Huron and Milan	23	197			2	59		9	2						6	6	
Sandusky		16				58		69							54		
Fremont		1,087	94	63	211	529		132	5	5					4	229	2
Toledo	1,600	1,15			70										34	2	
Monroe																	
Gibraltar				3½	465	52		8	20							5	
Detroit		30															
Trenton																	
St. Clair																	
Saginaw																	
Macbinaw																	
Green Bay																	
Beaver Islands																	
Grand Haven																	
St. Joseph's																	
Sheboygan					194			2								6	
Milwaukee		88			82	849	8½	1	5						256	2	4
Racine						295		2							1,981		
Kenosha																	
Waukegan					116												
Chicago	26	886	1	1,216	536	1,494		28	18							22	
Michigan City	17														30		
Canada	1,792	3,560	95	1,284½	2,280	5,238	8½	887	84	7	19,017	1,229	18	8	1,156	8	1,600
Total	1,792	3,560	95	1,284½	2,280	5,238	8½	887	84	7	19,251	1,229	18	8	1,156	8	1,600

Statement of property, moving eastward, received at Buffalo, &c.—Continued.

Ports.	Beer pumps.		Bath brick		Brick.		Bones.		Bristles.		Brandy.		Buffalo robes.		Candles.		Carpeting.		Carriages.		Cedar posts.		Cement.	
	Number.	Number.	Number.	Tons.	Tons.	Hdhs.	Tons.	Hdhs.	Sacks.	Casks.	Hdhs.	Casks.	Bales.	Boxes.	Rolls.	Number.	Cords.	Number.	Barrels.					
Silver Creek																								
Dunkirk																								
Barcelona																								
Erie			24,000	26																				
Conneaut																								
Ashtabula																								
Madison Dock																								
Fairport																								
Black River																								
Vermillion																								
Cleveland			18,800	30			5	6	10					18	990	41	15	500	621					
Huron and Milan																								
Sandusky	2													160	1	3	681	500						
Fremont																								
Toledo																								
Monroe																								
Gibraltar																								
Detroit																								
Trenton																								
St. Clair																								
Mackinaw																								
Green Bay																								
Beaver Islands																								
Grand Haven																								
St. Joseph's																								
Sheboygan																								
Milwaukee																								
Racine																								
Kenosha																								
Waukegan																								
Chicago																								
Michigan City																								
Canada	2		87,800	56	5	272	5	272	10	20	4	1	8,246	8,551	55	156	742	1,530	631					
Total	2	805	87,800	56	5	272	5	272	10	20	4	1	8,246	8,551	57	171	742	1,530	631					

Statement of property, moving eastward, received at Buffalo, &c.—Continued.

Ports.	Cheese.		Cider.	Cigars.	Coal.	Coin.		Copper.		Coffee.	Corn.	Corn meal.	Cranberries.	Deer skins.
	Boxes.	Casks.				Tons.	Barrels.	Dollars.	Packs.						Tons.	Pieces.	Bushels.	Barrels.	Bales.	Barrels.	Packs.
Silver Creek														
Dunkirk		316												25
Barcelona	48,465	134			10,229									26
Erie	18,648	207		42				1						84
Conneaut	38,789		14				8							
Ash abula														
Madison Dock	32,780	18												
Fairport	87													
Black River	116													
Black River	357													
Vermilion	26,298	2	31	4	788		18	166½	18		227		2	88
Cleveland											43			61
Huron and Milan														
Sandusky							15			5				28
Sandusky														
Fremont	772	9		6						26				165
Monroe		1												
Gibraltar														
Detroit	10	5		5				76	1	20				283
Trenton														18
St. Clair														
Saginaw														
Mackinaw														
Green Bay														
Beaver Islands														
Grand Haven														
St. Joseph's	1,864													
Sheboygan														
Milwaukee		9												
Racine														
Kenosha														
Waukegan														
Chicago														
Michigan City														
Canada	163,699	701	62	57	17,017	169,400	173	242½	15	53	5,988,788	2,929	820	927
			17	17			2	¾			8			8
Total	163,699	701	62	57	17,017	169,400	173	243½	15	53	5,988,746	2,929	810	930

Statement of property, moving eastward, received at Buffalo, &c.—Continued.

Ports.	Earthenware.		Eggs.		Feathers.		Felt.		Fish.		Fire-wood.		Flax and hemp.		Flax-seed.		Flour.		Fruit, green.		Fruit, dried.		
	Casks.	Barrels.	Crates.	Barrels.	Sacks.	Rolls.	Barrels.	Cords.	Bales.	Tons.	Sacks.	Barrels.	Bales.	Tons.	Sacks.	Barrels.	Barrels.	Barrels.	Barrels.	Barrels.	Barrels.	Boxes.	
Silver Creek																							
Dunkirk																							
Barcelona																							
Erie																							
Conneaut	79	1																					
Ashtabula																							
Madison Dock																							
Fairport																							
Black River																							
Vermilion																							
Cleveland																							
Huron and Milan	68	2																					
Sandusky																							
Fremont																							
Toledo	7																						
Monroe																							
Gibraltar																							
Detroit																							
Trenton																							
St. Clair																							
Saginaw																							
MacKinnaw																							
Green Bay																							
Beaver Islands																							
Grand Haven																							
St. Joseph's																							
Sheboygan																							
Milwaukee																							
Racine																							
Kenosha																							
Waukegan																							
Chicago																							
Michigan City																							
Canada	154	3	116	11,371	3,331	1,057	9,970	82	2,471	113	1,338	1,848	1,204,643	113	1,338	1,848	1,204,643	2109	847	2,095	208		
				61	5	5	2					9	11,960				1,261						
Total	154	3	116	11,432	3,336	1,507	9,981	82	2,471	113	1,338	1,857	1,216,603	113	1,338	1,857	1,216,603	2109	2,108	2,095	208		

Statement of property, moving eastward, received at Buffalo, &c.—Continued.

Ports.	Fruit, dried.		Furniture.			Furs.			Ginseng.			Glass.			Glassware.		
	Baskets.	Sacks.	Boxes.	Packages.	Lots.	Packs.	Boxes.	Casks.	Barrels.	Boxes.	Packages.	Boxes.	Tons.	Boxes.	Casks.	Packages.	Tons.
Silver Creek.....																	
Dunkirk.....			10	75	1	42											
Barcelona.....			31	51			7	3				2,010	18	642	302	349	1
Erie.....			2		2		4					5				1	
Connetquot.....			7														
Astoria Dock.....																	
Madison Dock.....																	
Black River.....			2		1		2										
Vermillion.....			2	18	1												
Cleveland.....	153	120	24	506	1	227	24	25	23	6	24	764		1,162	270	325	48
Huron and Milan.....		2	49	30													
Sandusky.....			3	31	15	467	24	1	18					14		7	
Fronton.....						9	2	6									
Monro.....		74	93	180	3	425	6	6	143		112	2		12	14	28	
Montezuma.....			2	122	1												
Gibraltar.....				160	1												
Detroit.....				134	2	369	31	4	3	1					10		
Trenton.....																	
St Clair.....																	
Saginaw.....																	
McKinaw.....					1												
Green Bay.....				5	1												
Beaver Islands.....						1	4										
Grand Haven.....				20		82											
St Joseph's.....																	
Sheboygan.....			44	61	1	6	4										
Milwaukee.....				24		85	4	7			40						
Madison.....				29	1	17	1	8	2								
Racine.....		24	15				1										
Kenosha.....				10													
Waukegan.....			32	377	3	546	2	3	38		19	1					
Chicago.....			6														
Michigan City.....																	
Canada.....	153	303	317	1,917	37	2,274	115	59	122	7	195	*3,188	18	1,880	610	710	49
			10	8	6	11									1		
Total.....	153	303	327	1,925	43	2,285	115	59	122	7	195	3,188	18	1,880	611	710	49

* 400 boxes from Ogdensburg.

COLONIAL AND LAKE TRADE.

Statement of property, moving eastward, received at Buffalo, &c.—Continued.

Ports.	Hardware.		Iron.			Lard.			Lead.		Leaf pipe.		Leather.		
	Bundles.	Pieces.	Pigs.	Tons.	Casks.	Bundles.	Kegs of nails.	Barrels.	Casks.	Kegs.	Pigs.	Tons.	Packages.	Rolls.	Boxes.
Silver Creek.....															
Dunkirk.....														83	
Barcelona.....	1,491		90											207	18
Erie.....	5	130	5,920	735	207	72	2,694			24				177	4
Conneaut.....			57											267	8
Madaburh.....	19			135											
Madison Dock.....				10											4
Katipon.....								3							
Black River.....								6							
Vermillion.....	7		1	80				1							
Cleveland.....	462	609	680	766	93		503	2,112	571	133				8,127	20
Huron and Milan.....								13	5					21	
Sandusky.....	28		8	12	44			874		855			1	646	1
Everson.....								9		7				121	
Toledo.....	14		4	80			2	2,767	551	1,401			14	2,218	16
Monroe.....	17							13		1				184	
Gibraltar.....														236	4
Detroit.....	143	10		46	64		2	21		14			1	150	1
St. Clair.....															
St. Catharines.....														28	1
St. Mary.....															
Mackinaw.....															
Green Bay.....															
Green Island.....															
Grand Haven.....														39	
St. Joseph's.....															
Sheboygan.....													2	21	
Milwaukee.....	12			1											
Rock.....														800	9
Kenosha.....	13			10	18			54						231	
Waukegan.....								7							
Chicago.....	9			100				826	826	595				448	28
Michigan City.....				9				829	829						
Canada.....	2,210	890	6,050	*2,195 †4,991½	466	197	†3,951	9,354	2,482	2,574		80	18	8,843	121
Total.....	2,210	890	6,050	7,186½	540	197	8,951	9,354	2,482	2,577		80	19	8,843	121

† 150 kegs from Ogdensburg.

† From England.

* 335 tons from Ogdensburg.

Statement of property, moving eastward, received at Buffalo, &c.—Continued.

Ports.	Lumber, shingles, &c.											Malt.		Machines.	
	Black walnut.		Oak timber.		Ship plank.	Sawed pine, white wood, &c.		Shingle bolts.		Shingles.	Laths.	Bushels.	No.	Pieces.	Boxes.
	Feet.	Tons.	Pieces.	Feet.	Tons.	Pieces.	Feet.	Feet.	Cords.	M.	Bundles.	Bushels.			
Silver Creek.....							375,993						5		
Dunkirk.....							520,500								
Barcelona.....							9,757,297								
Erie.....				151,142			5,697,614		36	447			8		
Conne ut.....							2,936,118				1,450				
Ashabula.....							871,400								
Madison Dock.....							405,415								
Fairport.....							256,000								
Black River.....				220,000			193,000						9	5	
Vermillion.....				10,000			184,143						1		
Cleveland.....	19,677		88				650,153			5		691	28	8	15
Huron and Milan.....							804,950								
Sandusky.....		100	120				121,287								
Fremont.....		2					1,616,814			66			9		
Toledo.....	83,915		523				1,745,640								
Monroe.....	166,870		717	160½	1,483		271,000						2	8	
Gibraltar.....							8,953,714			329					
Detroit.....						836	809,192								
Trenton.....							1,939,023								
S. Clair.....							8,985,549			425					
Saginaw.....															
MacKInaw.....															
Green Bay.....															
Beaver Islands.....									6½	390					
Grand Haven.....	140,000						982,000			1,192					
St. Joseph's.....							164,000			20					
Sheboygan.....															
Milwaukee.....															
Racine.....															
Kenosha.....															
Waukegan.....															
Chicago.....				464		965	106,000								
Michigan City.....						2									
Canada.....	860,462	153	1,511	10,000	624½	2,841	42,390,097		49½	2,951		691	73	21	15
	801,017			876,957			89,373,936		263	8,148		202			
Total.....	661,479	153	1,511	886,957	624½	2,841	81,773,633		810½	6,099	12,643	890	73	21	15

Statement of property, moving eastward, received at Buffalo, &c.—Continued.

Ports.	Paint.		Paper.		Pianos.	Plaster.	Peas and beans.		Poultry.		Pork.	Potatoes.		Railroad ties.		Rags.		Reapers.	Roots.
	Barrels.	Kegs.	Bundles.	Boxes.			Rolls.	No.	Tons.	Barrels.		Pounds.	Boxes.	Barrels.	Bushels.	Number.	Tons.			Sacks.	Number.	Barrels.
Silver Creek									300	1	113	821							
Dunkirk											88								
Barcelona	20		474	88		2	6	22			206	2,156			8				
Erie						1		68		9	73	603							
Conneaut								2											
Ashtabula																			
Madison Dock											188	6							
Fairport											180								
Black River	2										5,089	480			820				
Vermillion						1					255	229			2				
Cleveland	5,846		8,706	88	200						1,371	145			184				8
Huron and Milan											150								
Sandusky						1		84			9,259	1,786			8				178
Fremont	549		294			3		204			289	1,105			2				6
Toledo								45											
Monroe								285											
Gibraltar						6		39							15				12
Trenton																			
Detroit																			
St. Clair																			
Saginaw																			
Mackinaw																			
Green Bay																			
Beaver Islands																			
Grand Haven																			
St. Joseph's																			
Sheboygan											1,393	124			493				
Milwaukee											811	10			182				
Racine						1									96				
Kenosha											115	234			700				175
Waukegan						3					9,215				175				
Chicago											4,893				100				
Michigan City																			
Canada	6,417	88	5,096	122	1,200	18	89	753	800	75	32,814	10,095			27	10,288			202
							1	196			11	1,351			6	20			
Total	6,417	88	5,096	122	1,200	18	90	949	800	75	32,825	11,446			33	10,308			299

Statement of property, moving eastward, received at Buffalo, &c.—Continued.

Ports.	Rope.		Eye.		Salaratus.		Sausages.		Sheep.		Sheep-skins.		Seed.			Stone.		Soap.		Starch.		Staves.	
	Packages.	Bushels.	B-xes.	Barrels.	Barrels.	Barrels.	Number.	Tons.	Bundles.	Barrels.	Boxes.	Casks.	Tuns.	Boxes.	Boxes.	Barrels.	Boxes.	Barrels.	Boxes.	Boxes.	M.		
Silver Creek																							
Dunkirk																							
Barcelona																							
Erie	6	7,534		16			142		856														
Conneaut		2,500							101														
Ashtabula		144							224														
Ma'ison Dock																							
Fairport		188							101														
Black River									70														
Vermillion																							
Cleveland	26	90	89	197			5,313	1,197	271				460	272									
Ruron and Milan																							
Sandusky																							
Fremont		8,892		27			9,075	746	1,091														
Toledo	105			51			1,900	942	858														
Monroe								14	18														
Gibraltar									70														
Detroit	1		109	203			890	606	85														
Trenton																							
St. Clair																							
Saginaw																							
Mackinaw																							
Green Bay																							
Beaver Islands																							
Grand Haven																							
St. Joseph's																							
Sheboygan																							
Milwaukee																							
Racine																							
Kenosha																							
Waukegan																							
Chicago																							
Michigan City																							
Canada	138	19,348	270	617			18,316	7	5,338				461	485									
		87					590		2,048			1,711											
Total	138	19,435	270	617	46	18,906	7	7,376	8,758	277	112	2,172	485	388	227	3,206	10,689	227	3,206	10,689	57		

Statement of property, moving eastward, received at Buffalo, &c.—Continued.

Ports.	Wood manufactures.																
	Wheat.		Whiskey.		Wool.		Sundry articles.			Carriers' blocks. Ha. ds. spikes.			Oars.			Wagon woods.	
	Bushels.	Barrels.	Bales.	Tons.	Boxes.	Bundles.	Number.	Number.	Tons.	M feet.	Number.	Hubs.	Spokes.	Pieces.	Felloes.		
Silver Creek.....			21														
Dunkirk.....			200														
Barcelona.....		285	2,484														
Erbe.....	600				99				40	413						88	
Concord.....			74														4,000
Ashtab.....			221														
Madison Dock.....			156														
Putnam.....		88	873		141												
Black River.....			887												400		22,000
Vermilion.....	28,619		180														
Cleveland.....	673,403	2,033	27,180	6%	145	1,376	895										
Hon. and Milan.....	267,728		1,098												600		
Sandusky.....	619,529	8,613	8,366		102												
Freemont.....	44,224		25														
Talado.....	802,654	4,941	3,963														
Monroe.....	168,654	23	1,086		2										280		
Gibbslar.....																	
Detroit.....	512,759	228	7,817														
Trenton.....																	
St. Clair.....																	
Saginaw.....																	
MacIntosh.....																	
Green Bay.....																	
Beaver Islands.....																	
Grand Haven.....	30,776		166														
St. Joseph's.....	20,354		11														
Sheboygan.....			1														
Milwaukee.....	58,602		11							6							
Racine.....	95,802	38	1,004	2%													
Kenosha.....	68,894		394														
Waukegan.....	82,441	1	150							27							
Chicago.....	815,595	575	4,728														
Michigan City.....	30,812		204														
Canada.....	3,948,655	11,765	61,290	9%	387	3,132	825	1,480	40	413	85,792	1,250	22,000	88	4,000		
	101,955		46	89%	7												
Total.....	4,050,310	11,765	61,336	45%	387	3,130	825	1,480	40	413	85,792	1,250	22,000	88	4,000		

WM. KETCHUM, Collector.

CUSTOM-HOUSE, BUFFALO, February 19, 1852.

Statement showing the estimated value of each aggregate of the several articles received at each of the several ports in the district of Buffalo Creek coastwise and from Canada, and total values of all, for the year ending the 31st December, 1851.

RECEIVED AT BUFFALO.

Articles.	Quantities.		Value.
	Packages.	Pounds.	
Ashes	13,721 casks	6,860,500	\$291,550
Ale	62 barrels	18,600	} 388
Ale	39 dozen bottles..	720	
Alcohol	789 casks	284,040	16,569
Barley	166,188 bushels.....	7,977,024	116,332
Beef	54,414 barrels	17,412,480	} 521,894
Beef	6,222 tierces	2,488,800	
Beef	356 casks	178,000	} 645
Bark	129 packages	12,900	
Bacon and hams.....	236 boxes	70,800	} 405,765
Bacon and hams.....	4,215 barrels	1,348,800	
Bacon and hams.....	1,792 tierces	716,800	
Bacon and hams.....	3,540 casks	1,770,000	
Bacon and hams.....	95 hogsheads.....	66,500	
Bacon and hams.....	1,284½ tons	2,568,500	} 8,890
Beeswax	257 barrels	38,550	
Beeswax	9 casks	2,700	
Beeswax	32 boxes	3,200	} 3,420
Brooms	2,280 dozen	22,800	
Broom-corn	5,238 bales	1,047,600	} 63,879
Broom-corn	8½ tons	16,500	
Books	340 boxes	102,000	8,500
Boots and shoes.....	84 boxes	5,040	3,360
Bladders	7 barrels	2,100	84
Butter	19,251 kegs	1,925,100	} 234,859
Butter	1,229 firkins.....	122,900	
Butter	1,156 barrels	289,000	
Butter	18 casks	7,200	
Butter	8 hogsheads	4,800	
Beer-pumps	2	100	10
Beer-bottles	1,600	1,600	24
Bath brick	805	3,220	64
Brick	37,800	151,200	} 330
Brick	56 tons	112,000	
Bones	5 tons	10,000	} 1,820
Bones	272 hogsheads	113,500	
Bristles	10 sacks	2,000	} 400
Bristles	20 casks.....	600	
Brandy	4 hogsheads .....	.....	} 1,480
Brandy	4 casks	4,200	
Buffalo robes.....	3,246 bales	194,760	162,300
Candles	3,551 boxes	106,530	21,306
Carpeting	57 rolls	1,140	1,710
Carriages	171	119,700	8,550
Cedar posts.....	1,530 .....	.....	} 858
Cedar posts.....	42 cords.....	97,800	
Cement	521 barrels	156,300	1,042
Cheese	163,099 boxes.....	.....	} 346,256
Cheese	701 casks.....	.....
Cheese	62 tons.....	3,596,280	
Cider	84 barrels	25,200	252
Cigars	57 cases.....	11,400	2,850
Coal	17,009 tons	34,018,000	68,036
Copper	540 barrels .....	.....	} 266,700
Copper	243½ tons .....	.....
Copper	15 masses	1,311,500	

RECEIVED AT BUFFALO—Continued.

Articles.	Quantities.		Value.
	Packages.	Pounds.	
Coffee	53 sacks.....	5,300	\$530
Corn.....	5,938,746 bushels.....	332,469,776	2,672,436
Corn meal.....	2,929 barrels.....	632,664	5,858
Cotton.....	310 bales.....	159,500	13,950
Cranberries.....	1,417 barrels.....	198,380	8,502
Deer skins.....	930 bales.....	130,200	46,500
Earthenware.....	154 casks.....		} 8,136
Earthenware.....	3 barrels.....		
Earthenware.....	116 crates.....	81,600	
Eggs.....	11,432 barrels.....	15,600,480	91,456
Feathers.....	3,336 sacks.....	166,800	66,720
Felt.....	1,057 rolls.....	10,570	528
Fish.....	9,981 barrels.....	2,994,360	59,886
Firewood.....	82 cords.....	164,000	246
Flax and hemp.....	2,471 bales.....	1,337,950	44,478
Flaxseed.....	113 tons.....		} 21,609
Flaxseed.....	1,338 sacks.....		
Flaxseed.....	1,857 barrels.....	648,920	
Flour.....	1,216,603 barrels.....	262,786,248	4,258,110
Fruit, green.....	2,108 barrels.....	210,800	2,108
Fruit, dried.....	2,095 barrels.....		} 14,711
Fruit, dried.....	208 boxes.....		
Fruit, dried.....	15 ³ baskets.....		
Fruit, dried.....	303 sacks.....	528,850	} 65,400
Furniture.....	327 boxes.....		
Furniture.....	1,925 packages.....		
Furniture.....	2 tons.....	487,100	} 245,900
Furs.....	2,285 packs.....		
Furs.....	115 boxes.....		
Furs.....	59 casks.....	245,900	} 6,052
Ginseng.....	222 barrels.....		
Ginseng.....	7 boxes.....		
Ginseng.....	195 packages.....	22,710	} 7,810
Glass.....	3,185 boxes.....		
Glass.....	18 tons.....	195,250	
Glassware.....	1,830 boxes.....		} 33,360
Glassware.....	611 casks.....		
Glassware.....	710 packages.....		
Glassware.....	48 tons.....	533,100	} 4,365
Glue.....	291 barrels.....	29,100	
Grease.....	1,154 barrels.....	259,650	
Grindstones.....	4,753.....		} 30,598
Grindstones.....	1,723 tons.....	3,921,300	
Hats.....	180 cases.....	9,000	
Hair.....	364 packages.....	109,200	1,092
Hides.....	48,013.....		} 188,765
Hides.....	604 bundles.....		
Hides.....	26 tons.....	3,478,950	
High wines.....	62,780 casks.....	22,600,800	627,800
Hogs.....	97,697.....	9,769,700	635,011
Horned cattle.....	8,594.....	5,156,400	257,820
Horses.....	2,761.....	2,208,800	165,660
Hops.....	7 bales.....	2,100	784
Horns and hoofs.....	269 hogsheads.....	201,750	4,304
Hardware.....	643 boxes.....		} 18,849
Hardware.....	81 barrels.....		
Hardware.....	2,010 bundles.....		
Hardware.....	890 pieces.....	209,720	} 301,436
Iron.....	6,050 pieces.....		
Iron.....	7,186 ¹ / ₂ tons.....		
Iron.....	540 casks.....		} 15,412,260
Iron.....	197 bundles.....		

RECEIVED AT BUFFALO—Continued.

Articles.	Quantities.		Value.
	Packages.	Pounds	
Nails.....	3,951 kegs.....	395,100	\$15,804
Lard.....	9,354 barrels.....		
Lard.....	2,482 casks.....		282,156
Lard.....	2,577 kegs.....	3,305,150	
Lead.....	20,888 pigs.....		81,100
Lead.....	80 tons.....	1,622,160	
Lead pipe.....	18 packages.....	3,600	180
Leather.....	8,343 rolls.....		758,130
Leather.....	121 boxes.....	864,550	
Lumber, black walnut.....	661,479 feet.....		14,000
Lumber, black walnut.....	153 tons.....		
Lumber, black walnut.....	1,511 pieces.....	3,706,500	
Oak, timber.....	386,967 feet.....		74,722
Oak, timber.....	2,841 pieces.....		
Oak, timber.....	6,214½ tons.....	4,643,100	
Ship-plank.....	789,142 feet.....	851,000	15,780
Lumber.....	81,773,633 feet.....	245,318,000	8,995,100
Shingle bolls.....	310½ cords.....	465,750	3,105
Laths.....	12,634 bundles.....	505,720	2,928
Shingles.....	6,099 M.....	1,219,800	15,245
Malt.....	896 bushels.....	26,880	806
Machines.....	73.....		8,260
Machines.....	21 pieces.....		
Machines.....	15 boxes.....	92,200	
Mattresses.....	182.....	5,460	1,092
Merchandise.....	654 boxes.....		113,550
Merchandise.....	1,590 packages.....		
Merchandise.....	47 bales.....	687,300	
Medicines.....	679 packages.....	35,500	1,340
Nuts.....	978 barrels.....		3,444
Nuts.....	69 casks.....	160,720	
Nuts.....	16 boxes.....		
Oats.....	1,133,811 bushels.....	36,281,952	340,143
Oil.....	6,023 barrels.....		151,503
Oil.....	232 boxes.....	1,818,500	
Oil-cloth.....	23 packages.....	6,900	1,380
Oil-cake.....	583 hogsheads.....		30,007
Oil-cake.....	1,845 tons.....	3,981,500	
Oil-stones.....	78 boxes.....	3,120	156
Paint (clay).....	6,417 barrels.....		22,899
Paint (lead).....	88 kegs.....	1,933,900	
Paper.....	5,096 bundles.....		86,016
Paper.....	122 boxes.....	289,200	
Paper.....	1,200 rolls.....		
Pianos.....	18.....	9,000	1,800
Plaster.....	90 tons.....	180,000	540
Peas and beans.....	949 barrels.....	189,800	2,847
Poultry.....	300 pounds.....		399
Poultry.....	75 boxes.....	4,050	
Railroad ties.....	12,734.....	3,546,800	4,202
Pork.....	32,825 barrels.....	10,504,000	393,900
Potatoes.....	11,446 bushels.....	686,760	6,868
Rags.....	33¼ tons.....		53,202
Rags.....	10,308 sacks.....	2,128,100	
Reapers.....	289.....	231,200	57,800
Roots.....	202 bales.....	30,300	1,010
Rope.....	138 packages.....	20,700	2,760
Ry.....	19,435 bushels.....	1,088,360	11,661
Salæratus.....	270 boxes.....		13,455
Salæratus.....	617 barrels.....	193,210	
Sausages.....	46 barrels.....	11,500	552
Sheepskins.....	7 tons.....		187,900
Sheepskins.....	7,376 bundles.....	1,489,200	

RECEIVED AT BUFFALO—Continued.

Articles.	Quantities.		Value.
	Packages.	Pounds.	
Sheep.....	18,906	1,512,480	\$47,265
Seed.....	3,758 barrels.....	} 745,680	49,710
Seed.....	277 boxes.....		
Seed.....	112 casks.....		
Stone.....	2,172 tons.....	} 4,373,100	8,456
Stone.....	485 boxes.....		
Soap.....	338 boxes.....	25,350	1,014
Starch.....	227 barrels.....	} 141,580	8,228
Starch.....	3,206 boxes.....		
Staves.....	10,696,000.....	99,144,000	320,880
Stave bolls.....	31½ cords.....	94,500	126
Sundries.....	6,924 packages.....	2,077,200	311,580
Tallow.....	2,432 barrels.....	608,000	43,776
Tea.....	62 chests.....	5,580	2,232
Tin.....	66 boxes.....	6,600	660
Tobacco.....	1,417 hogsheads.....	} 1,717,900	207,888
Tobacco.....	852 boxes.....		
Tobacco.....	18 barrels.....	} 69,440	3,255
Tongues.....	217 barrels.....		
Tripe.....	219 barrels.....	70,080	3,285
Type.....	113 boxes.....	11,300	1,017
Varnish.....	10 barrels.....	4,000	300
Veneering.....	39 boxes.....	7,800	780
Ware.....	2 tons.....	} 36,100	1,497
Ware.....	107 packages.....		
Wine.....	116 boxes.....	} 8,080	2,155
Wine.....	11½ casks.....		
Wheat.....	4,050,310 bushels.....	240,018,600	2,835,217
Wool.....	61,336 bales.....	} 12,364,700	3,709,410
Wool.....	48¾ tons.....		
Wooden ware.....	3,526 packages.....	473,050	14,104
Carriers' blocks.....	825.....	33,000	825
Handspikes.....	1,480.....	14,800	177
Oars.....	40 tons.....	} 2,346,520	63,840
Oars.....	413,000 feet.....		
Oars.....	85,792.....		
Wagon woods.....	27,288 pieces.....	119,152	1,637
Total pounds.....		1,462,923,246	31,889,951
Tons of 2,000 pounds.....		731,461.1246	.....

RECEIVED AT DUNKIRK.

Ashes.....	147 casks.....	91,850	3,638	
Ale.....				
Ale.....				
Alcohol.....				
Barley.....				
Beef.....	} 9,293 barrels.....	} 3,192,910	80,675	
Beef.....				487 tierces.....
Beef.....				
Bark.....				
Bacon and hams.....	} 1½ tons.....	} 270,568	11,922	
Bacon and hams.....				833 barrels.....
Bacon and hams.....				2 casks.....
Bacon and hams.....				
Beeswax.....	} 4 barrels.....	600	120	
Beeswax.....				
Beeswax.....				

RECEIVED AT DUNKIRK—Continued.

Articles.	Quantities.		Value.
	Packages.	Pounds.	
Brooms.....			
Broom-corn.....	} 200 bales.....	40,000	\$2,400
Broom-corn.....			
Books.....	16 boxes.....	3,200	400
Boots and shoes.....	4 boxes.....	200	160
Bladders.....			
Butter.....	} 6,230 kegs..... 56 barrels.....	} 639,800	63,700
Butter.....			
Beer-pumps.....			
Beer-bottles.....			
Bath brick.....	30,000.....	120,000	150
Brick.....			
Brick.....			
Bones.....			
Bones.....			
Bristles.....			
Bristles.....			
Brandy.....			
Brandy.....			
Buffalo robes.....	11 bales.....	1,100	550
Candles.....	8 boxes.....	240	48
Carpeting.....	3 rolls.....	90	90
Carriages.....	3.....	2,100	150
Cedar posts.....			
Cedar posts.....			
Cement.....			
Cheese.....	} 10,178 boxes..... 2 casks.....	} 204,160	20,392
Cheese.....			
Cheese.....			
Cider.....	11 barrels.....	3,300	33
Cigars.....			
Coal.....	766 tons.....	1,532,000	3,064
Copper.....	} 6 barrels..... 2 masses.....	} 4,000	2,800
Copper.....			
Copper.....			
Coffee.....	1 sack.....	100	10
Corn.....	4,697 bushels.....	263,032	2,113
Corn-meal.....	6 barrels.....	1,296	12
Cotton.....			
Cranberries.....	545 barrels.....	87,200	3,230
Deer-skins.....	2 bales.....	280	100
Earthenware.....	} 2 casks..... 2 crates..... 1 barrel.....	} 1,400	132
Earthenware.....			
Earthenware.....			
Earthenware.....			
Eggs.....	1,203 barrels.....	192,480	9,624
Feathers.....	118 sacks.....	5,900	2,360
Felt.....			
Fish.....	618 barrels.....	185,400	3,708
Firewood.....			
Flax and hemp.....			
Flaxseed.....	} 422 sacks.....	} 42,200	1,055
Flaxseed.....			
Flaxseed.....			
Flour.....	61,735 barrels.....	13,334,760	216,072
Fruit, green.....	136 barrels.....	21,760	136
Fruit, dried.....			

RECEIVED AT DUNKIRK—Continued.

Articles.	Quantities.		Value.
	Packages.	Pounds.	
Furniture.....	} 166 packages.....	32,200	\$2,200
Furniture.....			
Furniture.....			
Furs.....			
Furs.....	} 34 pack.....	3,400	3,400
Furs.....			
Ginseng.....	} 2 barrels.....	380	32
Ginseng.....			
Ginseng.....			
Glass.....	} 26 boxes.....	1,300	52
Glass.....			
Glassware.....			
Glassware.....			
Glassware.....	} 158 packages.....	9,480	1,738
Glassware.....			
Glassware.....			
Glassware.....			
Glue.....			
Grease.....	72 barrels.....	18,000	1,080
Grindstones.....	} 186.....	18,600	186
Grindstones.....			
Hats.....	12 cases.....	600	300
Hair.....			
Hides.....	} 2,461.....	} 173,670	8,238
Hides.....				8 bundles.....
Hides.....			
High wines.....	485 casks.....	173,800	4,857
Hogs.....	14,743.....	1,474,300	95,829
Horned cattle.....	1,455.....	873,000	43,650
Horses.....	279.....	223,200	16,740
Hops.....			
Horns and hoofs.....	6 casks.....	3,000	96
Hardware.....	} 27 packages.....	1,310	224
Hardware.....			
Hardware.....			
Hardware.....			
Iron.....			
Nails.....	158 kegs.....	15,860	513
Lard.....	} 1,269 barrels.....	} 342,250	27,380
Lard.....				250 kegs.....
Lard.....			
Lead.....			
Lead.....			
Lead pipe.....			
Leather.....	192 rolls.....	} 39,600	18,156
Leather.....	2 boxes.....		
Lumber, black walnut.....			
Lumber, black walnut.....			
Lumber, black walnut.....			
Oak timber.....	} 60,000 feet.....	3,600,000	8,400
Oak timber.....			
Oak timber.....			
Ship-plank.....			
Lumber.....	82,000 feet.....	295,000	902
Shingle bolts.....			
Laths.....	245,000 pieces.....	5,600	1,225
Shingles.....			
Malt.....			
Machines.....	} 3.....	} 9,500	950
Machines.....			
Machines.....				13 boxes.....

RECEIVED AT DUNKIRK—Continued.

Articles.	Quantities.		Value.
	Packages.	Pounds.	
Mattresses.....			
Merchandise.....			
Merchandise.....	1,073 packages.....	242,600	\$56,450
Merchandise.....	14 tons.....		
Medicines.....	4 packages.....	200	48
Nuts.....			
Nuts.....	9 barrels.....	1,500	27
Nuts.....			
Oats.....	634 bushels.....	20,288	190
Oil.....			
Oil.....	222 barrels.....	66,600	5,550
Oil-cloth.....	15 boxes.....	4,500	900
Oil-cake.....			
Oil-cake.....			
Oil-stones.....			
Paint (clay).....			
Paint (lead).....	22 barrels.....	6,600	77
Paper.....			
Paper.....	48 bundles.....	2,000	768
Paper.....			
Pianos.....	3.....	2,000	300
Plaster.....	1 ton.....	2,000	12
Peas and beans.....			
Poultry.....	1,000.....	4,000	415
Poultry.....	67 boxes.....		
Railroad ties.....			
Pork.....	1,762 barrels.....	564,000	24,204
Potatoes.....	2,005 bushels.....	120,000	1,203
Rags.....			
Rags.....	14 sacks.....	2,800	70
Reapers.....	1.....	1,000	200
Roots.....			
Rope.....	55 packages.....	1,100	1,100
Rye.....			260
Salæratus.....			
Salæratus.....	13 barrels.....	5,000	260
Sausages.....			
Sheepskins.....	7 bundles.....	1,400	175
Sheepskins.....			
Sheep.....	1,062.....	85,000	2,655
Seed.....			
Seed.....	220 barrels.....	35,600	2,461
Seed.....	6 sacks.....		
Stone.....			
Stone.....	88 boxes.....	4,400	352
Soap.....	20 boxes.....	1,500	60
Starch.....			
Starch.....	4 boxes.....	120	8
Staves.....			
Stave bolts.....			
Sundries.....	573 packages.....	162,000	171,900
Tallow.....	236 barrels.....	71,000	4,248
Tea.....			
Tin.....			
Tobacco.....	92 hogsheads.....	133,700	18,588
Tobacco.....	167 boxes.....		
Tobacco.....	10 kegs.....		
Tongues.....	9 barrels.....	2,880	135
Tripe.....			
Type.....			
Varnish.....			
Veneering.....			

COLONIAL AND LAKE TRADE.

RECEIVED AT DUNKIRK—Continued.

Articles.	Quantities.		Value.
	Packages.	Pounds.	
Ware	100 packages	32,300	\$1,050
Ware			
Wine	3 boxes	300	15
Wine			
Wheat	4,442 bushels	266,520	3,331
Wool	3,294 bales	658,800	197,640
Wool			
Wooden ware	40 packages	7,460	373
Curriers' blocks			
Handspikes			
Oars			
Oars			
Oars			
Wagon woods			
Total pounds		29,374,879	959,857
Tons of 2,000 pounds		14,687,879	

RECEIVED AT TONAWANDA.

Ashes	1,168 casks	534,000	23,360
Ale			
Ale			
Alcohol			
Barley	420 bushels	20,160	294
Beef	1,803 barrels	576,960	14,424
Beef			
Beef			
Bark			
Bacon and hams		1,005,592	70,391
Bacon and hams			
Bacon and hams			
Bacon and hams			
Bacon and hams			
Beeswax			
Beeswax			
Beeswax			
Brooms			
Broom-corn			
Broom-corn			
Books			
Boots and shoes			
Bladders			
Butter		137,817	13,781
Butter			
Butter			
Butter			
Beer-pumps			
Beer-bottles			
Bath brick			
Brick			
Brick			
Bones			
Bones			
Bristles			
Bristles			
Brandy			

RECEIVED AT TONAWANDA—Continued.

Articles.	Quantities.		Value.
	Packages.	Pounds.	
Brandy			
Buffalo robes			
Candles			
Carpeting			
Carriages			
Cedar posts			
Cedar posts			
Cement			
Cheese	}	76,683	\$4,600
Cheese			
Cheese			
Cider			
Cigars			
Coal			
Copper			
Copper			
Copper			
Coffee			
Corn	207,773 bushels.....	11,835,288	83,109
Corn-meal			
Cotton			
Cranberries			
Deerskins			
Earthenware	}	11,750	1,175
Earthenware			
Eggs	156 barrels	21,806	1,240
Feathers			
Felt			
Fish	2 barrels	640	19
Firewood	16,147 cords.....	48,441,000	32,294
Flax and hemp		3,257	1,746
Flaxseed			
Flaxseed			
Flaxseed			
Flour	170,181 barrels.....	36,759,096	595,633
Fruit, green			
Fruit, dried		10,629	1,062
Fruit, dried			
Fruit, dried			
Fruit, dried			
Furniture	}	19,031	1,900
Furniture			
Furniture.....			
Furs	}	3,200	4,000
Furs			
Furs			
Ginseng			
Ginseng			
Ginseng			
Glass			
Glass			
Glassware			
Glassware			
Glassware			
Gluc.			
Grease			
Grindstones			
Grindstones			
Hats			
Hair			

RECEIVED AT TONAWANDA—Continued.

Articles.	Quantities.		Value.
	Packages.	Pounds.	
Hides	}	13,940	\$697
Hides			
Hides			
High wines	11,895 gallons	107,100	2,980
Hogs			
Horned cattle			
Horses			
Hops			
Horns and hoofs			
Hardware			
Hardware			
Hardware			
Hardware			
Iron			
Iron			
Iron			
Iron			
Nails			
Lard	}	1,112,597	77,883
Lard			
Lard			
Lead			
Lead			
Lead pipe			
Leather	}	58,856	10,594
Leather			
Lumber, black walnut			
Lumber, black walnut			
Lumber, black walnut			
Oak timber	}	4,516,500	141,960
Oak timber			
Oak timber			
Ship-plank			
Lumber	15,141,878 feet	45,425,000	515,856
Shingle bolls			
Jaths			
Shingles	557 M	111,400	1,382
Malt			
Machines	}	59,553	2,508
Machines			
Machines			
Mattresses			
Merchandise			
Merchandise			
Merchandise			
Medicines			
Nuts			
Nuts			
Nuts			
Oats	10,485 bushels	335,520	3,145
Oil			
Oil			
Oil-cloth			
Oil-cake	}	22,912	170
Oil-cake			
Oil-stones			
Paint (clay)			
Paint (lead)			
Paper			
Paper			
Paper			
Pianos			

RECEIVED AT TONAWANDA—Continued.

Articles.	Quantities.		Value.
	Packages.	Pounds.	
Plaster			
Peas and beans	83 bushels	4,930	\$83
Poultry			
Poultry			
Railroad ties			
Pork	2,257 barrels	722,240	27,084
Potatoes	238 bushels	14,280	142
Rags			
Rags			
Reapers			
Roots			
Rope			
Rye			
Salteratus			
Salteratus			
Sausages			
Sheepskins			
Sheepskins			
Sheep			
Seed	}		
Seed		33,898	2,233
Seed			
Stone			
Stone	}	333,890	667
Soap			
Starch			
Starch			
Staves	6,729,725, number	62,917,459	201,870
Stave bolts			
Sundries		861,035	86,000
Tallow		11,150	669
Tea			
Tin			
Tobacco	}		
Tobacco		190,401	11,424
Tobacco			
Tongues			
Tripe			
Type			
Varnish			
Veneering			
Ware			
Ware			
Wine			
Wine			
Wheat	162,669 bushels	9,760,140	113,868
Wool	}		
Wool		142,721	42,816
Wooden ware			
Curriers' blocks			
Handspikes			
Oars			
Oars			
Oars			
Oars			
Wagon woods			
Total pounds		226,422,241	2,089,663
Tons of 2,000 pounds		113,211,241	

STATEMENT—Continued.

Articles.	Aggregate quantities received at Buffalo, Dunkirk, and Tonawanda.	Aggregate value of each article received at Buffalo, Dunkirk, and Tonawanda.
	<i>Pounds.</i>	
Ashes	7,536,350	\$315,548
Ale	19,320	388
Alcohol	284,040	16,569
Barley	7,997,184	116,626
Beef	23,849,150	616,993
Bark	12,900	645
Bacon and hams	7,817,552	488,078
Beeswax	45,050	9,010
Brooms	22,800	3,420
Broom corn	1,104,100	66,279
Books	105,200	8,900
Boots and shoes	5,240	3,520
Bladders	2,100	84
Butter	3,126,617	312,340
Beer pumps	100	10
Beer bottles	1,600	24
Bath brick	123,220	214
Brick	263,200	330
Bones	123,500	1,820
Bristles	2,600	400
Brandy	4,200	1,480
Buffalo robes	195,860	162,850
Candles	106,770	21,354
Carpeting	1,230	1,800
Carriages	121,800	8,700
Cedar posts	97,800	858
Cement	156,300	1,042
Cheese	3,877,123	371,248
Cider	28,500	285
Cigars	11,400	2,850
Coal	35,550,000	71,100
Copper	1,312,500	269,500
Coffee	5,400	540
Corn	344,568,096	2,757,658
Corn-meal	633,960	5,870
Cotton	139,500	13,950
Cranberries	285,580	11,732
Deer skins	130,480	46,600
Earthenware	83,000	8,268
Eggs	15,814,766	102,320
Feathers	17,270	69,080
Felt	10,570	528
Fish	3,180,340	63,613
Firewood	48,605,000	32,540
Flax and hemp	1,341,207	46,224
Flaxseed	691,120	22,664
Flour	312,880,104	5,069,815
Fruit, green	232,560	2,244
Fruit, dried	539,479	15,773
Furniture	53,931	69,500
Furs	252,500	253,300
Ginseng	23,090	6,084
Glass	196,550	7,862
Glassware	542,580	35,098
Glue	29,100	4,365
Grease	277,650	18,390
Grindstones	3,939,900	30,784
Hats	9,600	4,800
Hair	109,200	1,092
Hides	3,666,560	197,700

STATEMENT—Continued.

Articles.	Aggregate quantities received at Buffalo, Dunkirk, and Tonawanda.	Aggregate value of each article received at Buffalo, Dunkirk, and Tonawanda.
	<i>Pounds.</i>	
High wines	22,882,700	\$631,637
Hogs	11,244,000	730,840
Horned cattle	6,029,400	301,470
Horses	2,432,000	182,400
Hops	2,100	784
Horns and hoofs	204,750	4,400
Hardware	211,030	19,173
Iron	15,412,260	301,436
Nails	410,900	16,317
Lard	4,759,997	387,419
Lead	1,622,160	81,110
Lead pipe	3,600	180
Leather	962,406	786,880
Lumber, black walnut	3,706,500	14,000
Oak timber	12,159,600	225,082
Ship plank	851,000	15,780
Lumber	290,948,000	1,066,972
Shingle bolts	465,750	3,105
Laths	510,720	4,153
Shingles	1,331,200	16,627
Malt	26,880	806
Machines	161,253	11,718
Mattresses	5,460	1,092
Merchandise	929,900	170,000
Medicines	33,700	1,388
Nuts	162,220	3,471
Oats	36,637,760	343,478
Oil	2,074,860	173,657
Oil-cloth	11,400	2,280
Oil-cake	4,004,412	30,177
Oil-stones	3,120	156
Paint (clay)	1,940,560	22,976
Paint (lead)		
Paper	291,200	86,784
Pianos	11,000	2,100
Plaster	182,000	552
Peas and beans	194,780	2,930
Poultry	8,050	814
Railroad ties	3,546,800	4,202
Pork	11,790,240	445,188
Potatoes	821,040	8,213
Rags	2,130,900	53,272
Reapers	232,200	58,000
Roots	30,300	1,010
Rope	21,800	3,860
Rye	1,088,360	11,661
Saleratus	198,210	13,715
Sausages	11,500	552
Sheepskins	1,490,600	188,075
Sheep	1,597,480	49,920
Seed	815,178	54,596
Stone	4,711,390	9,475
Soap	26,850	1,074
Starch	140,700	8,236
Staves	162,061,459	522,750
Stave bolts	94,500	126
Sundries	3,100,235	569,480
Tallow	690,150	48,729
Tea	5,580	2,232
Tin	6,600	660

STATEMENT—Continued.

Articles.	Aggregate quantities received at Buffalo, Dunkirk, and Tonawanda.	Aggregate value of each article received at Buffalo, Dunkirk, and Tonawanda.
	<i>Pounds.</i>	
Tobacco	2,142,001	\$237,900
Tongues	72,320	3,390
Tripe	70,080	3,285
Type	11,300	1,017
Varnish	4,000	300
Veneering	7,800	780
Ware	68,400	2,547
Wine	8,380	2,170
Wheat	250,045,260	2,952,416
Wool	13,166,221	3,949,866
Wooden ware	480,510	14,477
Curriers' blocks	33,000	825
Handspikes	14,800	177
Oars	2,346,520	63,840
Wagon woods	119,152	1,637
Total pounds	1,718,720,366	34,939,471
Tons of 2,000 pounds	859,360,366	.....

Recapitulation showing the total value and quantity of all property received from and shipped to the westward, in the district of Buffalo Creek, during the year ending December 31, 1851.

	Tons of 2,000 pounds.	Value.
Received at—		
Buffalo	731,462	\$31,889,951
Dunkirk	57,138	4,000,000
Tonawanda	113,211	2,089,663
Totals	901,811	37,979,614
Shipped at—		
Buffalo	204,536	44,201,720
Dunkirk	15,867	5,394,780
Tonawanda	5,037	1,692,423
Totals	225,440	51,288,923
Grand totals	1,127,251	89,268,537

WM KETCHUM, *Collector.*

DISTRICT OF BUFFALO CREEK, N. Y., CUSTOM-HOUSE, BUFFALO,
February 19, 1852.

An account of the principal articles of foreign produce, growth, and manufacture, exported to the British North American colonies, in British and American vessels, from the district of Buffalo Creek, for the year ending December 31, 1851.

Articles.	Quantity.	AMERICAN VESSELS.	BRITISH VESSELS.	TOTAL.
		Value.	Value.	Value.
Tea	pounds.. 143,457	\$40,422	\$23,458	\$63,880
Coffee	do... 46,849	2,604	1,866	4,470
Dry goods.....	.....	7,920	5,439	13,359
Medicines.....	.....	3,701	1,690	5,391
Crockery .....	.....	1,013	672	1,685
Toys .....	.....	474	787	1,261
Tin plate.....	boxes... 73	179	672	851
Raisins	pounds.. 10,175	193	865	1,058
Lemons	boxes... 155	280	463	743
Nuts	pounds.. 4,897	357	116	473
Pepper.....	do... 3,140	119	183	302
Oranges.....	boxes... 83	271	72	343
Pimento.....	pounds.. 2,122	115	110	225
Logwood.....	do... 4,496	31	220	251
Currants.....	do... 2,400	105	74	179
Cassia	do... 73	11	12	23
Indigo.....	do... 149	58	83	141
Figs.....	do... 501	41	9	50
Madder.....	do... 715	35	41	76
Ginger.....	do... 799	32	35	67
Bonnets, Leghorn.....	No... 285	.....	355	355
Sundries.....	.....	445	1,321	1,766
		58,406	38,543	96,949

WM. KETCHUM, *Collector.*

CUSTOM-HOUSE, *Buffalo, New York, January 1, 1852.*

An account of the principal articles of the growth, produce, and manufacture of the United States, exported from the district of Buffalo Creek, New York, to the British North American colonies, in British and American vessels, for the year ending December 31, 1851.

Articles.	Quantity.	AMERICAN VESSELS.	BRITISH VESSELS.	TOTAL.
		Value.	Value.	Value.
Dry goods.....		\$51,991	\$55,563	\$107,554
Groceries.....		25,511	26,891	52,402
Sundries.....		43,875	22,970	66,845
Manufactures of iron.....		47,900	46,345	94,245
Manufactures of wood.....		12,860	9,884	22,744
Furniture.....		8,063	5,724	13,787
Books and stationery.....		9,889	7,278	17,167
Oysters.....		2,059	871	2,930
Marble and stone.....		1,746	2,511	4,257
Drugs and medicines.....		3,082	7,311	10,393
Glassware.....		4,557	5,362	9,919
Spirits.....	7,921 gallons..	1,047	1,239	2,286
Grain.....	8,742 bushels..	4,523	876	5,399
Cheese.....	44,565 pounds..	1,191	1,305	2,496
Fish, dry.....	30,391..do....	600	296	896
Fish, pickled.....	120 barrels..	546	237	783
Oil.....	4,450 gallons..	2,260	2,115	4,375
Skins and fur.....	57,062 pounds..	4,804	5,987	10,791
Boots and shoes.....	7,998..pairs..	7,736	4,499	12,235
Salt.....	2,182 barrels..	1,597	675	2,272
Lard.....	14,917 pounds..	1,070	129	1,199
Leather.....	61,164..do....	4,321	6,871	11,192
Hams and bacon.....	9,638..do....	322	161	483
Beef and pork.....	620 barrels..	2,763	4,194	6,957
Tobacco.....	49,259 pounds..	6,084	4,093	10,177
Sugar.....	76,197..do....	2,820	1,768	4,588
Broom corn.....	50..tons....	158	1,650	1,808
Coal.....	450..do....	1,637	1,156	2,793
Cordage.....	10,400 pounds..	703	796	1,499
Cattle.....	25 number..	1,325	480	1,805
Clocks.....	1,129..do....	2,334	567	2,901
Tallow.....	139,274 pounds..	3,931	5,732	9,663
		263,305	235,536	498,841

WM. KETCHUM, *Collector.*

CUSTOM-HOUSE, Buffalo, New York, January 1, 1852.

An account of the principal articles of foreign produce and manufacture, with the values and amounts of duty, entitled to drawback, exported to the British North American colonies, in British and American vessels, during the year ending December 31, 1851.

Articles.	Quantity.	AMERICAN VESSELS.		BRITISH VESSELS.		Total value.	Total duty.
		Value.	Duty.	Value.	Duty.		
Dry goods		\$3,280	\$884 70			\$3,280 00	\$884 70
Sugar	219,080 pounds..	3,674	1,081 83	\$2,335	\$688 72	6,009 00	1,770 55
Wine	20 qr. casks.	152	59 28			152 00	59 28
Brandy	3 hlf. pipes.	127	127 00			127 00	127 00
Dry hides	2,000	1,126	54 89	3,449	168 14	4,575 00	223 03
Calf-skins	20 dozen ...	151	30 20			151 00	30 20
Machinery	7 cases			3,404	1,021 20	3,404 00	1,021 20
Boiler plates	105			327	95 65	327 00	95 65
Raisins	100 boxes ...			133	53 20	133 00	53 20
		8,510	2,237 90	9,648	2,026 91	18,158 00	4,264 81

CUSTOM-HOUSE, Buffalo, New York, January 1, 1852.

WM. KETCHUM, Collector.

An account of the principal articles, quantities, and values, imported into the district of Buffalo Creek, New York, from the British North American colonies, in American and British vessels, with the amount of duty received, for the year ending December 31, 1851.

Articles.	Quantity.	AMERICAN VESSELS.		BRITISH VESSELS.		TOTAL.	
		Value.	Duty.	Value.	Duty.	Value.	Duty.
		Lumber -	80,244,789 feet	\$26,653 32	\$5,380 60	\$113,515 52	\$2,708 20	$140,168 84	$88,083 80
Saw-logs	8,980,325 feet	6,680 55	1,382 02	17,657 90	8,587 68	24,245 45	4,956 87
Dressed lumber	151,508 feet	-	-	855 58	256 67	1,112 25	2,807 11
Timber -	409,001 feet	-	-	9,987 20	1,991 45	11,978 65	11,539 85
Shingles	2,749,173	1,484 11	316 58	2,282 50	675 79	2,958 29	2,824 61
Railroad ties -	16,424	454 11	40 18	2,128 19	424 65	2,552 84	464 88
Railroad iron	5,091 tons	200 00	40 18	2,128 19	424 65	2,552 84	464 88
Wool -	115,878½ pounds	69,238 28	20,771 49	66,441 21	20,682 87	187,159 49	40,856 84
Sheepskins	70,888½	15,550 57	4,849 42	2,717 89	815 89	18,368 46	6,420 81
Grain -	36,808¾ bushels	4,911 10	849 42	2,717 89	815 89	8,628 29	6,413 81
Flour	97¾ bushels	185 70	87 14	18,711 21	2,754 26	18,465 31	8,736 47
Fruit	2,298 bushels	857 02	71 44	181 16	36 24	1,038 26	63 88
Horned cattle	114	8,052 03	610 38	223 69	44 70	8,885 71	116 4
Horses	8,289 20	657 85	657 85	185 68	97 14	8,472 68	687 52
Sheep	464	462 02	90 41	580 24	1,805 68	8,879 54	7,591 07
Hogs	1,492	2,176 07	435 22	238 74	47 72	2,414 81	482 94
Eggs	4,894 dozen	235 40	47 07	181 08	26 18	242 55	73 95
Butter	12,889½ pounds	247 78	182 89	279 42	55 88	527 67	288 97
Potatoes	1,855	453 78	90 76	170 48	51 17	624 95	128 79
Stays -	58,301	151 62	80 85	180 21	36 03	361 88	248 19
Beef and pork	225¾ cords	299 04	89 71	256 18	19 80	555 17	49 65
Shingle bolts -	684,241½ pounds	30 80	6 18	888 42	77 68	919 22	168 86
Lathe -	86 1-5 tons	563 14	168 94	114 80	34 44	682 08	203 88
Scrap iron	13	20 50	6 15	2,468 21	738 98	2,537 19	743 18
Scow-boats	-	-	-	-	-	-	-
Various articles not enumerated in the above	-	144,495 82	86,471 17	236,580 16	54,700 80	381,075 97	91,171 97
Total	-	3,028 71	3,028 71	2,689 81	6,258 80	5,605 52	1,188 72
Total	-	147,824 63	87,031 69	289,219 97	55,820 10	386,744 50	92,357 69

WILLIAM KETCHUM, Collector.

DISTRICT OF BUFFALO CREEK, NEW YORK, Buffalo, January 3, 1852.

Statement of Canadian produce imported into the district of Buffalo Creek, New York, for warehouse and for transportation in bond to the port of New York, for exportation to foreign countries, during the year ending December 31, 1851.

Articles.	Quantity.	Value.
Wheat	bushels.. 88,316	\$56,901 93
Flour	barrels.. 10,763	34,007 95
Barley	bushels.. 987½	354 25
Butter	pounds.. 11,725½	964 49
Ashes	barrels.. 300	5,283 65
Wool	pounds.. 9,017	1,848 48
Canvass*	yards.. 3,170	326 03
Furs	barrels.. 2	180 40
Port wine*	hogsheads.. 2	133 42
Sherry wine*	casks.. 9	179 68
Brandy*	3 hds. & 1 cask	309 46
		100,489 74

* Imported for consumption.

CUSTOM-HOUSE, Buffalo, N. Y., March 18, 1852.

WM. KETCHUM, Collector.

Statement of Canadian produce imported into the district of Buffalo Creek, New York, during the year ending December 31, 1851, (being free of duty.)

Articles.	Quantity.	Value.
Horses	number.. 36	\$3,158
Horned cattle	do... 2	155
Sheep	do... 123	342
Grass seeds	bushels.. 2,856	6,873
Personal effects .....	.....	9,744
		20,272

CUSTOM-HOUSE, Buffalo, N. Y., March 18, 1852.

WM. KETCHUM, Collector.

Statement of the foreign and coasting vessels, tonnage, &c., entered and cleared from the port of Buffalo, New York, for the year ending December 31, 1851.

	ENTERED.			CLEARED.			TOTAL.		
	No. of vessels.	Their tonnage.	Men.	No. of vessels.	Their tonnage.	Men.	No. of vessels.	Their tonnage.	Men.
Foreign vessels from and to foreign ports.....	601	72,212	5,830	593	71,241	5,254	1,194	143,453	10,614
American vessels from and to foreign ports.....	170	30,100	1,897	205	31,927	2,202	375	62,027	4,099
Total in foreign trade.....	771	102,312	7,727	798	103,168	7,456	1,569	205,480	14,713
American coasting vessels.....	8,762	1,433,777	59,705	8,719	1,443,273	60,374	7,481	2,822,050	120,070
Total of American vessels in foreign and coasting trade.....	8,932	1,403,877	61,602	3,924	1,450,200	62,576	7,856	2,944,077	124,178
Total of foreign and coasting trade.....	4,533	1,536,059	66,932	4,517	1,551,441	67,800	9,050	3,087,539	134,792

Statement of the number and tonnage of American vessels trading at the port of Buffalo Creek, New York, during the year ending December 31, 1851.

	Number.	Tonnage.	Crew.
*Steamers and steam propellers enrolled and licensed at the district of Buffalo Creek.....	44	92,438	903
Sail vessels enrolled and licensed at the district of Buffalo Creek.....	104	23,619	873
Total of vessels enrolled and licensed in the district of Buffalo Creek, New York.....	148	46,057	1,781
Steamers and steam propellers enrolled and licensed at all other districts on the lakes.....	63	20,193	.....
Sail vessels enrolled and licensed at all other districts on the lakes.....	503	73,176	.....
Total.....	714	138,426	.....

*There are now being built, at this port, eight steamers and steam propellers, of the aggregate tonnage of..... 6,700
 And one sail vessel..... 280
 ----- 6,980 tons.

DIRECTOR OF BUFFALO CREEK, NEW YORK, Custom-house, Buffalo, February 19, 1852.

WILLIAM KETCHUM, Collector.

A statement of the vessels and tonnage which entered into, and cleared from, the British North American colonies, at the district of Buffalo Creek, New York, for the year ending December 31, 1851, distinguishing British from American, and steam from sailing vessels.

INWARD.

AMERICAN.				BRITISH.			
Steam.		Sailing.		Steam.		Sailing.	
No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
72	18,493	98	11,705	295	48,456	306	23,755

OUTWARD.

AMERICAN.				BRITISH.			
Steam.		Sailing.		Steam.		Sailing.	
No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
71	18,152	134	13,774	296	48,672	297	22,568

WILLIAM KETCHUM, *Collector.*

DISTRICT OF BUFFALO CREEK, NEW YORK,
Buffalo, January 3, 1852.

No. 10.—DISTRICT OF PRESQUE ISLE.

Port of entry, Erie, Pennsylvania; latitude 42° 08', longitude 80° 06'; population in 1830, 1,465; in 1840, 3,412; in 1850, 5,858.

This district embraces the whole coast line of the State of Pennsylvania on Lake Erie; it contains about forty miles of shore, and has three shipping points—Erie, the port of entry, North East, and Elk Creek; the two latter being principally engaged in the shipment of staves and lumber. Erie is a beautiful town of three thousand inhabitants or upward, finely situated on Presque Isle bay, on the southern shore of Lake Erie. It is distant from Buffalo 80 miles SSW.; from Cleveland 100, E.; from Harrisburg 270, NW.; from Washington, D. C., 343 NW. The town stands on a bluff commanding the harbor, formed by the projection of the peninsula of Presque Isle, the mouth of which was formerly closed by a difficult sand-bar. This has been, however, partially removed, and piers constructed by the United States government, by which means the channel has been so far deepened that most of the larger steamboats and vessels which navigate the lake now readily enter it.

The peninsula of Presque Isle has been gradually converted into an

island, the wash of the lake currents having severed the isthmus; and, the harbor having two entrances, it is expected that it will be permanently deepened, and the bar at its mouth by degrees swept away. The depth of water on it, at present, is from eight to ten feet, and within the harbor much more.

It was in this harbor that Perry's fleet was built, within seventy days from the time when the trees, of which it was constructed, were yet standing in the forest. Thence he sailed to give battle, and thither he brought back the prizes of Lake Erie, the relics of which may be yet seen rotting and half submerged, near the navy yard.

The naval depôt is still kept up at this place, and here the one or two small vessels which represent that arm of our service on the lakes are accustomed to go into winter quarters. But the commerce of the port is very limited.

A canal from Erie to Beaver connects it with one of the finest coal regions of the State, Pennsylvania, and this coal, being bituminous and of fine quality, is used by nearly all the lake steamers. This causes many of them to put in here, when they would otherwise continue on the direct route; for Erie is ninety-seven miles, more or less, from Buffalo, and, lying at the southern end of Presque Isle bay, is from fifteen to twenty miles off the direct course from Buffalo to Cleveland. The agricultural resources of the country circumjacent and inland are not yet fully developed, and of consequence contribute but little to the commerce of the place. It will be seen that last year the supplies of flour for consumption here were received from other lake districts; but it is certain that this state of things cannot long continue in such form, inasmuch as the mineral and manufacturing resources of the district are in rapid progress of development; and the agricultural productions must rapidly mature under such stimulus as that given by liberal prices and a constant home demand. It cannot be doubted that, before long—the demand for agricultural produce in the mining and manufacturing districts already being considerably in advance of the production of many articles—attention will be so strongly attracted to the resources of the soil as to insure not only an adequate supply for home use, but an ample surplus for exportation.

The importations for 1851, consisting principally of assorted merchandise, flour, fish, and manufactures of iron, amounted to—

Imports coastwise	\$1,979,913
“ foreign	3,455
Total importation	<u>1,983,368</u>

The exports consist of wool, lumber, wood, bark, glass, stoves, bar-iron, coal, and merchandise received by canal, with a small quantity of grain—the whole amounting to the following aggregate:

Exports coastwise	\$2,207,582
“ foreign	15,415
Total exportation	<u>2,222,997</u>

The entire commerce of the port amounts to a total value of \$4,206,483. The character and quantity of some of the chief articles of export, and their comparative increase and decrease are exhibited in the annexed tables for the series of years as named:

Articles.	1845.	1846.	1851.
Coal.....tons.....	8,507	21,534	86,000
Leather.....pounds..	46,661	123,370	19,396
Wool.....do.....	65,435	476,922	486,303
Butter.....do.....	} 1,041,000	1,257,000	989,062
Cheese.....do.....			1,416,695
Stoves.....do.....			1,071,694
Railroad and bar iron.....tons..	250	2,052	360
Glass.....pounds..	18,500	521,500	573,499
Hemp.....tons.....		409	15
Pig-iron.....do.....	150	800	944
Iron and nails.....do.....	83	612	661
Staves.....M.....	1,168	1,056	1,492
Lumber.....do.....	3,324	3,901	12,899
Tallow.....pounds..		36,200	31,700
Tobacco.....do.....		333,602	
Beef.....barrels..	550	882	
Barley.....bushels..	4,448	7,581	11,822
Castings.....tons.....	550	555	
Corn.....bushels..	853	10,107	14,389
Cotton.....pounds..		5,679	
Eggs.....barrels..	25	541	
Flour.....do.....	550	14,563	2,050
Feathers.....pounds..	250	56,760	
Ginseng.....do.....		14,075	
Pork and bacon.....do.....	520	2,546	110
Oats.....bushels..	4,800	16,300	54,041
Whiskey.....barrels..	115	35	2,088
Ashes.....casks....	2,184	2,272	323

The Erie extension canal has been in operation since 1845, and the effect is seen in the increase of business. It is worthy of note, that during some seasons produce goes southward, and at others northward.

The licensed and enrolled tonnage of this port is 7,882 tons.

The tables following this report exhibit the commerce of the district in detail, with value, tonnage, entrances and clearances, complete.

CANADIAN TRADE IN 1851.

	Imports.	Duty collected.
In American vessels.....	\$419 00	\$84 00
In British vessels.....	16 00	4 00
	<u>435 00</u>	<u>88 00</u>

Free goods—plaster in stone.

	Tons.	Value.
In American vessels.....	671	\$1,342
In British vessels.....	839	1,678
		<u>3,020</u>
Total imports.....		<u>\$3,455</u>

Exports—domestic produce and manufacture.

In American vessels	\$12,385
In British vessels.....	3,080
	<hr/>
	15,465
	<hr/>
Total imports in American vessels.....	\$14,146
Total imports in British vessels.....	4,724
	<hr/>
	18,870
	<hr/>

Tonnage inward.

	No.	Tons.
American, steam.....	2	680
“ sail.....	14	1,039
British, sail.....	6	721

Outward.

American, sail.....	33	3,205
British, sail.....	6	721

Lake receipts coastwise at the port of Erie, Pennsylvania, in 1851.

Articles.	Quantities.	Value.
Merchandise and sundries	6,682,600 pounds..	\$1,800,000
Flour.....	9,839 barrels..	34,436
Water-lime.....	984...do....	1,430
Fish.....	4,645...do....	27,876
Salt.....	21,246...do....	21,246
Salt.....	10,200 bags....	1,275
Railroad iron.....	1,816 tons....	81,700
Railroad spikes.....	564 kegs....	1,692
Limestone.....	340 cords....	1,610
Hops.....	66,533 pounds..	6,653
Iron ore.....	570 tons....	1,995
Total.....		<hr/> 1,979,913

Shipments coastwise at the port of Erie, Pennsylvania, in 1851.

Articles.	Quantities.	Value.
Wool.....	486,303 pounds..	\$145,890
Butter.....	989,062...do....	123,633
Cheese.....	1,416,695...do....	85,001
Leather.....	19,396...do....	4,849
Starch.....	102,706...do....	6,162
Stoves and hollow ware.....	1,071,694...do....	37,539
Iron, bar, &c.....	720,672...do....	21,620
Merchandise and sundries.....	2,876,000...do....	1,100,000
Glass.....	351,985...do....	12,319
Glassware.....	221,514...do....	51,206
Oil-cake.....	116,000...do....	696
Oil-cloth.....	37,450...do....	7,490
Saleratus.....	9,662...do....	483
Flax.....	30,959...do....	1,857
Malt.....	77,800...do....	3,112
Tallow.....	31,700...do....	2,536
Fire-brick.....	31...M.....	620
Shingles.....	621...do....	1,552
Corn.....	14,389 bushels..	7,194
Oats.....	54,041...do....	16,213
Barley.....	11,822...do....	5,911
Dried fruit.....	894...do....	1,788
Rye.....	10,442...do....	5,221
Coal.....	82,000...tons....	228,000
Pig iron.....	944...do....	23,600
Railroad spikes.....	356...do....	21,360
Pork.....	110 barrels..	1,100
Cider.....	206...do....	618
Eggs.....	110...do....	1,760
Rye flour.....	812...do....	2,436
Flour, "fancy".....	1,237...do....	5,566
Whiskey.....	1,430...do....	8,580
Apples.....	1,018...do....	2,036
High wines.....	658...do....	3,948
Ashes.....	323...casks..	12,920
Nails.....	6,097...kegs..	24,388
Lumber.....	12,899,762...feet..	128,997
Oars.....	831,220...do....	33,248
Bark.....	262 cords.....	524
Paper.....	4,500 reams..	11,250
Sheep pelts.....	705 bundles..	16,920
Staves.....	1,492,728 pieces..	29,854
Hoop-poles.....	758,500...do....	7,585
Total.....		2,207,582

Clearances coastwise.....	1,561	312,200 tons.
Entrances coastwise.....	1,561	312,200 "

No. 11.—DISTRICT OF CUYAHOGA.

Port of entry, Cleveland, Ohio; latitude 41° 30', longitude 81° 40'; population in 1830, 1,076; in 1840, 6,071; in 1850, 17,034.

This is a most important district, second in the value of its commerce to none west of Buffalo. It embraces all that portion of the south coast of Lake Erie which lies between the western State line of Pennsylvania and the Black river, a distance of one hundred miles.

It contains, beside Cleveland, the port of entry, many minor ports of

considerable importance, such as Conneaut, Ashtabula, Cunningham's Harbor, Madison Dock, Fairport, and Black River.

This district has for its back country one of the finest and most varied agricultural districts of the whole lake-shore region. The face of the land is soft and rolling, the soil in great part warm and fertile, and especially adapted to the cultivation of fruits and vegetables, and to the growth of all the cereal crops.

Among its most important and valuable exports are wheat, corn, and flour; large quantities of fruit, both green and dry, are sent off annually, together with pork, beef, butter, cheese, and vegetables, in all directions, but chiefly eastward by the lake, with the exception of butter and cheese, large quantities of which go southward by the Ohio canal, destined for Cincinnati, and thence for New Orleans and other southern cities.

A railway passing through the entire length of the district on the lake shore is nearly completed, which is destined eventually to become a portion of the continuous chain from Buffalo to Chicago. One railway, connecting Cleveland with Columbus and Cincinnati, and another forming a communication with Pittsburg, are already completed; and many branches of importance, scarcely second to the main lines, are far advanced already in construction.

Of canals, Cleveland has two of great value, one connecting her with Portsmouth, on the Ohio, and another uniting the line at Akron with Beaver, on the Ohio—virtually a canal from Cleveland to Pittsburg, inasmuch as loaded canal boats are continually towed by small steamers from the mouth of Beaver river to the latter city.

With three different lines of internal communication direct to the harbors on the coast, most of them among the best on the lakes, and these from the centre of the richest of the western States, it will readily be perceived that the district of Cuyahoga must be the theatre of commercial transactions which have no small influence upon exchanges of produce and merchandise in the great marts of the seaboard. Conneaut, the easternmost port of the district, is about twenty miles west from Erie, situated upon a river of the same name, which affords a good harbor. No returns exhibiting the commerce of this port, separately, have been received; but it is very considerable, as Conneaut is the entrepot for the landing of supplies and the shipping of produce for a large and fertile agricultural region, not only of the adjacent country in Ohio, but of an important section of Pennsylvania.

The next port to the westward is Ashtabula, similarly situated on a small stream bearing its own name, forming a good harbor, with facilities equal to the requirements of the place. The town stands back some two or three miles from the port, upon a rise of ground, forming a singularly eligible site.

The commerce of this port for the year 1851 consisted principally of butter, cheese, wool, leather, beef, pork, ashes, fruit, lumber, staves, &c., for exports, amounting to the value of..... \$450,291
 And of merchandise, agricultural implements, furniture, hides,
 and a little wheat and flour, for imports 504,211

Making a total declared value of the trade of this port..... 951,502

The tonnage owned at Ashtabula consists of two brigs, of 280 tons each, several schooners and one scow, making an aggregate of 1,741 tons, employing seventy-six men in their navigation.

Cunningham's Harbor is a port at present of small moment, except for the shipment of staves and lumber.

Madison Dock is a pier built out into the lake, in front of the town of Madison, about eighteen miles west from Ashtabula, and twelve east from Fairport, for the accommodation of the neighborhood in shipping staves, lumber, and produce. No separate estimates of its commerce have been kept for the past year.

Fairport stands on the Grand river, which furnishes one of the most eligible harbors in the West, and is quite sufficiently capacious for the traffic of any western port. It is thirty miles west from Ashtabula, and thirty east from Cleveland, and is merely a shipping and receiving port—Painesville, on the ridge, three miles inland from the lake, being the principal mart and place of business, as well as the county seat of Lake county. It is to be regretted that no particular returns have been received from this place, indicating the amount of its commerce, tonnage, &c., as it is a port of no little consideration, and holds the key to a fertile agricultural district, inhabited by an industrious and enterprising population.

Black River, the only remaining minor port of this district, lies about twenty-eight miles west of Cleveland, on the river from which it takes its name. Its commerce is of no great importance at present. It enjoys good harbor facilities for the shipment of staves and lumber, which are its principal exports, and for the receipt of such supplies as are in demand.

The city of Cleveland, port of entry of this district, and capital of Cuyahoga county, is situated 130 miles NW. from Pittsburg; 146 NNE. from Columbus; 200 by water from Buffalo; 130 from Detroit; and 359 from Washington.

The history of the growth of this city is one of the marvels of a marvellous age and region.

Its population in 1799 consisted of a single family. In 1825, it had risen to 500; in 1830, to 1,000; in 1834, to 3,400; in 1840, to 6,071; and at this moment there are 25,000 souls in the city proper, and at least 7,000 more in Ohio City, across the harbor—virtually one city with itself, though under a different corporate government.

It is at this day one of the most beautiful cities, not in the West only, but in the United States; built, for the most part, on an elevated plain, above the Cuyahoga, commanding a fine view of the lake and river; planted with groves of forest trees, and interspersed with fine squares and public places.

As a place of business it is of high importance, and its future growth can scarce fail to be commensurate to its unparalleled rise; nor are its inducements as a residence inferior to its commercial advantages.

Its harbor is one of the best on Lake Erie, spacious and safe when once entered, but, like all the lake harbors, liable to the formation of obstacles by the accumulation of sand at the mouth of the river which forms it. This bar can be kept down only by continual dredging, and hence the constant demand on Congress for appropriations to this end.

The harbor has depth, for a considerable distance, sufficient to accommodate the largest vessels which navigate the lake; it is formed by the projection of two piers, one on each side of the river, for twelve hundred feet into the lake, which are two hundred feet apart, faced with substantial masonry. There is a light-house on the high bank on the shore of Lake Erie, and a lower one near the end of one of the piers at the harbor's mouth.

The commerce of Cleveland, apart from the rest of the district, is not shown by the returns received; and in such returns as have been sent in—showing the business of the district—the valuation of the very same articles is set at a rate so much lower than in the other districts, as greatly to undervalue the real commerce of Cuyahoga, and to exhibit it at the greatest possible disadvantage.

It has consequently been judged best to raise the valuation of articles to the same rate adopted in the other districts, so as to produce and exhibit a uniformity of values in all the districts; since, whichever be the correct valuation, the higher rate is favored and adopted by the majority; and it can prejudice no one district or port of entry to the wrongful advancement of another, if a uniform rate be adopted.

The necessary alterations being, therefore, made in the figures, the commerce of Cuyahoga district, as represented by Cleveland, its port of entry, is as follows:

Imports, coastwise.....	\$22,804,159	
Exports, . . .do.....	12,026,497	
	<hr/>	
Total coastwise.....		\$34,830,656
Imports, foreign.....	360,634	
Exports, do.....	284,937	
	<hr/>	
Total foreign.....		645,671
		<hr/>
Total commerce, for 1851, of Cuyahoga district.....		<u>35,476,327</u>

Whole number of vessels from foreign ports—		
Entered in 1851.....	322	
Entered in 1850.....	292	
		—difference: gain, 30.
Cleared in 1851.....	247	
Cleared in 1850.....	215	
		—difference: gain, 32.

The following table will show the comparative business of Cleveland in some leading articles of its trade for a series of years, as named. All these are exports:

Articles.	1847.	1848.	1851.
Flour.....barrels..	697,553	472,999	656,040
Wheat.....bushels..	2,366,263	1,267,620	2,141,913
Corn.....do.....	1,400,332	690,162	906,653
Oats.....do.....	32,000	254,707	68,464
Pork.....barrels..	27,289	28,338	13,580
Beef.....do.....	8,246	10,321	26,944
Butter.....pounds..	917,090	1,927,300	1,550,900
Lard.....do.....	480,160	1,140,500	1,730,700
Coal.....tons.....	8,242	11,461	81,500
Ashes.....barrels..	2,052	440	1,830
Whiskey.....do.....	12,067	28,450	38,774
Tallow.....pounds..	140,000	.....	198,000
Bacon.....do.....	840,900	.....	1,164,600
Staves.....M.....	1,378	773	789
Wool.....pounds..	575,933	.....	3,939,100

To this table may be added an export for the year 1851, unknown to former years, of live hogs, 80,000.

It will be remembered that 1847 was the memorable year of unprecedented demand for produce, arising out of the famine in Europe, which caused the exportation of nearly all the produce held in the country, so that any difference and apparent diminution on the subsequent years must be ascribed to no falling off for 1848 and 1851, but to the excess of demand for 1847.

The valuation of the commerce of Cleveland for the three years above named, is thus stated :

	1847.	1848.	1851.
Imports.....	\$4,518,997	\$7,003,388	\$22,804,159
Exports.....	9,728,399	6,713,244	12,026,497
Total.....	14,247,369	13,716,632	34,830,656

Whole number of entrances coastwise—

For 1851.....1,981

For 1850.....1,381

Increase.....600

Whole number of clearances coastwise—

For 1851.....1,963

For 1850.....1,378

Increase.....581

Total foreign trade—

For 1851.....\$645,671

For 1850.....549,549

Increase.....96,122

It should be remarked, however, that this increase is more than overbalanced by the quantity of railroad iron imported from England by the St. Lawrence viâ Canada. So that, in fact, as regards direct trade with Canada, in lieu of an increase, there is actually a considerable decrease, more especially in the exports of domestic produce.

Below will be found full details of the trade of this district, by the returns so far as received.

The licensed and enrolled tonnage of this district for 1851 was 36,070 tons—11,355 steam, and 24,615 sail.

Canadian trade in 1851.

		Duty collected.
Imports.—In American vessels.....	\$220,538	\$52,444
In British vessels.....	140,096	42,154
	<u>360,634</u>	<u>94,598</u>
Exports domestic produce and manufacture—		
In American vessels.....		\$151,758
In British vessels.....		133,179
		<u>284,937</u>
Total imports and exports—		
In American vessels.....		\$372,296
In British vessels.....		273,275
		<u>645,571</u>

Abstract of duties received from imports or merchandise in American and foreign vessels during 1850.

1850.—Amount of duties received from imports in American vessels.....	\$25,960	24
Amount of duties received from imports in foreign vessels.....		41,554
		<u>67,514</u>
Total amount received in 1850.....		<u>25</u>

Statement of the foreign trade of the district of Cuyahoga, showing the number of vessels, tonnage, and number of crew, engaged during the years 1850-'51.

Years.	Number of vessels.	Tonnage.	Crew.
1850.			
American vessels entered	192	25,484.75	1,150
Foreign vessels entered	100	11,832.00	587
	292	37,316.75	1,737
1851.			
American vessels entered	220	28,812.67	1,431
Foreign vessels entered	102	11,770.00	707
	322	40,582.67	2,138
American vessels cleared	153	17,760.69	942
Foreign vessels cleared	94	10,545.00	639
	247	28,305.69	1,581

Entrances and clearances in 1850-'51.—Coasting trade.

1850.—Number of vessels entered	1,381
Do..... do .. cleared.....	1,378
1851.—Number of vessels entered.....	1,981
Do..... do .. cleared.....	1,963

An exhibit of the coasting trade of the district of Cuyahoga, Ohio, during the year 1851.

EXPORTS.

Species of merchandise.	Quantities.	Value.
Wheat.....bushels..	2,141,913	\$1,499,339 10
Corn.....do.....	906,653	362,661 20
Oats.....do.....	68,464	17,800 64
Flour.....barrels..	656,040	2,132,130 00
Pork.....do.....	13,580	190,120 00
Beef.....tierces...	15,011	165,121 00
Beef.....barrels...	4,428	26,568 00
Lard.....do.....	4,314	69,024 00
Lard.....kegs...	8,731	69,848 00
Butter.....do.....	13,575	122,175 00
Butter.....barrels..	967	17,406 00

EXPORTS—Continued.

Species of merchandise.	Quantities.	Value.
High wines.....	barrels.. 24,805	\$210,842 50
Whiskey.....	do..... 13,969	111,652 00
Green apples.....	do..... 2,926	4,052 00
Dried apples.....	do..... 2,763	22,104 00
Tallow.....	do..... 660	9,900 00
Salt.....	do..... 7,131	7,131 00
Fish.....	do..... 1,455	10,185 00
Lard oil.....	do..... 1,263	37,890 00
Eggs.....	do..... 5,686	34,116 00
Paint.....	do..... 8,280	74,520 00
Seed.....	do..... 944	7,552 00
Ashes.....	casks... 1,830	45,750 00
Wool.....	bales... 26,261	1,969,575 00
Glass.....	boxes... 22,930	45,860 00
Glassware.....	do..... 8,775	26,235 00
Glassware.....	casks... 451	13,530 00
Cheese.....	boxes... 40,069	120,207 00
Starch.....	do..... 3,397	10,191 00
White lead.....	kegs... 1,176	2,352 00
Nails.....	do..... 27,824	97,384 00
Powder.....	do..... 518	1,813 00
Candles.....	boxes... 2,350	14,100 00
Axes.....	do..... 125	1,500 00
Bacon.....	do..... 149	2,235 00
Tobacco.....	do..... 1,000	12,000 00
Tobacco.....	hhd... 803	28,105 00
Broom-corn.....	bales... 650	7,800 00
Bar-iron.....	tons... 2,681	160,800 00
Pig-iron.....	do..... 1,515	45,450 00
Grindstones.....	do..... 2,674	13,370 00
Rags.....	do..... 1,956	5,877 00
Coal.....	do..... 81,500	224,125 00
Refined copper.....	do..... 101	38,380 00
Oil-cake.....	do..... 160	1,920 00
Bacon.....	casks... 1,294	64,700 00
Lumber.....	M feet. 1,116	10,044 00
Walnut.....	do..... 165	2,310 00
Staves.....	M feet. 789	14,202 00
Leather.....	rolls... 2,613	78,390 00
Stoves and furniture.....	do..... 644	3,864 00
Stoneware.....	gallons. 155,148	12,411 00
Feathers.....	sacks... 920	32,200 00
Green hides.....	pieces... 4,447	13,341 00
Sheep-pelts.....	bales... 886	22,150 00
Fire-brick.....	M..... 150	3,300 00
Wrapping paper.....	reams... 7,616	26,656 00
Live hogs.....	No..... 80,000	400,000 00
Dressed hogs.....	do..... 6,604	69,342 00
Horses.....	do..... 630	50,400 00
Cattle.....	do..... 2,889	86,670 00
Sheep.....	do..... 6,220	12,440 00
Chickens.....	do..... 5,300	530 00
Mattresses.....	do..... 169	2,535 00
Hemp.....	bales... 357	5,335 00
Furs.....	do.....	80,000 00
Merchandise.....	tons... 3,681	2,944,800 00
Total value.....		12,026,497 00

IMPORTS.

Species of merchandise.	Quantities.	Value.
Salt.....barrels..	90,607	\$90,607 00
Water-lime.....do...	8,383	10,478 75
Lake fish.....do...	22,294	144,911 00
Lumber.....M feet..	12,263	122,630 00
Shingle-wood.....cords..	929	8,361 00
Shingles.....M....	3,988	8,975 50
Railroad iron.....tons...	7,383	366,650 00
Railroad spikes.....kegs...	4,666	27,866 00
Stoves.....No....	540	3,210 00
Pig-iron.....tons...	706	19,768 00
Bar-iron.....do...	498	20,990 00
Castings.....do...	161	9,660 00
Crude plaster.....do...	1,412	4,236 00
Bloom iron.....do...	212	10,600 00
Lehigh coal.....do...	514	6,168 00
Copper ore.....do...	815	285,250 00
Marble.....do....	1,213	42,455 00
Molasses.....barrels..	884	14,144 00
Sugar.....do....	5,082	86,394 00
Sugar.....hhds....	775	50,375 00
Powder.....kegs...	9,535	28,625 00
Nails.....do....	2,980	10,430 00
White lead.....do...	7,050	13,254 00
Leather.....sides...	4,550	13,650 00
Leather.....rolls...	1,120	33,600 00
Dairy salt.....sacks...	50,947	5,194 70
Coarse salt.....barrels..	1,663	2,078 75
Shoes.....boxes...	394	19,700 00
Hops.....bales...	159	12,720 00
Green apples.....barrels..	8,277	16,554 00
Cranberries.....do...	545	3,270 00
Siscawit oil.....do...	100	3,000 00
Potatoes.....bushels..	11,000	5,500 00
Oysters.....barrels..	607	3,642 00
Oysters.....boxes...	2,066	37,188 00
Patent pails.....dozen...	358	718 00
Burr-blocks.....pieces...	1,148	1,435 00
Locomotives.....No....	22	176,000 00
Limestone.....cords...	784	4,704 00
Fire-wood.....do...	424	848 00
Laths.....M....	1,991	2,986 50
Merchandise, sundries.....tons...	25,083	20,066,400 00
Total value.....		22,804,159 00

No. 12.—DISTRICT OF SANDUSKY, OHIO.

Port of entry, Sandusky city; latitude 41° 22', longitude 80° 42'; population in 1850, 5,087.

The district of Sandusky extends from Black river westward, including the ports of Vermillion, Huron, Milan, Sandusky, Venice, Fremont, Portage Plaster Bed, and Port Clinton, being a distance of fifty miles lake coast, and some fifty more of bay and river. In natural advantages for commercial progress, probably this district is surpassed by no other on Lake Erie west of Buffalo Creek. Within its borders are several navigable rivers and one of the finest bays in the west, capable of furnishing anchorage to any number of vessels, at which they may safely ride during the most severe gales, and to which they gain access during the prevalence of almost any wind. The whole of the back country on which it rests is fertile and rich in agricultural resources, and sends forth annually large quantities of surplus produce over the different railways and canals by which it is penetrated.

Vermillion, the easternmost of all the ports in this district, is situated on the lake shore at the mouth of the Vermillion river, about ten miles distant from Black river, and as many more from Huron. It has no remarkable features which require particular notice, but is simply a place for exchange of produce against merchandise, for its shipments to other markets. This statement exhibits the commerce of the port as follows:

Imports.....	\$116,295
Exports.....	196,712
	<hr/>
Total.....	313,007
	<hr/> <hr/>
In 1847, the valuation was.....	\$377,000
	<hr/> <hr/>

Huron, the next port in course to the westward, is situated on Huron river, about ten miles east from Sandusky, and has a good harbor, with this exception—that in some seasons there are accumulations on the bar at its mouth, which require removal in order to make access to it easy.

A ship-canal has been constructed from this point to Milan, a distance of eight miles, by which vessels ascend, and load at the latter point. A railway was projected from this point to intersect with the Sandusky and Mansfield railroad; but is not yet in progress. The commerce of Huron is valued as follows:

Exports.....	\$581,676
Imports.....	877,155
	<hr/>
Total.....	1,458,831
	<hr/> <hr/>
In 1847, the valuation amounted to nearly.....	\$3,000,000
	<hr/> <hr/>

Milan is not, to speak with exactitude, a lake port; but an account of its business is necessary to a full computation of the lake trade as no

returns of its business are supposed to be taken by the collector at Huron, through which port all vessels pass in going up and returning from Milan. This commerce, according to the canal-collector, amounted last year to—

Exports.....	\$435,816
Imports.....	690,185
Total.....	<u>1,126,901</u>

As no separate accounts of this trade appear to have been kept in 1847, it is probable that they were included with those of Huron.

Sandusky, the port of entry, lies on the south shore of a most beautiful bay of the same name, about five miles from its mouth, and contains about 8,000 inhabitants. This bay is about twenty miles in length and five in width, forming a shelter large enough to give anchorage to the whole lake marine, with an average depth of twelve feet water. The bar at the mouth of the bay is sometimes enlarged, or its shape changed, by the spring-currents. A straight channel has, however, been dredged through it, at the expense of the city, in which there is about eleven feet of water.

Sandusky city is the capital of Erie county, Ohio, and lies 60 miles west from Cleveland, 110 miles north from Columbus, 414 from Washington—directly facing the outlet of the bay into Lake Erie, at three miles distance, of which it commands a fine view. The city is situated on an inexhaustible quarry of fine-building stone, of which many of the best buildings are erected.

The Mad river and Lake Erie railroad connects this city with Cincinnati and the Ohio, the passage from city to city occupying about ten hours. This road runs through one of the most beautiful and opulent agricultural regions in all the West, literally overflowing with the cereal produce of a young and productive soil. The Sandusky, Mansfield, and Newark railway connects it with Newark, passing likewise through a rich portion of the State, and crossing the Cleveland and Columbus road, by means of which it has communication with both those cities. The advantageous relations of this city in regard to the central portions of the State, together with its superior harbor facilities give it an active commercial aspect.

The deputy collector has furnished returns showing the imports coastwise to amount—

In 1851, to.....	\$15,985,357
Exports same year, to.....	6,459,659
Total trade coastwise.....	<u>22,445,016</u>
Canadian imports, 1851.....	272,844
Canadian exports, 1851.....	99,088
Total commerce in 1851.....	<u>22,816,948</u>

Total in 1851.....	\$22,816,982
Total in 1850.....	12,111,034
	<hr/>
Increase.....	10,705,948
	<hr/> <hr/>

Number of arrivals in 1851.....	1,998
Number of departures in 1851.....	1,990
	<hr/>
	3,988
	<hr/> <hr/>

The total quantity of wheat shipped from Sandusky to Canadian ports amounted—

In 1851, to.....	121,672 bushels.
Coastwise	1,800,000 “
Also, 147,951 barrels flour, reduced to bushels. . . .	739,735 “
	<hr/>
Making a total equal to.....	2,661,407 “
	<hr/> <hr/>

The following comparative table will show the principal exports from Sandusky for the following consecutive years :

Articles, &c.	1849.	1850.	1851.
Wheat.....bushels..	829,210	1,552,699	1,922,069
Flour.....barrels..	56,686	78,902	147,951
Corn.....bushels..	98,486	288,742	712,121
Oats.....do.....	9,881	18,634	84,198
Pork.....barrels..	15,781	8,073	5,564
Hams.....pounds..	10,800	287,187	175,900
Butter.....do.....	610,951	754,588	382,340
Cheese.....do.....	3,660	545,685	8,100
Lard.....do.....	695,881	860,798	229,712
Tallow.....do.....	274,712	176,379	115,337
Ashes.....casks..	1,908	1,568	2,082
Whiskey.....barrels..	3,553	2,778	3,978
High wines.....do.....	2,491	5,278	11,916
Wool.....pounds..	1,435,360	1,669,677	1,690,557
Tobacco.....do.....	183,259	316,000	549,046
Furs.....do.....	42,800	61,126	109,125
Hogs.....number..	11,707	34,751	105,026
Saleratus.....pounds..	11,000	30,000	20,156
Arrivals.....	1,168	1,610	1,998
Clearances.....	11,136	1,546	1,990
Duties collected.....value..	\$11,052	\$20,806	\$33,834

Fremont, formerly called Lower Sandusky, is situated on Sandusky river, about thirty miles from Sandusky city, and is accessible to vessels of light draught. Its commerce is gradually on the increase, as will be seen by the accompanying statements furnished by the deputy collector :

Imports.....	\$359,419
Exports.....	314,530
Total for 1851.....	673,949
Total for 1850.....	217,843
Increase.....	<u>456,106</u>

Venice, at the mouth of Cold creek, on Sandusky bay, three miles above the city, is the place of shipment for the products of two large flouring mills; the shipments in 1851 were 34,771 barrels, valued at \$121,698.

Another shipping point on the opposite side of the bay is at the plaster quarry, known as the Portage Plaster Bed, and its business consists for the most part of shipments of plaster, both ground and crude. In 1851 there were shipped of the ground article from this port 4,051 barrels, valued at.....	\$5,265
Crude, 4,414 tons, valued at.....	13,242
Total.....	<u>18,507</u>

Port Clinton, the only port in this district not already noticed, is situated on the lake about ten miles west from Sandusky, and having but a narrow peninsula of land back of it, is not a place of extensive trade. The statement of the deputy collector fixes the value of imports for 1851 at.....	\$59,049
Exports for the same year.....	67,235
Total.....	<u>126,284</u>

Besides the above-mentioned regular ports, there are numerous islands included within the limits of this district, among which are Kelly's, Cunningham's, Put-in Bay, and others, some of them affording the best shelter to disabled vessels, in severe gales, to be found anywhere on the lakes. It was in the immediate vicinity of this group, and in fact in the midst of it, that Perry's engagement was fought, and the killed found a burying place on the island last named.

The commerce of these islands is not large. Wood, fish, with some vegetable food, are exported and supplied to vessels, and supplies for the inhabitants are imported; but no definite returns on which to estimate the value of their trade have been received.

The following tables will exhibit the trade of the district in detail, by which it will be seen that the total commerce was—

In 1851.....	\$22,511,570
In 1850.....	14,907,788
Increase.....	<u>7,603,782</u>

Years.	Entrances.	Tons.	Men.	Clearances.	Tons.	Men.
1851	2,843	540,171	19,565	2,840	537,979	19,433
1850	2,647	472,620	18,459	2,590	464,807	18,095
Increase	196	67,551	1,106	250	73,172	1,338

The following table will exhibit a few of the principal articles of export from the important ports in the district during the years 1847 and 1851:

Articles.	Sandusky.		Huron.		Milan.		Vermillion.	
	1847.	1851.	1847.	1851.	1847.	1851.	1847.	1851.
Wheat...bbls.	1,818,754	1,800,397	1,588,866	344,784	Included in Huron for the year 1847.	258,778	40,000	37,362
Corn...bush.	162,265	712,121	11,114	266,222		220,264	1,000	39,895
Flour...bbls.	113,066	147,951	7,082	1,973		1,763	2,000	6,864
Oats...bush.	150,000	84,198	100,000	65,423		56,033	20,000	6,860
Pork...bbls.	10,150	5,564	22,789	248		439	1,000	394
Beef...do..	610	1,084	2,644	1,390		297	500	107
Ashes...do..	1,817	2,088	2,653	492		535	200	101
Whiskey...do..	2,815	3,978	1,255	1,574		1,402	.....	.....
Lumber...feet.	.....	266,000	100,000	693,574		718,000	700,000	75,000
Staves...No.	67,859	1,079,099	1,813,058	1,364,000		1,456,500	700,000	1,133,000

There are enrolled in the Sandusky district 73 tons of steam, and 4,785 tons of sailing vessels; total.....	3,858
For 1847, total.....	4,322
Increase.....	<u>536</u>

Abstract of value of domestic exports of the district of Sandusky, Ohio, to Canada, during the following years, viz :

1849.—In American vessels.....	\$24 00
In British vessels.....	2,950 00
Total.....	<u>3,074 00</u>
1850.—In American vessels.....	\$39,435 00
In British vessels.....	43,236 00
Total.....	<u>82,671 00</u>

Canadian trade in 1851.

		Duties collected.
Imports—In American vessels.....	\$56,859	\$2,244
In British vessels.....	18,769	3,515
Total.....	*75,628	5,759

[* In this is included 2,286 tons of railroad iron imported via Quebec ; duty paid on 758 tons, \$5,076 ; balance, 1,528 tons, in bond. There was imported into the district of Sackett's Harbor, in British vessels, not included in the returns, 2,045 tons 6 cwt. 1 qr. 19 lbs. railroad iron ; value \$49,476 31 ; duty \$14,842 90.]

Exports—In American vessels.....	\$33,239
In British vessels.....	65,849
	99,088

121,672 bushels of wheat included in the above ; the whole amount principally provisions.

Total imports and exports—In American vessels.....	\$90,098
In British vessels.....	84,618
Total.....	174,716

Tonnage.

	Inward.		Outward.
American vessels.....	4 steam 1,494	.....10 sail..	\$1,396
	53 sail.. 4,760	..... 3 steam	336
British vessels.....	2 steam 280	..... 9 sail..	1,300
	15 sail.. 746		
Total.....	74	.....	22

Imports coastwise into the district of Sandusky, Ohio, during the year ending December 31, 1851.

Species of import.	Quantity.	Value.
Merchandise	21,011 tons	\$10,505,500
Express packages.....	900...do.....	3,900,000
Railroad iron.....	17,486...do.....	699,440
Spikes.....	480...do.....	38,400
Machinery.....	352½...do.....	28,260
Stoves and castings.....	1,241...do.....	198,560
Pig iron.....	192...do.....	7,680
Iron, assorted.....	449...do.....	44,900
Sheet iron.....	73 bundles.....	282
Nails.....	716 kegs.....	2,506
Tin plate.....	81 boxes.....	889
Threshing machines.....	2.....	700
Steam-engines and boilers.....	3.....	3,800
Scrap iron.....	40 tons.....	400
Locomotives.....	12.....	96,000
Coal.....	2,745 tons.....	11,100
Salt.....	52,738 barrels.....	53,902
Dairy salt.....	4,224 bags.....	520
Fish.....	7,538 barrels.....	52,766
Beer.....	2,058...do.....	12,348
Water lime.....	1,502...do.....	2,255
Cranberries.....	1,099...do.....	6,594
Lumber.....	6,809 M feet.....	68,090
Shingles.....	11,075 M.....	27,687
Shingle-wood.....	440 cords.....	5,328
Fire-wood.....	4,587...do.....	10,320
Cheese.....	383,889 boxes.....	23,033
Wagons.....	10.....	800
Stone ware.....	6,140 gallons.....	614
Cedar posts.....	913.....	114
Ground plaster.....	2,690 barrels.....	4,040
Furniture.....	74,900 pounds.....	7,490
Whiskey.....	603 barrels.....	4,824
Ploughs.....	314.....	2,512
Apples, green.....	11,284 barrels.....	22,568
Do...dried.....	90...do.....	317
Butter.....	279 kegs.....	2,790
Piano-fortes.....	362.....	72,400
Grindstones.....	75 tons.....	1,350
Coaches and carriages.....	85.....	17,000
Laths.....	3,976 M pieces... ..	7,952
Sand.....	70,000 bushels.....	1,400
Timber.....	220,000 feet.....	17,600
Hoop poles.....	9,000.....	90
Marble.....	44 tons.....	3,525
Barley.....	256 bushels.....	113
Lard.....	359 kegs.....	2,154
Powder.....	950...do.....	3,600
Malt.....	206 bushels.....	93
Tea.....	196 chests.....	4,800
Oil.....	60 barrels.....	1,920
Empty barrels.....	560.....	280
Potatoes.....	240 bushels.....	120
Shingle machine.....	1.....	125
Brick.....	30,000.....	120
Miscellaneous goods.....	254 tons.....	1,062
Sundries.....	677 articles.....	324
		15,985,357

Exports coastwise from the district of Sandusky, Ohio, during the year ending December 31, 1851—destined mostly for the eastern market.

Species of export.	Quantity.	Value.
Wheat	2,621,224 bushels....	\$1,808,645
Corn	1,282,509 ..do.....	513,004
Oats	239,936 ..do.....	71,981
Clover seed	203 barrels.....	2,842
Timothy seed	740 ..do.....	2,810
Flax seed	1,859 ..do.....	6,971
Hickory nuts	643 ..do.....	964
Express packages	250,000 pounds....	500,000
Flour	194,682 barrels....	681,386
Beef	3,038 ..do.....	21,286
Pork	7,196 ..do.....	86,352
Whiskey	5,552 ..do.....	36,088
High wines	12,598 ..do.....	91,326
Alcohol	589 ..do.....	12,958
Beans	11 ..do.....	38
Eggs	2,962 ..do.....	14,810
Cranberries	4 ..do.....	24
Ground plaster	4,146 ..do.....	6,219
Crude ..do	4,414 tons	132,420
Sweet potatoes	93 bushels.....	93
Ashes, pot	3,214 casks	67,494
Apples, green	190 barrels.....	380
Do. . . dried	86,452 pounds....	3,458
Peaches, dried	16,408 ..do.....	1,969
Butter	382,340 ..do.....	3,823
Lard	267,337 ..do.....	18,714
Tallow	157,127 ..do.....	13,370
Feathers	36,351 ..do.....	10,905
Wool	2,340,771 ..do.....	795,861
Beeswax	3,295 ..do.....	824
Ginseng	3 barrels	100
Leather (in rolls)	51 rolls	2,550
Do. . . (unfinished)	106,768 pounds....	21,353
Furniture	188,700 ..do.....	18,870
Merchandise	810,093 ..do.....	162,019
Rags	656,101 ..do.....	14,963
Cheese	8,100 ..do.....	486
Oil-cake	247,026 ..do.....	2,470
Candles	17,807 ..do.....	1,780
Corn-meal	113 barrels.....	175
Tobacco	549,046 pounds....	54,905
Hams	187,100 ..do.....	11,226
Broom-corn	21,565 ..do.....	1,078
Furs	128,425 ..do.....	128,425
Live hogs	72,399 ..do.....	434,394
Dressed hogs	32,827 ..do.....	295,443
Flaxseed oil	1,331 barrels....	42,592
Black-walnut lumber	425 M feet.....	5,375
Staves (pipe, hhd., and butt)	5,947 M	148,675
Hides	2,256 ..do.....	6,204
Sheep-pelts	1,035 bundles....	36,225
Deer-skins	54 ..do.....	2,700
Empty casks	1,084 ..do.....	813
Potatoes	411 bushels....	205
Salæratas	20,156 pounds....	907
Bristles	6 barrels.....	42
Railroad iron	42 tons	1,680
Railroad chairs	197 ..do.....	15,760
Pig iron	11 ..do.....	880
Lard oil	3 barrels.....	108
Beef-tongues	33 ..do.....	495
Lumber	2,046 M feet....	20,460
Ship-plank	252 ..do.....	3,528

Exports coastwise—Continued.

Species of export.	Quantity.	Value.
Shingles.....	530 M.....	\$1,325
Grindstones	1,068 tons.....	19,224
Ship-knees.....	60.....	60
Railroad ties.....	2,400.....	480
Buggy wagons.....	2.....	175
Flagging stones.....	50 M feet.....	3,000
Block stones.....	1,000 tons.....	8,000
Stoves and furniture	150.....do.....	10,500
Glass ware.....	5 boxes.....	50
Medicine.....	1 box.....	30
Wood.....	2,877 cords.....	3,409
Fish.....	1,494 barrels.....	8,735
Hoop-poles.....	139,000.....	1,390
Timber.....	35 sticks.....	175
Ox-marrow.....	5 barrels.....	90
Neatsfoot oil.....	10.....do.....	350
Miscellaneous.....	423,765 pounds.....	58,765
Total value.....		6,459,659

CUSTOM-HOUSE, Sandusky, Ohio, January 7, 1852.

No. 13.—DISTRICT OF MIAMI, OHIO.

Port of entry, Toledo; latitude 41° 38', longitude 83° 35'; population in 1840, 1,222; in 1850, 3,829.

This district has a shore-line of fifty miles in extent, comprising that portion of the lake and river coast lying between Port Clinton and the dividing line between Michigan and Ohio, and includes the ports of Manhattan, Toledo, Maumee, and Perrysburgh. The former is a port of but little importance, furnishing no returns. Maumee city and Perrysburgh are both situated on the Maumee river, within a few miles of Toledo, and might, perhaps, be considered with more propriety suburbs of that place, than independent ports of entry. The commerce of Perrysburgh is returned by the collector as follows:

Imports	\$264,755
Exports	41,055
Total.....	<u>305,810</u>

That of Maumee city is ascertained from the same source to be—

Imports	\$16,207
Exports	30,557
	<u>46,764</u>

Toledo is, in one respect, more advantageously situated for an ex-

tensive lake commerce than perhaps any other western port, from the fact that it has two canals, both connecting it with the Ohio, terminating in its port: one the Miami and Erie canal to Cincinnati, and the other the Erie and Wabash canal, intercommunicating with Evansville, Indiana, and traversing the entire Wabash valley, which thereby renders the richest portion of the entire State of Indiana tributary to its traffic. This circumstance, when taken in connexion with the fact that railway transportation has hitherto been unable to compete on equal terms with water for the inland carriage of heavy freight, such as agricultural produce, renders it absolutely certain that, at no very distant date, Toledo must become the grand depot for the lake trade of the valleys of the Miami and Wabash; and, inasmuch as the course of trade for productions of that sort is annually tending more and more to the northward, this is almost tantamount to saying that it must needs be ultimately the great meeting-place and mart for the immense products of all northwestern Ohio and of all northeastern Indiana, these valleys being beyond all doubt the very richest and most fertile portions of the respective States, which cannot be surpassed, if equalled, by any in the Union for their agricultural wealth.

Toledo is well situated on the west side of the Maumee river, at a short distance from the head of Maumee bay, in Lucas county, Ohio, 134 miles NNW. from Columbus and 464 from Washington. Its present population is estimated at about 5,000 individuals, and is constantly on the increase.

One line of railroad is already completed, connecting Toledo with Chicago, known as the Southern Michigan; and another—the lake shore road, which will form an intercommunication with Buffalo, Cleveland, Sandusky, and the other eastern marts and harbors on the lake—is in rapid progress; and will, it may be confidently expected, be finished within a twelve-month, or a little over, which will of course add a new stimulus to the business of Toledo. A third road is also projected through the Miami valley, in the direction of Cincinnati.

These advantages, together with the possession of an excellent harbor and good arrangements for freighting on the lakes, have already so far developed the commerce of this port, as to give the most gratifying assurances in regard to its future progress and prosperity.

The commerce of Toledo, so far as can be ascertained from the scanty returns which have been sent in by the collector, are as follows for the years 1851 and 1847; no comparative statement concerning other years being attainable, from the absence of reports:

Imports coastwise for 1851.....		\$22,987,772
Exports coastwise for 1851.....		7,847,808
		<hr/>
Total coastwise for 1851.....		30,835,580
Imports, foreign, for 1851.....	\$33,007	
Exports, foreign, for 1851.....	66,304	
		<hr/>
		99,311
		<hr/>
Total commerce, 1851.....		<u>30,934,891</u>

Entrances.....	1,603	.....tons	418,892
Clearances.....	1,609	....."	419,942
			<hr/>
Total.....	<u>3,212</u>		<u>838,834</u>

The total commerce of the district, including all the ports, for 1851, was—

Imports.....		\$23,301,741
Exports.....		7,985,724
		<hr/>
Total.....		<u>31,285,465</u>

The same for the year 1847 amounted only to—

Imports.....		\$4,033,985
Exports.....		4,034,824
		<hr/>
		<u>8,068,809</u>

Commerce of 1851.....		\$31,285,465
Commerce of 1847.....		8,068,809
		<hr/>
Increase on four years.....		<u>23,216,656</u>

The total enrolled and licensed tonnage for 1851, is 3,286 tons.

Entrances for 1851 in the whole district.....	1,710	.....tons	437,996
Clearances do do.....	1,714	....."	438,449
			<hr/>
Totals.....	<u>3,424</u>		<u>876,445</u>

CANADIAN TRADE IN 1851.

Imports.

In American vessels.....	\$8,441	.....duty	\$2,129
In British vessels.....	18,028	.....do	5,390
			<hr/>
Totals.....	<u>26,469</u>		<u>7,519</u>

Exports.

In American vessels.....		\$2,940
In British vessels.....		63,364
		<hr/>
Total exports.....		<u>66,304</u>

Total imports and exports—	
In American vessels.....	\$11,381
In British vessels.....	81,392
	<hr/>
Total Canadian trade.....	92,773
	<hr/> <hr/>

Tonnage inward.

American, sail.....	12.....	1,742 tons.
British, sail.....	7.....	934 “
British, steam.....	2.....	404 “
		<hr/>
		2,080
		<hr/> <hr/>

Tonnage outward.

American, sail.....	1.....	150 tons.
British, steam.....	2.....	404 “
British, sail.....	7.....	934 “
		<hr/>
		1,488
		<hr/> <hr/>

Statement showing the principal articles, their quantity and value, imported coastwise into the port of Toledo during the year ending December 31, 1851.

Articles.	Quantity.	Value.
Assorted merchandise.....tons..	23,260	\$18,608,000
Iron, bar and bundle.....do..	273	18,200
Iron, railroad.....do..	9,415	423,675
Iron, pig.....do..	113	4,520
Steel.....pounds..	18,928	2,082
Nails.....kegs..	6,067	19,354
Spikes.....do..	10,099	50,499
Castings, iron.....pounds..	187,558	7,502
Tin.....boxes..	2,176	20,760
Axes.....do..	720	7,920
Stoves.....number..	4,199	50,386
Stove trimmings.....pounds..	20,292	13,190
Hardware.....tons..	557	389,900
Hollow ware.....pieces..	3,619	7,238
Scales.....packages..	420	27,300
Machinery.....do..	583	52,470
Stoneware.....gallons..	16,650	1,665
Glass.....boxes..	3,249	6,498
Cheese.....do..	2,898	7,249
Coffee.....bags..	647	9,058
Sugar.....barrels..	3,900	70,200
Molasses.....gallons..	13,380	47,888
Tobacco.....pounds..	33,810	5,071
Hides, Spanish.....number..	16,380	2,293
Hops.....bales..	23	2,760
Powder.....kegs..	20,242	80,968
Spirits.....barrels..	481	26,455
Oil.....do..	132	3,960

STATEMENT—Continued.

Articles.	Quantity.	Value.
Candy	boxes.. 677	\$2,031
Apples, green.....	barrels.. 6,364	12,728
Apples, dry.....	bushels.. 1,215	1,823
Barley.....	do. 27,505	13,752
Malt.....	do. 3,672	2,295
Ale and beer.....	barrels.. 1,554	9,424
Water-lime.....	do. 1,828	2,742
Plaster.....	do. 467	467
White fish and trout.....	do. 10,499	73,493
Mackerel.....	do. 150	1,800
Salt.....	do. 102,032	107,032
Salt.....	bags.. 79,080	9,885
Leather.....	rolls.. 1,110	33,300
Boots and shoes.....	cases.. 6,098	243,920
White lead.....	kegs.. 1,837	6,429
Coal, bituminous.....	tons.. 1,829	7,316
Coal, Lehigh.....	tons.. 770	5,775
Pianos.....	number.. 220	44,000
Wagons.....	do.. 43	2,580
Carriages, &c.....	do.. 33	6,600
Railroad passenger cars.....	do.. 10	20,000
Do... locomotives.....	do.. 20	160,000
Do... freight cars.....	do.. 150	71,250
Threshing machines.....	do.. 61	16,775
Reapers.....	do.. 75	15,000
Iron safes.....	do.. 22	2,750
Household goods.....	packages.. 1,528	12,224
Marble.....	tons.. 1,777	63,972
Grindstones.....	number.. 1,054	697
Lumber.....	feet.. 11,837,747	142,052
Shingles.....	M.. 6,277	15,693
Laths.....	number.. 2,569,715	6,423
Pine logs.....	feet.. 1,000,000	7,000
Horses.....	head.. 101	6,060
Cattle.....	do.. 29	5,075
Sheep.....	do.. 221	4,420
Express goods.....	packages.....	1,910,000
Sundries.....	.....	17,755
Total value.....	.....	22,987,772

Statement of the principal articles, their quantity and value, exported coast-wise from the port of Toledo during the year ending December 31, 1851.

Articles.	Quantity.	Value.
Corn.....	bushels.. 2,775,149	\$1,110,017
Wheat.....	do.. 1,639,744	1,082,231
Flour.....	barrels.. 242,677	849,369
Bacon.....	casks.. 14,150	706,910
Hams.....	number.. 4,096	5,898
Pork.....	barrels.. 38,658	502,554
Lard.....	do.. 27,165	434,640
Lard oil.....	do.. 6,078	182,340
Live hogs.....	number.. 23,547	117,735
Live cattle.....	do.. 744	22,320
Live horses.....	do.. 301	27,090
Live sheep.....	do.. 1,759	3,518
Beef.....	barrels.. 7,296	69,312
Tallow.....	do.. 1,884	28,260

STATEMENT—Continued.

Articles.	Quantity.	Value.
Grease.....pounds..	396,400	\$19,820
Linseed oil.....barrels..	147	3,822
Oil-cake.....tons..	3,026	45,390
Hides.....number..	7,125	21,375
Sheep-pelts.....bales..	193	5,190
Furs (estimated).....		105,000
Oats.....bushels..	64,441	19,332
Beans.....do..	199	398
Barley.....do..	675	337
Corn-meal.....bags..	814	1,221
Seed.....barrels..	4,856	29,136
Potatoes.....bushels..	17,796	8,105
Cranberries.....barrels..	678	4,068
Cheese.....boxes..	768	2,304
Butter.....kegs..	3,119	37,428
Candles.....boxes..	2,454	12,270
Beeswax.....pounds..	36,200	9,050
Eggs.....barrels..	568	3,408
Fish.....do..	325	2,275
Sugar.....hogsheads..	758	56,850
Molasses.....barrels..	388	5,432
Nuts.....bushels..	130	97
Tobacco.....hogsheads..	1,216	42,560
Tobacco.....boxes..	1,953	23,436
Spirits.....casks..	21,934	186,439
Leather.....rolls..	2,642	79,260
Wool.....bales..	2,839	212,925
Feathers.....do..	1,090	38,150
Cotton.....do..	394	3,940
Broom-corn.....do..	156	1,872
Hemp.....do..	725	10,875
Ashes.....casks..	4,847	121,175
Lumber.....M feet..	2,134	32,011
Staves.....M..	2,504	62,621
Rags.....pounds..	31,453	943
Roofing paper.....rolls..	1,669	5,841
Carriages.....number..	23	2,300
Varnish.....barrels..	56	4,368
Peppermint, oil of.....pounds..	400	500
Merchandise.....do..	403,513	161,405
Express goods.....packages..		917,500
Sundries.....do..	9,081	302,800
Wash-boards.....dozen..	785	2,355
Total value.....		7,847,808

No. 14.—DISTRICT OF DETROIT.

Port of entry, city of Detroit; latitude 42° 20', longitude 83° 02'; population in 1830, 2,222; in 1840, 9,102; in 1850, 21,019.

The district of Detroit has the most extensive coast-line of any lake district not bordering on Lake Superior, and embraces all that portion of Michigan known as the Southern Peninsula. Commencing at the western line of Ohio, it extends thence northerly along Lake Erie, up the Detroit river, Lake St. Clair and St. Clair river, to Lake Huron, up that lake northwestwardly to the island and straits of Mackinaw, and southwardly, with a little westing, to the Indiana line, not far from the

head of Lake Michigan—a distance, following the sinuosities of the shores, which does not fall very far short of a thousand miles.

It has fifteen ports, none of which have any present importance, with the exception of Detroit and Monroe; although it is more than probable that within a few years several of them may rival the most promising harbors and ports in the West. There is, probably, no State in the Union which surpasses Michigan in its commercial advantages, or which, if properly fostered and developed to the extent of its vast internal resources, it will not ultimately equal or exceed in all the actual realities of progress and prosperity. She has more natural harbors, involving but little expense or labor to render them available in all seasons to all classes of shipping, than any other State bordering on the lakes. The extent of country enclosed within her extensive coast-line comprises 39,856 square miles, some of it the best and most fertile land of the West, watered by numerous lakes and streams—many of the latter navigable, and very extensively used for lumbering purposes, which is the principal occupation and interest of the inhabitants of the northern section of the State.

Among these rivers are the Raisin, Huron, Rouge, Clinton, Black, Saginaw, Thunder Bay, Manistee, White, Maskegon, Grand, Kalamazoo, and St. Joseph's—the six last named flowing into Lake Michigan, and the rest into Lake Erie, St. Clair, and Huron, and the Detroit and St. Clair rivers.

Although scarcely one third of the above area is under successful cultivation, yet Michigan is already known, throughout the country, as a large exporter of the choicest wheat and flour. It may indeed be said, without fear of contradiction, that for two seasons past the quality of Michigan wheat and flour has been, on the average, equal if not superior to that of any other State; her exports of flour amounting to 500,000 barrels, and of wheat to 1,000,000 bushels, in round numbers.

Monroe, the easternmost of her ports, is a terminus of the southern Michigan railway on Lake Erie, about 40 miles south of Detroit, and is situated at the lower falls of the river Raisin, with a population of about 5,000 souls. There is a daily line of steamers connecting it with Buffalo, and the harbor is accessible for vessels of the largest class.

Unfortunately, no special returns, showing the commerce of Monroe, are at hand. It is, however, a point rapidly increasing in importance, and must be eventually the depot for a very large amount of trade. The returns from the district of Detroit, which have been received, show the coastwise business only of that port; so that Gibraltar and Trenton, on the Detroit river; Mount Clemens, on the Clinton river; Algonac, Newport, St. Clair, and Port Huron, on the river St. Clair; Saginaw, on Saginaw bay; Thunder Bay islands, in Lake Huron; Grand Haven, St. Joseph's, and New Buffalo, on Lake Michigan, are all of them unrepresented.

This is a circumstance deeply to be regretted on several accounts. These are the outlets of the principal lumber regions of the western States, and supply the prairies of Illinois, as also St. Louis, and other southern cities, with nearly all their lumber and shingles, besides sending vast quantities to Detroit, Sandusky, and Buffalo. The St. Clair, Sandusky, and Maskegon lumber is as extensively known in the West

as being of superior quality, as is the pine of Canada to the eastward. Again, these portions of the district are so very rapidly increasing in importance that their influence will ere long cause itself to be most sensibly felt in the commercial cities of the West. Lastly, there is still a very large tract of public land in various parts of this district, in the hands of the government, for the most part well watered and well timbered, which sooner or later will become of immense value.

In past years these government lands have been trespassed on, by persons engaged in the lumber trade, to a very great extent; but the confiscation of several vessels, with their cargoes, has, it is to be hoped, effectually put an end to these depredations.

There is a very valuable business also carried on in the ports of Gibraltar and Trenton, in the shipment of staves; and at Port Huron, Newport, and St. Clair, on the St. Clair river, ship-building is prosecuted to a considerable extent and to very decided advantage; one of the largest steamers which navigates the lakes, of 1,600 tons burden, with an engine of 1,000 horse power, having been constructed on these waters.

In this district are situated the St. Clair flats, the greatest natural obstacles to the free navigation of the great lakes, with the exception of the rapids on the lower St. Lawrence, the Falls of Niagara, and the Sault Ste. Marie. These shallows lie nearly at the head of Lake St. Clair, about twenty-five miles above the city of Detroit. The bottom is of soft mud, bearing a lofty and dense growth of wild rice, with a very intricate, tortuous, and difficult channel winding over them, in many places so narrow that two vessels cannot pass them abreast; nor is it possible to navigate them at night.

There would be no difficulty whatever, and but a most trivial expense, as compared with the advantages which would accrue from removing this barrier, in dredging out a straight channel of sufficient depth to admit vessels of the largest draught. Nor is there any work more urgently and reasonably solicited from Congress by the men of the West, nor any more entirely justified by every consideration of sound economy and political wisdom, or more certain to produce returns incalculable, than the opening the flats of the St. Clair, and carrying a canal around the Sault Ste. Marie. These improvements would at once perfect the most splendid and longest chain of internal navigation in the world, extending above two thousand miles in length from Fond du Lac, at the head of Lake Superior, N. latitude $46^{\circ} 50'$, W. longitude $92^{\circ} 20'$, to the mouth of the St. Lawrence river, in $46^{\circ} 20'$ N. latitude, $65^{\circ} 35'$ W. longitude.

It is not, in fact, too much to say—so imperatively are these improvements demanded by the increase of commerce, and the almost incalculable mineral resources of northern Michigan—that within a few years they must and will be carried into effect, at whatever cost and expense of labor.

Above St. Clair river the first port is Saginaw, situated at the outlet of a river of the same name into the great bay of Saginaw, larger itself than a large European lake, setting up into the land southwesterly from Lake Huron. This bay, with the exception of Green bay, is the largest in all the West, but is rarely visited by any vessels except those trading directly thither, unless driven in by stress of weather,

since it lies some considerable distance off the direct line from Buffalo to Chicago.

The port, however, imports all the supplies necessary for the lumbering population, and exports what may be stated, on a rough calculation, at 10,000,000 feet of lumber annually.

At the Thunder Bay islands little business is done beyond the shipment of the produce of the fisheries; and to what extent these are carried on in that locality, owing to the total absence of all returns, it is impossible even to hazard a conjecture.

On Lake Michigan, the ports of Grand Haven, St. Joseph's, and New Buffalo, are places of shipment of produce, and importation of supplies to a reasonable extent; while Grand Haven, Maskegon, and Manistee, are all great exporters of lumber. The commerce of the district, independent of Detroit, which is the principal depot for the commerce of Michigan, cannot fall short of \$8,000,000, and may exceed it, though it is not possible to state it with precision, for want of the needful returns.

Detroit, the port of entry of this district, and capital of the county, is a finely built and beautiful town, laid out with streets and buildings which would be considered worthy of note in any city, partly on an ascending slope from the river Detroit, partly on the level plateau some eighty feet above it. The city now contains about 27,000 inhabitants who lack no luxury, convenience, comfort, or even display, which can be attained in the oldest of the seaboard cities, though itself the growth but of yesterday. It is situate 302 miles west of Buffalo, 322 east-northeast of Mackinaw, 687 west, by land, of New York, and 524 northwest of Washington.

The river Detroit is, at this point, about three quarters of a mile in width, dotted with beautiful islands, and of depth sufficient for vessels of a large draught of water. The shores on both sides are in a state of garden-like cultivation; and, from the outlet of the river into Lake Erie, to its origin at Lake Huron, resemble a continuous village, with fine farms, pleasant villas, groves, and gardens, and excellent roads, as in the oldest settlements. The soil is rich and fertile; the air salubrious, and the climate far more equable and pleasant at all seasons than on the seaboard. The regions around are particularly suited for the cultivation of grain, vegetables, and all kinds of fruit; many varieties of the latter, which can be raised only with great care to the eastward, as the apricot for example, and some of the finest plums, growing here almost spontaneously. The waters teem with fish, and the woods and wastes with game, which have recently become an article of traffic to the eastern cities in such enormous numbers as to threaten the extinction of the race, and to call for the attention of the citizens to the due regulation of the trade, as regards time and season.

Being not only the oldest but the largest town in the State, occupying a commanding situation, enjoying all the advantages which arise from a central position, a magnificent river, and a harbor of unsurpassed capacity and security, Detroit has arrived at a stand of commercial eminence from which it can now never be dislodged.

The Michigan Central Railroad extends to Chicago, via New Buffalo

and Michigan city, a distance of 258 miles; and the Pontiac Railroad some 20 miles to Pontiac. There are also about 120 miles of plank roads running from the city to several flourishing towns, in various rich portions of the State, as Ypsilanti, Utica, and other thriving places.

The commercial returns from Detroit are of the most conflicting character; but the following results are believed to approximate as nearly to a true estimate of the actual commerce of the port as can be attained:

Imports, coastwise.....		\$15,416,377
Exports, do		3,961,430
		<hr/>
Total.....		19,377,807
Imports, foreign.....	\$98,541	
Exports, do.....	115,034	
		<hr/>
Total.....		213,565
		<hr/>
		19,591,482
Add the estimated value of the commerce of the other ports of the district—say.....		8,000,000
		<hr/>
Total commerce of the district.....		<u>27,591,482</u>

The tonnage of the port of Detroit alone was—

Clearances, for 1851.....	2,611	tons	920,690	men	41,931
Entrances, “ “	2,582	“	905,646	“	41,546
			<hr/>		<hr/>
Total for 1851.....	5,193	“	1,826,336	“	83,477
“ “ 1850.....	4,420	“	1,439,883	“	64,098
			<hr/>		<hr/>
Increase, 1851.....	<u>773</u>	“	<u>386,453</u>	“	<u>19,379</u>

The entrances and clearances from the other ports cannot be reached, owing to the usual deficiency of returns from this region.

In 1847, however, the business of the district was represented as follows, in the various ports, and by these some idea may be formed of their comparative value:

Place or port.	Value of exports.	Value of imports.
Detroit.....	\$3,883,318	\$4,020,559
Monroe.....	1,139,476	817,012
Trenton.....	8,425	66,000
Brest.....	12,000	.....
St. Joseph.....	833,917	517,056
Grand Haven.....	265,068	220,000
Kalamazoo and Black rivers.....	100,738	60,000
Ports north of Grand Haven.....	58,250	45,000
Saginaw.....	45,702	18,000
Port Huron.....	159,400	100,000
St. Clair.....	59,320	30,000
Newport.....	14,772	20,000
Algonac.....	37,820	15,000
Mt. Clemens.....	168,711	123,200
Total.....	6,786,957	5,991,827
Add railroad iron.....	6,991,827	1,000,000
Grand total.....	13,778,784	6,991,827

Another great advantage will shortly accrue to Detroit from the opening of the Great Western railway, about to be constructed through Canada, which will bring it into direct communication with the New York and other eastern routes; as well as from the completion of the Lake Shore road. These will bring the city within twenty-four hours' journey of New York and the Atlantic ocean.

Such are the giant strides with which the fortunes of the West, through energy and enterprise, are pressing on to the ascendant.

The enrolled and licensed tonnage of the Detroit district for 1851 was 40,320 tons, of which 21,944 were steam and 18,376 sail.

Canadian trade in 1851.

Imports.—In American vessels.....	\$35,855	Duty collected. \$6,215
In British vessels.....	62,685	16,819
	<u>98,540</u>	<u>23,034</u>
Exports.—In American vessels.....		\$74,072
In British vessels.....		40,960
		<u>115,032</u>
Total imports and exports.—In American vessels.....		\$109,927
In British vessels.....		103,645
		<u>213,572</u>

Tonnage.

Inward—American, 2 steamers.....	389 tons.	
9 sail.....	1,544 “	
	<hr/>	1,923
British, 294 steamers.....	49,081 “	
68 sail.....	7,300 “	
	<hr/>	56,381
Total tonnage.....		<hr/> <hr/> 58,304
Outward—American, 14 steamers.....	2,086 tons.	
17 sail.....	1,668 “	
	<hr/>	3,754
British, 315 steamers.....	51,727 “	
67 sail.....	5,546 “	
	<hr/>	57,273
Total tonnage.....		<hr/> <hr/> 59,027

Imports coastwise into the port of Detroit during the year 1851, with their value.

Articles.	Quantity.	Value.
Merchandise.....	18,000 tons	\$14,500,000
Coal.....	30,106 do.	150,530
Pig iron.....	1,120 do.	28,000
High wines.....	800 barrels	8,000
Hogs.....	220 number	1,320
Wool.....	81 bales	4,050
Barley.....	2,120 bushels	848
Marble.....	831 pairs	8,310
Fish.....	4,119 barrels	20,594
Flour.....	1,827 do.	5,938
Water-lime.....	2,117 do.	2,117
Starch.....	101 boxes	250
Powder.....	721 barrels	14,840
Whiskey.....	2,301 do.	8,408
Salt.....	40,207 do.	40,207
Lard.....	3,180 kegs	15,582
Cut stone.....	2,000 feet	800
Building stone.....	421 cords	4,210
Glass.....	5,011 boxes	10,022
Staves.....	331 thousand	6,620
Lumber.....	1,190 thousand feet	11,900
Horses.....	237 number	9,480
Paper.....	1,831 reams	3,662
Sheep.....	913 number	2,393
Hides.....	1,141 do.	2,282
Wheat.....	3,753 bushels	2,450
Fruit trees.....	900 bundles	18,000
Plaster.....	7,900 barrels	7,900
Do. (crude).....	1,340 tons	6,700
Sugar.....	350 hogsheads	35,000
Castings.....	910,000 pounds	36,400
Iron.....	24,304 bars and bundles	121,520
Molasses.....	403 barrels	6,045
Oil.....	500 do.	15,000

Imports into the port of Detroit during the year 1851—Continued.

Articles.	Quantity.	Value.
Leather.....rolls.....	1,100	\$22,000
Pork.....barrels.....	620	9,300
Codfish.....pounds.....	7,110	284
Bark.....cords.....	900	2,700
Nails.....kegs.....	18,300	73,200
Apples.....barrels.....	1,100	2,200
Railroad iron.....bars.....	8,340	93,074
Salt.....bags.....	18,700	2,500
Bacon.....pounds.....	10,000	700
Cider.....barrels.....	100	300
Coffee.....bags.....	1,140	14,592
Tobacco.....hogsheads.....	61	6,100
Tea.....chest.....	610	12,200
Crude potash.....tons.....	211	12,661
Corn.....bushels.....	4,500	1,800
Stoves.....number.....	3,300	33,000
Shingles.....thousands.....	240	240
Wagons.....number.....	43	4,300
Stoneware.....gallons.....	58,480	5,848
Total.....		\$15,416,377

Exports coastwise from the port of Detroit during the year 1851, with their estimated value.

Articles.	Quantity.	Value.
Flour.....barrels.....	460,325	\$1,453,596
Lumber.....thousand feet.....	30,717	245,736
Wheat.....bushels.....	897,719	618,403
Shingles.....thousands.....	12,944	25,888
Laths.....do.....	8,445	21,102
Wool.....bales.....	2,977	178,620
Pork.....barrels.....	1,704	20,448
Furs.....bales.....	420	42,000
Fish.....half barrels.....	4,150	12,450
Hides.....number.....	1,484	2,968
Oats.....bushels.....	48,546	14,563
Beef.....barrels.....	568	4,544
Starch.....casks.....	248	12,400
Hams.....pounds.....	8,000	640
Leather.....rolls.....	529	26,450
Rags.....tons.....	61	3,660
Saleratus.....boxes.....	51	255
Coal.....tons.....	960	4,800
Nails.....kegs.....	34	136
Hay.....bundles.....	1,231	3,693
Sheep.....number.....	413	500
Pig-iron.....tons.....	343	10,290
Oil.....barrels.....	135	3,240
Cranberries.....do.....	1,479	4,437
Water-lime.....barrels.....	170	170
Corn.....bushels.....	378,070	151,238
Corn-meal.....barrels.....	1,667	4,989
Staves.....thousand.....	10,856	217,120
Ashes.....casks.....	2,207	55,175
High wines.....do.....	2,783	27,830
Fish.....barrels.....	7,336	43,996
Shingle bolls.....cords.....	693	4,851

Exports from the port of Detroit during the year 1851—Continued.

Articles.	Quantity.	Value.
Salt.....barrels.....	281	\$281
Potatoes.....bushels.....	3,518	1,055
Whiskey.....barrels.....	1,359	10,872
Beans.....do.....	179	358
Hogs.....number.....	2,375	23,750
Merchandise.....packages.....	12,090	453,300
Ale.....barrels.....	70	420
Brick.....thousand.....	893	1,179
Clover seed.....barrels.....	129	2,580
Malt.....bushels.....	150	172
Copper.....tons.....	277	110,800
Cattle.....head.....	256	7,680
Butter.....kegs.....	1,106	13,212
Horses.....head.....	85	5,100
Bark.....cords.....	135	405
Wash-boards.....dozen.....	50	300
Ice.....tons.....	1,510	7,550
Broom-corn.....bales.....	135	1,350
Apples.....barrels.....	4,888	4,888
Total.....		3,961,430

Statement of freight carried over the Michigan Central Railroad during the year ending December 31, 1851, in tons and thousandths.

Articles.	To Detroit.	Interior circulation east.	Total east.	From Detroit.	Interior circulation west.	Total west.	Grand total.
Apples, 140 lbs. per bbl.....	11.940	7.910	19.850	143.490	50.715	194.205	214.055
Ale and beer, 300 lbs. per bbl.	1.275	29.475	30.750	145.950	65.400	211.350	242.100
Ashes	386.966		386.966				386.966
Barley, 48 lbs. per bushel.....	88.864	36.363	120.227		14.690	14.090	184.317
Buckwheat flour	14.332	1.546	15.878		.989	.989	16.867
Beans, 60 lbs. per bushel.....	22.281	.090	22.371	9.400	4.189	18.589	35.960
Bran and shorts.....	629.146	35.670	664.816		94.597	94.597	759.413
Beef, 300 lbs. per bbl.....	199.807	.315	200.122		17.636	17.636	217.758
Butter.....	119.600	2.137	121.737	14.590	7.090	21.680	148.417
Corn, 56 lbs. per bushel.....	7,293.348	482.549	7,775.897		26.484	26.484	7,802.381
Corn meal, 200 lbs. per bbl.....	25.805	6.356	32.161		11.474	11.474	43.635
Cheese.....		1.728	1.728	144.328	2.671	146.999	148.727
Cranberries, 120 lbs. per bbl.....	106.935	.555	107.490	.075	2.868	2.943	110.438
Coal.....		.500	.500	809.346	1.265	810.611	811.111
Dried fruit.....	9.041	2.579	11.620	101.779	8.152	109.931	121.551
Flour, 216 lbs. per bbl.....	49,102.524	36.612	49,139.136	11.016	913.572	924.588	50,063.724
Furniture and baggage.....	372.040	327.645	699.685	1,109.466	473.797	1,583.263	2,282.948
Grass and clover seed.....	5.390	8.936	14.326	.480	1.556	2.036	16.362
Garden roots and potatoes.....	354.630	13.021	367.624	.095	445.324	445.419	813.043
Hams and bacon.....	52.791	2.802	55.593		3.055	3.055	58.648
High wines, 350 lbs. per bbl.....	1,276.975	3.675	1,280.650	9.275	38.850	48.125	1,328.775
Hides.....	75.377	13.347	89.224		22.378	22.378	111.602
Iron and nails.....	1.176	20.266	21.442	1,649.545	8.904	1,658.449	1,679.391
Lime.....	.396	67.228	67.624	251.374	26.502	278.376	346.000
Lumber, 3½ lbs. per foot.....	657.583	1,377.452	2,035.035	782.302	1,272.130	2,054.432	4,089.467
Laths.....		46.016	46.016	290.533	13.958	304.491	350.507
Leather.....	8.361	24.557	32.918	229.731	10.157	239.888	272.806
Millstones.....				19.541		19.541	19.541
Miscellaneous merchandise.....	698.801	1,046.181	1,744.982	12,361.234	1,046.216	13,407.450	15,152.432
Oats, 32 lbs. per bushel.....	1,097.677	3.954	1,101.631		7.779	7.779	1,109.410
Other agricultural products.....	64.918	2.902	67.820	44.982	97.289	142.271	210.091
Plaster.....		66.127	66.127	1,174.823	17.515	1,192.338	1,258.465
Pig iron.....	92.121	147.388	239.509	93.176	6.000	99.176	338.685
Pelts.....	93.521	7.393	101.414	.367	1.798	2.165	103.579
Pork in bbls., 300 lbs. per bbl.....	301.950	5.550	307.500	3.900	8.400	12.300	319.800
Pork in hog.....	1,299.711	16.008	1,315.719	.320	47.703	48.023	1,363.742
Salt, 250 lbs. per bbl.....	7.000	48.440	55.440	2,411.080	14.420	2,425.500	2,430.940
Stoves.....	.530	48.094	48.624	406.310	9.366	416.176	464.800
Shingles, 200 lbs. per M.....	17.000	335.400	352.400	52.500	128.250	180.750	533.150
Wool.....	485.400	12.439	497.839		3.519	3.519	501.358
Wheat, 60 lbs. per bushel.....	14,515.117	2,637.135	17,202.300	2.948	318.698	321.646	17,523.946
Whiskey, 350 lbs. per bbl.....	96.775	36.050	132.825	458.325	69.213	527.538	660.363
Cord-wood, 2 tons per cord.....					9,870.000	9,870.000	9,870.000
Stone, sand, and brick.....	3,539.000	59.225	3,598.225	5.398	157.518	162.916	3,761.141
Neat cattle, 1,000 lbs. per head.....	426.500	9.500	436.000	15.000	11.500	26.500	462.500
Horses, 1,000 lbs. per head.....	33.000	16.000	49.000	38.500	24.000	62.500	161.500
Hogs, 200 lbs. per head.....	460.000	6.700	466.700		35.500	35.500	502.200
Sheep, 50 lbs. per head.....	.300	.025	.325	34.375	2.775	37.350	37.675
Total.....	84,041.377	7,104.389	91,145.766	22,326.754	15,415.262	38,242.016	129,387.732

No. 15.—DISTRICT OF MICHILIMACKINAC.

Port of entry, Mackinaw; latitude $45^{\circ} 51'$, longitude $84^{\circ} 35'$; population in 1850, 3,598.

This, which is the most northerly of the lake districts, as well as the most extensive of them all, embraces that portion of the American coast on the western shore of Lake Michigan, from Sheboygan, Wisconsin, $43^{\circ} 41'$ north latitude, $88^{\circ} 01'$ west longitude, northward, including Manitowoc, Two Rivers, Green Bay, Lake Winnebago, with all its ports, in Wisconsin—embraces Little Bay Noquet, Big Bay Noquet; the Fox, Manitou, and Beaver islands; the coast on the straits of Mackinaw; the St. Mary's river to the Sault; thence west along the south shore of Lake Superior to Montreal river—all in the State of Michigan—and continues thence along the Wisconsin shore to the western extremity of the lake at Fond du Lac; whence it proceeds northeasterly along the shore of the Minnesota Territory to Port Charlotte, on the dividing line between the United States and the British possessions. The entire length of this coast-line considerably exceeds 1,300 miles, following the sinuosities of the shore; and from the isolated situation of many portions of the district, it has been found impossible to obtain full or satisfactory returns.

The country bordering upon the great length of coast in this district was partially explored, and even mapped, with sufficient accuracy, more than two centuries ago, by the French Jesuits—those indefatigable discoverers and civilizers, and pioneer colonists of the mighty West; and from that period it has been at all times more or less frequently visited by missionaries, traders, trappers and hunters, until the present day, when a systematic and steady colonization may be said to be fairly established, together with a practical and successful development of its resources, by the cultivation of its productive lands, the prosecution of its fisheries, and the exploitation of its forests and its mines. Notwithstanding all this, there is much ground for the belief that the influence which it is one day destined to exercise on the commercial affairs of this continent, though it may be appreciated by a few far-reaching minds, is little foreseen or understood by the people at large.

The grounds existing for this confident expectation are to be found in the following peculiar, and in some degree singular, features of this district:

First, the unequalled facilities which it possesses for navigation, afforded by its numerous lakes, bays and rivers, through which, and their artificial improvements, it has ready access to both the St. Lawrence and Mississippi, from which, by the various internal chains of canal and railroad, it has easy communications to almost every important market along the vast seaboard stretching from the Balize to the straits of Belleisle.

Secondly, the unbounded productiveness of its fisheries, which may be, and are, it might be said, advantageously prosecuted through the entire length of its waters.

Thirdly, the immense resources it possesses in the magnificent forests of pine which border all the southern portions of its coasts, and are:

capable of supplying lumber for the entire consumption of the Northwest.

And, fourthly, the incalculable wealth of the mineral regions of Lake Superior.

These four influences—apart from any agricultural resources, which, under the stimulus of demand arising from the development of the former, are constantly and steadily on the increase—are already felt surely to a degree which has commanded the attention of those engaged in commercial pursuits, and in fact of the government itself.

Every succeeding year fresh ports are springing into existence at different points—all imperatively demanding aid for the construction of light-houses, and piers, and other facilities for navigation; and all as imperatively demanded by the requirements of a commerce growing spontaneously—not forced into life by any fictitious stimulants of speculation—with a rapidity and steadiness hitherto unknown in the commercial history of the world.

At the southern extremity of this district is Manitowoc, about thirty-five miles north from Sheboygan, on the Michigan shore—a port which, almost unknown three years ago, has now, including the country in which it stands, a population of 5,000 inhabitants, and a trade, though hitherto almost entirely overlooked, already exceeding that of Chicago for 1839, as regards exports, although the imports are necessarily something inferior, owing to the smaller extent of country at present looking to Manitowoc for its supplies.

The exports are principally lumber, laths, pickets, ashes, shingles, furs, wood, white-fish, &c., &c., to the value of . . .	\$77,122
The imports consist of merchandise, as salt, flour, pork, beef, meal, butter, lard, &c., to the value of	106,721

Making a total of	183,843
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Entrances, 788; tonnage, 227,940.

A few miles north of Manitowoc is the port of Two Rivers—also in Wisconsin—well situated for lake trade.

Both these new ports require appropriations for light-houses and piers.

The country adjacent to Two Rivers is finely timbered, and furnishes large quantities of lumber for export, as also shingles, ashes, furs, &c.; but, whenever the land shall be cleared, its exports will consist of grain, wool, animals, and other agricultural produce, such as is furnished by the land of Wisconsin generally. So that, in a few years, the commerce of these two ports may be expected to undergo an entire revolution—becoming, from exporters of lumber and importers of agricultural supplies, exporters of the produce of the soil, and importers of assorted merchandise and luxuries.

The business of Two Rivers will be confined to the peninsula east of Green Bay, and Lake Winnebago, and Fox river; since that route, being more direct, and affording extraordinary facilities for water transportation, will undoubtedly prevent any trade west of it from passing to the lake shore eastward. The local business, however, necessarily

flowing to these points on the shore, will keep up, for all time, an active and advantageous trade at them.

The port of Two Rivers has never before reported its commerce fully, but the following results show an excellent commencement :

Imports in 1851.....	\$115,000
Exports in 1851.....	112,763
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Total.....	227,763
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Of the imports there were for local purposes.....	\$42,585
Ditto for home consumption.....	72,424
	<hr/>
Total.....	115,009
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In 1847, the imports at this port were valued at \$53,747.	
Of the exports there were—Products of the forest.....	\$90,072
Fisheries.....	16,198
Domestic manufactures.....	6,493
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	112,763
	<hr/>

Entrances, 822 steam; 192 sail; making a total of 1,014 arrivals during the season.

The next port claiming the attention of the commercial classes is in fact the most important in the district—Green Bay—situated at the southwestern extremity or head of the great basin of the same name, and the outlet of the Fox river.

This port, indeed, bids fair to rival Chicago, as the lake depot for all that most important branch of the lake trade, which has its origin on the borders of the upper Mississippi. The work known as the Fox river improvement is now nearly completed, connecting the Mississippi with the great lakes, by steam navigation. This work has so greatly improved the navigation of the Fox river, flowing from Lake Winnebago into Green Bay, as to admit the ascent of small steamers to the former; whence, by a further improvement of the Fox river, and a canal connecting it with the Wisconsin river, the passage is free to the Mississippi, entrance to which is had about two miles below Fort Crawford. From this point steamers can navigate the Mississippi upward or downward, at option, as occasions may require.

This is the first water route which has been opened connecting the lake, with the Mississippi, navigable by steam power; and what the practical result of its operation may be, is yet in the bosom of the future.

Fort Crawford is situated 487 miles above St. Louis; 257 above Burlington, Iowa; 80 above Galena, Illinois; 60 above Dubuque, Iowa; 5 below Prairie du Chien; 243 below St. Paul's, Minnesota Territory; and 255 below the Falls of St. Anthony.

The distance from Green Bay to the mouth of the Wisconsin is about 220 miles, through the richest valley of Wisconsin; by this route, therefore there is an uninterrupted steam communication from Buffalo,

Oswego and Ogdensburg, or the Canadian cities, and the mouth of the St. Lawrence, to St. Louis, New Orleans, and the Balize.

This is certainly indicative of a new era in the practice of inland steam navigation ; as it will open at once an easy and direct communication between New York and the new States of Wisconsin, Iowa, and the Minnesota Territory, rendering any of the above-named points on the Mississippi easier of access by way of the lakes than St. Louis itself. This is a fact which cannot be overlooked by immigrants, and will, therefore, bring the public lands of those new States and Territories advantageously into the market at no distant day. This line of communication also brings the lead mines of Galena nearer by a hundred miles to the lakes, than to St. Louis ; and to it ultimately all the hidden wealth of the upper Mississippi valley, incalculable in its amount and apparently inexhaustible, must become tributary—inasmuch as for the transmission of heavy freight and produce this is the easiest and most direct, and therefore, of course, the cheapest channel. Along the eastern portion of this route across the State of Wisconsin, there have already sprung up several promising ports on Lake Winnebago and Fox river ; among them Oshkosh, Neenah, Menasha, Du Pere, and Fond du Lac, all well situated, with good harbor facilities, and rich agricultural regions circumjacent. The public lands are in rapid progress of selection and settlement, whether by warrants or regular entry in the land offices, while plank roads are traversing the country in all directions.

Green Bay, which has for several years been a great depot for fish and lumber, is now rapidly becoming the great commercial depot for the internal trade of Wisconsin, and during the season of 1851 there was a line of steamers regularly plying between this point and Buffalo. The completion of the Fox river improvement will, however, demand much greater facilities, henceforth, than have ever before been brought into requisition. No details of the business at Green Bay for the season of 1851 have been received, but it is notorious that the commerce of this place has advanced incalculably within the year ; and in the absence of accurate information, it may be fairly assumed as follows :

Imports	\$2,000,000
Exports	1,000,000
Total	<u>3,000,000</u>

This estimate of imports may, at first view, appear too large ; but, when it is remembered that the country, in the rear and around, is comparatively new, and unable, as yet, to export anything very material, and that the tide of emigration, constantly and regularly pouring in, demands a great quantity of supplies of all kinds for subsistence, for which it must be temporarily in arrear until the land shall be cleared, cultivated, and brought up to the standard which shall constitute it an exporting in lieu of an importing region, this opinion will be reversed.

In consideration of the great and still growing importance of Green Bay, and the remoteness of its situation from Michilimackinac, it might properly be made a port of entry, with the shores of Winnebago,

Green Bay, and the lake coast, from the straits of Mackinaw to Manitowoc, constituting a new district.

Debouching into Green Bay, flow from the northward the rivers Oconto, Peshtego, and Menomonee—the latter a large stream, and formerly, for some distance, the frontier line between the States of Michigan and Wisconsin. On it are situated several saw-mills for the cutting of lumber for the Chicago market. The source of this river is but a few miles distant from the shore of Lake Superior, on the southern watershed of the northern peninsula of Michigan. Its course is about two hundred miles in length to its outlet, in which space it has a descent of 1,049 feet, and is emphatically a river of cataracts and rapids, bringing down a vast volume of water, and occasionally spreading to a width of 600 feet. It can, therefore, be made available to any extent for water-power; though its navigation will be, in all times, limited to canoeing.

The lower course of the Menomonee, toward its mouth, is bordered by tracts of heavily timbered pine-lands, the produce of which is now growing into brisk demand in the neighboring lumber markets.

Below the Menomonee, to the northeast, the White Fish, Escanaba, and Fort rivers, discharge their waters into the Little Bay de Noquet. They are also fringed along their skirts by extensive pine forests, from which much lumber is annually manufactured.

The Monistique falls into Elizabeth bay, farther to the north. The principal business carried on upon the islands of Lake Michigan, belonging to this district, is fishing and wood-chopping; steamers and propellers frequently stopping at them to wood, and obtain supplies of fish, for the latter of which groceries, fruit, &c., are given in direct barter. The climate is genial and the soil productive; but the present inhabitants—being principally Indians and half-breeds, or fishermen, who have few tastes except for fishing and hunting—contrive to subsist themselves principally by those employments, and the cultivation of small patches of corn and potatoes.

The North and South Manitous have good harbors for the shelter of vessels, as well as the Foxes and Beavers. On the latter group there is a settlement of Mormons; but so far as civilization, refinement, and the tilling of the soil are concerned, they are in no wise superior to the neighboring tribes of savages.

Mackinac island, in the straits of Mackinac, which connect Lakes Huron and Michigan, is an old missionary settlement and military post, first established above two centuries ago by the French Jesuits, with that admirable forecast and political wisdom which they displayed in the selection of all their posts. It is, in fact, as to natural military strength, the Gibraltar of the lakes, and might easily be rendered almost impregnable. The present fort, however, is a blunder, and could not be defended for half an hour, being commanded by an almost unassailable height within half a mile in its rear, from which, in effect, at the commencement of the war of 1812, it was threatened with two or three light guns, dragged up the reverse during the night, by a handful of Indians and British, and, being unable to offer any resistance, was reduced to an immediate surrender.

It was for a long time an important depot of the American Fur Com-

pany, and is still maintained as a military station by the United States, and used as the rendezvous of the various Indian tribes, which resort thither annually to receive their government payments.

Mackinac is now a place of considerable traffic, the principal exports being fish and furs, the latter becoming annually more and more scarce; and the imports, blankets, ready-made clothing, fishermen's supplies, and trinkets for the Indians, who rarely carry away much of their receipts in money.

This point is distant from Chicago 340 miles; from Buffalo about 700 by water; and from the Sault Ste. Marie 120.

No returns for its coastwise commerce are at hand for 1851.

Its Canadian imports for 1851 were.....	\$3,967
Do. do. 1850	3,261
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Increase on 1851.....	706
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Duties collected in 1851.....	\$818
Do. do. 1850.....	663
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Increase on 1851.....	155
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Sault Ste. Marie is situated on St. Mary's river, the outlet of Lake Superior, at about 120 miles from Mackinac, 405 from Detroit, and 921 from Washington. It is pleasantly situated on the west side of the straits, and at the foot of the rapids, whence its name. These rapids are about three quarters of a mile long, at about twenty miles below Lake Superior, with a fall of about twenty-one feet. The river St. Mary's is, in all, from Lake Superior to Huron, about sixty miles in length, flowing first a few degrees north of east, then bending abruptly and flowing a few degrees east of south. "Through its whole course it occupies the line of junction between the igneous and detrital rocks, forcibly illustrating to what extent the physical features of a country are influenced by its geological structure." Between Mackinac and the Sault Ste. Marie there are innumerable groups of small islands, principally near the northern shore of Lake Huron and the mouth of the St. Mary's, their number having been estimated at thirty thousand.

None of these are as yet of any commercial importance, unless it be St. Joseph's, which is beginning to export grain and live-stock.

Hitherto the Sault Ste. Marie has been the head of lake navigation, in consequence of the interruption caused by the rapids at this point.

When it is considered that the distance to be overcome does not exceed one mile, with a lift 22 feet, and that the banks of the river nowhere rise to above twenty feet above the water line, and are composed of soft, friable rock, imbedded in easy soil, it is astonishing that a ship canal has not been opened long ago across this trivial portage—trivial in regard to the labor and expense of rendering it passable; the cost not being estimated as likely to go beyond a few hundred thousand dollars—which would open to the American lake marine the navigation of the finest lake in the world, furnishing and requiring all articles necessary to build up and maintain a large and prosperous trade.

In no other respect, however, is this obstacle slight or trivial; for

everything required for the facilitation of the vast, numerous and wealthy iron and copper mines of Superior, including machinery of enormous weight, and supplies and forage for the men and live-stock employed—nor this only, but the huge blocks of native copper and heavy ore returning down this route—must all be transported overland at extraordinary difficulty and expense. Even large vessels, several in number annually, are transported over this portage by means of ways and horse-power; nor is it in the least extravagant to say, that the aggregate amount of money thus unnecessarily expended year after year, without any permanent result, would, if collected for a few seasons, defray not only the interest, but the prime cost of this most necessary work.

“Efforts have been made, and will doubtless be renewed,” says the report of Messrs. Foster and Whitney, on the copper regions of Lake Superior, “to induce the government to construct a canal around these rapids, and thus connect the commerce of Lake Superior with those of the lower lakes. The mere construction of locks is not, however, all that is required. It will be necessary to extend a pier into the river above the rapids, to protect the work and insure an entrance to the locks. This pier will be exposed to heavy currents, and at times to large accumulations of ice, and must be constructed of the firmest materials and strongly protected.”

Materials of the best quality can be easily obtained, as the report goes to show, from Scovill's Point, on the Isle Royale, or the Huron islands, for the completion of the works, which would not, it is believed, at any rate exceed half a million of dollars.

The effect of the removal of this untoward obstacle—which deters a large, useful, and healthy population from settling in this region—keeps the mineral lands out of the market, and in a very great measure debars the influx of mineral wealth, which could not be otherwise shut out—would be to give a general stimulus to trade, and an infusion of vigor, activity and spirit to the whole movement of the country, with a general increase to the national wealth, entirely beyond the reach of calculation.

It were, therefore, undoubtedly a wise and prudent policy, founded on the experience of all ages, and in nowise savoring of rash or speculative legislation, to disburse the small comparative amount necessary at once to render this vast addition to the national wealth, commerce, and marine, available.

It is clearly impossible that young and necessarily poor States—as all new States unavoidably must be, until their lands are rendered capable of producing, and their mines ready for exploitation—can construct such works at their own expense; and they must necessarily be raised by aid from government, or be left undone, from want of aid, to the great detriment of the community.

Another though inferior consideration is this—that in case nothing is done by the United States government, a canal will undoubtedly be cut, even with the disadvantage of a ten-fold expense, through the hard igneous rocks on the British shore, by the Canadian government, which never lacks energy or enterprise when channels of commercial advantage are to be opened or secured to itself. And the result of this would be the diversion from the citizens of the United States of the

large sums payable, in the way of tolls, on a work ten times more expensive than would be requisite on the American side.

The business of the Lake Superior country for 1851 is estimated as follows, for the articles which crossed the portage at the Sault :

Imports, 100,000 barrels bulk ; in which are included 2,000 bundles pressed hay ; 20,000 bushels of oats and other kinds of grain ; provisions, dry goods, groceries, general supplies, and five mining engines ; forming an aggregate estimated value of \$1,000,000.

The exports passing around the rapids, for the same season, are as follows :

1,800 tons of copper, at \$350.....	\$630,000
500 tons of iron blooms, at \$50.....	25,000
4,000 barrels fish, at \$5.....	20,000

The imports are about 40,000 barrels bulk in excess of the imports of 1850. The cost of transportation on the above one hundred thousand barrels bulk was an average of about nine shillings a barrel from Detroit, or a gross sum of \$112,000 for the transportation of 100,000 barrels for a distance of 500 miles, all by water, with the exception of one mile. The opening of a ship canal at this point would undoubtedly reduce this cost by two-thirds within three years ; and within six years the actual savings would defray the whole cost of construction.

Above the Sault is the whole coast of Lake Superior, awaiting only free communication with the lakes below to send forth the rich mineral treasures of that region in exchange for the manufactures and merchandise of the east.

The lake is 355 miles in length, having an American coast to the extent of not much less than 900 miles. The area of the lake is 32,000 square miles ; its greatest breadth from Grand Island to Nee-pigon bay is 160 miles, and its mean depth of water 900 feet, with an elevation of 627 feet above the level of the sea, and 49 feet above the waters of Huron and Michigan. The water is beautifully clear and transparent, and abounds with the most delicious fresh-water fish, the flavor and richness of which infinitely exceed those of the lower lakes, so that they will always command a higher price in the market. One species, the siskawit, has only to be known in the New York and eastern markets in order to supersede all varieties of sea-fish, for unquestionably none approach it in succulence and flavor.

This lake is fed by about eighty streams, none of them navigable, except for canoes, owing to the falls and rapids with which they abound. The more prominent of these rivers, flowing through American territory, are the Montreal, Black, Presque Isle, Ontonagon, Eagle, Little Montreal, Sturgeon, Huron, Dead, Carp, Chocolate, La Prairie, Two-hearted, and Tequamenen. The Ontonagon and Sturgeon are the largest and most important rivers, which, by the removal of some obstructions at their mouths and the construction of piers to prevent the formation of bars, might be converted into excellent and spacious harbors, in the immediate vicinity of some of the most valuable mines, where the want of safe anchorage is now severely felt.

The mouth of the Ontonagon is already a place of some growing business, as is La Pointe, at the Apostle islands, where is a good harbor. Eagle and Copper harbors are also places of commerce for the importation of supplies and the shipment of mineral produce. Ance, at the head of Keweenaw bay, Marquette, Isle Royale, where there is a good harbor, are all places rapidly growing into importance. It would seem that the whole lake coast, from the Sault Ste. Marie to the Isle Royale, is rich in iron and copper ore, and it is scarcely possible to conceive the results which may be expected, when the present mines shall have been developed to their highest standard of productiveness, and others, as unquestionably there will be, discovered and prepared for exploitation.

There are at present two steamers, four propellers, and a considerable number of smaller sailing craft, all of which have been dragged overland, by man and horse, across the portage, in constant employment carrying up supplies and bringing back returns of ore and metal. All these articles have necessarily to be transhipped and carried over the isthmus; and yet, under all these disadvantages and drawbacks, the traffic is profitable and progressive. This consideration only is sufficient to establish the positive certainty of success which would follow the construction of an adequate and well-protected ship canal.

Indeed it may be asserted, without hesitation, that a well-concerted system of public works, river, lake, and harbor improvements, are only wanted to render the great lake regions, and this district not the least, the most valuable and most important, as they are now the most beautiful and most interesting portion of the United States.

The enrolled tonnage for the Mackinac district, according to the official reports of June 30, 1851, is stated at 1,409 tons, all sail. This is evidently inaccurate, as there were several steamers and propellers plying, at that very date, on the lake above the Sault, and several small steamers running regularly on the waters of Green bay, Lake Winnebago, and the Fox river.

The extreme inaccuracy, looseness, and brevity of the returns kept, and reports made from most of the lake ports of entry, can hardly be too much deprecated or deplored, rendering it, as they do, impossible to compile a complete report of the lake commerce sufficiently explicit, and with details sufficiently full, to the perfect understanding of a subject at once so intricate and so important.

Canada trade in 1851.

Imports..... \$3,967 Duty collected..... \$818

No. 16.—DISTRICT OF MILWAUKIE.

Port of entry, Milwaukie; latitude 43° 3' 45", longitude 87° 57'; population in 1840, 1,712; in 1850, 20,061.

This district, which formerly was attached to that of Chicago, was erected in 1850, and the returns embraced in this report, being the first that have been made of its lake commerce, give little opportunity for comparison.

The coast extends from Sheboygan, Wisconsin, southward to the northern line of the State of Illinois, a distance of about a hundred miles, embracing the ports of Sheboygan, Port Washington, Kenosha, or Southport, Racine, and Milwaukee. These ports are all situated in the State of Wisconsin, on the western shore of Lake Michigan. Sheboygan is immediately adjoining the district of Mackinac; has a good situation for business, though the harbor needs some improvement. The State legislature has authorized a loan for this purpose of \$10,000. There is an excellent farming country in the rear of Sheboygan, the soil of which ordinarily produces good returns of the first quality of grain; in the last two years, however, the wheat crop has been almost a total failure.

The imports of this port for 1851, were.....	\$1,304,961
Exports, do. do. do.	121,705
Total	<u>1,426,666</u>

Entrances, 730.

Port Washington, twenty-five miles north of Milwaukee, is a port of a growing and important trade, its harbor being formed by the projection of a pier into the lake. The town is situated on a high bluff, which shields the pier from westerly winds. The country circumjacent is well adapted for agriculture, grazing, and wool-growing. The trade of this port is steadily on the increase.

Imports of Port Washington for 1851	\$904,400
Exports, do. do.	139,450
Total	<u>1,043,850</u>

Southport, the name of which has been recently changed with good taste, to the old Indian appellation of Kenosha, is a flourishing place situated on the bluffs, 35 miles south of Milwaukee, and sixty north of Chicago. Under the protection of the bluffs upon which the town stands, piers have been extended into the lake, alongside which vessels may lie and load or discharge cargoes, except during the prevalence of strong easterly gales, during the height of which the seas sometimes are heaped on the piers, and break with such violence as to compel the shipping to stand off into the lake for sea-room. Like the rest of this portion of the State of Wisconsin, the soil about Southport is of a nature to encourage agricultural pursuits; and in consequence the back country is increasing very rapidly in population, and the prairies beginning to export their rich and varied produce, the result of which is a growth of the commerce of the port beyond the anticipations of the most sanguine.

The returns show the imports for 1851 to have been.....	\$1,306,856
Do. do. exports for 1851	661,228
Total	<u>1,968,084</u>

Entrances, 856.

Racine lies ten miles north from Kenosha, on a beautiful stream of the same name, which forms a harbor in all respects excellent, except for the wonted drawback of an awkward bar at its mouth. The population of Racine in 1840 was about 1,500; in 1850 it was 5,111. The principal business, however, is done on piers, which project from its mouth, as at Kenosha. The city is on a height, and is, without doubt, the most beautiful site for a lake city west of Cleveland. The back country, depending on the city for supplies and a market, is very similar to that already described in other parts of the district.

Its imports for 1851, were.....	\$1,473,125
Exports for do.	1,034,590

Total	<u>2,507,715</u>
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Entrances, 1,462.

Milwaukie, the port of entry and principal port in the district, is situated on Milwaukie river, which forms a good harbor for vessels and steamers of light draught, but it needs some improvement to make it easy of access to larger craft. The harbor of Milwaukie is in one respect very favorably situated, as there is a sort of bay, or bayou, running in behind the north point, making a fair shelter against all but easterly winds.

The city stands partly on the river, and partly on the bluffs, which are very high and overlook the lake for many miles. It is ninety miles north from Chicago, and contains 25,000 inhabitants. It is the terminus of the Milwaukie and Mississippi railway, which is finished some fifty miles west, and is intended eventually to communicate with the Mississippi at Dubuque, or Prairie du Chien. This road runs through one of the most fertile districts of Wisconsin, and will bring immense traffic to this port. Of late, owing mainly to the partial failure of the wheat crop during the two successive years of 1849 and 1850, the commerce of this district has not augmented so rapidly as for several years previously, or as it probably would have done in the event of good or average crops.

The city of Milwaukie increased in population from 1,712 inhabitants in 1840, to 20,061 in 1850, being a ratio of 1,072 per cent. greater than that of any other city during the same period. It is situated 805 miles northwest from Washington.

The commerce in 1851 is estimated for the city as follows:

Imports	\$14,571,371
Exports	2,607,824

Total	<u>17,179,195</u>
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Entrances, 1,351.

The commerce of the whole district for the same year was:

Imports	\$19,560,713
Exports	4,564,779

Total	<u>24,125,510</u>
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Total entrances, 5,000.

The enrolled and licensed tonnage, on the 30th June, 1851, was set down in the official report at 2,946 tons, of which 287 tons were steam, and 2,659 tons sail. The official report of the collector, however, published at the end of the season, makes the tonnage of the district amount to 6,526 tons, giving employment to 325 men. Therefore there must be an error somewhere, as it is not possible that the tonnage of the district should have more than doubled itself within a few months. Such inconsistencies, however, seem to be the rule, not the exception, in the reports of the lake districts.

The following table will show the business in a few prominent articles of trade, in this district, for export from the several ports; and the comparative trade of the port of entry for the years 1850 and 1851, according to the returns.

Articles	Milwaukie.		Racine.	Kenosha.	Sheboygan	Port Wash- ington.
	1851.	1850.	1851.	1851.	1851.	1851.
Flour.....barrels...	113,233	100,017	22,977	2,651	163	3,000
Pork.....do.....	3,832	476	1,112	56	.....	.....
Beef.....do.....	2,331	1,426	1,712	.....	.....	.....
Wheat.....bushels...	181,904	297,758	272,678	233,052	.....	.....
Oats.....do.....	47,098	2,100	80,898	59,769	3,650	2,000
Barley.....do.....	175,723	15,270	40,908	55,169	1,000	1,500
Corn.....do.....	22,233	5,000	18,941	31,168	.....	.....
Wool.....pounds...	226,256	126,595	106,471	30,731	9,250	.....
Hides.....do.....	385,840	.....	112,000	20,160	69,440	.....
Lard.....do.....	29,120	.....	22,400	.....	.....	.....
Ashes.....tons...	262	276	55	.....	201	900
Lead.....pounds...	987,840	1,050,000	.....	.....	.....	.....
Lumber.....M feet.....	.....	.....	.....	.....	1,830	.....
Laths.....M.....	.....	.....	.....	.....	247	.....
Shingles.....do.....	.....	.....	.....	.....	1,190	.....
Fish.....barrels...	.....	.....	.....	.....	3,384	200

The imports consist principally of assorted merchandise necessary for the consumption of a new country—salt, and the household property of emigrants. This district reports no trade with Canada.

Statement showing the principal articles of export and import, coastwise, in the district of Milwaukee, during the year 1851.

IMPORTS.

Articles.	Quantity.	Value.
Merchandise	30,594 tons.....	\$15,297,000
Sundries	6,980 ..do	3,502,287
Salt	31,985 bags.....	4,698
Salt	34,881 barrels.....	43,601
Fruit	17,517 ..do.....	26,275
Fish.....	1,208 ..do.....	4,832
Lumber	40,401 M feet.....	404,010
Laths	4,556 M.....	45,560
Shingles.....	13,125 M.....	26,250
Cedar posts.....	12,788.....	2,556
Whiskey.....	6,517 barrels.....	65,170
Coal	2,177 tons.....	15,239
Pig iron	507 ..do.....	12,400
Water lime.....	2,329 barrels.....	3,494
Cut stone.....	350 tons.....	1,750
Cheese.....	124,240 pounds.....	7,454
Tan-bark.....	1,375 cords.....	27,500
Railroad iron, &c.....	556 tons.....	27,800
Fruit trees.....	11,150.....	2,787
Locomotives.....	4.....	40,000
Potter's clay.....	150 tons.....	450
		19,560,713

EXPORTS.

Articles.	Quantity.	Value.
Flour.....	142,015 barrels.....	\$426,045
Pork.....	5,000 ..do.....	70,000
Beef.....	4,043 ..do.....	28,301
Wheat	687,634 bushels.....	412,580
Oats	193,405 ..do.....	38,681
Barley.....	137,163 ..do.....	274,327
Wool	372,708 pounds.....	111,812
Hides	504,500 ..do.....	20,180
Ashes	1,418 tons.....	141,800
Lard	46,000 pounds.....	3,280
Broom-corn.....	843 tons.....	8,430
Corn	72,342 bushels.....	28,936
Merchandise	1,535 tons.....	767,000
Lead	987,840 pounds.....	49,392
Lime.....	2,500 barrels.....	3,700
Brick.....	853,900.....	4,265
Hay.....	250 tons.....	2,500
Ship-knees.....	279.....	5,580
Lumber	1,833 M feet.....	18,330
Laths	247 M.....	2,470
Shingles	1,199 M.....	2,997
Fish.....	3,584 barrels.....	14,336
Wood.....	10,000 cords.....	20,000
Staves.....	200 M.....	4,000
Hops.....	10 tons.....	4,000
Hoop-poles	50 M.....	500
Potatoes.....	25,000 bushels.....	7,500
Sundries.....	4,534 tons.....	2,093,855
		4,564,797

No. 17.—DISTRICT OF CHICAGO.

Port of entry, Chicago; latitude $42^{\circ} 00'$, longitude $87^{\circ} 35'$; population in 1840, 4,470; in 1850, 29,963.

This district is about eighty miles in extent of coast-line from Michigan City, in Indiana, to Waukegan, Illinois, embracing that portion of the coast of Lake Michigan bordering on the States of Indiana and Illinois. Michigan City, Waukegan, and Chicago are the only ports. The commerce of Michigan City is comparatively small; but having no definite returns from that point, it may be roughly estimated at \$600,000. It is the only lake port of Indiana, and is about forty miles east from Chicago, and on the opposite side of the lake to that city. The Michigan Central railway passes through this place en route for Chicago, and most of the supplies of merchandise are received by it. The exports of flour, wheat, corn, and oats from this place are worthy of some consideration.

Waukegan is situated forty miles north from Chicago, on the western shore of Lake Michigan, and is a thriving place of business, though its harbor consists only of piers, extending into the lake, similar to those at Racine, Sheboygan, and other places in the district of Milwaukee. The country circumjacent to it is becoming rapidly populous, and the land is fertile, and adapted amply and abundantly to repay all the expenses of toil and time annually bestowed upon it.

It cannot, therefore, be reasonably doubted that its annual increase will not fall short of the general progress of its own and the neighboring States.

The account of the tonnage of this place is as follows:

The entrances at Waukegan during the year 1851 were 1,058; being 698 steamers, 244 propellers, 14 brigs, 105 schooners, 2 barques, and 3 sloops.

The following is a concise statement of the commerce of Waukegan, with the names of some of the leading articles both of import and export:

IMPORTS.

Articles.	Quantity.	Value.
Merchandise.....tons.....	1,110	\$555,000
Lumber.....M.....	4,368	43,680
Shingles.....do.....	809	2,022
Laths.....do.....	475	4,750
Salt.....barrels.....	2,804	4,206
Flour.....do.....	371	1,113
Apples.....do.....	809	1,213
Whiskey.....do.....	451	4,510
Lime.....do.....	210	315
Broom-corn.....bales.....	108	168
Sundries unenumerated.....		2,757
Total imports.....		619,834

EXPORTS.

Articles.	Quantity.	Value.
Wheat.....bushels.....	173,129	\$103,977
Oats.....do.....	64,090	12,918
Corn.....do.....	29,874	11,949
Barley.....do.....	8,943	4,471
Seed.....do.....	1,480	1,480
Flour.....barrels.....	3,340	10,020
Pork.....do.....	250	3,500
Eggs.....do.....	62	372
Wool.....pounds.....	35,800	10,740
Sundries unenumerated.....		35,391
Total exports.....		194,818
Total imports.....		619,834
Total commerce of Waukegan.....		814,652

The city of Chicago stands at the mouth of the Chicago river, with a population of about 40,000, and, as the river debouches into the head of Lake Michigan, is therefore the inmost port of the lake, and the farthest advanced into the country, which supplies its export and consumes its import trade. It is, on this account, most favorably situated for a commercial depôt. The river within a mile of its mouth being made up into two affluents, the northern and southern, the city lies on both banks of the main river, and to the west of both the tributaries, with floating bridges whereby to facilitate easy communication for the citizens. Four miles south of the city, the Illinois and Michigan canal falls into the south branch at a place called Bridgeport, and up to this point this stream is navigable for the largest lake craft. The first level of the canal is fed from this stream by means of huge steam-pumps, which are constantly employed in forcing water to the height of about eight feet. On entering the canal, therefore, the boats first ascend a lock of about eight-foot lift, and thence, on their way to the Illinois, continually lock downward till they reach the lower level of that valley. • This canal is ninety-eight miles in length from Bridgeport to Peru, on the Illinois, and by means of it the waters of the Mississippi and the lakes are united, so that canal boats can readily pass from Chicago to St. Louis, and *vice versa*, as indeed to any point of the Illinois river, without detention or transhipment of cargo.

The Galena and Chicago Union railway is open from Chicago to Rockford, a distance of eighty miles, and will soon be finished to Freeport, where it will effect a junction with the Galena branch of the Illinois Central railway. The Chicago and Rock Island road is completed to Juliet, forty miles' distance from Chicago, which is eventually to connect Chicago with Rock island, and which is expected to be completed and opened, within the space of one year, to the Mississippi.

It is proposed to intersect Illinois with a net-work of railways, by which Chicago shall be connected with every portion of the State; and beside these lines, two or three others are projected with the intent of connecting that city with Green Bay, Milwaukie, Beloit, and Janes-

ville, Wisconsin, by railway, but it is still problematical whether they will be wrought to a successful termination.

It is owing, doubtless, to the advantageous situation above described, that Chicago owes her rapid growth during the past few years, her enviable commercial position for the present, and her brilliant prospects for the future.

In 1840 Chicago had a population of less than 5,000; in 1850 it numbered upward of 28,000, having increased in one year, as shown by the returns of the city census of 1849, over 5,200; and the lowest estimate put upon the population in January, 1852, is 35,000 souls, while more generally it is rated at nearly 40,000 individuals. No parallel for so great an increase exists.

The following tables will give some idea of the details of the commerce of Chicago, which will be found interesting as showing the progressive business of the city, during a long series of successive years, as well as the alteration of the character of that business, as affected by the continual progression of the country, from an earlier and more imperfect to a fuller and better developed system of cultivation.

The progressive value of the imports and exports of Chicago is exhibited during a series of fourteen years, which will be found to give the best idea of the actual progression of the place.

Years.	Imports.	Exports.
In 1836.....	\$325,203	\$1,000
1837.....	373,677	10,065
1838.....	579,174	16,044
1839.....	630,980	38,843
1840.....	562,106	228,635
1841.....	564,347	348,862
1842.....	664,347	659,305
1843.....	971,849	682,210
1844.....	1,686,416	785,504
1845.....	2,043,445	1,543,519
1846.....	2,027,150	1,813,468
1847.....	2,641,852	2,296,299
1851.....	24,410,400	5,395,471

From 1842 to 1847 the leading articles of export were wheat, flour, beef, pork, and wool. The quantities exported in those years were as follows:

Years.	Wheat.	Flour.	Beef & pork.	Wool.
	<i>Bushels.</i>	<i>Barrels.</i>	<i>Barrels.</i>	<i>Pounds.</i>
In 1442.....	586,907	2,920	16,209	1,500
1843.....	628,967	10,786	21,492	22,050
1844.....	891,894	6,320	14,938	96,635
1845.....	956,860	13,752	13,268	216,616
1846.....	1,459,594	28,045	31,224	281,222
1847.....	1,974,304	32,538	48,920	411,488

From 1848 to 1851 no valuation was made of the importations or

exportations; and the valuation of 1848 is deemed so utterly incorrect as to be valueless and unworthy of citation; for the valuation for that year included, under the head of exports, every small bill of sale, whether sent into the circumjacent country for domestic consumption, or shipped, coastwise or foreign, by the lake, for actual exportation. It is therefore set aside.

The following table shows the importations of lumber during the years mentioned:

Articles.	1847.	1848.	1849.	1850.	1851.
Boards .....feet..	38,188,225	60,009,250	73,259,553	100,364,791	125,056,437
Laths .....No..	5,655,700	10,025,109	19,281,733	19,890,700	27,583,475
Shingles .....do..	12,148,500	20,000,000	39,057,750	55,423,750	60,338,250

The table below exhibits some of the leading articles of export from Chicago during the same series of years, and shows the nature and increase or decrease of the trade in various articles:

Articles.	1847.	1848.	1849.	1850.	1851.
Wheat.....bushels..	1,974,304	2,160,000	1,936,264	788,451	427,820
Flour .....barrels..	32,598	45,200	51,309	66,432	71,832
Corn.....bushels..	67,315	550,460	644,848	262,013	3,221,317
Oats .....do....	38,892	65,280	26,849	158,054	605,827
Beef.....barrels..	26,504	19,733	48,436	40,870	53,685
Pork.....do....	22,416	34,467	17,940	16,598	19,990
Tallow.....do....	203,435	513,005	.....	719,100	1,084,377
Lard.....do....	139,009	.....	684,600	724,500	2,996,747
Bacon.....do....	47,248	.....	850,709	909,910	1,524,600
Tobacco.....do....	28,243	209,078	.....	85,409	182,758
Wool.....pounds..	411,088	500,000	520,242	913,862	1,086,944
Hides.....No....	8,774	.....	.....	.....	1,617

CANADIAN TRADE IN 1851.

Exports of domestic produce and manufactures.

In American vessels	\$93,008
In British vessels.....	23,117
	116,185

Imports.

In American vessels.....	\$4,935	Duty collected.
In British vessels.....	876	\$1,204
	5,811	182

Tonnage inward.—American vessels—steam	2	652 tons.
sail	2	290 “
British vessels—sail.....	2	428 “

of lumber, 60,000,000 of shingles, and 27,000,000 pieces of lath, of which, according to the Chicago Tribune—esteemed the commercial journal of that place most worthy of confidence—54,000,000 feet of lumber were shipped by canal, and 44,000,000 of these reached the Illinois river; 51,000,000 of shingles were shipped by canal, and 47,000,000 of these reached the Illinois; while of lath 12,000,000 left Chicago for the south, of which 11,000,000 passed beyond the terminus of the canal.

The continued failure of the wheat crop in northern Illinois has turned the attention of farmers to grazing and wool growing, for which the prairie lands are admirably adapted, and of this the results are partially seen in the returns.

In 1851 there were slaughtered and packed, for American and English markets, in Chicago, 21,806 head of cattle. The shipments of beef during the same year were 52,856 barrels; and it is hardly necessary to say that this beef is of the finest quality, for Chicago beef is at this day as well known, both in the American and English markets, for its succulence and tenderness, as if it had been an established article in the provision trade for centuries, instead of years.

The growth of wool in Illinois is not yet, by any means, developed, the trade in this article not having been ten years in existence, at the utmost, yet the exports of 1851 amounted to 1,086,944 pounds.

Over and above these shipments, increased by the addition of 20,000 barrels of pork, there were exported during the year great numbers of cattle, hogs, and sheep, driven, or transported by railway and steamer, from the prairies of Illinois to the markets of Buffalo, Albany, and New York, alive. If these be taken as the results of the first few years of the grazing business, what may not be expected of the great resources of these prairie States, when they shall be fully developed and brought nearer to market by the railway facilities which are already contemplated, and perfected by the complete stocking of the grazing lands?

Hemp and tobacco are also large products of this State.

The arrivals at Chicago for 1851 are as follows: steamers, 662; propellers, 183; schooners, 1,182; brigs, 239; barques, 13; total, 2,279. Tonnage of the season, inward, 958,600.

The enrolled tonnage of the district on the 30th of June, 1851, was 23,105, being 707 tons steam, and 22,397 tons sail.

The following table will exhibit the quantity and value of the principal articles of export and import coastwise, at the port of Chicago, during the year 1851:

EXPORTS.

Articles.	Quantity.	Value.
Flour.....barrels....	71,723	\$215,169
Wheat.....bushels....	436,808	262,084
Corn.....do.....	3,221,317	1,159,674
Barley.....do.....	8,537	4,268
Oats.....do.....	767,089	15,218
Hemp.....pounds....	694,783	41,687
Beef.....barrels....	52,865	370,055
Pork.....do.....	20,522	287,308
Tallow.....pounds....	1,084,377	65,062
Lard.....do.....	2,976,747	239,140
Hams.....do.....	899,504	81,960
Shoulders.....do.....	650,955	32,548
Hides.....number....	31,617	88,527
Wool.....pounds....	1,086,944	326,083
Tobacco.....do.....	482,758	48,275
Timothy seed.....barrels....	1,670	11,690
Steam engines.....number....	15	75,000
Sugar.....barrels....	709	14,180
Salt.....do.....	3,581	6,371
Reapers.....number....	552	55,200
Potatoes.....bushels....	2,000	500
Oil.....barrels....	78	1,872
Merchandise.....tons....	2,491	1,245,500
High wines.....barrels....	1,878	18,780
Leather.....pounds....	33,875	16,937
Lead.....do.....	1,375,872	68,793
Iron.....do.....	144,380	14,438
Furs.....do.....	564,500	564,500
Buffalo robes.....do.....	7,215	3,657
Cattle.....number....	448	13,440
Sundries unenumerated.....		48,555
		5,395,471

IMPORTS.

Articles.	Quantity.	Value.
Merchandise.....tons....	37,368	\$21,081,300
Barley.....bushels....	12,331	6,165
Flour.....barrels....	6,630	19,890
Wheat.....bushels....	26,084	15,650
Lumber.....thousand feet....	125,056	1,250,560
Shingles.....thousand.....	60,338	150,845
Lath.....thousand pieces....	27,583	275,830
Timber.....cubic feet....	410,679	21,500
Sugar.....pounds....	3,139,800	282,582
Molassas.....gallons....	81,156	32,462
Salt.....barrels....	128,541	192,811
Castings, car wheels and axles.....pounds....	347,500	17,000
Stoves.....number....	9,742	97,420
Wood.....cords.....	5,924	11,848
Wagons.....number....	198	9,900
Nails and spikes.....pounds....	44,034	2,642
Locomotives.....number....	4	40,000
Leather.....pounds....	4,567	20,783
Iron.....tons.....	10,286	411,440
Fruit.....barrels....	9,836	14,754
Fish.....do.....	5,257	27,036
Coffee.....bags.....	11,316	135,792
Coal.....tons.....	30,000	150,000
Sundries unenumerated.....		142,190
		24,410,400

THE LAKES.

Heretofore the various districts of collection have been presented separately, with such statistics as were attainable and deemed necessary, in regard to their respective trade, tonnage, local resources, avenues and outlets for external communication, and for the facilities of exporting and importing produce, merchandise, &c.

In many cases, however, the establishment of the districts being arbitrary, to suit the conveniences of the custom-house, and founded neither on geographical position, nor territorial limits of States—so that at one time characteristics the most different are presented in one and the same district, and at another many adjacent districts possess identically the same qualities and facilities—it has been judged best, with a view to presenting a general and comprehensible synopsis of the various regions, with their several interests, trades, improvements, and requirements of farther improvement, to give a cursory sketch of this most interesting region, lake by lake; and thereafter to collect the whole lake country, with its interests, and influence on the cities of the Atlantic coast, and on the increase, wealth, and well-being of the confederacy at large, into one brief summary.

Commencing, therefore, from the easternmost terminus of the lake country proper, and proceeding in due order westward, the first to be mentioned is

LAKE CHAMPLAIN.

This lake lies between the States of Vermont and New York, on the east and west, and for a small distance, at the northern end, within the British province of Canada East. It is about 110 miles in length from north to south, and varies in width from half a mile to 14 miles, with a depth of water varying from 54 to 282 feet. Its principal feeders are the outlet of Lake George, at Ticonderoga, the rivers Saranac, Chazy, Au Sable, Missisquoi, Winooski, and Wood and other creeks. Its outlet is by the Sorel, Richelieu, or St. John's river, into the St. Lawrence, some 45 miles below Montreal.

The New York and Vermont shores of this lake are of a character the most opposite imaginable, that to the eastward being for the most part highly cultivated, fertile, and well settled, with grazing and dairy farms, furnishing supplies for a thriving business in produce; while the counties of New York to the westward, wild, rocky, barren, and rising into vast mountains intersected by lakes, with little or no bottom lands and intervalles, sends down lumber and iron in vast quantities; above ten thousand tons of iron ore, nine thousand of bloom and bar, and nearly three thousand of pig-iron, having passed down the lake and entered the Champlain canal in 1851.

There is, moreover, a large lumber trade, partially from Canada, passing down this lake and canal, to the amount last year of 116 millions of feet.

The whole value of the commerce of Lake Champlain was, for 1846, about eleven millions; for 1847, seventeen; and for 1851, above

twenty-six millions of dollars. Its licensed tonnage for the same year was 8,130. The avenues and outlets of this lake trade are the Chambly canal, and Sorel river improvements, to the St. Lawrence river, affording a free navigation up or down the lakes from the Sault Ste. Marie to the Gulf of St. Lawrence; and the Champlain canal, uniting at Waterford with the Erie canal and Hudson river, and thence giving access to the port of New York and the Atlantic ocean; the Ogdensburg railroad, from a fine port on the St. Lawrence, crossing the upper end of the lake, to Burlington, where it makes a junction with the Rutland and Vermont Central railroads, and so proceeds to Boston and the eastern harbors of the Atlantic; and the Whitehall railroad by Ballston to Troy, whence it has communication, via the Harlem and Hudson River railroads, with the city of New York—vast facilities for transportation, to which may be added all the advantages for vessels ascending the lakes, and coasting, possessed individually by each of the regions lying above it, on the St. Lawrence basin.

LAKE ONTARIO.

This lake is 180 miles in length by 40 miles in average width; its mean depth is 500 feet, its height above the sea 232, and its area 6,300 square miles; its principal affluent is the outlet of the superfluous waters of all the great upper lakes, by the Niagara Falls and river.

Its only tributaries of any consequence are, from the Canadian side the Trent and Credit, and from the State of New York the Black river, the Oswego, and the Genesee. Its natural outlet is by the channel of the St. Lawrence, through the thousand isles, and down a steep descent, broken by many rapids and chutes, to Montreal; and thence without further difficulty to the ocean.

The shores of this lake on both sides, but more especially on the southern or New York coast, combine perhaps the most populous, thickly-settled, and productive agricultural regions of the United States, interspersed at every few miles of length by fine and flourishing towns, and beautiful villages, resting upon a wheat country—that of Genesee—inferior to few in the world for the productiveness of its soil, and the quality of its grain, and a fruit or orchard country not easily surpassed. It has also, bordering on its southern shore, the most valuable and largely exploited salt district of the United States; while all the regions adjoining it possess rare advantages in their admirable system of internal communication, and especially in the Erie canal, running nearly parallel to the lake, through their whole length for a distance of three hundred and sixty-three miles from Buffalo, on Lake Erie, to Albany, on the Hudson river. The abundant water-power afforded by the rivers falling into this side of the lake is turned to much profit for the flouring both of domestic and imported grain, for transshipment by canal for New York and the Atlantic harbors.

The avenues and outlets of the lake are as follows:

It is united with Lake Erie by the Welland canal, round the Falls of Niagara, capable of admitting vessels of twenty-six feet beam, one hundred and thirty feet over all, and nine feet draught—the heaviest that can be carried across the flats of Lakes St. Clair above, and St.

Peters below—and equal to the stowage of three thousand barrels under deck.

With the Gulf of St. Lawrence it has communication by the Lachine, Beauharnois, Cornwall, and Williamsburg canals, of superior capacity even to those on the Welland, constructed to admit the large lake steamboats plying between Montreal, Kingston, and Ogdensburg. Besides these, it has the Oswego canal, falling into the Erie canal at Syracuse; and the Ogdensburg and the Oswego and Syracuse railways, uniting with the Albany and Buffalo, Great Western, Hudson river, and Vermont system of railways, having ramifications through all the New England States, and opening up to it free access to all the more important harbors on the Atlantic.

In addition to these direct outlets, it of course incidentally possesses all those opening from Lake Champlain.

The value of the commerce of this lake for 1851 amounted to about thirty millions, and its licensed tonnage to thirty-eight thousand tons. The first steamer was launched on this lake in 1816.

LAKE ERIE.

This lake, which lies between $41^{\circ} 22'$ and $42^{\circ} 52'$ N. latitude, and $78^{\circ} 55'$ and $83^{\circ} 23'$ W. longitude, is elliptical in shape; about 265 miles in length, 50 average breadth, 120 feet mean depth, and 565 feet above tide-water; 322 above the level of Lake Ontario, 52 below that of Lakes Huron and Michigan; being the shallowest, and, of consequence, most easily frozen, of all the great lakes.

Lake Erie is singularly well situated with regard to the soil, character, and commercial advantages of the countries circumjacent to its waters; having at its eastern and southeastern extremity the fertile and populous plains of western New York; west of this, on the southern shore, a portion of Pennsylvania, and thence to the river Maumee, at the western extremity of the lake, the whole coast—productive almost beyond comparison—of Ohio, containing the beautiful and wealthy cities of Cleveland, Sandusky, and Toledo. On the west it is bounded by a portion of the State of Michigan, and on the north by the southern shore of the rich and highly cultivated peninsula of Canada West—undoubtedly the wealthiest and best farmed district of the Canadian province, and settled by an energetic, industrious, and intelligent population, mostly of North of England extraction and habit, and differing as widely as can be conceived from the French and Irish agriculturists of the lower colony.

The whole of the country around Lake Erie is, to speak in general terms, level, or very slightly rolling, with a deep, rich, alluvial soil, covered in its natural state with superb forests of oak, maple, hickory, black walnut, and in certain regions pine, and producing under cultivation magnificent crops of wheat, corn, barley, and oats, besides feeding annually vast multitudes of swine and beef-cattle for the eastern, provincial, and transatlantic marts. No equal amount of land, perhaps, on the face of the globe, contains fewer sterile or marshy tracts, or more soil capable of high cultivation and great productiveness, than this region—as is already evidenced by its large agricultural exports; and

when it is considered that the portions under cultivation are as yet comparatively a small part of the whole, while none has probably been yet brought to the utmost limit of profitable culture, what it may one day become, is as yet wholly incalculable.

This lake has few islands, and these principally toward the western end; but on the northern shores it has three considerable promontories—Long Point, Landguard Point, and Point au Pelè—which do not, however, afford much shelter to shipping.

The tributaries of this lake are: From Canada the Grand river, a stream of considerable volume, with fine water-power, having at its mouth the harbor of Port Maitland, probably the best on the whole lake, and the only one worthy of note on the Canada side. From New York it receives the Cattaraugus creek, and the Buffalo creek, at the outlet of which is the flourishing city and fine harbor of Buffalo. From Ohio it is increased by the waters of the Maumee, Portage, Sandusky, Vermillion, Black, Cuyahoga, Grand, Ashtabula, and Conneaut rivers, and by those of the Elk and some other small streams from Pennsylvania. Infinitely its largest and most important affluent is, however, the wide and deep river of Detroit, which, flowing down—with a rapid stream and mighty volume of water—a descent of 52 feet in some 60 miles, pours into it the accumulated surplus of the three mighty lakes above it, and all their tributary waters.

Its natural outlet is the Niagara river, which, with an average width of three quarters of a mile and a depth of forty feet, descends, in about 35 miles, 322 feet over the foaming rapids and incomparable cataract of Niagara, which of course prevents the possibility of navigation or flotation down the stream, though it is crossed at several points by ferries of various kinds.

Lake Erie, however, is connected with Ontario by the Welland canal, a noble work on the Canadian side, having a descent of 334 feet effected by means of 37 locks, and passable from lake to lake by vessels of 134 feet over all, 26 feet beam, and 9 feet draught, stowing 3,000 barrels under deck.

By means of this fine improvement, it has free egress to Lake Ontario, and thence to the St. Lawrence; and by the various improvements of that river, and communications from Ontario and Champlain, to many points, as heretofore enumerated, on the Atlantic seaboard.

The artificial outlets of this lake are very numerous, and no less important; many of them already of considerable age, and reflecting much credit on the early energy and enterprise of the State of New York, by which they were principally constructed, in order to secure a precedence in the trade of the great West.

These are, the Welland canal, as described; the Erie canal, connecting the waters of Lake Erie with the Hudson river, and thus by direct navigation with the Atlantic; the Erie and Beaver canal, from Erie, Pennsylvania, to Beaver, on the Ohio, affording access to Pittsburg and Cincinnati; the Ohio canal, connecting it with the Ohio river at Portsmouth, one hundred miles above Cincinnati, and again (by a branch to Beaver) with the same river about forty miles below Pittsburg; the Erie and Miami canal, from Toledo to Cincinnati; and the Wabash canal, connecting the Miami and Erie with the Ohio at Evans-

ville, in Indiana; and with the Wabash river navigation at Lafayette, in the same State.

For land steam transportation it has the New York Central railway to Albany, where it communicates with the Great Western, Hudson river, Harlem, Housatonic, and all the eastern railroads; the Buffalo and Corning and New York railroad, connecting at Hornelsville and Corning with the Erie railroad, direct from Dunkirk to New York city, and the projected Buffalo and Brantford railway to Brantford, Canada West. It has, again, through the State of Ohio, the Cleveland and Columbus railway, the Columbus and Xenia railway, and the Little Miami railway, to Cincinnati; the Sandusky and Mansfield railway, connecting with the Cleveland and Columbus road at Shelby; the Madison and Lake Erie railroad, from Sandusky city to Springfield, and thence by the Little Miami railroad, in one connexion, and by the Great Miami railroad (the Cincinnati, Hamilton and Dayton road) in another, to Cincinnati; and the Lake Shore railway, destined to be carried to Toledo, where it will connect with the Michigan Southern railroad to the head of Lake Michigan and to Detroit, whence it will have access to New Buffalo and Chicago, and ultimately to Galena and the Mississippi, and Fond du Lac, Winnebago, and Green Bay, on Lake Michigan.

The estimated value of the commerce of Lake Erie is \$209,712,520. But it is difficult to define accurately between the lakes, so closely is their trade intermingled.

The licensed tonnage of the lake is 138,852 tons, of which a large and increasing proportion is steam.

LAKE ST. CLAIR.

This small lake, which forms the connecting link, by means of the St. Clair and Detroit rivers, between Lakes Huron, Michigan, and Erie, is but an inconsiderable sheet of water if compared with the vast inland seas above and below it, not exceeding twenty miles in length by thirty in width. It has an average depth of twenty feet of water, although its mud flats between Algonac and the embouchure of the Thames river are extremely shoal, covered with luxuriant crops of wild rice, and navigable only by a shallow and tortuous channel, never capable of admitting above nine, and in dry seasons not more than seven or eight feet burden. It receives from the Canadian shore the Thames river, with some smaller streams, the principal of which is the Chenail Ecartè; and from Michigan the river Clinton, at the mouth of which is Mt. Clements, which with Algonac, at the outlet of the St. Clair, its principal affluent, are the only shipping places on its waters.

At the upper end, Lake St. Clair is filled with many large, low islands, some of them bearing such trees as love the waters; these being capable of some degree of cultivation, and others mere flats, covered with wild meadows, affording rank grass as their sole production. From the principal channel, looking toward the Canadian coast, the whole expanse of the lake, for many miles' distance, resembles a vast morass of the waving wild rice, intersected by small winding bayous; close to the Canadian

shore, however, there is another pass from the mouth of the Thames lakeward.

This lake has little commerce proper to itself beyond the sale of wood, fruit, vegetables, and supplies for passing steamers and sailing craft, although some ship building is done on its waters, and the largest steamboat running on the lakes launched upon them.

No separate returns of the small shipping places in the district of Detroit having been made since 1847, it is impossible even to approximate the trade of Lake St. Clair; but when it is considered that the whole business of the upper lakes, including the prosperous towns and immeasurably wealthy back countries on both sides of Lake Michigan, and all the mineral regions of Lakes Huron and Superior, pass through this outlet, it cannot but appear at a glance how vitally necessary is the action of Congress for the removal of the obstructions in Lake St. Clair and Lake St. George, and the construction of a ship canal around the Sault Ste. Marie; nor can it fail to strike every one who compares the apathy of the American government, in opening the navigation of the upper lakes and the St. Lawrence, with the energy and earnestness displayed by the British and Provincial authorities in conquering the far superior obstacles presented to navigation on its lower waters, and in perfecting a free ingress and egress from the ports of Lakes Huron and Michigan to the tide-waters of the Atlantic ocean.

The commerce of all the lakes to the northward and westward of Lake Erie has an estimated value of above sixty millions of dollars, with a licensed tonnage of nearly thirty thousand tons of steam and sail—a wonderful amount, when the brief period of the existence of this trade, and of the States themselves which furnish it, is taken into consideration.

LAKE HURON.

This superb sheet of water lies between Lake Superior on the northwest, Lake Michigan on the southwest and west, and Lakes Erie and Ontario on the south and southeast. It is two hundred and sixty miles in length, and one hundred and sixty in breadth in its widest part, inclusive of the Georgian bay, a vast expanse—almost a separate lake—divided from it by the nearly continuous chain of promontory and islands formed by the great peninsula of Cabot's Head, the Manitoulin, Cockburn, and Drummond groups, up to Point de Tour, the easternmost cape of northern Michigan. It is said to contain thirty-two thousand islands, principally along the northern shore and at the northwestern end, varying in size from mere rocky reefs and pinnacles to large and cultivable isles. The surface of Lake Huron is elevated five hundred and ninety-six feet above the surface of the Atlantic, and depressed forty-five below that of Lake Superior, and four below that of Michigan. Its greatest depth is one thousand feet, near the west shore. Its mean depth is nine hundred feet.

It is bounded on the north and east by the Canadian shore, which, above Goderich, is bold and rocky, carrying a great depth of water to the base of the iron-bound coast, with an interior country which may be generally described as a desolate and barren wilderness.

At the southern extremity of the Great Georgian bay, whence there is a portage viâ Lake Simcoe to Toronto, not exceeding a hundred miles in length—the future line of a projected railway—is the small naval and military station of Penetanguishine, with some unimportant Canadian settlements on the river Wye, Nottawasauga bay, Owen's sound, &c., and on the islands westward of it some considerable reserves of Chippewa and Pottawatomie Indians. Far up the northern shore are the Bruce mines, under the Lacloche mountains, and opposite to them the settlement on the fertile and partially cultivated island of St. Joseph. These are all the signs of cultivation or improvement on the British side, below the river St. Mary's, on which there is a long, straggling village, with a fort or station of the Hudson Bay Company, over against the American village at the Sault. On the west it has the eastern coast of Michigan, with the deep indentation of Saginaw bay, as yet thinly settled and only cultivated to a limited degree, though the lands of the interior are of unsurpassed excellence and fertility as a grain country, and at the present time extremely valuable for their fine lumber.

Lake Huron is ill-provided with natural harbors, having none on the eastern shore, except that afforded by the entrance of a small river at Goderich, between the St. Clair river and Cape Hurd, on Cabot's Head. The western shore has—though somewhat better provided—only two or three safe places of shelter in heavy weather, the principal and best of which are Thunder bay and Saginaw bay, the latter of which contains several secure and commodious havens. This lake has no outlets of any kind for its commerce, except the natural channel of its waters, by the river, and across the flats of St. Clair to the eastward—no canal or railroad as yet opening on its shores; though it will certainly not be many years—perhaps not many months—before the great Western railroad through Canada will open to it, viâ Penetanguishine, Hamilton, and the Niagara Falls and Buffalo railways, a direct and very short communication with the Atlantic seaboard—making a saving of above six hundred miles of distance from the Sault Ste. Marie. By the straits of Mackinaw it has an outlet to the southward, into Lake Michigan, and enjoys through it communication, viâ Green bay and Lake Winnebago, the Fox and Wisconsin rivers, with the Mississippi and the Gulf of Mexico.

LAKE MICHIGAN.

This, which is second of the great lakes in size—inferior only to Lake Superior—is, in situation, soil, and climate, in many respects, preferable to them all. Its southern extremity running southward, into fertile agricultural regions, nearly two degrees to the south of Albany, and the whole of its great southern peninsula being embosomed in fresh waters, its climate to the southward is mild and equable, as its soil is rich and productive. It lies between $41^{\circ} 58'$ and 46° north latitude, and $84^{\circ} 40'$ and $87^{\circ} 8'$ west longitude; is 360 miles in length, and 60 in average breadth; contains 16,981 square miles, and has a mean depth of 900 feet. On its western shore it has the great indentation of Green bay, itself equal to the largest European lakes, being a hundred

miles in length, by thirty in breadth, well sheltered at its mouth, by the Traverse islands, and having for its principal affluent the outlet of Lake Winnebago and the Fox river.

The other principal tributaries of Lake Michigan are the Manistee, Maskegon, Grand, Kalamazoo, and St. Joseph rivers, from the southern peninsula of Michigan; the Des Plaines, O'Plaines, and Chicago rivers from Indiana and Illinois; and from the northern peninsula of Michigan, the Menomonic, Escanaba, Noquet, White-fish, and Manistee rivers.

The lake is bounded to the eastward by the rich and fertile lands of the southern peninsula of Michigan—sending out vast supplies of all the cereal grains—wheat and maize especially—equal if not superior in quality to any raised in the United States; on the south and southwest by Indiana and Illinois—supplying corn and beef of the finest quality, in superabundance, for exportation; on the west by the productive grain and grazing lands and lumbering districts of Wisconsin; and on the northwest and north by the invaluable and not yet half-explored mineral districts of northern Michigan.

The natural outlet of its commerce, as of its waters, is by the straits of Mackinac into Lake Huron, and thence by the St. Clair river down the St. Lawrence, or any of internal improvements of the lower lakes, and the States hereinbefore described.

Of internal communications it already possesses many, both by canal and railroad, equal to those of almost any of the older States, in length and availability, and inferior to none in importance.

First, it has the Green bay, Lake Winnebago, and Fox river improvement, connecting it with the Wisconsin river, by which it has access to the Mississippi river, and thereby enjoys the commerce of its upper valleys, and its rich lower lands and prosperous southern cities; and second, the Illinois and Michigan canal, rendering the great corn valley of the Illinois tributary to its commerce. By railways, again, perfected or projected, it has, or will shortly have, connexion with the Mississippi, in its upper waters and lead regions, via the Milwaukie and Mississippi and the Chicago and Galena lines. To the eastward, by the Michigan Central and Southern railroads, it communicates with the Lake Shore road, and thence with all the eastern lines from Buffalo to Boston; and to the southward it will speedily be united, by the great system of projected railroads through Illinois and Indiana, to the Mississippi and Ohio river.

It is impossible not to be convinced, on surveying the magnificent system of internal improvements so energetically carried out by these still young, and, as it were, embryo States, that if they were, in a degree, anticipatory of their immediate means and resources, they were not really in advance of the requirements of the age and country. This is sufficiently proved by their triumphant success, and by the high position of population, civilization, agricultural and commercial rank to which they and they alone have raised, as if by magic, the so lately unexplored and untrodden wildernesses of the west.

By the strong, deep, and rapid river of St. Mary's, with its broad and foaming Sault, Lakes Michigan and Huron are connected with what may be called the headmost of the great lakes, though itself the recipient of the waters of a line of lakes extending hundreds of miles farther

to the northwestward, though unnavigable except to the canoes of the savage.

LAKE SUPERIOR.

Lake Superior is bounded on the south by the northern peninsula of Michigan and part of Wisconsin, on the west and northwest by a portion of the Minnesota Territory, and on the north and northeast by the British possessions. The lands immediately adjoining it are, for the most part, sterile, barren, and rugged beyond description, consisting, for the most part, on the southern shore, of detrital, and on the northern, of igneous rocks, covered with a sparse and stunted growth of pines and other evergreens, mixed with the feeble northern vegetation of birch, aspen, and other deciduous trees of those regions. Little of the shores, it is believed, are susceptible of cultivation; and it is likely, when these wild districts become—as they one day will, beyond doubt—the seat of a large laborious population, that its inhabitants will depend mainly for their supplies of food and necessaries, as of luxuries, on the more genial regions to the south and eastward. The tributary rivers of this lake are numerous, and, bringing down a large volume of water, afford superabundant water-power for manufactories the most extensive in the world, though, from their precipitous descent and numerous falls and chutes, they can never be rendered navigable for more than a few miles above their mouths except for canoes; and even for these, owing to the number and difficulty of the portages, the ascent is laborious in the extreme.

That these regions will, at no very distant future period, be largely, if never densely, peopled, may be held certain, since, from the east to the west the whole southern shore abounds with copper—not, as it is generally found, in ore yielding a few per cent., but in vast veins of almost virgin metal, the extent of which is yet unexplored, as it is probably unsuspected and incalculable. So long ago as when the French Jesuits discovered these remote and desolate regions, early in the seventeenth century, these mines were known and worked by the Indians, who, at that time, possessed implements and ornaments of copper. They concealed, however, the situation of these mines with a superstitious mystery; and as instruments and weapons of iron and steel were introduced among them by the white man, the use of copper fell into abeyance, and the existence of the mines themselves was lost in oblivion.

Within a few years there have been rediscovered several mines—some of which, and those by no means the least productive, have been discovered within a year or two of this date—which are now in the full current of successful exploitation. Many more are doubtless yet to be discovered, as the whole region is evidently one vast bed of subterraneous treasure. The isles Royale and Michipicoton are also, beyond question, full of copper, as are portions of the British coast to the northward, where two or three mining stations have been already established, with more or less prospects of success. The grounds of these prospects, and the character of the country and its mineral deposits, are very ably and graphically described in the interesting memoir, by Dr. Jackson, on the geology, mineralogy, and topography of Lake

Superior, which is appended to this report, and which, it is believed, contains most correct and valuable information.

As yet, beyond the mining stations and the village at the Sault, Lake Superior has no towns or places of business except the points for shipping the mineral products of her soil, and receiving the supplies necessary to the subsistence of the men and animals employed in the exploitation of her treasures. Nor beyond this has she any trade, unless it be the exportation of her white-fish and lake trout, which are unequalled by any fish in the world for excellence of flavor and nutritious qualities.

The only inlet for merchandise, or outlet for the produce of this vast lake, and the wide regions dependent on it, is the portage around the Sault, across which every article has to be transported at prodigious labor and expense; whereas, by a little less exclusive devotion to what are deemed their own immediate interest, on the part of the individual States of the Union, and a little more activity and enterprise on that of the general government, an easy channel might be constructed at an expense so trivial as to be merely nominal, the results of which would be advantages wholly incalculable to the commerce of all the several States, to the general wealth and well-being of the nation, and to the almost immediate remuneration of the outlay to the general government by the increased price of, and demand for, the public lands in those regions.

Geology, Mineralogy, and Topography of the lands around Lake Superior; by CHARLES T. JACKSON, M. D., late United States Geologist and Chemist, Assayer to the State of Massachusetts, and late Geologist to the States of Maine, New Hampshire, Rhode Island, and for the public lands of Massachusetts.

Lake Superior is the largest sheet of fresh water on the face of the globe, and is the most remarkable of the great American lakes, not only from its magnitude, but also from the picturesque scenery of its borders, and the interest and value attaching to its geological features. As a mining region it is one of the most important in this country, and is rich in veins of metallic copper and silver, as well as in the ores of those metals. At the present moment it may be regarded as the most valuable mining district in North America, with the exception only of the gold deposits of California.

This great lake is comprised between the 46th and 49th degrees of north latitude, and the 84th and 92d degrees of longitude, west of Greenwich. Its greatest length is 400 miles; its width in the middle is 160 miles, and its mean depth has been estimated at 900 feet. Its surface is about 600 feet above the level of the Atlantic ocean, and its bottom is 300 feet below the level of the sea. The ancient French Jesuit Fathers, who first explored and described this great lake, and published an account of it in Paris in 1636, describe the form of its shores as similar to that of a bended bow, the northern shore being the arc, and the southern the cord, while Keweenaw Point, projecting from the

southern shore to the middle of the lake, is the arrow. This graphic description is illustrated by a map, prepared by them, which displays the geographical position of the shores of this great lake with as much fidelity as most of the common maps of our own day, and proves that those early explorers were perfectly familiar with its shores, and knew how to make geographical surveys with considerable exactness. Reference to a former report to the government of the United States by myself, (31st Congress, 1st session, Ex. Doc. No. 5, part 3d, Washington, 1849,) fully demonstrates how much was known to the early French explorers of the geography and mineral resources of Lake Superior and the regions circumadjacent; and that report will be found, notwithstanding some omissions and interpolations, for which I do not hold myself responsible, to contain much that will tend to throw light on the mineral resources of the public lands lying along the southern shores of the lake.

The coast of Lake Superior is formed of rocks of various kinds and of different geological groups. The whole coast of the lake is rock-bound, and in some places mountain masses of considerable elevation rear themselves from the immediate shore, while mural precipices and beetling crags oppose themselves to the surges of this mighty lake, and threaten the unfortunate mariner, who may be caught in a storm upon a lee shore, with almost inevitable destruction. Small coves, or boat harbors, are abundantly afforded by the myriads of indentations upon the rocky coast; and there are a few good snug harbors for vessels of moderate capacity, such as steamboats, schooners, and the like. Isle Royale, though rarely visited by the passing vessels, affords the best harbors. Keweenaw Point has two bays in which vessels find shelter, viz., Copper harbor and Eagle harbor. Adequate protection may be found from the surf under the lee of the Apostle islands, at La Pointe; and there is tolerable anchorage at the Sault de Ste. Marie, the port of embarkation upon St. Mary's river, at the outlet of the lake.

There are but few islands in Lake Superior; and in this respect it differs most remarkably from Lake Huron, which is thickly dotted with isles and islets, especially on its northern shore.

Owing to the lofty crags which surround Lake Superior, the winds sweeping over the lake impinge upon its surface so abruptly as to raise a peculiarly deep and combing sea, which is extremely dangerous to boats and small craft. It is not safe, on this account, to venture far out into the lake in batteaux; and hence voyageurs generally hug the shore, in order to be able to take land in case of sudden storms. During the months of June, July, and August, the navigation of the lake is ordinarily safe; but after the middle of September great caution is required in navigating its waters, and boatmen of experience never venture far from land, or attempt long *traverses* across bays. Their boats are always drawn far up on the land at every camping-place for the night, lest they should be staved to pieces by the surf, which is liable at any moment to rise and beat with great fury upon the beaches.

The northern or Canadian shore of the lake is most precipitous, and consequently most dangerous to the navigator. On the south shore, again, the sandstone cliffs, which rise in mural or overhanging precipices directly from the water's edge for many miles, afford no landing-

places. This is the case especially along the cliffs at the Pictured Rocks, and on the coast of Keweenaw bay, called *l'Anse* by the French voyageurs.

On the coast of Isle Royale there are beautiful boat harbors scattered along its whole extent on both sides of the island; and at its easterly extremity the long spits of rocks, which project like fingers far into the lake, afford abundant shelter for boats or small vessels, while at the western end of the island there is a large and well-sheltered bay, called Washington harbor.

Near Siskawit bay the navigator must beware of the gently-shelving red sandstone strata which run for many miles out into the lake, with a few feet only of water covering them. Rock harbor, on the south side of the island, is a large and perfectly safe harbor for any vessels, and has good holding ground for anchorage, with a very bold shore; while the numerous islands, which stand like so many castles at its entrance, protect it from the heavy surges of the lake. The whole aspect of this bay is not unlike that of the bay of Naples, though there is no modern volcano in the back ground to complete the scene.

None of the American lakes can compare with Lake Superior in healthfulness of climate during the summer months, and there is no place so well calculated to restore the health of an invalid who has suffered from the depressing miasms of the fever-breeding soil of the southwestern States. In winter the climate is severe, and at the Sault Ste. Marie mercury not unfrequently freezes; but on Keweenaw Point, where the waters of the lake temper the chillness of the air, the cold is not excessive, and those who have resided there during the winter say that the cold is not more difficult of endurance than in the New England States. Heavy snows fall in mid-winter on this promontory, owing to its almost insular situation; but the inhabitants are well skilled in the use of snow-shoes, so that the snow is not regarded as an obstacle to the pedestrian, while on the newly-made roads the sleds and sleighs soon beat a track, on which gay winter parties ride and frolic during the long winter evenings of this high northern latitude. From researches which I have made, it appears that the mean annual temperature at Copper Harbor, on Keweenaw Point, is 42° ; and from my experiments on the temperature of the lake, at different seasons of the year, the waters of this great lake are shown to preserve a constant temperature of about $39\frac{1}{2}^{\circ}$ or 40° F., which is that of water at its maximum density.

It is known that Lake Superior never freezes in the middle, nor anywhere except near its shores, from which the ice very rarely extends to more than ten or fifteen miles distance. Occasionally, in severe winters, the ice does extend from the Canada shore to Isle Royale, which is from fifteen to twenty miles distant; so that the caribou and moose cross over on it to the island, whither the Indian hunters sometimes follow them over the same treacherous bridge, liable, although it is, to be suddenly broken into fragments by the surges of the lake.

By the action of drifting ice, not only have boulders of rocks and of native copper been transported far from their native beds, and deposited upon the shore at distant places, but even animals, such as squirrels, rabbits, deer, moose, caribou, and bears, have thus navigated

the waters of Lake Superior, and been landed on islands to which they could not otherwise have gained access. The mouth of every river on the lake shore reveals, by the *debris* brought down by ice in the spring freshets, the nature of the rocks and minerals which occur in its immediate banks or bed; and thus indicates to the explorer the proper places where to search for ores or metals.

The early French explorers noticed the fact of the transportation of masses of native copper and rock by drift ice, but they made no use of these facts to discover the native deposits of metals in the rocks which border on the rivers. It was by following the hint drawn from these traces that my assistant and myself were enabled, in 1844 and 1845, to discover and make known to the country those valuable mines, which have so astonished the world by their metallic contents, and which subsequently induced the government of the United States to undertake a geological survey of that territory, with the conduct of which I was charged by the Hon. Robert J. Walker, late Secretary of the Treasury, and which I effected, so far as it was possible to do so, before my labors were brought to an abrupt conclusion, by circumstances over which I had no control.

To the construction of a canal around the falls of the Sault Ste. Marie, one of the principal obstacles will be found in the winter's ice, against which the locks at the entrance to the canal must be guarded, or the work, however strong, will be overturned and destroyed. Vessels of any considerable burden cannot approach the shore nearer than about half a mile. The canal must, therefore, be carried out into the water to that distance, and the form of the ice-breakers, guards, or mole, must be such as to allow the ice to rise over them, and not to press against perpendicular walls. This is to be done by giving a proper slope, or bevel, to the walls, so that the ice will ride up them and break into pieces. By this method the harbor and entrance locks may be sufficiently protected against the driving and expanding ice of the lake and St. Mary's river.

The opening of a ship canal between Lake Superior and the lower lakes is one of the most important enterprises of the day, and it is only to be regretted that Congress has thought it best to appropriate land instead of applying money directly to the execution of this great work, which may now be delayed for some time, to the great disadvantage of the country at large. So soon as the canal above mentioned shall be completed, the summer tour of travellers will be extended to a cruise around Lake Superior, and from La Pointe many will cross over to the Falls of St. Anthony, on the Mississippi river; and thus explorers will find it easy to gain access to remote regions, now seldom visited by white men. The importance of this enterprise can hardly be over-estimated, and its consequence will be the vast facilitation and increase of the commerce of Lake Superior, and the incalculable enhancement of the value of the public lands, while a tide of immigration may be looked for from Norway, Sweden, and the north of Europe, as well as from the New England States, pouring into the northwestern wilderness, and subduing the forests, and extending far and wide the area of freedom and civilization.

The time will doubtless come when a canal or railway will be made

to the Falls of St. Anthony ; and possibly we may see the trade of Hudson's bay flowing into the United States, through Lake Superior and our other great lakes and rivers. For that great bay is but fifteen days' canoe voyage from Lake Superior, and the portages are few and not long, so that the British Hudson's Bay Fur Company carry on constant communication with their factories upon the bay from their posts upon Lake Superior ; and their agents at the British posts in Oregon travel from their stations on the borders of the Pacific ocean, by way of Hudson's bay and Lake Superior, on their route to Great Britain. This northern region has unfortunately been always, hitherto, undervalued. It is now known to be one of the most important mineral regions in America ; and it should be borne in mind that there are deposits of native copper on Copper Mine and McKenzie's rivers, in the same kinds of rock that contain the stupendous *lodes* of this metal on Keweenaw Point and the Ontonagon rivers. Every means that tend to carry our population farther northward will tend to bring to light and to practical utility the mineral treasures of those regions ; while trade in furs and seal skins will be brought nearer to us by enterprising men, it matters not whether of the British provinces or of the United States of America.

The time is now come when the public faith is settled on the value of mineral productions ; and it is understood that good working mines are sure to command and reward the energies of capitalists and miners, since it is proved that mining is liable to no greater risks of failure than ordinary mercantile enterprises, provided due precaution be exercised by the adventurers in the selection of their mines and in working them to advantage.

ROCKS OF LAKE SUPERIOR LAND DISTRICT.

On approaching the Sault Ste. Marie by the St. Mary's river the geologist has an opportunity of discovering the age of the sandstone strata, by observing that the limestones of Saint Joseph's island, and of the other numerous isles in that river, are rocks of the Devonian group, and contain the characteristic fossils by which that rock is determined to be the equivalent of those of Eifel, as has been fully proved by Mons. Jules Marcou, the geologist sent to the United States by the government of France, to make collections for the Museum of Geology in the *Jardin des Plantes* of Paris. These Devonian rocks, like those of Mackinac, have been mistaken by two geologists who have reported upon this district for Siberian limestones ; by whom the geological position of the sandstone of the Sault Ste. Marie has also been mistaken, in their supposing that it passed beneath these Devonian rocks, when it in reality is above them, as it is seen to rest horizontally around Silurian limestone, near Sturgeon river, on Keweenaw Point, beneath which it cannot pass, considering the fact that the limestone in question has a dip of thirty degrees from the horizon, while the sandstone at that place is quite horizontal.

It is obvious, then, that the red and gray sandstones of Lake Superior are above Devonian rocks, and therefore cannot be older than the coal formation ; while from their lithological characters they appear to belong to the Permian system of Verneuil and Murchison. Above the Sault

we see these red and gray sandstones dipping at a gentle angle into the lake, showing that they do in fact dip directly opposite to the direction that would be required to make them dip beneath the limestone on St. Mary's river.

This question is one of some importance; since, if the sandstones of Lake Superior were, as has been erroneously alleged, of the Potsdam group, they would be out of all accordance with the ascertained facts of geological science, and would break into the system of the best known laws of elevation of strata and of order of super-position. In *point of fact* the sandstones of Lake Superior are the exact equivalents of those of Nova Scotia, where trap-rocks of the same age as those on Lake Superior pass through it and produce precisely the same results as I have already described in my reports on the geology and mines of Lake Superior, bearing in the same way more or less native copper, with occasional particles of silver. Now, Potsdam sandstone *never* presents any such results in any part of America; and to call that of Lake Superior its equivalent, is but to lead people astray, and to nourish false hopes of finding copper and silver where it does not occur, while a great error introduced into science cannot fail to produce the most mischievous results. On this account, I have thought proper to notice an error which would not otherwise be worthy of refutation.

Leaving the Sault and cruising along the southern shore of the lake, with an occasional trip inland, we come to cliffs of sandstone, and then to rocks called metamorphic, which extend from Chocolate to Carp and Dead rivers, and find slate rocks, granite rocks, sienite, hornblend rock, and chlorite slate. In this group of primary rocks we find mountain masses of excellent specular iron ore and magnetic iron ore mixed. These mountains of iron ore were originally explored under my directions, by Mr. Joseph Stacy, of Maine, who first called public attention to them in 1845. They were subsequently examined by Dr. John Locke, and Dr. Wm. F. Channing, while serving as my assistants in the geological survey of this region in 1847.

There is an immense supply of the richest kind of iron ore in these hills, and the Jackson Iron Company of Michigan has erected forges for making blooms for bar-iron—the quality of which is excellent. This region may be called one of the important iron-districts of Lake Superior, and will become of great value at some future day, when there shall be facilities for transportation of the ore to the coal districts of Ohio.

The granitic and sienite rocks occupy a considerable tract of land which has not yet been explored, and has only been run over by the linear surveyors, who have brought out fragments indicating the country to the westward of the sandstone, on the coast, to be crystalline; but the geological relations of the two rocks have never been ascertained, nor have their mineral contents been seen by any one.

Following the coast to l'Anse, or Keweenaw bay, we find on the south side of that bay large beds of slate rocks, some of which are good novaculite or whetstone slate. On the northern side of the bay we find a long series of cliffs of red sandstone perfectly horizontal, or at most wavy, extending all the way to Bête Gris. This sandstone, as before

observed at Sturgeon river, surrounds a mass of Silurian limestone containing shells, known as the *Pentamerus oblongus*, one of which I discovered in a piece of the limestone brought to me by one of my assistants in 1848.

At Lac la Belle and at Mt. Houghton the trap-rocks occur, and ride over the sandstone strata after passing between their layers; and at Mt. Houghton the igneous agency of this trap-rock has changed the fine sandstone into a kind of jasper.

At Lac la Belle, on Bohemian mountain, we have regular veins of the gray sulphuret of copper, containing a certain proportion of sulphuret of silver. Mines have been opened on this hill, but have not thus far proved successful, since the ore requires preparation by machinery not yet to be procured in that region.

Lac la Belle is a most beautiful sheet of water, bordered by mountains or steep hills, such as Mt. Houghton and Bohemian mountain, while on the south the horizontal plains of sandstone stretch away in the distance and are covered with a growth of forest trees. Leaving Lac la Belle, we pass down a serpentine stream which enters the great lake. Then following the coast, we pass beneath frowning crags and visit the falls of the Little Montreal stream. All this coast consists of trap-rocks, and of a kind of porphyry or compact red feldspar. No copper veins of any value occur on the coast this side of the point, though many companies have wasted their money in attempts to work calcareous spar veins that are perfectly dead lodes, or free from copper. At the extremity of the point, agates are found in amygdaloidal trap-rocks, and on the shore in the form of rolled pebbles.

Doubling the cape, we soon pass Horseshoe cove and reach Copper harbor, the site of Fort Wilkins, and one of the first places where copper ore was noticed by the French Jesuits; since whose time it has ever been known to the voyageurs on the lake under the name of the *green rock*.

While constructing the fort at Copper Harbor, numerous boulders of black oxide of copper, a very rare ore of that metal, were discovered; and before long a vein of this valuable ore was discovered in the conglomerate rocks, near the pickets which enclose the parade ground. This was found to be a continuation of the vein called the *green rock* at Hayes's Point, and was immediately opened by the Boston and Pittsburg Mining Company. Unfortunately, however, the vein was soon cut off, as I had ventured to predict it would be, by a heavy stratum of fine-grained red sandstone, which is not cupriferous. There the vein was found to consist wholly of calcareous spar, and of earthy minerals of no economical value.

The miners were then transferred to the cliff near Eagle river, where I had surveyed a valuable vein of native copper, mixed with silver. This vein has since been fully proved, and is one of the wonders of the world; there being solid masses of pure copper in the vein, of more than 100 tons weight each, besides masses of smaller size in other parts of the vein. This mine has produced about 900 tons of copper per annum, and is one of the most valuable copper mines in the country. It is a regular metallic vein, in amygdaloidal trap-rock, which underlies the compact trap-rock that caps the hill. The spot is one of

the finest locations for mining purposes that I have seen, the vein being exposed in the face of a cliff 300 feet above the level of the southwest branch of Eagle river. This vein, when first discovered, was far from disclosing its real value. A perpendicular vein of prehnite, six inches wide at the top of the cliff, was observed to contain a few particles of copper and silver, not amounting to more than two per cent. of the mass. About half way down the cliff this vein of prehnite was found to be a foot and a half wide, and contained five and a half per cent. of copper and some silver. It was thought worth while to drive a level into the lower part of the cliff, where, according to the rate of widening of the vein, it ought to be from two to three feet wide. This was done at my suggestion, and a magnificent lode of copper was disclosed; many lumps of solid copper of several hundred weight being found mixed with the vein-stone. On sinking a shaft at this point the solid metallic copper was soon found to occupy nearly the whole width of the chasm, and immense blocks of copper are now taken from this vein by the miners, who are working levels 300 or more feet below the mouth of the shaft. Large quantities of lumps of copper called barrel ore, and rock rich in smaller pieces of copper, mixed with silver, are now raised, this last being called stamp ore, and worked by stamping and washing the ore. From this stamp work about five thousand dollars' worth of pure silver is picked out by hand, and much is still left among the finer particles of metal and goes into the melted copper.

Suitable cupelling furnaces will ultimately be erected for the separation of all the silver from this rich argentiferous stamp work, lead being the appropriate metal for its extraction by eliquation and cupellation.

There are other valuable copper mines on Eagle river. The North American Company, which has one end of the cliff vein, called the South Cliff mine, and another on which their mining operations commenced some years ago, is at present in successful operation, and will add much to the exports of copper from the lake.

The Lake Superior Copper Company, which was the first that engaged in those mining operations that gave value to this district, opened its first mines on Eagle river in 1844. Under the very unfavorable state of things which then existed in the savage and uncivilized state of the country, and after two or three years' labor, they very unfortunately sold their mines, at the precise moment when they were upon the vein that now has been proved to be so very rich in copper and silver. The Phoenix Copper Company, formed of the remains of the Lake Superior Company, opened these mines anew; and now these give ample encouragement to the new adventurers, who will doubtless reap their reward in valuable returns for their labor and enterprise.

A new vein a little to the eastward of the first that was opened, on the river's borders, is said to give promise of valuable returns.

The Copper Falls mine, another branch of the Lake Superior Company, is also engaged in working valuable veins of native copper and silver, and has sent some of their metals to market.

The Northwest Company has a valuable mine a few miles from Eagle Harbor, and the metal raised therefrom is very rich and abundant, some of it being mixed with sprigs and particles of metallic silver. This mine, if opened with due skill, and in as bold a manner as that of

the Boston and Pittsburg Company at the cliff, cannot fail to prove of great value.

There is also a mine, owned by the Northwestern Company, near the Copper Falls mine, in the rear of Eagle Harbor, which is also rich in native copper, but I do not know its present condition.

A mine was also opened at Eagle Harbor, which gave a large yield of copper mixed with laumonite; but the mine was opened like a quarry, and was close to the waters of the lake. It was, therefore, soon flooded, and was consequently abandoned by the miners.

There is also a mine called the Forsyth, which is probably a valuable one, but it was not opened at the time I made my surveys. I obtained fine specimens of copper and silver from this vein, and sent them to Washington, with the large collection I made for the United States government, and they are now to be seen with my collection in the Smithsonian Institute.

A full and minute descriptive catalogue of the collection I made for the United States government was sent by me, as a part of my report, to the late Secretary of the Interior; but it has not been printed, though it was the most valuable part of my report, and is absolutely necessary for the full understanding thereof, and for learning the nature, locality, and value of each specimen in the collection made by me.

The rocks which contain native copper, on Keweenaw Point, are of that kind called amygdaloidal trap, which is a vesicular rock, formed by the interfusion of sandstone and trap-rock, and is the product of the combination of the two gaseous bubbles, or aqueous vapors, which have blown it into a sort of scoria at the time of its formation. It is in this rock that we find the copper-bearing prehnite and other vein-stones peculiar to the copper lodes. In Nova Scotia the same facts were observed by Mr. Alger and myself, only that there the copper is more abundant in the brecciated trap, or a trap tuff, which lies below the amygdaloid. Prehnite does not occur in Nova Scotia trap, but in its stead we find analcime, laumonite, and stilbite, as the minerals accompanying the native copper.

On Isle Royale we have phenomena similar to those observed on Keweenaw Point: long belts of trap-rock, with bands of a conglomerate of coarse water-worn pebbles, and strata of fine red sandstone.

The trap-rocks rest on the strata of sandstone, after passing between thin strata; and at the line of contact, and for a considerable distance, we have an amygdaloidal structure developed. It is probable that the trap-rock was poured over the sandstone strata while the whole was submerged, and that other beds of sandstone were deposited upon it; so that if this was the case, we should have a succession of deposits; but in some places it appears as if the trap had elevated the strata, and pushed itself through the sandstone by main force. Whatever may be the theory of this, it is certain that the strike of the strata and the direction of the included trap-rock are the same. On Keweenaw Point we have veins cutting across the general direction of the strata, and, of course, of the trap range, or, as the miners call it,

“*across the country* ;” while on Isle Royale the copper veins more frequently run parallel with the trap ranges, or “*with the country*.”

On Isle Royale, as near the Ontonagon river, on the south shore of the lake, massive epidote is the most common “vein-stone” that bears native copper—the metal being interspersed with it in its mass, or spread in thin sheets in the natural joints of the rock, with occasional masses or lumps of considerable magnitude. Near Rock Harbor, on Isle Royale, at a place called Epidote, and at another called after the most abundant mineral found in the veins, granular and compact epidote are the prevalent rocks accompanying the native copper. So, also, at Scovill’s Point the same associations prevail in the cupriferous veins.

The most important and productive mines of native copper on Isle Royale have been opened on the north side of the island ; but still the explorations have been too limited to allow of our judging of the value of the numerous veins upon that remarkable island. At Washington Harbor, upon Phelps’s island, several promising veins of native copper, associated with prehnite, occur ; but they have not been opened to a depth sufficient to establish their value. At Siskawit bay we find a large body of fine red sandstone bordering the trap-rocks, and shelving down into the lake at a very moderate angle. No valuable copper veins have been found at this place ; but the bay is one of the favorite stations for fishermen, who pack annually great numbers of siskawit, [*salmo siskawit*,] the fattest and finest species of the lake trout family, and large lake trout, namaycush, [*salmo amethystus*,] and white-fish, atihawmeg, [*coregonus albus*,] for the western market—from 900 to 1,000 barrels of these fine fish being salted and packed for sale each year.

The siskawit may be said to be peculiar to the shores of this island, few being caught on the shores of Keweenaw Point, and their migrations being extremely limited. They are caught readily by the hook, but are more commonly taken by means of gill-nets, which are set a yard or two from the bottom, in water of about 200 feet depth—the lower edge of the net being anchored by means of small stones attached to cords, while the upper edge is sustained vertically by means of thin laths or spindles of light wood. These nets are set at night, and are drawn in the morning.

The siskawit weighs from five to twenty pounds, while the lake trout often weighs as much as forty or fifty pounds.

Of all the fish caught upon the lake the siskawit is most prized by the natives on account of its fatness. White-fish are, however, much more delicate, and are preferred to all others by the white inhabitants and travellers.

The fisheries of Lake Superior are of great value to the people living upon the shores of the lake, and of some importance to the States bordering on the other and lower lakes, and the inland towns near their borders. To the poor Indian the bounties of the great lakes are of vital importance, for, without the fish, the native tribes would soon perish. Game has become exceedingly scarce in these thickly wooded regions, only a few bears, rabbits, and porcupines, and some

partridges, being found in the woods, and ducks in moderate numbers upon the waters.

Agriculture has scarcely begun to tame the wilderness in the vicinity of the copper mines, and the only crops raised are potatoes and a few hardy northern esculents. Small cereal grains—such as oats, barley and rye—will do well here as in Canada; and Indian corn of the northern varieties, in places not too much exposed to the chill breezes of the lake, thrives and ripens. English grasses have not yet been cultivated, but they will undoubtedly thrive as well on the south shore of Lake Superior as in New Brunswick and Nova Scotia. The native grasses are abundant and good, but are limited to small natural prairies or dried-up ponds. Judging from the luxuriant growth of forest trees—such as the maple, yellow birch, and other trees common to Maine and New Brunswick—we should judge that the soil was as good on the shores of Lake Superior as in that State and province.

Those who have only viewed the immediate coast of the lake, especially that now densely covered with a tangled growth of small, stunted, spruce and fir trees, would be likely to undervalue the agricultural resources of that region. They should remember that the cold air from the lake affects the vegetation only near its shores, and that farther inland the temperature more resembles that of Canada and the northern parts of New Hampshire and New York. This is not only shown by the native forest trees and the flowering plants, but also, where clearings have been made to a sufficient extent, by the agricultural produce raised upon the soil.

The forests also are filled with excellent timber for building purposes; and, where the growth is of mixed trees, such as sugar-maple, yellow birch, and pines, the white and yellow pines are of large dimensions, and furnish good lumber for sawing into boards, planks, and deals. Though there is little prospect at present of sending sawed boards from Lake Superior to the lower lake country, the time will come when this valuable timber will become of commercial importance; and that time will arrive the sooner if the ship canal now proposed at the Sault de Sainte Marie shall be constructed within any reasonable time.

The northern or British shore of Lake Superior has as yet been but little explored, either geologically or for minerals. One mine of blende, or sulphuret of zinc, richly mixed with spangles of native silver, and a vein of sulphuret of copper, have been discovered at Prince's bay, on the north shore, not far from Isle Royale. I know not what progress has been made in developing the ores of this mine, but at the time when I examined it, in 1847, it gave promise of rich returns. As a general thing the copper on the northern shores is mineralized by sulphur, and occurs as yellow copper pyrites, or as gray or black sulphurets of copper, while the copper on the south shore and on Isle Royale is mostly in the metallic state, and all the valuable working-mines are there opened for the native metal. This is a remarkable reversion of the usual laws of mineral veins, and was first discovered and pointed out by myself, and the first mines for native copper were opened by my advice and in accordance with my surveys, in 1844, as before stated. This remarkable region has certainly surprised both geologists

and miners by its wonderful lodes of native copper, and by the lumps of pure silver which have been opened and brought to light by enterprising companies and skilful miners.

One of the most remarkable associations of metals is here observed in the intermixture of pure silver with pure copper, the two metals being perfectly united without any alloying of one with the other. This singular condition of these two metals has puzzled chemists and mineralogists; and the solution of the problem of their mode of deposition in the veins is still undiscovered. It is obvious, from experiment, and from all we know of the affinities of metals for each other, that the native copper was not injected in a molten state into the veins. Although I have discovered the manner in which the copper veins were probably formed, I am far from having learned that of the silver, for we know of no volatile salt, or combination of that metal. This subject, which has occupied much of my time for several years, will be explained more fully at a future time, in a paper addressed to scientific men, as it does not form a suitable subject for a mere popular essay like the present communication; and, as before observed, is still an uncompleted study.

The rocks known to belong to the cupriferous formation of Lake Superior are all of igneous formation, or have been thrown up from the unknown interior of the globe in a molten state, and in long rents, having a somewhat crescentic shape, with the curve toward the north and west; the radius of the arc not being far from thirty miles in length on Keweenaw Point. The average width of this belt is not more than five miles, while its length is not less than two hundred miles. The Keweenaw belt of trap runs by the Ontonagon river, narrowing to only a mile in width in some parts of its course, and then widening rapidly as it extends into Wisconsin.

On the Ontonagon river it is about four miles wide; and it is there highly cupriferous, several important veins, now wrought by mining companies, having been discovered by the miners in their employ, on this river and in its vicinity. The Minnesota mine has been, thus far, the most successful of those opened upon this part of the trap range. It is remarked by all the geologists and miners who have examined these rocks, that the copper ore lies in the amygdaloidal variety of them; and that the veins of native copper are pinched out into narrow sheets in the harder trap-rock which overlies the amygdaloid. This fact was first noticed by Mr. Alger and myself in the geological survey of Nova Scotia, made by us in 1827; and the private geological surveys which I made on Keweenaw Point, in 1844 and 1845, proved it to be true also in that region; so that it is a law now well known to the miners upon the Lake Superior land district. It was discovered, also, that the copper dies out in the veins when they cut through sandstone rocks. The reason for this I have discovered, and proved by experiment and observation, and shall farther verify when ordered to complete my government survey of the mineral lands of the United States in Michigan.

Much may be expected from the explorations now going on upon the northern shore of the lake, under the authority of the Canadian government, since the wisdom of that province has perceived the importance

of rendering her researches and investigations into the mineral treasures of her soil the most effectual and complete, and has consequently intrusted them to men the most thoroughly competent to the task.

Experienced miners are often good observers, and to them we owe much valuable observation; but they are not often sufficiently acquainted with geology and mineralogy to enable them to judge of the value of a mine in a country with which they are not familiar; and they cannot describe what they discover so as to make their observations intelligible or valuable to others. Miners are good assistants, but poor principals, in any geological survey. Hence the British government employs her most learned and practical geologists in her surveys in Canada, and allows them time and means to accomplish in a proper manner their important work.

On the northern shores of the lake, as before observed, we find most commonly the ores of copper; while in the trap-rocks, on the south side, the metal occurs in its pure metallic state. The ores which have been found on Lake Huron already promise to give ample profits to the owners of the mine; and other localities are known, where there is a reasonable prospect of successful mining, on the northern borders of Lake Superior.

Trade will spring up between us and our Canadian neighbors as soon as their shore becomes inhabited, and, it is to be hoped, will prove of reciprocal advantage to the two countries.

C. T. JACKSON.

THE LAKES.—GENERAL VIEW.

This is a brief and rapid outline of a country, and a system of waters, strangely adapted by the hand of Providence to become the channel of an inland navigation, unequalled and incomparable the world over; through regions the richest of the whole earth in productions of all kinds—productions of the field, productions of the forest, productions of the waters, productions of the bowels of the earth—regions overflowing with cereal and animal wealth, abounding in the most truly valuable, if not most precious, metals and minerals—lead, iron, copper, coal—beyond the most favored countries of the globe; regions which would, but for these waters, have been as inaccessible as the *steppes* of Tartary or Siberia, and the value of the productions whereof must have been swallowed up in the expense of their transportation.

And this country, these waters, hitherto so little regarded, so singularly neglected, the importance of which does not appear to be so much as suspected by one man in ten thousand of the citizens of this great republic, is certainly destined to excel in absolute and actual wealth, agricultural, mineral, and commercial, the aggregate of the other portions of the United States, how thrifty, how thriving, how energetical and industrious soever they may be.

Of these lakes and rivers, during the year 1851, the commerce, foreign and coastwise, was estimated at three hundred and twenty-six million five hundred and ninety-three thousand three hundred and thirty-five dollars; transacted by means of an enrolled tonnage of

seventy-seven thousand and sixty-one tons of steam, and one hundred and thirty-eight thousand nine hundred and fourteen tons of sail, or an aggregate licensed tonnage of two hundred and fifteen thousand nine hundred and seventy-five tons.

In the prosecution of this commerce, it would appear, as nearly as can be ascertained, that there was entered an aggregate at all the lake ports together, of 9,469,506 tons during the season; and cleared at the same ports 9,456,346 tons—showing an average of nearly forty-four entrances of the whole lake tonnage during the season.

Of the above amount of commerce the value of \$314,473,458 went coastwise, and \$12,119,877 Canadian or foreign.

The returns of the coasting trade are, it is true, very imperfect and unsatisfactory, as are also the estimates founded upon them; but, as approximations only can be arrived at under the circumstances, the best use has been made of the returns received; and the results arrived at cannot but appear strange to those not immediately conversant with the character of the lake trade.

According to these estimates the coasting trade is divided into exports, \$132,017,470; and imports, \$182,455,988; showing a difference of \$50,438,518, when there should have been a perfect balance. This discrepancy arises from a higher rate of valuation at the place of importation than at that of exportation, or *vice versa*. Products of agriculture, the forests, and the mines, are easily valued at a correct rate; whereas one great division of articles of importation, classed as merchandise, including everything from the finest jewelry and choicest silks to the most bulky and cheapest articles of grocery, can scarcely be reduced to a correct money value.

The discrepancy, then, arises from the valuation of the articles per ton being fixed at too high a figure at one port, or too low at another. Which valuation is the more correct, it is impossible to ascertain under the present system of regulations.

Taking the lowest estimate, the actual money value of the coastwise exports of these lakes is \$132,000,000, in round numbers, being the mere value of the property passing over the lakes, without including passage money, passengers carried, cost of vessels, expenses of crews, or anything in the least degree extraneous.

The amount of grain alone which was transported during the season of 1851, amounted to 1,962,729 barrels of flour, and 8,119,169 bushels of wheat—amounting to what equals an aggregate of 17,932,807 bushels of wheat; 7,498,264 bushels of corn; 1,591,758 bushels of oats; and 360,172 bushels of barley; in all 27,382,801 bushels of cereal produce. This branch of traffic, it is evident, must continually increase with the increasing influx of immigration, and the bringing into cultivation of the almost unbounded tracts of the very richest soil, on which the forest is now growing, which surround the lakes on almost every side. And the like may be predicated of the exploitation of the mines, the prosecution of the fisheries, and the bringing to light of all natural resources—facilities of transportation causing immigration, immigration improving cultivation and production, and these two originating commerce, and multiplying a thousand-fold the wealth, the rank, and the happiness of the confederacy.

No. 1.—Statement exhibiting the trade and tonnage, American and Canadian, the tonnage enrolled, and the amount of duties collected in each of the collection districts on the lakes, and the aggregates of the whole lake commerce, for the year ending Dec. 31, 1851.

Names of the several collection districts, commencing at the east and proceeding west.	COASTING TRADE.		CANADIAN OR FOREIGN TRADE.			
	Exports.	Imports.	Exports.			
	Value.	Value.	Domestic produce.	Foreign merchandise.	Foreign merchandise entitled to drawback.	Aggregate exports.
Vermont.....			Value.	Value.	Value.	Value.
ChAMPLAIN.....	\$20,858,426	\$3,455,194	\$458,006	\$108,712	\$200,854	\$767,572
OswEGatchie*.....	918,587	2,424,145	375,549	267,587	105,866	749,002
Cape Vincent.....			252,050	98,424	268,174	618,648
Sackett's Harbor.....	303,258	497,809	32,389			32,389
Oswego.....	11,471,071	6,083,036	21,980			21,980
Genesee.....			2,291,911			3,007,811
Niagara.....	438,634		445,967	654,765	261,135	913,554
Buffalo.....	50,674,975		426,761	335,708	131,979	585,784
Presque Isle.....	1,601,857		498,841	59,059	99,964	613,948
Cuyahoga.....	12,026,497		15,415	96,949	18,158	15,415
Sandusky.....	6,459,659		284,946			284,936
Miami.....	7,847,808		99,088			99,088
Detroit.....	6,961,430		66,304			66,304
MacINac.....	2,000,000		109,690	5,344		115,014
MilWAUKIE.....	4,564,797					
Chicago.....	5,895,471					
Grand totals.....	132,017,470	182,455,988	5,495,082	1,626,548	1,086,130	8,207,750

* Had the coastwise exports from this district been valued at the same price per ton, in the article of merchandise, which ruled in the valuation of some other districts, the amount of exports would have been increased by the sum of \$2,725,269, or fully three hundred per cent.

STATEMENT—Continued.

Names of the several collection districts, commencing at the east and proceeding west.	CANADIAN OR FOREIGN TRADE.						Aggregate trade amount of duties collected.
	Imports.				Aggregate trade with foreign countries.	Aggregate imports.	
	Foreign goods and produce free of duty.	Foreign goods and produce in bond.	Foreign goods and produce paying duty.	Aggregate imports.			
	<i>Value.</i>	<i>Value.</i>	<i>Value.</i>	<i>Value.</i>	<i>Value.</i>	<i>Value.</i>	
Vermont	\$23,779	\$15,206	\$227,412	\$266,417	\$1,033,989	\$47,152	
ChAMPLAIN	13,803	27,994	252,487	294,284	1,043,286	51,849	
OSWEGATCHIE	7,775	115,286	91,459	214,520	893,168	19,367	
Cape Vincent .....	.....	.....	61,358	61,358	93,747	13,705
Sackett's Harbor .....	.....	.....	56,119	56,119	78,099	16,400
OSwego .....	.....	.....	435,153	1,784,412	4,992,223	89,760
Genesee	14,911	1,334,348	49,040	49,040	962,694	10,539	
Niagara	10,904	.....	93,081	103,985	689,769	19,957
Buffalo	20,272	100,490	386,744	507,506	1,121,454	92,357	
Presque Isle	3,020	.....	435	3,455	18,870	89
Cuyahoga .....	.....	.....	360,634	360,634	645,570	93,784
Sandusky .....	.....	.....	75,628	75,628	174,716	5,759
Miami .....	.....	.....	26,470	26,470	92,774	7,519
Detroit .....	.....	.....	98,541	98,541	213,555	23,034
Mackinac .....	.....	.....	3,967	3,967	3,967	818
Milwaukee .....	.....	.....	.....	.....	.....	.....
Chicago .....	.....	.....	5,811	5,811	121,996	1,386
Grand totals	94,464	1,593,324	2,224,359	3,912,147	12,119,877	493,475	

STATEMENT—Continued.

Names of the several collection districts, commencing at the east and proceeding west.	AGGREGATE OF LAKE TRADE.				TONNAGE.		
	Grand total of the lake commerce, 1851.	Enrolled.		Entered.	Cleared.		
		Steam.	Sail.				
Vermont.....Vt.....	Value.	Tons.	Tons.	Tons.	Tons.		
Champlain.....N. Y.....	\$26,390,895	3,240	692	197,500	197,500		
Oswegatchie.....do.....	4,175,900	917	3,291	351,427	359,987		
Cape Vincent.....do.....	89,747	1,985	2,496	439,930	439,930		
Sackett's Harbor.....do.....	879,166	343	6,763	348,436	347,393		
Oswego.....do.....	22,546,330	4,382	21,941	721,383	685,793		
Genesee.....do.....	962,694	429	2,957	212,794	212,794		
Niagara.....do.....	1,360,087	100	506	425,660	425,660		
Buffalo.....do.....	89,268,537	22,438	23,620	1,536,089	1,551,441		
Presque Isle.....Penn.....	3,828,309	5,961	2,249	316,121	314,640		
Cuyahoga.....Ohio.....	35,476,296	11,355	24,716	775,720	755,690		
Sandusky.....do.....	22,619,732	73	4,785	509,782	504,633		
Miami.....do.....	30,928,354	1,153	2,083	418,892	419,942		
Detroit.....Mich.....	27,591,362	21,944	18,475	905,640	920,690		
Mackinac.....do.....	5,003,967	1,747	1,409	253,600	253,600		
Milwaukee.....Wis.....	24,125,510	287	2,659	1,250,000	1,250,000		
Chicago.....Ill.....	31,342,519	707	22,396	806,432	807,353		
Grand totals.....	326,593,335	77,061	138,914	9,469,506	9,456,346		

No. 2.

Statement showing the quantity and value of the principal articles imported into each collection district on the lake frontier, from Canada, during the year ending December 31, 1851.

District.	THE FOREST.										THE WATERS.			
	Sawed lumber.		Timber—square and round.		Shingles.		Railroad ties.		Furs.		Ashes—pot and pearl.		Fish—all kinds, reduced to—	
	M feet.	Value.	M cub. ft.	Value.	M.	Value.	No.	Value.	Value.	Value.	Casks.	Value.	Barrels.	Value.
Vermont.....	10,476	\$48,181	252	\$6,688	1,094	.....	.....	.....	\$1,344	234	\$7,188	250	\$1,862
Champlain.....	10,668	50,088	939	44,724	1,094	\$712	32,254	\$3,032	1,800	.....	.....	536	3,636
Oswegatchie.....	279	1,594	2	40	72	66	.....	.....	1,500	201	3,864	98	445
Cape Vincent.....	80	408	42	1,104	.....	.....	3,558	177	.....	.....	.....	.....	.....
Sackett's Harbor.....	104	486	18	424	.....	.....	.....	.....	347	.....	.....	.....	.....
Oswego.....	62,527	326,364	235	10,891	6,481	6,457	18,065	761	132	614	11,675	113	347	
Genesee.....	3,028	14,206	8	168	4,694	4,499	.....	.....	.....	.....	.....	989	4,070
Niagara.....	2,901	14,474	.....	.....	.....	.....	1,981	256	3,543	.....	.....	1,108	.....
Buffalo.....	30,396	141,024	1,234	35,888	2,749	2,737	16,424	2,324	.....	263	4,997	.....	.....
Presque Isle.....	128	257	1	23	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cuyahoga.....	6,471	26,496	.....	.....	1,842	1,886	.....	.....	.....	.....	.....	2,491	7,267
Sandusky.....	344	1,504	.....	.....	39	44	.....	.....	43	.....	.....	40	85
Miami.....	313	1,306	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Detroit.....	286	1,181	60	1,653	.....	.....	.....	.....	2,761	161	2,421	1,672	5,692
Mackinac.....	64	264	.....	.....	187	243	.....	.....	.....	.....	.....	399	799
Milwaukee.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	317
Chicago.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	128,065	637,833	2,791	101,603	17,158	16,644	72,282	6,550	11,470	1,473	30,145	7,776	24,490	

STATEMENT—Continued.

COLONIAL AND LAKE TRADE.

DISTRICTS.		AGRICULTURE AND MANUFACTURES.											
		Flour, of wheat.		Wheat.		Oats.		Barley.		Rye.		Peas and beans.	
Barrels.	Value.	Bushels.	Value.	Bushels.	Value.	Bushels.	Value.	Bushels.	Value.	Bushels.	Value.	Bushels.	Value.
Vermont.....				101,565	\$24,933								
Champlain		626	\$1,034	162,902	32,174	8,367	\$3,322	987	\$308	5,535	\$2,229	12,397	3,685
Oswegatchie.....	30,610	\$94,694	10,445	28,471	5,417	2,657	1,066	1,201	491	6,348	2,503	6,348	2,503
Cape Vincent	5		133	902	136	8		580	116	146	38		
Sackett's Harbor	12		101	108	25	2,822	1,065	73	29				
Oswego.....	259,875	861,931	441,267	78,771	16,582	23,511	14,543	53,950	19,300	60,418	22,134		
Genesee.....	17		108	3,564	949								
Niagara	57	202	4,581	2,194	513	67	36						
Buffalo	11,960	39,867	101,655	66,075	594	19,615	11,769	87	35	1,157	573		
Presque Isle.....													
Cuyahoga.....													
Sandusky			38			3,097	1,333						
Miami													
Detroit.....			450	250	490	4,711	1,931					1,325	646
Machinac	15	45		2,404		6,315	3,356					1,906	376
Milwaukee													
Chicago.....													
Total.....	302,548	996,830	798,430	534,016	383,259	71,170	38,923	56,878	55,279	89,296	32,675		

STATEMENT—Continued.

AGRICULTURE AND MANUFACTURES.

Districts.	Potatoes.		Eggs.		Hops.		Butter.		Wool.		Flax seed.		Clover and grass seed.	
	Bushels.	Value.	Dozen.	Value.	Pounds.	Value.	Cwt.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Vermont.....	5,958	\$923	250,279	\$12,584	29,200	\$2,540	1,724	\$13,309	71,089	\$9,138	.....	.....	.....	.....
Champlain.....	2,298	478	275,033	13,727	35,445	2,129	707	5,029	9,851	1,307	.....	.....	.....	.....
Oswegatchie.....	11,959	2,148	19,186	1,082	.....	.....	1,716	13,723	55,598	7,692	.....	.....	.....	.....
Cape Vincent.....	133	19	.....	.....	.....	.....	.....	.....	14,664	2,504	.....	.....	.....	1,950 \$4,000
Sackett's Harbor.....	11,476	2,361	5,050	311	.....	.....	.....	.....	6,273	8,856	.....	.....	.....	.....
Oswego.....	.....	.....	.....	.....	.....	.....	.....	.....	82,908	14,158	.....	.....	.....	16,675 4,635
Genesee.....	.....	.....	.....	.....	.....	.....	.....	.....	64,447	10,217	.....	.....	.....	.....
Niagara.....	138	42	87	5	3,655	395	129	1,080	95,604	13,404	.....	.....	.....	.....
Buffalo.....	1,355	418	4,894	366	.....	.....	74	652	115,878	18,068	.....	.....	.....	1,535 3,734
Presque Isle.....	5	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cuyahoga.....	264	68	.....	.....	3,000	378	.....	.....	2,200	422	.....	.....	.....	6 4
Sandusky.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miami.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Detroit.....	.....	1,079	18,852	952	.....	.....	253	1,541	20,551	3,044	.....	.....	.....	.....
Mackinac.....	696	147	255	23	.....	.....	2	20	.....	.....	.....	.....	.....	.....
Milwaukee.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	34,282	7,685	573,633	29,050	71,300	5,442	5,297	40,920	539,063	80,810	5,770	4,428	20,166	12,373

STATEMENT—Continued.

AGRICULTURE AND MANUFACTURES.

Districts.	Fruit.		Rags.		Horses.		Cattle.		Sheep.		Swine.		Beef and pork.	
	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Barrels.	Value.
Vermont.....			\$2,093	2,310	\$53,865	2,585	\$28,133	5,953	\$5,650	91	\$211	290		\$2,776
Champlain.....			2,609	1,871	44,282	808	5,319	163	171	50	107	145		859
Oswegatchie.....	\$94		794	777	19,717	2,981	21,039	5,299	3,693	464	531	45		343
Cape Vincent.....				177	4,783	2,172	18,082	4,002	2,931	634	574			
Sackett's Harbor.....			128	48	1,467	39	371	180	2,202					
Oswego.....				101	3,566	35	397	1,647	1,165			6		32
Genesee.....			470	78	6,072	161	2,580	330	567					
Niagara.....	26		158	344	17,992	1,985	26,401	1,174	2,541	1,279	2,886	19		154
Buffalo.....	518			114	3,879	530	3,188	464	526	1,492	2,415	31		248
Presque Isle.....				1	20									
Cuyahoga.....	72			5	228	1	10							
Sandusky.....				6	163	14	247							
Miami.....														
Detroit.....				350	11,073	347	4,189							
Mackinac.....				3	70	92	1,337	71	106			6		57
Milwaukee.....														
Chicago.....				4	320	2	35							
Total.....	1,732		6,252	6,189	167,397	11,752	111,338	19,283	17,552	4,379	7,185	542		4,469

STATEMENT—Continued.

Districts.	PRODUCTS OF MINES.										MISCELLANEOUS.	
	Railroad iron.		Pig and bar iron.		Coal.		Salt.		Hides, skins, &c.	Unenumerated.	Total value.	
	Tons.	Value.	Tons.	Value.	Tons.	Value.	Bushels.	Value.				
									Value.	Value.		
Vermont.....			15	\$201	255	\$255	19,713	\$1,204	\$162	\$40,947	\$266,417	
Champlain.....	305	\$8,616	77	1,705			21,088	1,935		57,071	294,284	
Oswegatchie.....			62	3,793	40	183				21,427	214,520	
Cape Vincent.....			951	22,396					677	2,266	61,358	
Sackett's Harbor.....	2,045	49,476	3	42					316	756	56,119	
Oswego.....			6	143					2,377	20,480	1,784,412	
Genesee.....									306	13,862	49,040	
Niagara.....			86	678					1,732	8,409	103,985	
Buffalo.....	5,091	136,139	3	16			6,000	1,089		47,926	360,634	
Presque Isle.....	10,918	264,587	851	8,847			550	175		75	75,628	
Cuyahoga.....	2,218	72,388	24	179			800	264		9,720	26,470	
Sandusky.....	768	22,248	239	857					524	856	98,541	
Miami.....	1,801	46,423									3,967	
Detroit.....												
Mackinac.....												
Milwaukee.....			166	1,688			17,024	2,799			5,811	
Chicago.....												
Total.....	23,146	599,897	2,483	40,545	295	498	65,175	7,466	14,388	254,711	3,912,147	

STATEMENT—Continued.

Districts.	AGRICULTURE.											
	Animals.		Pork and beef.		Flour.		Tallow and lard.		Butter.		Cheese.	
	No.	Value.	Barrels.	Value.	Barrels.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Vermont.....	179	\$2,013	41	\$520	.....	.....	13,018	\$805	.....	.....	.....	.....
Champlain, N. Y. ....	.....	.....	.....	.....	.....	.....	19,100	1,246	.....	.....	.....	.....
Oswegatchie, N. Y. ....	.....	.....	.....	.....	69	\$267	156,600	10,440	.....	.....	6,814	\$867
Cape Vincent, N. Y. ....	.....	.....	140	1,998	.....	.....	.....	.....	28,900	\$3,979	24,004	1,290
Sackett's Harbor, N. Y. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,000	290
Oswego, N. Y.	5	400	64	960	.....	.....	20,819	1,798	2,100	250	12,048	737
Genesee, N. Y.	190	2,384	.....	.....	1	4	71,700	7,538	.....	.....	.....	.....
Niagara, N. Y.	20	1,665	.....	.....	.....	.....	200,491	13,291	.....	.....	60,232	3,506
Buffalo, N. Y.	25	1,805	668	7,440	.....	.....	154,191	10,862	.....	.....	44,565	2,496
Presque Isle, Penn. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cuyahoga, Ohio. ....	.....	.....	430	5,238	20,097	68,099	402,800	16,405	.....	.....	12,569	828
Sandusky, Ohio. ....	.....	.....	1,442	17,306	30	98	3,000	160	.....	.....	.....	.....
Miami, Ohio. ....	.....	.....	3,698	48,074	2,556	8,946	24,310	5,944	.....	.....	.....	.....
Detroit, Mich.	8	112	217	2,550	23,062	72,833	13,600	1,014	.....	.....	1,750	170
Mackinac, Mich. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milwaukee, Wis. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Ill. ....	.....	.....	4,024	48,915	.....	.....	635,800	35,752	1,450	146	.....	.....
Total.....	427	8,379	10,724	133,001	45,835	150,307	1,716,429	105,255	32,450	4,375	170,789	10,341

STATEMENT—Continued.

Districts.	AGRICULTURE.											
	Hides and skins.		Wheat.		Corn.		Rice.		Other grain.		Fruits.	Hops.
	Number.	Value.	Bushels.	Value.	Bushels.	Value.	Pounds.	Value.	Bushels.	Value.	Value.	Value.
Vermont, Vt.....	131, 100	\$14, 153					310, 944	\$5, 317	499	\$377	\$2, 816	
Champlain, N. Y.....	30, 500	1, 800	148	\$131			304, 120	3, 985				
Oswegatchie, N. Y.....							36, 750	1, 773	2, 558		4, 066	
Cape Vincent, N. Y.....										1, 148		
Sackett's Harbor, N. Y.....												39
Oswego, N. Y.....	209, 732	28, 366	412	340	5, 640	\$2, 820	139, 500	11, 039			2, 617	\$2, 321
Genesee, N. Y.....												
Niagara, N. Y.....	8, 813	847					12, 295	543				35
Buffalo, N. Y.....												
Presque Isle, Penn.....												
Cuyahoga, Ohio.....			183, 906	129, 453	103, 540	44, 741						
Sandusky, Ohio.....			121, 672	80, 605					8, 742	5, 399		
Miami, Ohio.....	32	48										
Detroit, Mich.....			2, 862	2, 146	8, 000	3, 340						
Mackinac, Mich.....					3, 075	907						
Milwaukee, Wis.....												
Chicago, Ill.....	697	2, 234	15, 320	9, 192	42, 643	14, 827			350	105		
Total.....	380, 874	47, 448	324, 320	221, 867	162, 898	66, 635	803, 609	22, 657	12, 149	7, 029	9, 538	2, 356

STATEMENT—Continued.

Districts.	AGRICULTURE.				MANUFACTURES.								
	Tobacco.		Hemp.		Broom-corn.		Other articles of agriculture.	Wood, & manu- factures.	Iron, and manu- factures.	Cotton, & manu- factures.	Wool, and manu- factures.	Dry goods.	Furniture.
	Pounds.	Value.	Pounds.	Value.	Tons.	Value.							
Vermont, Vt.....	274,993	\$35,433	30,000	\$1,970	.....	.....	\$570	\$5,599	\$75,847	\$108,977	\$49,887	\$31,230	\$3,265
Champlain, N. Y.....	410,092	41,317	22,000	1,340	.....	.....	.....	3,648	53,507	63,932	8,137	37,240	6,146
Oswegatchie, N. Y.....	206,784	41,971	44,000	2,702	17	\$745	340	2,183	40,335	28,702	42,243	8,524	7,985
Cape Vincent, N. Y.....	.....	.....	.....	.....	.....	.....	289	2,645	3,900	.....	.....	.....	.....
Sackett's Harbor, N. Y.....	799,180	165,827	20,400	1,319	.....	.....	1,850	4,605	4,605	10,397	.....	137	150
Oswego, N. Y.....	25,000	3,030	.....	.....	.....	.....	1,850	5,688	174,087	84,736	213,555	11,041	13,828
Genesee, N. Y.....	87,882	9,785	164,367	9,761	256	4,982	17,629	29,884	71,840	92,776	56,799	12,816	6,122
Niagara, N. Y.....	49,259	10,177	.....	.....	484	8,317	.....	6,294	18,277	10,797	5,571	7,291	.....
Buffalo, N. Y.....	.....	.....	.....	.....	50	1,808	.....	22,744	94,245	.....	.....	107,554	13,787
Presque Isle, Penn.....	.....	.....	.....	.....	.....	.....	.....	.....	1,480	.....	.....	35	30
Cuyahoga, Ohio.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sandusky, Ohio.....	.....	.....	.....	.....	.....	.....	.....	.....	564	.....	.....	.....	.....
Miami, Ohio.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Detroit, Mich.....	.....	.....	.....	.....	.....	.....	.....	7,129	4,877	2,130	.....	945	.....
Mackinac, Mich.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milwaukee, Wis.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Ill.....	.....	.....	52,000	2,602	.....	.....	1,109	688	175	.....	.....	200	.....
Total.....	1,853,190	307,540	332,767	19,694	807	15,852	21,787	86,502	453,739	402,447	376,192	217,013	51,313

STATEMENT—Continued.

Districts.	MANUFACTURES.								NATURAL.				Unenumerated articles.	Total.	
	Leather and manufactures.	Books and stationery.	Drugs and medicines.	Spirits, distilled.	Tobacco manufactures.	Groceries, &c.	Glass, and manuf-actures.	Earthen and stone-ware.	Stone, lime, clay, and gypsum.	Salt.		Coal.			
										Value.	Value.	Value.			Value.
Vermont, Vt.....	\$26,189	\$13,296	\$5,767	\$1,125	\$1,346	\$6,127	\$9,615	\$645	\$3,177	.....	.....	\$544	\$47,770	\$458,006
Champlain, N. Y.....	26,368	7,664	1,150	.....	2,080	5,720	.....	.....	2,583	.....	.....	.....	101,538	375,549
Oswegatchie, N. Y.....	17,314	3,849	541	2,179	12	8,611	1,950	150	369	.....	.....	141	13,981	252,050
Cape Vincent, N. Y.....	.....	.....	.....	.....	.....	.....	14,313	.....	.....	.....	.....	.....	3,460	33,189
Sackett's Harbor, N. Y.....	.....	596	.....	.....	.....	1,143	.....	.....	22	.....	.....	.....	3,158	21,980
Oswego, N. Y.....	55,942	12,846	13,248	4,868	23,955	8,625	48,902	5,194	30,084	\$87,192	22,193	.....	1,229,387	2,291,911
Genesee, N. Y.....	12,168	31,784	11,596	.....	.....	6,463	5,246	.....	4,443	.....	.....	.....	98,877	21,980
Niagara, N. Y.....	10,544	6,504	.....	1,522	.....	2,910	10,530	.....	.....	239	.....	.....	288,948	426,761
Buffalo, N. Y.....	23,427	17,167	10,393	2,286	.....	56,990	9,919	.....	4,257	2,272	2,793	.....	71,245	498,841
Presque Isle, Penn.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,415
Cuyahoga, Ohio.....	.....	.....	.....	.....	.....	.....	.....	293	3,652	93	8,270	.....	8,024	284,937
Sandusky, Ohio.....	.....	.....	.....	.....	.....	.....	6	.....	24	.....	.....	.....	156	99,088
Miami, Ohio.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66,304
Detroit, Mich.....	2,260	223	.....	382	.....	.....	.....	.....	.....	1,302	1,172	.....	13,812	109,690
Mackinac, Mich.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milwaukee, Wis.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Ill.....	.....	.....	.....	33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	174,212	93,929	42,695	12,395	27,393	96,589	94,581	6,282	48,611	91,123	48,814	.....	1,807,993	5,495,873

STATEMENT—Continued.

Districts.	MANUFACTURES AND AGRICULTURE.									
	Dyes.	Sugars.	Groceries not enumerated.	Oranges.	Lemons.	Raisins.	Fruits.	Cigars.	Nuts.	Pepper.
Vermont.....	\$837	\$29,079	\$2,452			\$2,605	\$3,481	\$2,632	\$1,312	\$725
Champlain.....	3,395	24,399	5,661			3,291	2,582	6,340	2,976	3,540
Oswegatchie.....	96	9,954	556			3,306	715	839		
Cape Vincent.....										
Sackett's Harbor.....										
Oswego.....	1,735	107,526	5,850			8,626	5,626	5,563	180	490
Genesee.....										
Niagara.....					\$2,490	5			46	
Buffalo.....	468	6,000	315	\$343	743	1,191	229		473	302
Presque Isle.....										
Cuyahoga.....										
Sandusky.....										
Miami.....										
Detroit.....	247				58	226	57		5	54
Mackinac.....										
Milwaukee.....										
Chicago.....										
Total.....	6,778	176,967	14,834	343	3,233	19,250	12,627	19,130	4,942	5,111

Value.

STATEMENT—Continued.

Districts.	MANUFACTURES AND AGRICULTURE.								Total.	
	Barthenware.	Jewelry.	Hardware.	Manufactur's of wool.	Manufactur's of cotton.	Manufactures of silk.	Dry goods.	Hides and leather manufactures.		Unenumerated articles.
	Value.									
Vermont.....	\$287	\$21,433	\$9,209	\$8,111	\$7,885	\$40,006	\$33,550	\$11,949	\$23,979	\$309,566
Champlain.....	6,318	228	7,783	395	4,383	9,174	4,601	30,873	46,195	373,453
New York.....		3,534	10,974	18,544	11,522	16,915	159,516	16,687	12,483	366,598
Oswegatchie.....										
do.....										
Cape Vincent.....										
do.....										
Sackett's Harbor.....										
do.....										
Oswego.....	4,185	3,411	23,440	54,873	62,868	48,777	30,313	27,609	46,515	915,900
do.....	279	1,471		100,671	140,363	60,975	108,465	1,661	42,331	467,087
Genesee.....		4,164	1,751	9,350	13,038	41,670	21,270		5,257	159,023
Niagara.....	17									
do.....										
Buffalo.....	1,685		4,255				16,639	4,736	2,448	115,107
do.....										
Presque Isle.....										
Pennsylvania.....										
Cuyahoga.....										
Ohio.....										
Sandusky.....										
do.....										
Miami.....										
do.....										
Detroit.....										
Michigan.....			9							
Mackinac.....										
do.....										
Milwaukee.....										
Wisconsin.....										
Chicago.....										
Illinois.....										
Total.....	12,771	34,241	57,421	191,444	240,055	217,517	374,354	93,802	179,266	2,712,678

No. 5.—Statement exhibiting the export trade of the collection districts on the lake frontier with Canada during the year 1851, distinguishing between foreign and domestic produce, and showing what portion of the former was entitled to drawback, and whether exported in American or British vessels.

Districts.	ENTITLED TO DRAWBACK.			FOREIGN MERCHANDISE.			DOMESTIC PRODUCE.			AGGREGATE.	
	American vessels.	British vessels.	Total.	American vessels.	British vessels.	Total.	American vessels.	British vessels.	Total.	Exports.	Imports.
	Value.	Value.	Value.	Value.	Value.	Value.	Value.	Value.	Value.	Value.	Value.
Vermont.....	\$200,854	.....	\$200,854	\$108,712	.....	\$108,712	\$458,006	.....	\$458,006	\$767,572	\$366,417
ChAMPLAIN.....	105,866	.....	105,866	267,587	.....	267,587	375,549	.....	375,549	749,002	294,284
OSWEGATCHIE.....	74,367	\$193,807	268,174	59,620	\$38,804	98,424	52,369	\$199,681	252,050	618,648	214,520
Cape Vincent.....	.....	.....	.....	.....	.....	.....	32,389	.....	32,389	32,389	61,358
Sackett's Harbor.....	.....	.....	.....	.....	.....	.....	21,463	.....	21,463	21,980	56,119
OSwego.....	90,532	170,603	261,135	287,288	367,477	654,765	1,136,092	1,155,819	2,291,911	3,207,811	435,153
Genesee.....	.....	131,979	131,979	.....	335,708	335,708	62,015	383,952	445,967	913,804	49,040
Niagara.....	.....	75,242	75,242	30,942	28,117	59,059	212,924	212,839	426,761	585,784	103,985
Buffalo.....	24,722	.....	24,722	.....	.....	.....	263,305	235,536	498,841	613,948	507,506
Presque Isle.....	8,510	9,648	18,158	58,406	38,543	96,949	12,385	3,030	15,415	15,415	3,455
Cuyahoga.....	.....	.....	.....	.....	.....	.....	151,767	133,179	284,946	284,936	360,634
Sandusky.....	.....	.....	.....	.....	.....	.....	33,239	65,849	99,088	99,088	75,628
Miami.....	.....	.....	.....	.....	.....	.....	2,940	63,364	66,304	66,304	26,470
Detroit.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mackinac.....	.....	.....	.....	5,104	240	5,344	68,969	40,721	109,690	115,014	98,541
Milwaukee.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	504,851	581,279	1,086,130	817,659	808,889	1,626,548	2,976,420	2,518,662	5,495,052	8,207,730	3,912,147

No. 6.—Statement giving a tabular view of the Canadian import trade of the lake districts, and also the tonnage entering and clearing at each port, distinguishing American from British vessels, and steam from sail, during the year ending December 31, 1851.

Districts.	IMPORTS.				Duties.	
	Bonded.	Free.	Dutiable.			Amount.
			American vessels.	British vessels.		
Value.						
Vermont.....	\$15,206	\$23,779	\$251,211	.....	\$47,152
ChAMPLAIN.....	27,994	13,803	238,241	\$24,246	51,849	
Oswegatchie.....	115,286	7,775	27,722	63,727	19,367	
Cape Vincent.....	.....	.....	61,358	.....	13,705
Sackett's Harbor.....	.....	.....	5,844	.....	16,400
Oswego.....	1,384,348	14,911	174,712	50,274	89,760	
Genesee.....	.....	.....	8,456	260,941	10,539
Niagara.....	.....	10,904	42,115	40,584	19,957
BuFALO.....	100,490	20,272	147,524	61,870	92,357	
Presque Isle.....	.....	3,020	1,761	239,220	89
Cuyahoga.....	.....	.....	220,538	140,096	93,784
Sandusky.....	.....	.....	56,859	18,769	5,759
Miami.....	.....	.....	8,442	18,028	7,519
Detroit.....	.....	.....	35,855	62,685	23,034
Mackinac.....	.....	.....	.....	.....	818
MilWAUKIE.....	.....	.....	.....	.....	.....
Chicago.....	.....	.....	4,935	875	1,386
Total.....	1,593,324	94,464	1,275,573	983,009	493,475	

STATEMENT—Continued.

Districts.	AMERICAN.						FOREIGN.					
	Steam.			Sail.			Steam.			Sail.		
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Vermont.....	166	56,421	338	17,490	122	9,566	162	10,758				
Champlain.....	411	90,436	74	8,135	37	3,899	106	20,759				
Oswegatchie.....	302	206,684	296	47,124	360	90,962	44	6,657				
Cape Vincent.....	696	427,457			53	12,473						
Sackett's Harbor.....	197	163,616	3	201	7	1,060	24	1,934				
Oswego.....	376	228,842	1,807	345,681	48	7,259	1,087	85,601				
Genesee.....	200	160,000	21	1,620	91	27,900	62	3,714				
Niagara.....	212	75,072	13	964	409	145,773	55	1,344				
Buffalo.....	72	18,493	98	11,705	205	48,456	306	23,755				
Presque Isle.....	2	680	680	1,039	6	878	96	10,892				
Cuyahoga.....	19	4,543	201	24,269	2	280	15	746				
Sandusky.....	4	1,494	53	4,760								
Miami.....												
Detroit.....	2	389	9	1,544	294	49,081	68	7,300				
Mackinac.....												
Milwaukee.....												
Chicago.....	2	652	2	290								
Total.....	2,661	1,434,779	3,595	464,822	1,724	397,587	2,033	174,619				

STATEMENT—Continued.

Districts.	TONNAGE CLEARED.							
	AMERICAN.				FOREIGN.			
	Steam.		Sail.		Steam.		Sail.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Vermont.....	147	58,024	318	17,020	119	9,321	111	7,602
Champlain.....	411	90,436	74	8,135	37	3,899	106	20,759
Oswegatchie.....	303	218,069	280	45,205	346	89,356	44	6,657
Cape Vincent.....	696	427,457	.....	.....	53	12,473	.....	.....
Sackett's Harbor.....	197	161,375	14	1,385	7	1,060	24	1,934
Oswego.....	346	267,594	1,726	327,172	48	7,239	1,078	83,768
Genesee.....	200	160,000	21	1,620	91	27,900	62	3,714
Niagara.....	212	75,072	13	4,964	409	145,773	55	1,344
Buffalo.....	71	18,152	134	13,774	296	48,672	297	22,568
Presque Isle.....	.....	.....	33	3,205	.....	.....	6	721
Pennsylvania.....	10	2,070	143	15,690	6	926	88	9,619
Cuyahoga.....	.....	.....	10	1,396	3	336	9	1,300
Sandusky.....	.....	.....	.....	.....	.....	.....	.....	.....
Miami.....	.....	.....	.....	.....	.....	.....	.....	.....
Detroit.....	14	2,086	17	1,668	315	51,727	67	5,546
Mackinac.....	.....	.....	.....	.....	.....	.....	.....	.....
Wisconsin.....	.....	.....	.....	.....	.....	.....	.....	.....
Milwaukee.....	5	2,183	7	1,628	.....	.....	2	428
Chicago.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	2,612	1,482,548	2,790	438,862	1,730	398,702	1,949	166,010

No. 7.

Property coming from Canada by way of Buffalo, Black Rock, Oswego, and Whitehall, during the year 1851.

Articles.	Buffalo.	Bl'k Rock.	Oswego.	Whitehall.	Total.
THE FOREST.					
Fur and peltry.....pounds..	11,186			1,041	12,227
Product of wood—					
Boards and scantling.....feet..	10,200,427	12,393,957	74,209,425	24,090,425	120,893,897
Shingles.....M...	164,000	370	6,645	1,929	172,944
Timber.....cub. feet..	2,989	44,492	232,855	1,187,371	1,467,707
Staves.....pounds..	356,151				356,151
Wood.....cords..		8			8
Ashes, pot and pearl...barrels..	382		889	2,081	3,352
AGRICULTURE.					
Product of animals—					
Pork.....barrels..	19				19
Bacon.....pounds..	6,000				6,000
Butter.....do...	12,788		4,898		17,686
Lard.....do...	700			154,461	155,161
Wool.....do...	95,020		141,209	4,835	241,064
Hides.....do...	16,317				16,317
Vegetable food—					
Flour.....barrels..	19,302	950	343,932	7,589	371,773
Wheat.....bushels..	150,960	2,475	684,280		837,715
Rye.....do...			70,176	7,989	78,165
Corn.....do...	104,143				104,143
Barley.....do...		5,729	19,844	25,606	51,179
Oats.....do...	12,296		111,291	243,084	366,671
Bran and ship stuffs...pounds..				3,509	3,509
Peas and beans.....bushels..			64,896	21,132	86,028
Potatoes.....do...	90		56		146
All other agricultural products—					
Cotton.....pounds..	6,000				6,000
Clover and grass seed...do...	21,416		68,679	1,101	91,196
Hops.....do...				25,862	25,862
MANUFACTURES.					
Domestic spirits.....gallons..	10,470				10,470
Linseed oil.....do...				1,120	1,120
Leather.....pounds..	3,882		2,860		6,742
Furniture.....do...	2,200	2,800			5,000
Machines and parts thereof.do...				13,000	13,900
Iron.....do...				184,638	184,638
OTHER ARTICLES.					
Stone, lime, and clay...pounds..	11,669				11,669
Eggs.....do...				172,363	172,363
Fish.....do...	2,000			132,091	134,091
Sundries.....do...	83,317	34,132	455,778	679,501	1,252,728

No. 8.—Statement showing the quantity of some of the principal articles exported and imported coastwise, in the several collection districts on the lake frontier, during the year ending December 31, 1851.*

Districts	THE FOREST.				PRODUCTS OF AGRICULTURE.					
	Furs.		Lumber.		Ashes.		Flour.		Wheat.	
	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.
	Pounds.	Pounds.	M feet.	M feet.	Casks.	Casks.	Barrels.	Barrels.	Bushels.	Bushels.
Vermont and Champlain, New York.....		2,000	116,093	3,930	870					
Oswegatchie, New York.....		199	196	103	375,320			7,222		377,725
Cape Vincent, New York.....				365		129				
Sackett's Harbor, New York.....		2,896	145	3,895	1,630	169			5,402	37,890
Oswego, New York.....		148	21,295		130,054	2,727			2,500	3,561,697
Genesee, New York.....										
Niagara, New York.....				4		13,925			391,550	
Buffalo, New York.....		442,960	57,632	14,773	1,436,559					4,115,766
Presque Isle, Pennsylvania.....		12,899		393	9,839	2,049				
Cuyahoga, Ohio.....	80,000		1,281	1,830	656,040				2,141,913	
Sandusky, Ohio.....	128,400		2,046	3,214	194,682				2,621,224	
Miami, Ohio.....	105,000		2,134	4,847	242,677				1,639,744	
Detroit, Michigan.....	42,000		330,717	6,207	1,827	460,325			897,719	
Mackinac, Michigan.....			38,900	200						
Milwaukee, Wisconsin.....			1,833	5,672					687,634	
Chicago, Illinois.....	571,715		125,056			71,723			436,808	
Total imports and exports...	927,115	444,960	392,953	23,278	23,445	1,786,461	1,962,729	8,831,716	8,119,162	

* If every article passing over the lakes was properly accounted for and reported at the custom-house, the footing of the column of exports would, in each instance, balance that of the column of imports.

STATEMENT—Continued.

COLONIAL AND LAKE TRADE.

PRODUCTS OF AGRICULTURE.

Districts.	Corn.						Oats.		Barley.		Potatoes.		Fruit.	
	Exports.		Imports.		Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.
	<i>Bushels.</i>	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	<i>Packages.</i>	<i>Packages.</i>
Vermont, and Champlain, New York.....	1,312	82,458	346,761	5,242	26,489	2,107	.....	.....	.....	.....	241,355	.....	.....	53
Oswegatchie, New York.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	400	.....	.....	3,487
Cape Vincent, New York.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sackett's Harbor, New York.....	42,581	28,684	.....	.....	34,068	62,895	40	.....	.....	.....	.....	.....	.....	1,476
Oswego, New York.....	7,500	1,251,306	97,213	.....	.....	171,347	.....	.....	.....	.....	4,874	.....	.....	3,327
Genesee, New York.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Niagara, New York.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Buffalo, New York.....	.....	6,131,316	.....	1,142,552	.....	18,700	146,573	.....	.....	.....	12,338	.....	.....	6,500
Presque Isle, Pennsylvania.....	14,389	.....	.....	.....	54,041	11,822	.....	.....	.....	.....	.....	.....	.....	.....
Cuyahoga, Ohio.....	906,653	.....	.....	.....	68,464	.....	.....	.....	.....	.....	.....	.....	1,268	.....
Sandusky, Ohio.....	1,282,509	.....	.....	.....	239,936	.....	256	.....	.....	.....	11,000	.....	5,689	8,277
Miami, Ohio.....	2,775,149	.....	.....	.....	64,441	675	27,505	.....	.....	.....	240	.....	1,054	12,399
Detroit, Michigan.....	378,070	4,500	.....	.....	48,546	.....	2,120	.....	.....	.....	.....	.....	.....	6,575
Mackinac, Michigan.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milwaukee, Wisconsin.....	72,342	.....	.....	.....	193,405	137,163	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Illinois.....	3,221,317	.....	.....	.....	767,089	8,537	12,331	.....	.....	.....	.....	.....	.....	17,517
Total imports and exports.....	8,701,822	7,498,264	1,591,758	1,496,479	360,172	241,899	50,429	270,207	21,284	69,447	.....	.....	.....	.....

STATEMENT—Continued.

PRODUCTS OF AGRICULTURE.

Districts.	Cotton.		Hemp.		Tobacco.		Broom-corn.		Peas and beans.		Pork.		Beef.	
	Exports.	Imports	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.
Vermont, and Champlain, N. Y.	Bales.	Bales.	Bales.	Bales.	Packages	Packages	Bales.	Bales.	Bushels.	Bushels.	Barrels.	Barrels.	Barrels.	Barrels.
Oswegatchie, N. Y.				72			1,176		32,270		150		4,450	
Cape Vincent, N. Y.									150		25		2,887	
Sackett's Harbor, N. Y.	147						300		7,173		145			
Oswego, N. Y.	57			266	282				31		595		27,950	15,940
Genesee, N. Y.														
Niagara, N. Y.		310		2,450	2,856		65				50		36,833	76,285
Buffalo, N. Y.							5,478				110			
Presque Isle, Penn.		62												
Cuyahoga, Ohio		357		803		650	1,060				13,580		26,944	
Sandusky, Ohio.				549		54					7,196		3,038	
Miami, Ohio.	394			725		156		38			38,658		7,296	
Detroit, Mich.					61		135	199			1,704		620	568
Mackinac, Mich.								626						
Milwaukee, Wis.							4,215				5,000			4,043
Chicago, Ill.		1,369		482							20,522			52,865
Total imports and exports	451	457	2,533	2,818	5,003	3,199	8,079	8,186	38,138	87,585	68,616	94,754	102,709	

STATEMENT—Continued.

Districts.		PRODUCTS OF AGRICULTURE.									
		Lard.		Tallow.		Butter.		Cheese.		Eggs.	
		Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Barrels.</i>	<i>Barrels.</i>
Vermont, and ChAMPLAIN, New York.....	3,000	16,800	.....	.....	.....	.....	.....	.....	.....	.....	11,173
Oswegatchie, New York.....	.....	15,900	.....	135,300	.....	25,900	.....	40,200	.....	.....	65
Cape Vincent, New York.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sackett's Harbor, New York.....	.....	.....	.....	7,200	.....	161,500	.....	403,200	.....	.....	5
Oswego, New York.....	.....	3,662,400	.....	134,100	.....	.....	.....	.....	.....	7,500	.....
Genesee, New York.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	777,600	.....
Niagara, New York.....	.....	.....	7,500	.....	.....	.....	.....	.....	.....	.....	.....
Buffalo, New York.....	.....	4,759,997	.....	690,150	.....	.....	.....	.....	.....	3,877,123	12,731
Presque Isle, Pennsylvania.....	.....	.....	31,700	.....	.....	989,062	.....	1,416,695	.....	.....	.....
Cuyahoga, Ohio.....	2,167,300	.....	198,000	.....	.....	1,550,900	.....	2,404,140	.....	.....	.....
Sandusky, Ohio.....	.....	.....	157,127	.....	.....	382,340	.....	8,100	.....	383,869	.....
Miami, Ohio.....	5,433,000	.....	565,200	.....	.....	311,900	.....	50,720	.....	144,900	.....
Detroit, Michigan.....	.....	.....	.....	.....	.....	110,600	.....	.....	.....	.....	.....
Macinae, Michigan.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milwaukee, Wisconsin.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Illinois.....	.....	.....	1,084,377	.....	.....	.....	.....	.....	.....	.....	.....
Total imports and exports.....	10,928,584	8,713,597	2,043,894	966,750	3,532,202	4,335,800	4,323,055	6,662,552	10,625	23,974	.....

STATEMENT—Continued.

Districts.	PRODUCTS OF AGRICULTURE.						PRODUCTS OF MINES.					
	Horses.		Cattle.		Sheep.		Swine.		Coal.		Lead.	
	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.
Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number.	Tons.	Tons.	Tons.	Tons.	
Vermont, and Champlain, New York.....												
Oswegatchie, New York.....								8	371			
Cape Vincent, New York.....								80	1,280			
Sackett's Harbor, New York.....	25								799			
Oswego, New York.....	150		15									
Genesee, New York.....				18	50							
Niagara, New York.....	71											
Buffalo, New York.....	2,909		9,552		19,378				17,775			803
Presque Isle, Pennsylvania.....									82,000			
Cuyahoga, Ohio.....	630		2,889		6,220				81,500			
Sandusky, Ohio.....									2,745			
Miami, Ohio.....	301		744		1,759		221	23,547				
Detroit, Michigan.....	85		256		413		913	2,375	960	30,106		
Mackinac, Michigan.....												
Milwaukee, Wisconsin.....												
Chicago, Illinois.....			448									
Total imports and exports.....	1,166	3,393	4,337	9,614	8,392	20,562	178,321	111,186	164,548	88,866	1,180	803

STATEMENT—Continued.

Districts.	PRODUCTS OF MINES.				OTHER ARTICLES.							
	Iron.		Railroad iron.		Oils.		Fish.		Glass.		Merchandise.	
	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.
	Tons.	Tons.	Tons.	Tons.	Barrels.	Barrels.	Barrels.	Barrels.	Packages	Packages	Tons.	Tons.
Vermont and Champlain, New York.....	26,081											
Oswegatchie, New York.....	1,016	200				4	65	273	125,000	18,366		
Cape Vincent, New York.....						102	51	4,058	4,360	1,507		
Sackett's Harbor, New York.....	732	183		1,000								
Oswego, New York.....	4,384	550	43,429		525	2,433	1,518	1,147	115	1,461		
Genesee, New York.....												
Niagara, New York.....						26						
Buffalo, New York.....	1,004			2,195		6,023						
Presque Isle, Pennsylvania.....	944	570		1,816								
Cuyahoga, Ohio.....	4,196	1,365		7,383	1,263		1,455	1,759	1,438	3,341		
Sandusky, Ohio.....	11	641	42	17,486	3	60	1,494	22,930	3,681	25,083		
Miami, Ohio.....	343	1,120		9,415	6,078		3,325	10,499	405	21,011		
Detroit, Michigan.....				366	135		19,486	4,119	201	23,260		
Mackinac, Michigan.....				556			40,000		5,011	18,000		
Milwaukee, Wisconsin.....	72	10,286					3,584					
Chicago, Illinois.....					78							
Total imports and exports.....	11,698	42,893	43,471	40,217	8,082	8,648	67,913	24,689	17,107	383,769	179,991	

PART IV.

RAILROADS AND CANALS OF THE UNITED STATES.

As a report upon the inland commerce of the United States, or of any important portion of it, would be imperfect without reference to the various works constituting its channels, to which in some degree it owes its direction, the following notice of the railroads and canals of the United States has been prepared.

The peculiar characteristics of this country, in regard to its geographical and topographical features and to the industrial condition and relations of the people of the different regions render works of internal improvement necessary to the development of the resources and progress of every portion. With us such works are chiefly commercial enterprises, their principal object being to cheapen and facilitate the movement of persons and property. Generally, the means for their construction have been furnished by incorporated associations, and consequently the construction and management of them have been intrusted to such companies.

The opposition by many of the prominent and influential statesmen of the United States to the interference of the federal government in aid of such works, on the alleged ground of absence of constitutional power, has hitherto prevented the rendering of such assistance, except in the case of the Cumberland road, and one or two other instances. Many intelligent men doubt if this opposition has not been advantageous. Wherever the respective States have aided such works, they have fortunately, in most instances, committed the control of them to private hands and private interests. Considerations apart from commercial objects have had but little influence in their construction or management. These works, therefore, constitute the best expression of the commercial wants of our people, and their immense cost the best illustration of the magnitude and value of this commerce.

The early settlements in this country having been made upon the seaboard, manufacturing and commercial communities at first grew up at favorable points near the coast. The extension of the settlements into the interior necessarily involved the construction of outlets for them to markets upon the seaboard. So long as this population was confined to the Atlantic slope, public highways were not of great magnitude nor importance. When, however, settlers had crossed the Alleghany mountains and peopled the regions beyond them, the public mind was turned to the subject of constructing channels of commercial intercommunication adequate to their wants.

The natural outlets of the great interior basin—the rivers Mississippi and St. Lawrence—are not in all respects adequate and convenient

outlets. The first person to present a definite project for an artificial work, on an extensive scale, was General Washington. That great and wise man foresaw the future importance of the country beyond the Alleghanias, and the magnitude of its prospective commerce, which he proposed to secure to his own colony. Before he reached the age of twenty-one years he had crossed the mountains, and the subject of a canal from the tide-waters of the Chesapeake to the waters of the Ohio received his careful attention. At subsequent periods he visited the Ohio valley, and presented the results of his examination and observation to the House of Burgesses of Virginia, from which body he received a vote of thanks. The plan of a canal proposed by him was eagerly embraced, and has now so long remained a favorite object that its importance and ultimate consummation have become traditional ideas with the people of Virginia.

The merits of a general plan for a commercial channel, by which to connect the East and West, suited to the wants of the two different sections of the country, were not involved in the question of route. Virginia, prior to the Revolution, was the richest, most populous, and most central of the colonies, and her tide-waters most nearly approached the navigable waters of the Ohio. It was taken for granted that the appropriate route for such a work lay through her territory; but at that time our people had neither the engineering skill nor the experience, nor were they sufficiently acquainted with the topography of the mountain ridge separating the great western valley from the Atlantic slope, to decide upon the question of route. As they became better acquainted with the country, it was ascertained that the best route for a canal connecting the navigable water-courses separated by the Alleghanias lay farther north; and it was reserved for New York first to realize the idea of General Washington, and thereby secure to itself the vast benefits the result of which he foresaw, and which, before the Revolution, he sought to secure to Virginia. For years after General Washington proposed his plan, our western settlements did not extend beyond the Ohio; and, in fact, all the country west of the Mississippi was claimed by a foreign power. The vast regions now filled with a numerous and thriving population, comprising the States of Ohio, Indiana, Illinois, Missouri, Iowa, and Wisconsin, were not only a wilderness, but the idea that they would ever be densely occupied by civilized man was regarded as chimerical. The principal settlements beyond the mountains were those most contiguous to Virginia, and what is now Kentucky was then a part of the "Old Dominion." The rapid settlement of Ohio and the adjacent States, after the war of 1812, changed the aspect of affairs in the West. The preponderating interest and influence extended northward of the first settlements, and the State of New York was the first to open an improved line of commercial communication between the Atlantic and the Great West. A canal was discovered to be practicable through her territory, and the genius and public spirit of her statesmen stimulated her legislators to make use of this advantage, securing to her the chief interior trade.

It was not until after the completion of the Erie canal, in 1825, that the adaptability of railroads to the uses of commerce was established. These works are destined to compete with canals, and

even natural water-courses, as *media* of commercial intercourse. Their construction and profitable operation may be regarded as practicable upon all the routes of commerce; and all the Atlantic cities have either completed, or have in progress, lines of railroads having the same general objects and direction with the great New York work, by which they propose to secure similar results. These works are regarded as of greater benefit to the interior portions of the country than to the cities which are their *termini* upon our navigable water-courses. Their construction is now the absorbing topic. They will one day become the ordinary highways of transit for property as well as persons. A satisfactory view of the commerce of the country, therefore, necessarily involves a description of them, as its future channels.

It is also important that the uses, objects, and influences of public works in developing the resources, in stimulating and in giving new directions to the commerce of the country, should be thoroughly understood, both as tending to correct legislation in commercial affairs and as securing to these enterprises that degree of public confidence to which they are entitled. As heretofore stated, at least \$80,000,000 are now annually required to carry forward works in progress, and to meet the demand of new ones as they may arise. Of this sum, \$50,000,000 are borrowed either of the capitalists of this country or of Europe, at rates of interest averaging from 6 to 10 per cent. per annum for a series of years. A large sum is in this manner added to the cost of these works, which might be saved were the public mind properly enlightened as to their productiveness, as investments of capital, and as to their influence in increasing national wealth and prosperity.

This review of railroads and canals will commence with a notice of those of New York, the pioneer State in successful achievements on a large scale. In noticing the works of other States, a geographical rather than chronological order will be observed. Only the leading lines—such as are in some measure identified with the commerce of the country—will be particularly described; and where works are still in progress the results predicated of them will be stated.

Following the notice is a brief consideration of railroads in their *economical* aspects and results, a matter esteemed of equal if not greater importance than a detailed description of the works themselves.

NEW YORK

Population in 1830, 1,918,608; in 1840, 2,428,921; in 1850, 3,097,394. Area in square miles, 46,000; inhabitants to square mile, 67.33.

Erie canal.—Although it was known at an early period that a favorable route for a canal from tide-water to the lakes existed in the valley of the Mohawk river, it was not until 1816 that the project received particular attention from the authorities of the State of New York. In that year, the governor of the State, the Hon. D. D. Tompkins, in his annual message to the legislature, recommended the construction of a

canal from the Hudson river, at Albany, to Lake Erie. This recommendation was favorably received, and after a protracted discussion as to the plan which should be pursued, the work was formally commenced on the 4th of July, 1817; and on the 26th day of October, 1825, the canal was completed.

Previous to the construction of the canal the cost of transportation from Lake Erie to tide-water was such as nearly to prevent all movement of merchandise. A report of the committee of the legislature, to whom was referred the whole subject of the proposed work, consisting of the most intelligent members of that body, dated March 17, 1817, states that at that time the cost of transportation *from* Buffalo to Montreal was \$30 per ton, and the *returning* transportation from \$60 to \$75. The expense of transportation from Buffalo to New York was stated at \$100 per ton, and the ordinary length of passage *twenty days*; so that, upon the very route through which the heaviest and cheapest products of the West are now sent to market, the cost of transportation equalled nearly *three* times the market value of wheat in New York; *six* times the value of corn; *twelve* times the value of oats; and far exceeded the value of most kinds of cured provisions. These facts afford a striking illustration of the value of internal improvements to a country like the United States. It may be here stated, as an interesting fact, that prior to the construction of the Erie canal the wheat of western New York was sent down the Susquehanna to *Baltimore*, as the cheapest and best route to market.

Although the rates of transportation over the Erie canal, at its opening, were nearly double the present charges—which range from \$3 to \$7 per ton, according to the character of the freight—it immediately became the convenient and favorite route for a large portion of the produce of the northwestern States, and secured to the city of New York the position which she now holds as the emporium of the confederacy. Previous to the opening of the canal the trade of the West was chiefly carried on through the cities of Baltimore and Philadelphia, particularly the latter, which was at that time the first city in the United States in population and wealth, and in the amount of its internal commerce.

As soon as the lakes were reached, the line of navigable water was extended through them nearly one thousand miles farther into the interior. The western States immediately commenced the construction of similar works, for the purpose of opening a communication from the more remote portions of their territories with this great water-line. All these works took their direction and character from the Erie canal, which in this manner became the outlet for almost the greater part of the West.

It is difficult to estimate the influence which this canal has exerted upon the commerce, growth, and prosperity of the whole country, for it is impossible to imagine what would have been the state of things without it. But for this work the West would have held out few inducements to the settler, who would have been without a market for his most important products, and consequently without the means of supplying many of his most essential wants. That portion of the country would have remained comparatively unsettled up to the present time; and, where now exist rich and populous communities, we

should find an uncultivated wilderness. The East would have been equally without the elements of growth. The canal has supplied it with cheap food, and has opened an outlet and created a market for the products of its manufactures and commerce. The increase of commerce and the growth of the country have been very accurately measured by the growth of the business of the canal. It has been one great bond of strength, infusing life and vigor into the whole. Commercially and politically, it has secured and maintained to the United States the characteristics of a homogeneous people.

It will be seen, by the following tabular statement, that the growth of the city of New York in population, wealth, and commerce, has nearly kept pace with the increase of the business of the Erie canal and the progress of the western States. The tables show the intimate relation of this great work to the commerce and prosperity of the country, and that to maintain a large foreign commerce it is necessary that a city should have a large domestic trade.

They also indicate the annual tonnage of the canal; the value of produce and merchandise passing to and from tide-water; the tonnage and value of produce received at Buffalo and Oswego from the western States; the number of annual lockages on the canal; the foreign arrivals at, and tonnage of, the ports of Boston, New York, Philadelphia, and Baltimore; the value of exports and imports of each of these cities, their increase in wealth and population, and also the increase of the population of the western States since 1820.

Comparative statement, showing the tolls, trade, and tonnage of the New York State canals and the progress, in commerce, navigation, population, and valuation, of the four principal Atlantic cities, and the foreign commerce of the United States, from 1820 to 1851, inclusive.

Years.	New York State canals—tolls, trade, and tonnage.									
	Tolls, amount collected.	Total movement, east and west.	Total received at tide-water.	Total going from tide-water.	Proportion destined to other States.	Proportion received from other States.	Value of the total movement.	Lockages at Alexander's lock.	Value from other States, via Buffalo and Oswego.	Total value received at tide-water.	Value of merchandise despatched for other States, via Buffalo and Oswego.
	Dollars.		Tons.	Dollars.	Number.	Dollars.	Number.	Dollars.	Dollars.	Dollars.
1820.....	5,244									
1821.....	94,388									
1822.....	64,072									
1823.....	153,099									
1824.....	340,761									
1825.....	566,279	157,446	32,385		6,166					
1826.....	765,104	185,405	33,438		10,985					
1827.....	859,260	269,795	84,086		15,156					
1828.....	893,447				13,004					
1829.....	813,137				14,579					
1830.....	856,922				12,619					
1831.....	1,223,801				14,674					
1832.....	1,229,488				16,284					
1833.....	1,469,715				18,601					
1834.....	1,340,106				20,649					
1835.....	1,548,108				22,911					
1836.....	1,614,842				25,798					
1837.....	1,292,629	1,310,807	114,608	67,684,648	25,516	67,684,648		5,498,816	20,932,470	9,728,250
1838.....	1,590,911	1,171,296	138,796	188,796	61,167	110,108		4,813,626	21,832,854	6,822,750
1839.....	1,616,382	1,383,011	122,180	192,180	54,766	110,779		5,589,928	23,088,510	8,667,250
1840.....	1,775,747	1,435,713	142,082	202,082	77,090	125,000		6,269,645	23,163,199	10,259,100
1841.....	2,084,832	1,609,012	162,515	229,515	85,198	158,000		7,246,968	23,213,573	7,457,600
1842.....	1,749,197	1,521,661	174,834	250,834	63,871	214,456		7,877,858	23,235,822	11,174,700
1843.....	2,081,590	1,286,921	192,394	292,394	81,742	272,836		11,869,273	22,751,013	7,218,900
1844.....	2,415,761	1,513,439	143,595	223,595	54,011	229,836		9,215,808	22,483,408	13,067,250
1845.....	2,645,981	1,816,586	198,000	298,000	72,500	286,891		11,975,943	24,452,821	14,846,250
1846.....	2,755,593	1,904,943	176,737	276,737	60,016,008	340,151		15,875,568	24,183,167	17,866,800
1847.....	2,654,942	2,268,662	195,000	300,000	104,018	383,525		14,162,289	25,452,821	20,415,600
1848.....	2,252,184	2,869,819	213,795	328,295	138,235	450,219		15,875,568	25,105,256	27,295,800
1849.....	2,265,296	2,706,230	218,795	328,295	144,654	450,219		15,875,568	25,105,256	27,295,800
1850.....	2,273,899	2,894,732	229,557	329,557	137,463	450,219		15,875,568	25,105,256	27,295,800
1851.....	2,829,737	3,532,733	318,370	418,370	158,501	537,891		26,718,796	25,471,962	62,963,640
			467,961	567,961	246,812	1,047,649		26,928,315	53,927,508	

Comparative statement, showing the tolls, trade, and tonnage of the New York State canals, &c.—Continued.

Years.	Commerce, navigation, valuation, and population of New York, Boston, Philadelphia, and Baltimore, with the customs' revenue at each port.							
	Value of imports at the ports of—			Value of exports from the ports of—				
	Boston.	New York.	Philadelphia.	Baltimore.	Boston.	New York.	Philadelphia.	Baltimore.
1820.	26,020,012	8,158,922	.....	.....	11,769,511	5,743,549	.....	5,487,974
1821.	33,912,452	11,874,170	.....	.....	12,124,645	7,391,767	.....	7,243,542
1822.	80,601,455	13,696,770	.....	.....	15,405,694	9,047,802	.....	9,941,702
1823.	87,783,147	11,805,531	.....	.....	21,089,696	9,617,192	.....	9,022,485
1824.	50,024,973	15,041,797	.....	.....	22,809,362	9,364,893	.....	11,178,189
1825.	84,728,664	13,551,779	.....	.....	34,082,279	11,269,931	.....	15,752,100
1827.	41,441,892	11,212,935	.....	.....	19,437,229	8,331,722	.....	11,525,862
1828.	39,117,016	12,884,408	.....	.....	24,614,085	7,575,833	.....	13,217,695
1829.	84,972,493	10,100,152	.....	.....	22,135,487	6,051,480	.....	18,745,147
1830.	88,656,064	9,525,898	.....	.....	17,069,660	4,089,935	.....	15,012,533
1831.	57,291,727	11,673,755	.....	.....	26,142,719	4,291,793	.....	20,096,136
1832.	42,542,012	10,043,195	.....	.....	22,792,529	3,516,066	.....	15,070,124
1833.	56,527,976	11,153,757	.....	.....	24,708,903	4,078,951	.....	13,039,151
1834.	72,724,210	10,479,268	.....	4,647,167	23,842,736	3,939,746	.....	10,183,542
1835.	87,734,844	12,389,937	.....	5,647,153	29,413,152	4,176,290	.....	11,597,466
1836.	24,248,727	11,700,917	.....	7,131,003	27,668,159	3,677,607	.....	13,424,717
1837.	17,949,146	78,543,706	.....	7,857,033	25,459,627	3,841,607	.....	1,928,868
1838.	12,355,181	68,150,360	.....	5,701,869	21,654,765	3,477,151	.....	2,239,554
1839.	17,987,754	99,483,414	.....	6,995,285	31,946,474	5,299,415	.....	14,475,995
1840.	14,826,967	60,064,942	.....	8,232,366	32,404,659	6,820,145	.....	17,167,968
1841.	18,912,078	75,353,263	.....	4,835,617	30,792,758	5,152,501	.....	8,418,538
1842.	15,796,600	57,446,061	.....	6,101,313	30,792,758	4,945,346	.....	1,367,259
1843.	18,834,434	81,112,297	.....	7,330,794	25,467,316	3,753,894	.....	11,273,499
1844.	21,230,381	64,528,188	.....	2,479,132	19,722,803	3,354,544	.....	4,072,296
1845.	22,615,117	69,897,405	.....	3,917,730	25,920,054	3,003,894	.....	2,287,848
1846.	23,279,148	83,947,611	.....	3,741,268	33,554,776	5,216,980	.....	5,569,649
1847.	27,183,777	92,947,176	.....	4,042,915	33,646,006	4,751,003	.....	6,996,724
1848.	23,275,953	91,374,564	.....	5,343,648	46,586,685	8,541,167	.....	16,975,972
1849.	28,656,163	116,697,553	.....	8,692,008	42,788,237	7,129,461	.....	1,978,480
1850.	30,508,189	144,454,016	.....	6,124,201	47,580,357	5,343,421	.....	2,829,563
1851.	.....	.....	.....	6,643,774	10,493,180	5,396,036	.....	3,122,660
.....	.....	.....	.....	.....	79,857,315	.....	.....	28,772,553
.....	.....	.....	.....	.....	.....	.....	.....	6,250,588
.....	.....	.....	.....	.....	.....	.....	.....	1,004,961
.....	.....	.....	.....	.....	.....	.....	.....	1,068,530

Dollars.

Duties collected at the ports of—

Value of exports from the ports of—

Value of imports at the ports of—

Comparative statement, showing the tolls, trade, and tonnage of the New York State canals, &c.—Continued.

Years.	Valuation of real and personal estate in—					Foreign commerce of the United States.			
	Boston.	New York.	Philadelphia.	Baltimore.	Dollars.	Specie excluded.		Specie included.	
						Imports.	Exports.	Imports.	Exports.
1820.	85,289,200				51,520,384	54,406,323	74,450,000	69,691,669	
1821.					79,811,605	61,250,181	62,585,724	64,974,882	
1822.					74,450,371	65,828,103	82,941,541	79,180,981	
1823.		83,075,676		16,387,500	81,590,372	69,979,109	71,579,967	75,986,657	
1824.				16,387,500	90,268,811	90,738,323	96,840,075	99,538,858	
1825.	54,442,600			16,387,500	78,988,938	79,530,789	86,974,477	77,535,322	
1826.		107,447,781		16,387,500	71,322,563	64,001,210	84,454,063	82,364,656	
1827.		112,211,926		16,387,500	81,088,945	67,684,651	82,509,824	72,858,671	
1828.		114,019,698		16,387,500	69,760,956	71,668,783	74,492,327	73,849,506	
1829.		111,808,096		17,282,660	69,838,179	73,996,792	74,876,920	78,810,583	
1830.	59,568,000	125,288,518		17,847,465	69,917,942	81,520,892	103,191,124	87,176,984	
1831.	60,698,200	139,280,214		18,200,000	101,047,943	87,598,783	101,029,966	90,140,483	
1832.	67,514,400	146,802,618		18,200,000	108,610,700	109,260,215	126,531,332	104,836,673	
1833.	70,477,200	166,495,187		18,900,000	136,784,995	115,215,802	149,895,742	121,698,577	
1834.	74,805,800	186,648,511		19,175,000	176,570,154	134,388,704	189,930,085	128,668,040	
1835.	79,302,600	218,723,793		44,400,000	190,479,808	111,443,127	140,989,217	117,419,876	
1836.	88,245,000	309,501,620		44,400,000	95,970,988	101,975,570	118,717,404	108,486,616	
1837.	89,583,800	268,747,850		44,400,000	156,406,968	129,251,678	162,092,182	132,085,946	
1838.	90,231,600	266,162,941		51,867,384	98,268,748	123,668,832	107,141,519	121,851,608	
1839.	91,326,400	262,235,515		56,585,285	169,075,544	111,817,471	127,146,117	104,691,584	
1840.	94,584,600	252,235,515		58,000,000	169,075,544	99,877,995	100,160,887	104,691,584	
1841.	98,006,600	251,194,920		58,000,000	49,488,464	82,828,689	64,758,799	84,846,480	
1842.	106,728,700	237,806,906		58,324,752	102,604,606	103,748,892	108,485,085	111,200,046	
1843.	110,566,000	229,229,078	118,693,523	58,324,752	113,184,822	106,040,111	117,254,564	114,646,606	
1844.	118,450,800	235,960,047	120,608,327	58,324,752	117,914,065	109,588,248	121,691,797	118,488,516	
1845.	135,948,700	239,993,318		61,717,376	131,494,849	156,741,598	146,645,788	158,648,622	
1846.	148,849,600	244,962,405		71,912,925	143,688,704	138,100,511	154,998,928	164,932,181	
1847.	162,360,400	247,152,806		77,672,829	141,206,198	140,351,072	147,857,489	145,758,820	
1848.	167,728,600	254,192,027	125,679,689	78,321,986	178,509,526	144,873,726	178,186,318	151,898,790	
1849.	174,180,200	256,217,093		80,206,960	207,965,024	188,967,289	215,725,995	217,517,180	
1850.	180,000,500	286,085,416	139,604,284						
1851.	187,947,000	320,108,368	140,391,780						

The foregoing statements show, that while the cities of Baltimore and Philadelphia have made a rapid advance in population, their foreign commerce has remained very nearly stationary for a long series of years, proving most conclusively that a large *foreign* commerce can only be maintained by a city that is able to make herself the depot of the *domestic* products of the country.

The Erie canal secured to the city of New York the trade of the interior, because it occupied the *only* route practicable for such a work. So long, therefore, as canals continued the most approved of known modes of transportation, the superior position of that city in reference to the internal trade of the country remained unquestioned. Such is now no longer the case. For travel, and for the transportation of certain kinds of merchandise, the superiority of railroads is admitted. It is also claimed that they can successfully compete with the canal in heavy freights. However this may be, the correctness of the assumption is admitted by the construction of railroads parallel to all the canals, for the purpose of competing for the business of the latter. The conviction is now almost universal, that commercial supremacy is to be secured and maintained by this new agency, which neutralizes, to a great extent, the advantages arising from the accidents of position; and that the commerce of the country is still a prize for the competition of all cities which may choose to enter the lists. Influenced by these views, all the great commercial towns have either completed, or are constructing, stupendous lines of railroad, with the confident expectation of securing to *each* a portion of the trade which, up to the present time, has been almost entirely monopolized by *one*.

It is proper to state, that the people of New York, in view of the competition and rivalry with which they are threatened, have determined to complete the enlargement of the Erie canal within the shortest practicable period. It is calculated that this enlargement can be completed within *three* years after it shall be undertaken. The enlarged canal will allow the use of boats of 224 tons burden, or three times the capacity of those now employed; and will, it is estimated, reduce the cost of transporting a barrel of flour from Buffalo to Albany to twenty-five cents, and other merchandise in like proportion. As the canal is abundantly supplied with water, the only limit to its capacity is the time required for passing boats through the locks. It is calculated that an average of 26,000 boats can be locked each way during the business season. Allowing each boat to be fully loaded, the total tonnage capacity of the enlarged canal would equal 11,648,000 tons. But as the proportion of down to up freights is as four to one, the average tonnage of the boats is estimated, in the reports of the State engineer for 1851, at 140 tons for each boat, which, for 52,000 boats, would give an annual movement of 7,230,000 tons as the total capacity of the canal, or 5,824,000 tons down, and 1,406,000 tons up freight. It is estimated that upon the enlarged canal the cost of transportation, embracing tolls, will be reduced to five mills per ton per mile upon ordinary merchandise, or to \$1 82 per ton for the entire distance from Albany to Buffalo.

Champlain canal.—This work, though originally constructed for the accommodation of the trade of the country bordering upon that lake,

bids fair to become an important avenue for the trade of the St. Lawrence basin. This lake is now connected with the St. Lawrence river at Ogdensburg, above the rapids, by the Ogdensburg or Northern railroad; at Montreal, by the Champlain and St. Lawrence railroad; and will soon have a farther connexion at Lachine, by means of the Plattsburg and Montreal railroad, now in progress of construction. It is also connected with the St. Lawrence river, at the mouth of the Sorel, by means of the Chambly canal. Through this last channel the State of New York now receives a large and annually increasing amount of lumber. The Ogdensburg railroad was built expressly for the purpose of diverting a portion of the trade of the St. Lawrence at that point, and it is reasonable to suppose that all the roads named will, in time, become, in connexion with the lakes and canal, important outlets for western trade. They promise to open not only cheap, but expeditious routes, which, in a press of business, must be well patronized. It may be stated here, that the proposed ship-canal from Caughnawaga to Lake Champlain will open a practicable route for the largest class of vessels from the upper lakes to Whitehall, within seventy-five miles of tide-water.

As the route of the proposed canal is remarkably favorable, and as it can be fed from the St. Lawrence, and built at a moderate expense, it is believed that it must be constructed at no distant day.

Railroads of New York.

Railroads from Albany to Buffalo.—The first continuous line of railroad to connect the lakes and tide-water was that from Albany to Buffalo, following very nearly the route of the canal. As it was a private enterprise, and came into direct competition with the State works, the canal tolls were imposed upon the carriage of all freight, in addition to the cost of transportation. From this source the State has derived a large revenue. This tax has had a tendency to confine the business of the road to the less bulky and more valuable articles of freight, and to those of a perishable nature. The tax was removed on the first of December, 1851, by an act of the legislature; hence the road is now brought into free competition with the canal, and has, during the present season, carried flour from Buffalo to Albany for sixty cents per barrel, which is nearly fifty cents below the average price by canal for nearly twenty years subsequent to its opening. The quantity of freight is still restricted for the want of sufficient equipments and suitable accommodations for receiving and storing it, particularly at Albany. This fact operated as a serious drawback on the past winter's operations. The necessary facilities for business will soon be supplied, and there can be no doubt that the railroad will engage in a large carrying business in direct competition with the canal.

The above road will soon have practically a double track for its whole line. It already has such from Albany to Syracuse. From the latter place a new road is nearly completed to the Niagara river, composed of the straight line between Syracuse and Rochester, and the Rochester and Niagara Falls road. Its capacity for business will,

therefore, be unlimited. It connects with Lake Erie at Buffalo; and with Lake Ontario, through branches already in operation, at Sackett's Harbor, Cape Vincent, Oswego, and Lewiston; and, by lines in progress, at Great and Little Sodus bays, and at Rochester. By presenting numerous points of contact with western trade, it will escape all the inconveniences of too great a concentration of business at any one point, and will be enabled to offer great facilities for the cheap and easy transport of freight.

At Albany, it will connect with the Hudson river and Harlem roads, the former of which will be a double track road. In connexion with these a double track will be formed from New York to Buffalo, and to various points upon Lake Ontario. At Buffalo this line is carried forward to the roads of Ohio by the Lake Shore road. The great western roads of Canada, now in progress, will form a connexion with Detroit, by way of the north shore of Lake Erie. From Detroit, the Michigan Central railroad is completed to Chicago; as is the Michigan Southern from Monroe; so that by January, 1854, New York will have two parallel lines of railroad to Chicago, each of which will be about one thousand miles long. From Chicago to the Mississippi river two important roads are in progress—the Galena and Chicago, and the Rock Island and Chicago, both of which will be completed in the course of 1853. The length of these lines will be about one hundred and eighty miles each.

Although the carriage of freight has been denied to the above line, except on payment of canal tolls, which amounts to a virtual prohibition of many articles, it has exerted an influence on the growth and prosperity of New York second only to that exerted by the Erie canal. In connexion with the great lakes and the western lines of improvement, it commanded, as soon as opened, the travel between the Atlantic States and the West and Southwest, and concentrated this travel upon that city, which in this manner became a necessary point in the route of every western or southwestern merchant, visiting the eastern States. The result was, the introduction to merchants of that city of a large class of country traders, who would otherwise have continued to purchase at points where they had been previously accustomed to trade. By passing through New York, the whole business population of the country established business relations more or less intimate in that city.

Erie railroad and its branches.—The Erie railroad, unlike the Central line, was planned and has been executed with special reference to the accommodation of the trade between New York and the West. It is the greatest work ever attempted in this country, and its construction is the greatest achievement of the kind yet realized. The road and all its structures are on the most comprehensive scale, and its facilities for business are fully equal to the magnitude and object of the work.

As the lake, on the one hand, and the Hudson river on the other, are approached, the road spreads out into a number of independent lines, forming at each terminus a sort of *delta*, to accommodate its immense business. Its outlets to tide-water are at Newburgh, Piermont, and Jersey City. At the two former places the company

have extensive grounds for the reception, storing, and forwarding of merchandise. With only one terminus, it would be impossible to accommodate its immense business without great confusion and delay, and greatly increased cost.

On the western portion of the line, as soon as the Susquehanna valley is reached, important lines radiate from the main trunk, striking the lakes at all the points above named, and at Dunkirk in addition. The more important of these branches are the Syracuse and Binghamton, in connexion with the Syracuse and Oswego road; the Cayuga and Susquehanna, in connexion with the Lake Ontario, Auburn, and New York road; the Canandaigua and Corning, in connexion with the Canandaigua and Niagara Falls road; the Buffalo, Corning and New York, and the Buffalo and New York City railroads.

By means of all these feeders, the trade of the West will be intercepted at almost every important point on Lake Erie and Ontario, and collected and forwarded to the great trunk line. Measures are also in progress to connect the Erie road with Erie, Pennsylvania, by a line running direct from Little Valley; and with Pittsburg by means of the Alleghany Valley railroad. It is hardly possible to conceive a road with more favorable direction and connexions, possessing capacities for a more extensive business, or one that is destined to bear a more important relation to the commerce of the whole country.

This road was opened for business only on the first of June, 1851. It has not, therefore, been in operation a sufficient length of time to supply any satisfactory statistics as to its probable influence upon western commerce. So far as its business and revenues are concerned, it has exceeded the most sanguine expectations.

In this connexion it may be stated that another very important outlet from the Erie road to tide-water, the *Albany and Susquehanna* railroad, is about to be commenced; the means to construct which have already been secured. The distance from Binghamton to Albany by this route will be 143 miles, against 224 to New York by the Erie road. From Binghamton, going east, commence the most difficult and expensive portions of the Erie road, involving high grades, short curvatures, and a much greater cost of operating the road per mile than the portion of the line west of that point. From Binghamton to Albany the route is very direct, and the grades favorable; and there can be no doubt that a considerable portion of western freights, thrown upon the Erie road, will find its way to tide-water over the Albany and Susquehanna road. Such, particularly, will be the case with freight which is designed for an eastern market. The large number of railroads converging upon the Susquehanna valley renders the Albany and Susquehanna road highly necessary, to relieve the lower portions of the former from the immense volume of business that will be collected upon the main trunk from all its tributaries.

The best commentary on the importance of the last named project is to be found in the action of the city of Albany, which very recently, in her corporate capacity, made a subscription to its stock to the amount of \$1,000,000, in addition to large private subscriptions.

The following table will show the cost of the public works of New

York which have been constructed, or are in progress, with a view to their becoming avenues of the trade between the East and the West :

Erie and Champlain canals.....	\$26,000,000
Amount estimated for completion of Erie canal.....	9,000,000
Hudson river railroad.....	12,000,000
Harlem railroad.....	4,873,317
Utica and Schenectady railroad.....	4,143,918
Albany and Schenectady railroad.....	1,740,449
Syracuse and Utica railroad.....	2,570,891
Rochester and Syracuse railroad, (both lines).....	6,464,362
Buffalo and Rochester railroad.....	2,228,976
Rochester and Niagara Falls railroad.....	1,600,000
Oswego and Syracuse railroad.....	588,768
Rome and Watertown railroad.....	1,500,000
Sackett's Harbor and Ellisburg railroad.....	350,000
New York and Erie railroad.....	26,000,000
Canandaigua and Niagara Falls railroad.....	3,500,000
Buffalo, Corning and New York railroad.....	2,000,000
Buffalo and New York city railroad.....	1,500,000
Albany and Susquehanna railroad.....	4,350,000
	<hr/>
	110,410,681
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NOTE.—The cost of the Sodus bay and Southern, and the Lake Ontario, Auburn and New York railroads, cannot, in the present stage of their affairs, be estimated with sufficient accuracy to give them a place in the above table. The cost of the Rochester and Syracuse road is estimated.

Railroads from the city of New York to Montreal, Canada.—The roads that make up the line from the city of New York to Montreal constitute a very important route of commerce and travel. The city of Montreal is the commercial emporium of the Canadas, and is a large and flourishing town. It lies very nearly north, and at a distance of about four hundred miles from New York. The roads which connect these cities lie in the gorge which divides in two the great mountain range extending, unbroken, except in New York, nearly from the Gulf of Mexico to the Gulf of St. Lawrence. This basin, or gorge, is occupied by the Hudson river, Lake Champlain, and the outlet of the latter to the St. Lawrence—the river Sorel. The route, as will be seen, is remarkably direct and favorable, as far as its physical characteristics are concerned; and as it connects the commercial metropolis of this continent with the great city of the St. Lawrence, and traverses a constant succession of large and flourishing towns, its importance will be readily appreciated.

This great route is made up, for a large portion of the distance, of two distinct lines. The first link, from New York to Albany, is composed of the Hudson river and Harlem roads; the second, from Albany to Rutland, Vermont, is made up of the Troy and Boston, and Western Vermont roads, and the Albany and Northern, and Rutland and Washington roads. From Rutland only one line is in operation, composed

of the Rutland and Burlington, Vermont and Canada, and Champlain and St. Lawrence roads. A road is also projected upon the west bank of Lake Champlain, which, when completed, will give two distinct lines for the whole distance between New York and Montreal. From Albany and Troy a railroad is in operation to Whitehall, the southern terminus of the lake. A road is also in operation from Montreal to Plattsburg, a distance of about sixty miles, and a comparatively short link only is wanting to constitute a new and independent route between New York and the St. Lawrence river; which there is every reason to believe will soon be supplied.

The above line of road, though recently opened, already commands an amount of travel fully equal to the importance of the connexions it sustains. Its through-freight business is not so large as its passenger travel, for the reason that a large portion of the line follows the immediate bank of an excellent navigable water-line, which, in the summer season, commands the heavy freight. In the winter it will become the channel of trade as well as of travel. As a pleasure route it presents uncommon attractions, which will secure to it a large business in the dull season for freight. The inland lines in Vermont and New York, however, traverse sections of country capable of supplying a very large local traffic both from their agricultural and mineral resources.

Among the most remarkable topographical features of this country is the severance of the great Alleghany range by the Hudson and Mohawk rivers, on the one hand; and Lake Champlain on the other. So deep are these indentations that the "long level" of seventy miles on the canal, occupying the summit of the ridge which divides the waters running into Lake Ontario from those flowing into the Hudson river, and which corresponds to the crest of the Alleghanies, is nearly one hundred feet below the surface of Lake Erie, and might, with some additional expense, have been fed from that source.

Lake Champlain is only eighty-seven feet above the ocean, and the summit between it and the Hudson is only one hundred and forty-seven feet above tide-water, and only twenty-three feet above the latter where the Champlain canal intersects it. In approaching New York from the interior, which is in the direction of the heavy trade, the above routes are the most favorable to economical transit, nothing being lost in overcoming adverse grades. It is these facts that constitute these routes keys to an important portion of the commerce of the country, and have rendered New York the commercial metropolis.

They are as well adapted to railroads as to canals; and as these depressions are bounded by high ranges of hills, the basin at the head of navigation on the Hudson must be regarded as one of the most important interior points in the railroad system of the country. Albany and Troy are the cities of the eastern States, lying upon tide-water, the most accessible from the interior, and are consequently the radiating points of some of our most important lines of improvement. The *trunks* of these to tide-water are the Hudson river and Harlem roads, which bear the same relation to the roads occupying the routes above described, as does the Hudson river to the Erie and Champlain canals. These facts

are a sufficient illustration of the important relations borne by the Hudson river and Harlem roads to the railroad system of the country.

Railroads from Lake Champlain to the St. Lawrence.—The Champlain and St. Lawrence and the Plattsburg and Montreal railroads have already been briefly described. The third and most important line of road uniting the above waters is the *Northern*, connecting the lake with the river St. Lawrence, at Ogdensburg, a point above the falls on that river. This road, though in the State of New York, is properly a *Boston* work, as it was planned and the means furnished for its construction by that city. It is regarded as the key which opens to the roads terminating there the navigable waters of the lakes.

An important extension of this road is under contract from its southern angle, near Potsdam, to Sackett's Harbor, on Lake Ontario. The completion of this link will form a complete chain of railroads through the northern portions of New York, connecting Lake Champlain with all the important ports on the eastern shore of Lake Ontario.

The three leading lines already described constitute, with their branches, the great routes of railway travel and commerce in the State of New York. In addition to the *through* business, they all traverse routes capable of supplying a lucrative *local* traffic; particularly the lines in western New York. The description of the trunk lines will convey a sufficiently accurate idea of the objects and characteristics of their respective branches without a special notice of the latter.

The most considerable line of road, not particularly alluded to, is the *Long Island* road. This was one of the earliest works of the kind in the State, and was constructed chiefly to accommodate the travel between the cities of New York and Boston. It is a somewhat remarkable fact that the pioneer work should be now entirely abandoned as a route of travel between the above cities. It is now only used to accommodate the local business upon its line, and consequently cannot be regarded as a work of much importance.

Delaware and Hudson canal.—This work was constructed for the purpose of opening an outlet for the northern Pennsylvania coal-field. It extends from Roundout to Honesdale, in Pennsylvania, a distance of 108 miles, and is connected at that place with the coal-fields by a railroad. It is a well-constructed work, of large capacity, and has proved a very useful one, not only on account of its coal trade, whence its chief revenue, but from its local traffic.

Measures are also in progress for the construction of two considerable lines in the western portion of the State—one from the city of Rochester, following the valley of the Genesee river, to Olean; and the other from Buffalo, probably to the same point. The objects inducing the construction of these roads, independent of local considerations, are the communications which they promise to open through the Alleghany valley road with Pittsburg and the coal-fields of northern Pennsylvania. Both routes traverse districts of great fertility, which cannot fail to afford a good business. The value of a railroad connexion between Buffalo and Rochester, the two most important cities of western New York, and Pittsburg, which is at the head of navigation on the Ohio, will be readily appreciated.

An examination of the accompanying map will show how complete

is the system of public works in New York, constructed with a view of commanding the trade of the interior of the country. As previously stated, a large portion of this trade naturally falls upon the great lakes, from the facilities they offer for reaching a market. The importance of this great water-line is still farther increased from the fact that most of the leading works of the West, designed to be routes of commerce, rely on it as a base. The commercial or business outlet for the lakes, as well as of the works connected with them, has been the Erie canal. That work comes in contact with the lakes at only two points, Buffalo and Oswego. The railroad, on the other hand, by the greater facility of its construction, opens as many outlets from the lakes to tide-water as there are harbors upon the former accessible to its commercial marine. New York is now profiting to the utmost by her advantages in reference to western trade. Nearly every good harbor, as well on Lake Erie as on Ontario, either is or soon will be connected with tide-water by railroads, actually constructed or in progress. Already such connexions are formed with the harbors of Cape Vincent, Sackett's Harbor, and Lewiston, on Lake Ontario; and roads are in progress from Great and Little Sodus bays and Charlotte, with similar objects. On Lake Erie, roads already extend from Tonawanda, Black Rock, Buffalo, Dunkirk, and Erie, Pennsylvania, to tide-water; so that instead of only *two* outlets for the trade of the West, at Buffalo and Oswego, there are to be at least six times that number in New York alone. The facilities given to the commerce of the country by all these lines must prove not only of utility to this commerce, but to the trade and prosperity of the State and city of New York. The additional avenues to market, already opened and in progress, will, by a healthy competition, reduce the cost of transportation to the lowest possible point, and stimulate the movement of property and merchandise to an extraordinary degree. While every region of the United States is making extraordinary exertions to turn to themselves the interior trade of the country, New York is preparing for the most formidable competition with her rivals, and makes the most of the means within her reach to maintain her present pre-eminence.

RAILROADS OF NEW ENGLAND.

State of Massachusetts.—Population in 1830, 610,408; in 1840, 737,699; in 1850, 994,514. Area in square miles, 7,800; inhabitants to square mile, 127.49.

State of Vermont.—Population in 1830, 280,652; in 1840, 291,948; in 1850, 314,120. Area in square miles, 10,212; inhabitants to square mile, 30.76.

State of New Hampshire.—Population in 1830, 269,328; in 1840, 284,574; in 1850, 317,976. Area in square miles, 9,280; inhabitants to square mile, 34.26.

The Massachusetts System.

Under this head will be embraced a notice of the railroads of the States of Massachusetts, New Hampshire, and Vermont, as the lines of these States constitute one general system, and have been constructed by means furnished chiefly by the city of Boston.

Western railroad.—No sooner had the people of this country become acquainted with the part that railroads are capable of performing in commercial affairs, than the city of Boston conceived the bold idea of securing to itself the trade of the interior, from which it had previously been cut off by the impossibility of opening any suitable communication by water. It was this idea that gave birth to the *Western railroad* project, the most important which has yet been consummated in New England, and one of the most so in the United States. This work has probably exerted a wider influence, as the best illustration of what railroads accomplish for the advancement and welfare of a people, than any similar work in the country. From the largeness of the enterprise, the early period of our railroad history in which it was undertaken, and the difficulties in the way of its construction, it is properly referred to as a fitting monument of the sagacity, skill, and perseverance of the merchants of Boston. The completion of this road may be considered as establishing the railroad interest of this country upon a firm basis. It showed what could be accomplished, and the influence such works were calculated to exert upon the course of trade, and in promoting the prosperity of all classes. It imparted a new impulse to the internal-improvement feeling of the country, under which our railroad enterprises have moved forward, with increasing strength and vigor, to the present time.

The Western railroad, when its objects, direction, and the obstacles in the way of its construction are considered, is certainly a remarkable work. Through it the city of Boston proposed to draw to herself the trade and produce of the West, from the very harbor of New York, (for the Albany basin can only be regarded as a portion of her harbor;) and to open in the same direction an outlet for the product of her manufactures, and of her foreign commerce. It is well known that these efforts have been so far successful as to secure to Boston a large amount of western trade, which otherwise would have gone to New York, and to render the Western road her channel of communication between the former city and the West. It was only when menaced by this work, that New York successfully resumed the construction of the Erie railroad; and it is not too much to say, that but for the former, the Erie road would probably have been abandoned, even after the expenditure of many millions of dollars, and the Hudson River railroad project remained untouched up to the present time.

The Western railroad, though constructed at immense cost, has proved to be one of the most productive works in the United States, paying an annual dividend of eight per cent., besides accumulating a large sinking fund. It has been the chief instrument of the extraordinary progress of Massachusetts in population, wealth, and commercial greatness, from 1840 to 1850. It supplies the State with a large portion of many of the most important articles of food. It opened an out-

let to the products of her manufacturing establishments and her foreign commerce, and stimulated every industrial pursuit to an extraordinary degree, and, from the results that have followed its opening, forced all our leading cities to the construction of similar works, with similar objects.

Railroads from Boston to Lake Champlain and the St. Lawrence.—The Western railroad, though accomplishing greater results, and exerting a wider influence upon the varied interests of the State, than either were or could, with reason, have been anticipated, secured to the city of Boston only a small portion of the western produce reaching Albany. As the canal, which has been the avenue for this produce, is in operation only during the period of navigation on the Hudson river, it is found that this produce can be forwarded to New York by water much cheaper than to Boston by railroad. *Cost* of transportation always determines the *route*. At the dullest season of the year for freights, flour is often sent from Albany to Liverpool at a cost not exceeding twenty-five cents per barrel, which is only equal to the lowest rate charged from Albany to Boston. The Western railroad, therefore, though a convenient channel through which the people of Boston and of Massachusetts draw their domestic supplies of food, is found unable to compete with the Hudson river as a route for produce designed for *exportation* to foreign countries or to the neighboring States. It failed to secure one of the leading objects of its construction. Its fault, however, was not so much ascribed to the *idea* upon which the road was built, as to the route selected to accomplish its object. It was felt that a route farther removed from the influence of the New York system of public works must be selected, and this conviction led to the project of a direct line of railroad from Boston to the navigable waters of Lake Ontario, passing to the north of Lake Champlain. This line, freed from all immediate competition, and from the attractive influence of other great cities, would, it was believed, secure to Boston the proud pre-eminence of becoming the exporting port of western produce, and, as a necessary consequence, the emporium of the country.

This great line has been completed; but it has too recently come into operation to predict, with any certainty, the result. From Boston to Lake Champlain it is composed of two parallel lines: one made up of the Boston and Lowell, Nashua and Lowell, Concord, Northern (New Hampshire,) and Vermont Central; the other of the Fitchburg, a part of the Vermont and Massachusetts, Cheshire, and Rutland roads. From Burlington, on Lake Champlain, these roads are carried forward upon a common trunk, composed of the Vermont and Canada, and Ogdensburg (northern New York) roads, to Ogdensburg, on the St. Lawrence, above the rapids in that river, thus forming an uninterrupted line from the navigable waters of the great basin to the city of Boston.

The lower portions of these lines in Massachusetts and New Hampshire were, in the outset, constructed chiefly with local objects in view. It was not until the State of Vermont was reached, that more comprehensive schemes began to give direction and character to the railroad enterprises in that quarter. The Vermont Central, the Rutland, and the Ogdensburg roads were commenced nearly simultaneously. The

leading object in their construction was that to which we have already adverted. Only with such objects to be realized in the future, and not during the progress of the works, could they have been accomplished. Men were called upon to make—and they contributed under a conviction that they were making—great present sacrifices for a future and prospective good. The constancy with which these works have been sustained and carried forward under circumstances the most discouraging, and under an unexampled pressure in the money market, reflects high credit upon the people of Boston, by whom the money for them has been chiefly furnished, and is the best possible evidence of the value of the prize sought to be gained.

By means of the line above described, a railroad connexion is opened with Montreal, through which that city now receives a large amount of her foreign imports, both from the United States and Great Britain. This trade has already far exceeded expectation; and as the city of Boston is a convenient winter port for Montreal, the latter will, undoubtedly, continue to receive a large amount of her winter supplies of merchandise through the former, giving rise to a large and profitable traffic, both to the railroads connecting the two, and to the cities themselves, and tending to strengthen the position of each, as far as its hold upon the trade of the country is concerned.

Should the line of railroad connecting Ogdensburg and Boston prove unable to compete successfully with the New York works, in the carriage of western produce, so far as the *export* trade is concerned, it will, undoubtedly, supply the demand for *domestic* consumption, and in this way not only secure a profitable traffic, but prove of great utility to the manufacturing and commercial districts of New England. For the articles of flour, corn, and cured provisions, the New England States depend principally upon the West. To supply these articles in a cheap, expeditious, and convenient manner, the above line is well adapted. It not only traverses many of the most important points of consumption, but connects with other roads penetrating every important portion of New England.

Were those immediately interested in the above roads to derive no other advantage than that of receiving their supplies of western products, and forwarding over them in return those of their own factories, they would be fully compensated for all their outlay. The unexampled progress of New England in population and wealth, in spite of all her disadvantages of soil and climate, proves, most conclusively, the wisdom and foresight of her people in constructing their numerous lines of railroad, which ally them to the more fertile and productive portions of the country.

The distance from Boston to Ogdensburg is about four hundred and twenty-five miles. The rates charged for the transportation of a barrel of flour between the two have ranged from sixty to seventy-five cents per barrel, which is less than the cost on the Erie canal for the same article from Buffalo to Albany, (a distance of three hundred and sixty-three miles,) for many years after its opening. Upon a considerable portion of the above line the grades are somewhat unfavorable, but not more so than upon other lines of road that aspire to a large through-traffic.

Table showing the cost of the various lines of public improvements constructed for the purpose of securing to Boston the trade of the basin of the St. Lawrence and the West.

Western railroad, including Albany and West Stockbridge.	\$9,953,758
Boston and Lowell.....	1,945,646
Lowell and Nashua.....	651,214
Concord.....	1,485,000
Northern.....	2,768,000
Vermont Central.....	8,500,000
Fitchburg.....	3,612,486
Vermont and Massachusetts.....	3,450,004
Cheshire.....	2,777,843
Rutland.....	4,500,000
Vermont and Canada.....	1,500,000
Ogdensburg or Northern.....	5,200,000
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	46,343.951
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Although only a portion of the Vermont and Massachusetts road is used in the above line, the total cost of the road is included, as it is proposed to make this road a part of a new line to the West, to be effected by tunnelling the Hoosac mountains.

In addition to the roads aiming at Lake Champlain, there are two important lines, the Connecticut and Passumpsic, and the Boston, Concord, and Montreal roads—the former in Vermont, and the latter in New Hampshire—having a general northerly direction, which are designed to be ultimately extended to Montreal. The former has reached St. Johnsbury, a distance of two hundred and thirty-eight miles from Boston, and three hundred and thirty-two from New York—a higher point than any yet attained by any New England road, with the exception of the Atlantic and St. Lawrence and the Vermont and Canada roads. The latter is nearly completed to *Wells river*, where it will form a junction with the Connecticut and Passumpsic road. The former will undoubtedly be soon extended about thirty miles farther north, to *Island Point*, which is the point of junction of the Atlantic and St. Lawrence and St. Lawrence and Atlantic railroads, through which it will have a railroad connexion both with Montreal and Quebec. The Boston, Concord, and Montreal railroad is now being extended to Littleton, a distance of twenty miles farther north, and will undoubtedly be continued up the valley of the Connecticut, for the purpose of forming a junction with the Atlantic and St. Lawrence road near *Lancaster*.

The *Boston and Worcester* road, next to the Western, is the most important project in the State. With the former, it makes a part of the *through* line to Albany, previously noticed. It is the only channel of communication between the city of Boston and the central portions of the State, and commands a large local revenue in addition to its through-traffic. It is one of the most expensive, and at the same time one of the most profitable works of the kind in the country.

The Boston and Lowell, the Fitchburg, and the Lowell and Nashua

roads, have already been briefly noticed in describing the great lines of which they severally form the trunks. All these possess a very large and lucrative *local* business, independent of what they derive from intersecting roads. They deservedly rank among the leading roads of the State, and the former was a pioneer work of the kind in this country.

Of the roads radiating from Boston in a southerly direction, the leading line is the Boston and Providence, which derives especial importance from connecting the two largest cities in New England. It also forms a part of one of the most popular routes to New York, and holds a conspicuous position from the necessarily intimate relation it bears to one of the great routes of commerce and travel. The next most important road in the southern part of Massachusetts is the Fall River road, which connects Boston with Fall River, a large manufacturing town, and constitutes a portion of another through-route to New York.

The other roads in this portion of Massachusetts, though of considerable local consequence, do not, for the want of connecting lines, possess any considerable interest for the public.

Railroads from Boston eastward.—Two important works, the *Boston and Maine* and *Eastern* roads, connect Boston with the State of Maine, traversing the northeastern portion of Massachusetts and the southeastern portion of New Hampshire. They form a junction soon after entering Maine, and are carried forward by the Portland, Saco, and Portsmouth railroad to Portland. The two former run through an almost continued succession of large manufacturing towns, which afford a very lucrative traffic to both lines. These roads are daily becoming more important from the rapid extension of railroads in Maine, and the probable construction of the European and North American railroad, connecting the Maine system of roads with St. John and Halifax, in the lower British provinces, which is destined to become a great route of travel between the Old World and the New. The above-named lines have already a very large *through* as well as local traffic, and occupy a conspicuous position as a part of our great coast-line of railroads.

There are several lines of road traversing the State of Massachusetts from north to south, of much consequence as *through* routes; among which may be named the Connecticut River line, and that made up of the *Worcester and Nashua* and the *Norwich and Worcester* and *Providence and Worcester* roads. These lines traverse districts filled with an active manufacturing population, for which they open a direct railway communication with New York, the great depot both of the foreign and domestic trade of the United States.

The western portion of the State is also traversed from north to south by a line composed of the Housatonic and a branch of the Western road, extending to the town of North Adams. There are, too, in addition to these, numerous local works in the State, which do not call for particular notice.

In the State of New Hampshire there is but one work having for its object the concentration within itself of the trade of the State—the *Portsmouth and Concord* railroad. The principal motive in the construction of this road was to open a communication with the trade of the interior, and prevent its being drawn off to Boston on the one hand, and Portland on the other. This work secures to the city of Ports-

mouth all the advantages of a connexion with the line already described, by which the city of Boston proposes to draw to herself the trade of the West, and will undoubtedly contribute much to sustain the trade and commercial importance of the former.

The line of road traversing the Connecticut valley is briefly described under the "Railroads of Connecticut," and those traversing the western part of Vermont are embraced in the notice of the New York system.

CONNECTICUT AND RHODE ISLAND.

Connecticut.—Population in 1830, 299,675 ; in 1840, 309,978 ; in 1850, 370,791. Area in square miles, 4,674 ; inhabitants to square mile, 79.33.

Rhode Island.—Population in 1830, 97,199 ; in 1840, 108,830 ; in 1850, 147,545. Area in square miles, 1,306 ; inhabitants to square mile, 112.97.

The railroads of Connecticut and Rhode Island, though numerous, and some of them important, derive their chief consequence from the relations they sustain to the works of other States, in connexion with which they constitute parts of several main routes of travel.

The most prominent of these is the great line connecting Boston and New York. The portion of this line in Connecticut is made up of the *New York and New Haven*, and the *New Haven, Hartford, and Springfield* roads. These roads, in connexion with the Western and Boston and Worcester, constitute the great travelled land route connecting New England with New York, which justly ranks with the most important passenger roads in the United States, as it is one of the most profitable.

The travel between New York and Boston has also given birth to other projects, claimed to be still better adapted for its accommodation. The most prominent of these is the *Air-Line* road, designed to follow a nearly straight route between New Haven and Boston. Although this scheme has been long before the public, it has not been commenced, but there now appears to be a strong probability that it will be successfully undertaken. To open this route will only require the construction of that portion of it lying in Connecticut, as the Massachusetts link is already provided for by the Norfolk county road.

Another road, constructed partly with a view to giving a new route between Boston and New York, is the *New London and New Haven* road, recently opened to the public. This road is to be extended east, both to Stonington and Norwich, to form a connexion at the former place with the *Norwich and Worcester*, and at the latter with the *Stonington*, roads. By these connexions, two new routes would be formed between Boston and New York, one of which would take the important city of Providence in its course. It is, therefore, probable that at no distant day there will be four independent land routes between New York and Boston, in addition to the three lines now in operation, partly by water and partly by railroad.

By far the greater part of the travel, and no inconsiderable portion of the trade, between Boston and New York, is carried over the routes last named, which are known as the *Fall River, Stonington* and *Norwich and Worcester* routes; the first is composed of the *Fall River* road; the second of the *Boston and Providence*, and *Stonington*; and the third, of the *Boston and Worcester*, and *Norwich and Worcester*, and their corresponding lines of steamers. All these routes are justly celebrated for the comfort and elegance of their accommodations; the ease, safety, and dispatch with which their trips are performed; and are consequently the favorite routes of travelling by a large portion of the business and travelling public. The distance between Boston and New York, by these routes, is about 230 miles.

The other leading lines in Connecticut are the *Housatonic*, extending from Bridgeport to the State of Massachusetts, and connecting with the roads in the western part of that State; the *Naugatuck*, extending from Stratford to Winsted, a distance of about 60 miles; and the *Canal* railroad, extending from New Haven and following the route of the Old Farmington canal to the northern part of the State, whence it is to be carried forward to Northampton, in Massachusetts. An important line of road is also in progress from Providence, centrally through the States of Rhode Island and Connecticut, to Fishkill, on the Hudson river, taking the city of Hartford in its route. This road is regarded with great favor by the cities of Hartford and Providence, as a means of connecting themselves with the Hudson, through which both draw a very large amount of some important articles of consumption, such as breadstuffs, lumber, coal, and the like.

The railroads lying principally in Rhode Island are the *Stonington*, which has already been noticed, and which is chiefly important as a part of one of the leading routes between Boston and New York; and the *Providence and Worcester* road. The latter is an important local work, traversing for almost its entire distance a constant succession of manufacturing villages. It is also an important through-road to the city of Providence, bringing her in connexion with the Western railroad and the central portions of Massachusetts, and with New Hampshire and Vermont, by means of the railroads centering at Worcester.

The *Boston and Providence* railroad, lying partly in Rhode Island, is already sufficiently described in the notice of the Massachusetts railroads.

Another important line of railroads, not particularly noticed, which may be embraced in the description of the "railroads of Connecticut," is the great line following the Connecticut valley. This line, though composed of several distinct works, is in all its characteristics a homogeneous line. It traverses the most fertile, picturesque, and attractive portion of New England, and is important both from the large traffic and the pleasure-travel it commands. No line of equal extent in the United States presents superior attractions. It has already reached St. Johnsbury, Vermont, a distance of about 330 miles from New York, and 254 from New Haven. Measures are now in progress to secure its extension about 30 miles farther north to Island Point, there to form a junction with the St. Lawrence and Atlantic railroad, in connexion with which a new, direct, and convenient route will be opened be-

tween New York and the New England States, and the cities of Montreal and Quebec.

MAINE.

Population in 1830, 399,455; in 1840, 501,798; in 1850, 583,169. Area in square miles, 30,000; inhabitants to square mile, 19.44.

With the exception of the States of Maine and Connecticut, the railroad system of New England rests upon Boston as a common centre; by the capital of which it has been mainly constructed. The roads of Maine belong to an independent system, toward which the city of Portland bears the same relation as does Boston to the works already described.

The leading road in Maine forms a part of the line connecting Montreal and Portland, made up of the Atlantic and St. Lawrence in the United States, and the St. Lawrence and Atlantic in Canada. This great work was first proposed to the people of Portland as a means of recovering the position they had lost from the overshadowing influence of their great rival, Boston, and of securing to themselves a portion of the trade of the West, which is now exerting such marked influence in the progress of all our great commercial towns.

Portland possesses some advantages over any other city east of New York, in being nearer to Montreal, the emporium of the Canadas; and in possessing a much more favorable route for a railroad from the Atlantic coast to the St. Lawrence basin than any other, east of the Green Mountain range. The city of Montreal, being accessible from all the great lakes by the largest craft navigating these waters, is the convenient depot for the produce collected upon them. When once on ship-board, this produce may be taken to Montreal at slightly increased rates over those charged to Buffalo, Oswego, or Ogdensburg; but the want of a winter outlet from Montreal to tide-water has seriously retarded the growth and prosperity of that city, and prevented her from reaping all the advantages from her connexion, by her magnificent canals, with the trade of the West, which she would have secured by a convenient winter outlet. Formerly large amounts of western produce were usually collected there during the autumnal months, and warehoused till spring, and then shipped to England. Shipments by this route involved the necessity of holding produce received late in the season some four or five months. The inconveniences and losses arising from these causes, aided by the repeal of the English corn laws, were among the prominent reasons which led to the commercial arrangements by which colonial produce and merchandise are allowed to pass, in bond, through the territories of the United States. This arrangement had a tendency to divert a large trade from Montreal, and threatened the most disastrous consequences to its trade and prosperity. In view of this state of things, its citizens espoused and prosecuted the railroad to Portland with great energy and zeal. The whole work is far advanced toward completion on both sides of the line. The portion within the United States will be finished

during the present year, and the Canadian portion by the 1st of July, 1853. It occupies the shortest practicable route between the St. Lawrence river and the Atlantic coast. Its grades are favorable, nowhere exceeding fifty feet to the mile in the direction of the heavy traffic, or sixty feet on the opposite course. The gauge of the whole road is to be five and a half feet. As no transshipment will be necessary upon this road, and as its operations can be placed substantially under one management, it is believed that produce can be transported over it at much lower rates than the ordinary charges upon railroads.

As before stated, the plan of a railroad from Portland to the St. Lawrence originated in the idea of the possibility of making that city the Atlantic terminus of a portion of the trade of the St. Lawrence and the great lakes. The city of New York had so long been in the exclusive possession of this trade, as to create the idea that she held it by a sort of natural and inalienable right. When the idea was proposed of turning this trade through a new channel, and of bringing it to the Atlantic coast at a point some four hundred miles northward, the boldness of such a proposition was enough to stagger the credulity of every one who did not feel himself immediately interested in the result. As soon, however, as the prospect was fully unfolded to the people of Portland, its apparent practicability, and the advantages which it promised to secure, took complete possession of the public mind, and the city resolved, single-handed, to undertake the construction of a work running, for a considerable portion of its distance, through comparatively unexplored forests; traversing for one hundred miles, at least, the most mountainous and apparently most difficult portion of the eastern States for railroad enterprises; and involving a cost, for the American portion alone, of over five millions of dollars. Repeated attempts had been made to construct a short road, for the accommodation of local traffic, upon the very route since selected for the great line, but without success. The inducements held out were not regarded sufficient to warrant the necessary outlay. It was only by assuming that the people of Portland held within their grasp the trade of one of the most important channels of commerce in the whole country, that they could be induced to make the efforts and sacrifices necessary to success. These efforts and sacrifices have been made. The project is on the eve of realization, and the wisdom in which the scheme was conceived, and the skill and ability displayed in its execution, give the most satisfactory assurance of complete success.

The length of this line, the construction of which devolved upon the people of Portland, is about one hundred and sixty miles, costing about \$35,000 per mile, or an aggregate of nearly \$6,000,000. The first step in the process of construction was a stock subscription of over \$1,000,000 by the citizens of Portland, aided by some small contributions from towns on the route—for the project was regarded by all others as a mere chimera. This was expended in construction, and was sufficient to open the first division, which, running through an excellent country, at once entered into a lucrative traffic. The city of Portland then obtained, by two several acts of the legislature, permission to pledge its credit to the road to the amount of \$2,000,000. These sums, with some further additions to its stock, furnished a cash capital

of over \$3,000,000 to the work. The necessary balance has been raised upon stock subscriptions by contractors and company bonds. In this manner has a city of 20,000 inhabitants secured the construction of a first-class railroad, connecting it with the St. Lawrence by the shortest route practicable for a railroad from any of our seaports. The amount actually paid in to the project by the people of Portland will exceed \$50 in cash to each individual, in addition to \$100 to each, represented by the *credits* that have been extended. It is believed that no better monument exists in this country of the energy and enterprise of our people, and the successful co-operation of one community in the execution of a great enterprise by which all are, relatively speaking, to be equally benefitted. It is an example which cannot be studied and imitated without profit.

Prior to the construction of the Atlantic and St. Lawrence railroad, the only railroad of importance in the State was the Portland, Saco and Portsmouth road, which connected its commercial metropolis with the railroad system of Massachusetts. This road was constructed by persons interested in the connecting lines, as a necessary extension of their own. When the city of Portland was reached, their objects were regarded as secured. Any further extension of railroads in Maine was looked upon as of doubtful utility to the interests of the city of Boston, the great centre of the New England system. It was felt that the construction of railroads north and east from Portland, into the interior, might concentrate in *that* city the trade of the State, which had been almost exclusively enjoyed by the former. This trade was already secured and sufficiently accommodated, as far as Boston was concerned, by the extensive commercial marine of the two States; and the construction of railroads, it was felt, might lessen instead of strengthening the grasp by which she held it. While every other portion of the country was embarking in railroads, the conviction grew up that Maine was not the proper theatre for such enterprises, or, if it were, the people felt their means unequal to their construction, and it was known that no foreign aid would be had. All such projects, therefore, came to be regarded with comparative indifference. In this condition of the public mind the Atlantic and St. Lawrence scheme was proposed, and with it a system of railroads independent of the rest of the New England States, which should concentrate within her own territory her capital and energies, and which should not only place her in a commanding position in reference to the trade of the West, but, at the same time, place her *en route* of the great line of travel between the Old and New Worlds—a position combining all the advantages of the most favorable connexions with the domestic trade of the country and with foreign commerce and travel. These propositions constitute an era in the history of the State. A new life was infused into the public mind, and objects of the highest value held out as the reward of new efforts. The effect upon the policy and public sentiment of the State has been magical. The whole people felt and saw that they have rights and interests to maintain and vindicate, and that Maine, instead of being a remote and isolated State, removed from participation in the projects and schemes which are effecting changes so marvellous upon the face of society, could be brought by her own efforts into the very focus

of the great modern movement. A new destiny was opened before her. To this call she has nobly responded, and the State is alive with projects that promise, in a few years, to secure to every portion of it all necessary railroad accommodations, with the results which always follow in their train.

Next in importance to the Atlantic and St. Lawrence railroad is the *European and North American* project, which is designed to become a part of the great route of travel between the Old World and the New. Under the above title is embraced the line extending from Bangor, Maine, to Halifax, Nova Scotia, taking St. John, New Brunswick, in its route. From Bangor west, the line is to be made up of the Penobscot and Kennebec road, now in progress; the Androscoggin and Kennebec road, with a portion of the Atlantic and St. Lawrence, now in operation. When the whole line shall be completed, it is claimed that the transatlantic travel will pass over this road to and from Halifax, and that through Maine will be the great avenue of travel between Europe and America. Without expressing any opinion as to the soundness of such claims, their correctness is at present assumed, and is made the basis of action on the part of the people of the State, and, to a certain extent, gives character and direction to their railroad enterprises.

Of this great line, that portion extending from Portland to Waterville, a distance of eighty-two miles, is already provided for by a portion of the Atlantic and St. Lawrence, and the Androscoggin and Kennebec railroads. The portion from Waterville to Bangor, something over fifty miles, is in progress. From Bangor to the boundary line of New Brunswick, no definite plan has been agreed upon; although the subject is receiving the careful consideration of the parties having it in charge, and no doubt is expressed that such measures will be taken as shall secure complete and early success to the measure. The New Brunswick portion of it is already provided for by a contract with a company of eminent English contractors, who, it is believed, will also undertake the Nova Scotia division. Of the realization of this scheme at the earliest day there can be no doubt. The plan meets with as hearty approval in the provinces, and in Great Britain, as it does in Maine; and on both sides of the water are the results claimed fully conceded. Such being the fact, foreign capital will be certain to supply, and is, indeed, now supplying, whatever may be lacking in this country.

Another leading road in Maine is the Kennebec and Portland, extending from Portland to Augusta, upon the Kennebec river, a distance of over sixty miles. This road it is proposed to extend, to form a junction with the Penobscot and Kennebec, by which it will become a convenient link from Portland east in the great European and North American line already referred to.

An important line of road is also in progress, to extend from Portland to South Berwick, there to form a junction with the Boston and Maine road—thus forming two independent lines of railroad between Portland and Boston. A portion of this line is in operation, and the whole under contract, to be completed at an early day.

A project of considerable importance is also at the present time engrossing the attention of the people of Bangor—that of a railroad

following the Penobscot river up to Lincoln, a distance of about fifty miles. As the route is remarkably favorable, and easily within the means of the city of Bangor, its speedy construction may be set down as certain. It is much needed to accommodate the important lumbering interest on that river. From Bangor to Oldtown—a distance of twelve miles—a railroad already exists, which will form a part of the above line.

The projects enumerated embrace a view of all the proposed works in Maine, of especial public interest.

NEW JERSEY.

Population in 1830, 320,823; in 1840, 373,306; in 1850, 489,555. Area in square miles, 8,320; inhabitants to square mile, 58.84.

The railroads of New Jersey, as do those of the State of Connecticut, derive their chief importance from their connexion with the routes of commerce and travel of other States.

The most important roads in the State are those uniting New York and Philadelphia, the *Camden and Amboy* and the *New Jersey* railroads, in connexion with the *Philadelphia and Trenton* road, lying within the State of Pennsylvania. Upon these roads are thrown not only the travel between the two largest cities in the United States, but between the two great divisions of the country. As might be expected from such relations, they command an immense passenger traffic, and rank among our most successful and productive works of the kind. They are much more important as routes of travel than of commerce, as the Raritan canal, which has the same general direction and connexions, is a better medium for heavy transportation.

Another important work is the *New Jersey Central*, which traverses the State from east to west. At Elizabethtown it connects with the New Jersey road, thus forming a direct railroad connexion between New York and Easton, on the Delaware river. This road, though locally important, is still more so from its prospective connexions with other great lines of road, either in progress or in operation. It is proposed to extend it up the valley of the Lehigh, and through the mountain range lying between the Delaware and Susquehanna rivers, to Catawissa, on the latter, from which it will be carried to Williamsport, to form a connexion with the *Sunbury and Erie* road, which is about to be commenced. Upon the completion of these, the Central would not only form a very important avenue between the city of New York and the coal-fields of Pennsylvania, from which that city draws its supplies of fuel, but would unite the city with Lake Erie, opening a new and direct line for the trade of the West, and placing New York in very favorable relations to the proposed Sunbury and Erie line. From Easton to Sunbury a large amount has already been expended for the purpose of opening the above communication, and no doubt is expressed that this project will be speedily realized.

A road is also in progress from Trenton, designed to follow the Delaware up to the Water Gap, for the purpose of connecting with the

proposed road from the Lackawanna valley to that place, and of opening an outlet for the latter in the direction of Philadelphia. This road has already been completed to Lambertville, and is in progress beyond that point.

Another important road in this State, possessing similar characteristics with the Central, is the *Morris and Essex*. This road is now in operation to Dover, a distance of about forty miles from New York, and is in progress to a point on the Delaware river, opposite the Water Gap. From the Water Gap a road is proposed extending to the Lackawanna valley, at *Scranton*, the centre of very extensive deposits of iron and coal. The importance of a continuous line of railroad from the coal-fields of Pennsylvania to New York has already been adverted to. The extension of the Morris and Essex line into the Lackawanna valley is of the first consequence, from the connexion it would there form. This valley is already connected with western New York and the great lakes, and will be the focal point of a large number of roads, constructed for the purpose of becoming outlets for its coal in a northerly direction. By the opening of a railroad from this valley to New York, a new and important route would be formed between that city and the lakes, which could not fail to become a valuable one, both for commerce and travel.

Through the northern part of the State, the Erie railroad is now brought to Jersey City by means of what is now called the *Union* railroad, composed of two short roads, previously known as the *Paterson* and the *Paterson and Ramapo*; the track of this will be relaid, so as to correspond to the Erie gauge. Through this road the Erie is brought directly to the Hudson, opposite New York—a matter of great importance so far as its passenger traffic is concerned. The former is leased to, and is run as a part of, the Erie road.

A railroad is also in progress from Camden, opposite Philadelphia, to Absecum Beach, on the Atlantic coast. This road will traverse the State centrally, from northwest to southeast, and will prove a great benefit to the country traversed.

Canals of New Jersey.

There are two canals of considerable importance in the State—the *Delaware and Raritan*, and the *Morris and Essex*.

The *Delaware and Raritan* canal, the most considerable work of the two, commences at New Brunswick and extends to Bordentown, a distance of 43 miles. It is 75 feet wide at the surface, and 47 at the bottom, and 7 feet deep. There are seven locks at each end, 110 feet long, and 24 feet wide, having eight feet lift each. These locks pass boats of 228 tons burden. The canal is supplied from the Delaware river, by a feeder taken out 22 miles above Trenton. This canal connects with the Delaware division of the Pennsylvania canals, and is the principal channel through which New York is supplied with coal. It also commands a large amount of freight between New York and Philadelphia, and is navigated by regular lines of propellers, running between the two cities. This work is of very great importance to the city of New York, as a means of supplying that city with coal, and

as affording a convenient channel of communication with Philadelphia. It is also an important work in a national point of view; as, in connexion with the Chesapeake and Delaware and the Dismal Swamp canals, it forms an internal navigable water-line, commencing with Long Island sound, and extending south, and by way of the cities of New York, Philadelphia, Baltimore, and Norfolk, to the south part of North Carolina. This fact was regarded of great consequence to the commerce of the country, prior to the construction of railroads, as it would have enabled our people to maintain an uninterrupted communication between the different portions of the country in the event of a war with a foreign power.

Morris and Essex canal.—This work extends by a circuitous route from Jersey City to the Delaware river, at Easton. Its length is about one hundred miles. Its revenues are principally derived from the local traffic of the country traversed, and the transportation of coal, which is brought to Easton by the Lehigh canal. Its relations to the commerce of the country are not such as to call for particular notice.

PENNSYLVANIA.

Population in 1830, 1,348,233; in 1840, 1,724,033; in 1850, 2,311,786. Area in square miles, 46,000; inhabitants to square mile, 50.25.

The attention of the people of Pennsylvania was, at an early period in our history, turned to the subject of internal improvements, with a view to the local wants of the State, and for the purpose of opening a water communication between the Delaware river and the navigable waters of the Ohio. It was not, however, till stimulated by the example of New York, and the results which her great work, the Erie canal, was achieving in developing and securing to the former the trade of the West, that the State of Pennsylvania commenced the construction of various works which make up the elaborate system of that State.

The great *Pennsylvania* line of improvement, extending from Philadelphia to Pittsburg, was commenced on the 4th of July, 1826, and was finally completed in March, 1834. It is made up partly of railroad and partly of canal, the works that compose it being the Columbia railroad, extending from Philadelphia to Columbia, a distance of 82 miles; the eastern and Juniata divisions of the Pennsylvania canal, extending from Columbia, on the Susquehanna river, to Hollidaysburg, at the base of the Alleghany mountains, a distance of 172 miles; the Portage railroad, extending from Hollidaysburg to Johnston, a distance of 36 miles, and by which the mountains are surmounted; and the western division of the Pennsylvania canal, extending from Johnston to Pittsburg, a distance of 104 miles; making the entire distance from Philadelphia to Pittsburg by this line 394 miles. The canals are 4 feet deep, 28 feet wide at the bottom, and 40 at the water-line. Its locks are 90 feet long, and from 15 to 17 feet wide. The Alleghany mountains are passed by a summit of 2,491 feet, and the eastern division of the canal attains a height of 1,092 feet above tide-water. The Portage road consists of a series of inclined planes, which are worked by stationary engines.

The cost of this great line up to the present time has been about \$15,000,000.

The eastern division of the canal has an additional outlet, by means of the Tide-water canal, (a private enterprise,) which extends from Columbia to Havre de Grace, on the Chesapeake bay, in Maryland. It forms an important avenue between both Philadelphia and Baltimore and the interior of the State, as the boats that navigate it are, after reaching tide-water, conveniently taken to either city, as the case may require.

The line of improvement we have described was constructed with similar objects, and bears the same relation to the city of Philadelphia as does the Erie canal to the city of New York. It has not, however, achieved equal results, partly from the want of convenient western connexions, from the unfavorable character of the route, and partly from the fact that the line is made up of railroad and canal, involving greater cost of transportation than upon the New York work. It has, however, proved of vast utility to the city of Philadelphia and to the State, and has enabled the former to maintain a very large trade which she would have lost but for the above line. The comparatively heavy cost of transportation over this route has not enabled it to compete with the New York improvements, as an outlet for the cheap and bulky products of the West; but so far as the return movement is concerned, it enjoys some advantages over the former, the most important of which is the longer period during which it is in operation. At the commencement of the season it opens for business about a month earlier than the Erie canal—a fact which secures to it and to the city of Philadelphia a very large trade long before its rival comes into operation; so that, although it may not have realized the expectations formed from it as an outlet for western trade, it has been the great support of Philadelphia, without which her trade must have succumbed to the superior advantages of New York.

It would be a matter of much interest could the movement of property, upon the two lines of improvement from tide-water to the navigable waters of the West, be compared, both in tonnage and value. The returns of the Pennsylvania works, however, do not furnish the necessary data for such a comparison. There are no methods of distinguishing accurately the local from the through-tonnage, nor the quantity or value of property received from other States, as is shown upon the New York works. The returns of the business on the former, however, show only a small movement east over the Portage road, which must indicate pretty correctly the *through* movement. In the opposite direction the amount, both in value and tonnage, is much larger. A better idea, probably, can be formed of the value and amount of this traffic from the extent of the jobbing trade of Philadelphia, a very considerable portion of which must pass over the above route. Philadelphia, though it does not possess a large foreign commerce, is one of the great distributing points of merchandise in the Union; and the large population and the very rapid growth of that city, in the absence of the *foreign* trade enjoyed by New York, proves conclusively the immense *domestic* commerce of the former.

Another great line of improvement undertaken by the State is com-

posed of the *Susquehanna division* of the *Pennsylvania canal*, extending from the mouth of the Juniata to Northumberland, a distance of 39 miles, and the North Branch canal, extending from Northumberland to the State line of New York, a distance of 162 miles, where it will connect with the New York State works and the numerous proposed lines of railroad centring at Elmira. Of this last-named canal, 112 miles, extending from the mouth of the Juniata to Lackawannock, have been completed, at a cost of nearly \$3,000,000, and the remainder of the line is in rapid progress. As the lower part of this canal will connect with the Pennsylvania, and through this with the Tidewater canal, a great navigable water-line will be constructed, extending through the central portions of the State from north to south. This line will, for a considerable portion of its distance, traverse the anthracite coal-fields of the State, from which a large traffic is anticipated. A large trade is also expected from the New York works in such articles as Philadelphia and Baltimore are better adapted to supply than New York.

Another important work, so far as the coal trade of the country is concerned, is the *Delaware division* of the *Pennsylvania canal*, extending from Bristol to Easton, a distance of sixty miles. This work forms the outlet to the great Lehigh coal-fields. Its cost has been about \$1,500,000.

In the western portion of the State several important works were projected, as a part of the great system originally proposed, although only an inconsiderable portion of them has been completed by the State. Of these are, first, the *Beaver division* of the *Pennsylvania canal*, commencing at Beaver, on the Ohio, at the mouth of Beaver river, and extending to Newcastle, about twenty-five miles. This canal forms the trunk of the Mahoning canal, extending from the State line of Pennsylvania to the Ohio canal, at Akron, a distance of about seventy-six miles; and also of the Erie extension of the Pennsylvania canal, commencing near Newcastle and extending to Erie, a distance of about one hundred and six miles.

This last-described work has passed into private hands. It is at the present time chiefly employed in the transportation of coal, and is the principal avenue for the supply of this article to Lake Erie. Connected with the Erie extension is a State work called the French creek feeder and Franklin branch, extending from Franklin, on the Alleghany river, to Conneaut lake, by way of Meadville, a distance of about fifty miles. These improvements in the western part of the State are chiefly important as local works; they have not proved productive as investments, though highly beneficial to the country traversed.

The West Branch canal, extending from Northumberland to Lockhaven, a distance of seventy-two miles, is a work of much local importance, as it traverses a region very rich both in soil and minerals.

The above constitute the leading works which belong to the State system, as it may be termed. There are a few other works of minor importance, which do not call for particular notice.

So far as their income is concerned, the various works undertaken and executed by the State have not proved productive, though they have been of vast utility, and have exerted a great influence in devel-

oping the resources of the State. The usefulness of the great Central line has been seriously impaired by the compound and inconvenient character of the work, made up partly of railroad and partly of canal. The mountains are overcome by inclined planes, which are now regarded as incompatible with the profitable operation of a railroad, and which are to be avoided on the route by works now in progress. The other works described, not having been carried out according to the original plan, have failed to make the connexions contemplated, and consequently have not realized the results predicted. The State of Pennsylvania, however, possesses within herself elements which, properly developed, are fitted to render her, probably, the first State in the Union in population and wealth. This has, to a great extent, been already effected by the works described, which have in this way added to the various interests of the State a value tenfold greater than the cost; and her people can much better afford to pay the immense sums which these works have cost, than remain unprovided with such improvements, even with entire freedom from debt.

Annexed is a tabular statement, showing the length and cost of the various State works above described.

Tabular Statement showing the length, cost, total revenue, and expenditures of the public works of Pennsylvania up to January 1, 1852.

Lines.	Length.	Cost.	Revenue.	Expenditures.
	<i>Miles.</i>			
Columbia and Philadelphia railway.	82	\$4,791,548 91	\$7,483,395 53	\$5,105,058 39
Eastern division of canal.....	43	1,737,236 97	2,661,008 05	762,981 30
Juniata division of canal.....	130	3,570,016 29	1,371,948 59	1,760,583 19
Alleghany Portage railway.....	36	1,860,752 76	2,985,769 10	3,161,327 26
Western division of canal.....	105	3,096,522 30	2,523,979 59	1,197,182 83
Total main line.....	396	15,056,077 23	17,026,100 86	11,987,132 97
Delaware division of canal.....	60	1,384,606 96	2,238,694 75	1,117,716 70
Susquehanna division of canal....	39	897,160 52	402,779 15	554,835 22
North Branch division of canal....	73	1,598,379 35	1,003,047 58	753,662 17
West Branch division of canal....	72	1,832,083 28	449,058 19	738,470 58
	640	20,768,307 34	21,119,680 53	15,151,817 64
French Creek division of canal....	45	817,779 74	5,819 67	143,911 94
Beaver division of canal.....	25	512,360 05	38,312 29	210,360 00
Finished lines.....	710	22,098,447 13	21,163,812 49	15,506,089 58
Unfinished improvements.....	314	7,712,531 69	.....	.....
Board of Canal Commissioners.....	.....	70,782 67	.....	70,782 66
Board of Appraisers.....	.....	17,584 93	.....	.....
Collectors, weighmasters, and lock-keepers.....	.....	.....	.....	1,348,384 14
Exploratory surveys.....	.....	157,731 14	.....	.....
Total.....	1,024	30,057,077 56	21,163,812 49	16,925,256 88

Private Works.

Pennsylvania railroad.—The object of the Pennsylvania railroad is to provide a better avenue for the trade between Philadelphia and the

interior—one more in harmony with the works in progress and operation in other States than the great line already described. The latter is not only poorly adapted to its objects, but is closed a considerable portion of the year by frost. The mercantile classes of Philadelphia have long felt the necessity of a work better adapted to their wants, and fitted to become a great route of travel as well as commerce, from the intimate relation that the one bears to the other. It is by this interest that the above work was proposed, and by which the means have been furnished for its construction. The conviction of which we have spoken has been instrumental in procuring the money for this project as fast as it could be economically expended. The work has been pushed forward with extraordinary energy from its commencement. Already a great portion of the line has been brought into operation, and the whole will soon be completed.

The Pennsylvania railroad commences at Harrisburg and extends to Pittsburg, a distance of two hundred and fifty miles. The general route of the road is favorable, with the exception of the mountain division. The summit is crossed at about 2,200 feet above tide-water, involving gradients of ninety-five feet to the mile, which are less than those resorted to on the Baltimore and Ohio railroad, and not much exceeding those profitably worked on the Western railroad of Massachusetts. The route is graded, and the structures are prepared for a double track, which will be laid as soon as possible after the first shall be opened. The cost of the road, for a single track, is estimated at \$12,500,000, of which \$9,750,000 have been already provided by stock subscriptions. The balance is to be raised by an issue of bonds. The road is to be a first-class work in every respect, and is constructed in a manner fitting the great avenue between Philadelphia and the western States.

As a *through* route, both for trade and travel, there is hardly a work of the kind in the United States possessing greater advantages or a stronger position. Its western terminus (Pittsburg) is already a city of nearly 100,000 inhabitants, and is rapidly increasing. That city is the seat of a large manufacturing interest, and the centre of a considerable trade; and a road connecting it with the commercial metropolis of the State cannot fail to command an immense and lucrative traffic.

The western connexions which this road will make at Pittsburg are of the most favorable character. It already has an outlet to Lake Erie through the Ohio and Pennsylvania and the Cleveland and Wellsville roads. The former of these is regarded as the appropriate extension of the Pennsylvania line to the central and western portions of Ohio. Through the Pittsburg and Steubenville road (a work now in progress) a connexion will be opened with the Steubenville and Indiana railroad, which is in progress from Steubenville to Columbus. These lines, in connexion with the Pennsylvania road, will constitute one of the shortest practicable routes between Philadelphia and central Ohio. At Greenburg, 25 miles east of Pittsburg, the Hempfield railroad will form a direct and convenient connexion with Wheeling, which has already become an important point in the railroad system of the country. At that city, by means of the Hempfield line, the Pennsylvania

road will be connected with the central Ohio and with the northern extension of the Cincinnati and Marietta roads; and through all the above-named lines the former will be brought into intimate and convenient relations with every portion of the western States.

The Pennsylvania road must also become a route for a considerable portion of the travel between the western States and the more northern Atlantic cities. From New York it will constitute a shorter line to central Ohio than any offered by her own works. It will, for such travel, take Philadelphia in its course—a matter of much importance to the business community.

The route occupied by the road is one of the best in the country for local traffic, possessing a fertile soil and vast mineral wealth in its coal and iron deposits. From each of these sources a large business may be anticipated. The whole road cannot fail, in time, to become the seat of a great manufacturing interest, for which the coal and iron upon the route will furnish abundant materials.

The Pennsylvania road, though only partially opened for business, has demonstrated its immense importance to the trade of Philadelphia. It was the means of securing to that city during the present year a very large spring trade, which otherwise would have gone to New York. The advantages already secured are but an earnest, it is claimed, of what the above work will achieve when fully completed. It is confidently expected by its projectors that the work will be followed by the same results in Philadelphia that the Erie canal secured to the city of New York. However this may be, there can be no doubt of its becoming the channel of an extensive commerce, and one calculated to promote, in an eminent degree, the prosperity of the city of Philadelphia, as well as that of the whole State.

The next most important work in the State, and one of greater local importance, is the *Philadelphia and Reading* railroad. This work is the great outlet of the Schuylkill coal-fields to tide-water. On this account it bears a most intimate relation to most of the great interests of the country. Its length is about ninety miles, and its total cost about \$17,000,000. It is one of the most expensive and best-built roads in the United States. All its grades are in favor of the heavy traffic. Nearly 2,000,000 tons of coal have been transported over this road the past year. There can be no doubt that the enormous coal traffic which this road secures to Philadelphia is one of the causes of the extraordinary increase of that city from 1840 to 1850. This work has not, till a comparatively recent period, proved a profitable one to the stockholders; but it is confidently expected that for the future it will yield a lucrative income.

Philadelphia, Wilmington, and Baltimore railroad.—This work lies partly in the three States of Pennsylvania, Delaware, and Maryland, but may be appropriately described with the Pennsylvania roads. Its income is chiefly derived from its passenger traffic. It is one of the most important trunks in the great coast-line of railroads between the North and the South, and would be supposed to be one of the best routes in the country for a lucrative traffic. Its length is ninety-eight miles, and it has cost something over \$6,000,000. It has been an expensive work to construct and maintain, and has not, consequently, proved very

profitable to stockholders, though its value in this respect is rapidly increasing. Its position is such as to monopolize the travel between its termini and between the northern and southern States.

Among the other railroads in operation in the State may be named, 1st, the *Philadelphia and Trenton*, one of the links of the principal line of road connecting Philadelphia with New York, and for this reason an important work. This is one of the leading routes of travel in the country, and commands a very profitable traffic. 2d, the *Harrisburg and Lancaster* road, which forms a part of the great line through the State. 3d, the *York and Cumberland* road, which is to form a part of the line through central Pennsylvania, of which the *Susquehanna* road is to be an important link. 4th, the *Cumberland Valley* road, extending from Harrisburg to Chambersburg. 5th, the *Lackawanna and Western* road, connecting the northern coal mines of Pennsylvania with the New York improvements. 6th, the *Philadelphia, Germantown, and Norristown* road, of which it is proposed to form the base of a line extending from Norristown to the Delaware river. 7th, the *Franklin* railroad, extending from Chambersburg to Hagerstown, Maryland. 8th, the *Northeast*. 9th, the *Franklin Canal* road, extending from Erie to the Ohio State line. These two last form the only existing link between the railroads of the Mississippi valley and of the eastern States, and will, from their favorable relations, command an immense business. The Lackawanna and Western will soon become a part of another *through* route from western New York to the city. Already are roads either in progress or in operation from New York to the Water Gap. The completion of these will leave only about forty-five miles of new line, to open a new and shorter route from Great Bend, on the Erie road, to the city of New York than by that line.

There are also in the eastern part of the State numerous coal roads, the most important of which is the Pennsylvania Coal Company's road, extending from the Lackawanna valley, a distance of something over forty miles, to the Delaware and Hudson canal. With the above exception, the coal roads are short lines; as they are purely local works, a description of them is not appropriate to this report.

There are several very important works, proposed and in progress, in the State. Those in the eastern part of it are: the road from Norristown to the Delaware river, which is to be extended to the Water Gap, for the purpose of forming a connexion with the proposed road to the Lackawanna valley; the *Catawissa, Williamsport, and Erie* road, which is the virtual extension of the Reading road into the Susquehanna valley; and a road extending from Easton, following up the valley of the Lehigh, to a junction with the road last named. The first of these is in progress. The Catawissa road was partially graded some years since, and efforts are now making to secure its completion. The road up the valley of the Lehigh is regarded as the virtual extension of the New Jersey Central road into the valley of the Susquehanna, where a connexion will be formed with the Sunbury and Erie road, thus opening a direct communication between the latter and New York, and placing that city in as favorable connexions with the proposed line to Lake Erie as Philadelphia.

An important line of road is soon to be commenced, extending from

Harrisburg up the valley of the Susquehanna to Elmira, in the State of New York. This work may be regarded as a Baltimore project, and is sufficiently described in connexion with the Baltimore and Susquehanna railroad.

In the western part of the State the leading work in progress is the *Alleghany Valley* road, extending from Pittsburg in a generally north-eastern direction to Olean, on the New York and Erie road, which is the probable terminus of the Genesee Valley and the Buffalo and Olean roads. The length of the Alleghany Valley road will be about one hundred and eighty miles. Its gauge will probably correspond to that of the New York and Erie road. In connexion with this, it will form a very direct and convenient route between the cities of New York and Pittsburg, and also between the latter and the cities of Albany and Boston, through the Albany and Susquehanna road. By the above lines the Alleghany Valley road will connect Pittsburg with Lakes Erie and Ontario, and with the Hudson river. The road will traverse one of the best portions of Pennsylvania, possessing a fertile soil, and abounding in extensive deposits of coal and iron. The project has the warm support of Pittsburg, and when the inducements to its construction are considered, and the means that can be made applicable to this end, its early completion cannot be doubted.

Another road in progress in western Pennsylvania is the *Hempfield*, extending from Greensburg, on the Pennsylvania road, to Wheeling, a distance of seventy-eight miles. One of the leading objects of this road is to connect the great Pennsylvania line with the roads centring at Wheeling. It derives its chief public consideration from this fact, although its line traverses an excellent section of country, which would yield a large local traffic. This project is regarded with much favor by the people of Philadelphia, from the supposed favorable connexions it will make with the Ohio Central and the northern extension of the Cincinnati and Marietta roads. When completed, it will undoubtedly become an important avenue of trade and travel.

The *Pittsburg and Steubenville* road resembles the *Hempfield*, both in its objects and its direction. It was proposed as a more direct route to central Ohio than that supplied by the *Ohio and Pennsylvania* railroad. One of the leading motives for its construction was to counteract any influence that the *Hempfield* road might exert prejudicial to the interests of Pittsburg, by placing that city on one of the shortest routes between the East and West. At Steubenville it will connect with the *Steubenville and Indiana* road, now in progress from that city to Columbus, the capital of Ohio.

The proposed *Sunbury and Erie* railroad is intended to bear the same relation to Philadelphia, in reference to the trade of Lake Erie and the West, as does the Erie railroad to New York. Its length will be about two hundred and forty miles. Active measures are in progress to secure the necessary means for this work, which promise to be successful. The whole distance by this route, from Philadelphia to Lake Erie, will be about four hundred and twenty miles, somewhat less than that from New York.

There are a number of canals in the State owned by private companies, the most important of which are the *Schuylkill* and *Lehigh* ca-

nals, which have been constructed for the purpose of affording outlets for the anthracite coal-fields of that State. They derive their chief consequence from their connexion with the coal trade, although they have a large traffic in addition. These works, though of great utility and importance, from the relations they sustain to the varied interests of the country, in supplying them with fuel, are of a local character, and do not form portions of any extended routes of commerce.

The Tide-water canal has been briefly alluded to in the notice of the "State works," to which it supplies a communication with Chesapeake bay, and with the cities of Baltimore and Philadelphia, by a continuous water-line. It is a valuable improvement, and forms the outlet for a large and important section of the State, and for a portion of the commerce passing over the State works. It is a work of large capacity, and is in possession of an extensive trade. It is also a channel through which a large quantity of coal is sent to market.

DELAWARE.

Population in 1830, 76,748; in 1840, 78,085; in 1850, 91,532. Area in square miles, 2,120; inhabitants to square mile, 43.17.

The only road lying entirely in this State is the *Newcastle and Frenchtown*, connecting the Delaware with Chesapeake bay, by a line of 16 miles. This road was once of considerable importance, as it formed a part of the route of travel between the East and West, which has since been superseded by the Philadelphia, Wilmington, and Baltimore railroad. It may now be regarded only as a work of local consequence.

Chesapeake and Delaware canal.—The only improvement of any considerable importance in Delaware is the Chesapeake and Delaware canal, connecting the above-named bays. This work is $13\frac{1}{2}$ miles long, 66 feet wide, 10 feet deep, with two lift and two tide-locks. It cost nearly \$3,000,000. A very considerable portion of its cost was furnished by the general government, in donations of land. This work bears a similar relation to the commerce of the country with the Raritan canal, and makes up a part of the same system of internal water navigation. It is also the channel of a large trade between Chesapeake bay and Philadelphia and New York.

The *Philadelphia, Wilmington, and Baltimore* railroad lies partly within the State of Delaware, and has been sufficiently described under the head of "Pennsylvania."

MARYLAND.

Population in 1830, 447,040; in 1840, 470,019; in 1850, 583,035. Area in square miles, 9,356; inhabitants to square mile, 62.31.

Influenced by similar objects to those which actuated the people of Philadelphia, New York, Boston, and the eastern States, in their immense

expenditures for works that facilitate transportation, the people of Maryland, at an early period, commenced two very important works, the *Chesapeake and Ohio canal* and the *Baltimore and Ohio railroad*, for the purpose of attracting the trade of the interior, and of placing themselves on the routes of commerce between the two grand divisions of the country. By the deep indentation made by the Chesapeake bay, the navigable tide-waters are brought into nearest proximity to the Mississippi Valley in the States of Maryland and Virginia. To this is to be ascribed the fact, that before the use of railroads, the principal routes of travel between the East and the West were from the waters of that bay to the Ohio river. The great National road, established and constructed by the general government, commenced at the Potomac river, in Maryland, and its direction was made to conform to the *convenient* route of travel at *that* time.

No sooner had experience demonstrated the superiority of railroads to ordinary roads, than the people of Baltimore assumed the adaptation of them to their routes of communication, and immediately commenced the construction of that great work, the *Baltimore and Ohio railroad*, which, after a struggle of *twenty-five years*, is now on the eve of completion.

This road was commenced in 1828, and was one of the first roads brought into use in the United States. At the early period in which it was commenced, the difficulties in the way of construction were not appreciated. These obstructions, now happily overcome, for a long time proved too formidable to be surmounted by the engineering skill and ability, the experience in railroad construction, and the limited amount of capital which then existed in the country. Though for a long time foiled, its friends were by no means disheartened, but rose with renewed vigor and resolution from every defeat, until the experience of successive efforts pointed out the true pathway to success.

The Baltimore and Ohio railroad extends from Baltimore to Wheeling, on the Ohio river, a distance of 379 miles. Its estimated cost is \$17,893,166. It crosses the Alleghany mountains at an elevation of 2,620 feet above tide-water, and 2,028 feet above low water in the Ohio river, at Wheeling. In ascending the mountains from the east, grades of 116 feet to the mile are encountered on one plane, for about fifteen miles, and for about nine miles in an opposite direction. Grades of over 100 feet to the mile, for over ten miles, are met with on other portions of the line. These grades, which only a few years since were regarded as entirely beyond the ability of the locomotive engine to ascend, are now worked at nearly the ordinary speed of trains, and are found to offer no serious obstacle to a profitable traffic. Occurring near to each other, they are arranged in the most convenient manner for their economical working, by assistant power. With the above exception, the grades on this road will not compare unfavorably with those on similar works.

The road is now open to a point about 300 miles from Baltimore, and will be completed on or before the first of January next.

Whatever doubt may have existed among the engineering profession, or the public, as to the ability of this road, with such physical difficulties in the way, to carry on a profitable traffic, they have been

removed by its successful operation. That grades of 116 feet to the mile, for many miles, had to be resorted to, is full proof of the magnitude of the obstacles encountered. Its success in the face of all these, of a faulty mode of construction in the outset, and of great financial embarrassment, reflects the very highest credit upon the company, and upon the people of Baltimore.

As before stated, the first route of travel between the East and the West was between the waters of the Chesapeake and the Ohio. The opening of the Erie canal, and, subsequently, of the railroads between the Hudson river and Lake Erie, diverted this travel to this more northern and circuitous, but more convenient route. This diversion seriously affected the business of Baltimore, and materially lessened the revenues of the Baltimore and Ohio railroad, since its opening to Cumberland. All this lost ground the people of Baltimore expect to regain; and with it, to draw themselves a large trade now accustomed to pass to the more northern cities. Assuming the cost of transportation on a railroad to be measured by *lineal* distance, Baltimore certainly occupies a very favorable position in reference to western trade. To Cincinnati, the great city of the West, and the commercial depot of southern Ohio, the shortest route from all the great northern cities will probably be by way of Baltimore, and over the Baltimore and Ohio railroad. To strengthen her position still farther, the people of this city have already commenced the construction of the *Northwestern* railroad, extending from the southwestern angle of the Baltimore and Ohio railroad to Parkersburg, on the Ohio river, in a direct line towards Cincinnati. The distance from Baltimore to Parkersburg, by this route, will be about 395 miles, and about 580 to Cincinnati, by the railroads in progress through southern Ohio.

From Wheeling the main trunk will be carried to the lakes by the *Cleveland and Wellsville* railroad, now completed to *Wellsville*, 100 miles, and in progress from Wellsville to Wheeling, 36 miles; and through central Ohio to Columbus, by the Central Ohio railroad, now in operation from that place to Zanesville, a distance of about 60 miles, and in progress east to Wheeling, about 82 miles. When the Ohio, therefore, is reached, Baltimore will be brought into immediate connexion with all the avenues of trade and travel in the West and will be in a strong position to contend for the great prize—the interior commerce of the country.

The local traffic of this road assumes a great importance from the immense coal trade which must pass over it from the extensive mines situated near Cumberland. The superior quality of this coal will always secure for it a ready market, and there can be no doubt that the demand will always be equal to the capacity of the road. Already has this trade been a source of lucrative traffic, and contributed not a little to the success of the road before the western connexions, upon which complete success was predicated, could be formed. But for this traffic the credit of the company could have hardly been maintained, at a point necessary to secure the requisite means for its prosecution to the Ohio river.

Baltimore and Susquehanna railroad and its connexions.—The next great line of public improvement in Maryland is the *Baltimore and*

Susquehanna railroad, by which that city secures a communication with the country lying to the northwest, and with the public works of the State of Pennsylvania, as she will ultimately with those of New York. As far as distance is concerned, the city of Baltimore occupies as favorable a position in reference to the public works of Pennsylvania, and the various lines of improvement connecting with them, as does the city of Philadelphia; the former being only 82 miles from Harrisburg, while the latter is 107 miles. Such being the fact, Baltimore is making the most vigorous efforts to perfect and extend the works by which these important communications are maintained. She is especially occupied in pushing a line up the Susquehanna river, with a view to its extension to Elmira, the most considerable town on the Erie railroad between Lake Erie and the Hudson. This town is also connected with all the railroads running through central New York, with Lakes Erie and Ontario at various points, and by a water-line with the Erie canal. By reaching this point, the Baltimore lines of improvement will be brought into direct connexion with the New York system of public works, which have thus far monopolized the interior trade of the country. To divert this trade from its accustomed channels, and to turn a portion of it at least to Baltimore, is one great object that induces her to lend her aid to the *Susquehanna* road in Pennsylvania, through which this object is to be effected.

The trunk of this great line is the *Baltimore and Susquehanna* railroad, which extends from Baltimore to York, Pennsylvania, a distance of 56 miles. In its original construction it received important aid from the State. It has not been a successful work, in a pecuniary point of view, owing to a faulty mode of construction and to the want of suitable connexions on the north. But these drawbacks to its success have been removed, and its business prospects are now rapidly improving. From York it is carried forward to Harrisburg, by means of the York and Cumberland road. Beyond this point no railroad has been constructed up the Susquehanna valley. It is the construction of this link that is occupying the especial attention of the city of Baltimore, and toward which, in addition to private subscriptions, she has extended aid in her corporate capacity to the amount of \$500,000. The distance from Harrisburg to Sunbury, the route occupied by the Susquehanna company, is about 50 miles. From Williamsport to Elmira the distance is about 75 miles. A portion of this last-named link is in operation; and should the road from Williamsport to Ralston be adopted, as a part of the *through* route, it will require only the construction of some 20 miles to complete the last-named link. Vigorous measures are in progress for the commencement of operations upon the unfinished portion of the above line, and the whole will be completed, as soon as this can be done, by a prudent outlay of the means that can be made applicable to the work.

When the works in which the city of Baltimore is now engaged shall be completed, she will occupy a favorable position, as far as her *proximity* to the great interior centres of commerce is concerned. She will probably be on the shortest route between the great northern cities and Cincinnati—she will be nearer to Buffalo than even New York or Boston. She expects to realize in *results* the strength of her position in the

abstract. Assuming cost of transportation to be measured by lineal distance, how far the result will justify her expectations remains to be seen; at all events, she is certain to be amply repaid for all her efforts, by the local traffic of the country traversed by her lines of railroads, which will increase largely her present trade, by developing the resources of the section of country legitimately belonging to her.

The next most important line of road in Maryland is the *Washington branch of the Baltimore and Ohio* railroad. This forms a part of the great coast line, extending from the eastern boundary of Maine to Wilmington, North Carolina. Its traffic is chiefly derived from passengers. It is, besides, situated too near the navigable waters of the Chesapeake to command much more than *local* freight. As a connecting link in the great national line referred to, it occupies a position that must always secure to it a profitable traffic.

Chesapeake and Ohio canal.—This great work was projected with a view to its extension to the Ohio river at Pittsburg. The original route extended from Alexandria, up the Potomac river, to the mouth of Wills creek, thence by the Youghiogony and Monongahela rivers to Pittsburg. Its proposed length was 341 miles. It was commenced in 1828, but it was only in the past year that it was opened for business to Cumberland, 191 miles. Towards the original stock \$1,000,000 was subscribed by the United States, \$1,000,000 by the city of Washington, \$250,000 by Georgetown, \$250,000 by Alexandria, and \$5,000,000 by the State of Maryland.

From the difficulties in the way of construction, the idea of extending the canal beyond Cumberland has long since been abandoned; and though when originally projected, it was regarded as a work of national importance, it must now be ranked as a *local* work, save so far as it may be used in connexion with the Baltimore and Ohio railroad, as a portion of a *through* route to the Ohio. In this manner it bids fair to become a route of much general importance. As a very large coal trade must always pass through this canal, the boats will take return freights at very low rates, in preference to returning light. It is proposed to form a line of steam propellers from New York to Baltimore, for the transportation of coal; and it is claimed that the very low rates at which freights between New York and Cumberland can be placed by such a combination, will cause the canal, in connexion with the Baltimore and Ohio railroad, to become a leading route between New York and the West.

The canal is a work of great capacity, having six feet draught of water, and allowing the passage of boats of 150 tons burden. As it commands the whole water of the Potomac river, it will always be abundantly supplied with water.

This canal has encountered so many discouraging reverses as to cause a general distrust as to its ultimate success. It is believed, however, that it will not only become very important as a carrier of the celebrated Cumberland coal, but that it will, in time, work itself, in connexion with the railroad, into a large through-business between the eastern and the western States, in the manner stated.

VIRGINIA.

Population in 1830, 1,211,405; in 1840, 1,239,797; in 1850, 1,421,661. Area in square miles, 61,352; inhabitants to square mile, 23.17.

The State of Virginia is the birth-place of the idea of constructing an artificial line for the accommodation of commerce and travel between the navigable rivers of the interior and tide-water. It is now nearly one hundred years since a definite plan for a canal from the tide-waters of Virginia to the Ohio was presented by Washington to the House of Burgesses of Virginia, and ever since that time the realization of this project has been the cherished idea of the State.

The central position of Virginia, her unsurpassed commercial advantages, afforded by the deep indentations of her numerous bays and rivers, and the near approach toward each other, in her own territory, of the Ohio and the navigable waters of the Chesapeake, all pointed out this State as the appropriate ground for a connection between the two. To the apparent facility with which this could be formed, and to the advantages anticipated from it, is to be attributed the hold which this project has always maintained upon the public mind of the State.

James River and Kanawha Canal.—The great work by which this connexion has been sought to be accomplished is the *James river and Kanawha* canal, to extend from Richmond to the navigable waters of the Great Kanawha, at the mouth of the Greenbrier river, a distance of about 310 miles. This work is now completed to Buchanan, in the valley of Virginia, a distance of 196 miles, and is in progress to Covington, a town situated at the base of the great Alleghany ridge, about thirty miles farther. It was commenced in 1834, and has cost, up to the present time, the sum of \$10,714,306. The extension of this water line to the Ohio is still considered a problem by many, though its friends cherish the original plan with unflinching zeal. The work thus far has scarcely realized public expectation, from the difficulties encountered, which have proved far greater than were anticipated in the outset, and have materially delayed the progress of the work. The canal follows immediately on the bank of the river, which has a rapid descent, and after entering the Alleghany ranges, assumes many of the characteristics of a mountain stream. This fact has compelled the construction of numerous and costly works, such as dams, culverts, and bridges, and subjects the canal to all the dangers of sudden and high floods, from which it has at several times suffered severe losses. But, so far as the canal has been carried, all obstacles have been surmounted. The various works upon it have now acquired a solidity that promises to resist all the trials to which they may hereafter be subjected. The crossing of the crest of the Alleghanies, the most difficult portion of the whole line, has not been commenced. The summit at the most favorable point of crossing is 1,916 feet above tide-water, or 1,352 feet above the highest point upon the Erie canal, which is at the lake at Buffalo. Elaborate surveys and calculations have been made for the purpose of determining whether a sufficient quantity of water can be obtained for a supply at the summit, and the result seems to favor an affirmative opinion.

Could this canal be carried into the Ohio valley, with a sufficient

supply of water there can be no doubt it would become a route of an immense commerce. It would strike the Ohio at a very favorable point for *through* business. It would have this great advantage over the more northern works of a similar kind, that it would be navigable during the winter as well as the summer. The route, after crossing the Alleghany mountains, is vastly rich in coal and iron, as well as in a very productive soil. Nothing seems to be wanting to the triumphant success of the work but a continuous water line to the Ohio. Until this is accomplished, the canal must depend entirely upon its local business for support. Its eventual success as a paying enterprise was predicated upon such accomplishment. Though of great benefit to the contiguous country and to the city of Richmond, it does not promise in its present condition to be profitable to the stockholders.

Railroads in Virginia.

Central Railroad.—The object which led to the conception of the James river and Kanawha canal is now the ruling motive in the construction of the two leading railroad projects of this State, viz: the *Virginia Central* and the *Virginia and Tennessee* railroads. While the canal is still the favorite project with an influential portion of her citizens, it cannot be denied that, sympathizing with the popular feeling in favor of railroads, which have in many cases superseded canals as means of transportation, and which are adapted to more varied uses and better reflect the character and spirit of the times, a large majority of the people of the State deem it more advisable to open the proposed western connexions by means of railroads than by a farther extension of the canal.

The line of the Central road, after making a somewhat extended detour to the north upon leaving Richmond, takes a generally western course, passing through the towns of Gordonsville and Charlottesville, and enters the valley of Virginia near Staunton. At Gordonsville it connects with the Orange and Alexandria railroad, thus giving the former an outlet to the Potomac. This road is now nearly completed to Staunton, with the exception of the Blue Ridge tunnel, which is a formidable work, about one mile in length, and is in process of construction by funds furnished by the State. From Staunton the line has been placed under contract to Buffalo Gap, a distance of thirty-five miles. For the whole line up to this point ample means are provided.

The whole length of the road, from Richmond to the navigable waters of the Kanawha, will be about two hundred and eighty-six miles. The means for its construction have thus far been furnished by stock subscriptions on the part of the State and individuals, in the proportion of three-fifths by the former, to two-fifths by the latter. No doubt is entertained of its extension over the mountains, at a comparatively early period. The State is committed to the work, and has too much involved, both in the amount already expended and in the results at stake, to allow it to pause at this late hour. The opinion is now confidently expressed by well-informed persons that some definite plan will be adopted for the immediate construction of the remaining link of this great line.

By extending this line to Guyandotte a junction will be formed with the roads now in progress in Kentucky, and aiming at that point for an eastern outlet. It is also proposed to carry a branch down the Kanawha to its mouth, nearly opposite to Gallipolis, to connect with a road proposed from that point to intersect with the *Hillsboro' and Cincinnati* and the *Cincinnati and Marietta* railroads.

Virginia and Tennessee railroad.—The leading object in the construction of the above road is to form a part of a great route connecting the North and the South, by a road running diagonally through the United States. This line, commencing in the eastern part of the State of Maine, follows the general inclination of the coast, and passes through our most important eastern cities, as far south as Washington. After reaching this point, it still pursues the same general direction, and passing through Charlottesville and Lynchburg, in central Virginia, and soon after leaving the latter place, enters the lofty ranges of the Alleghany mountains, which it traverses for hundreds of miles, till they subside into the plains circling the Gulf of Mexico. The northern portion of this great line is in operation from Waterville, Maine, to Charlottesville, Virginia, a distance of nearly 800 miles. Parts of the southern division are completed, and the whole, with the exception of the short link from Charlottesville to Lynchburg, is in active progress. Of the central links, the *Virginia and Tennessee* is the longest, and in this point of view the most important. It extends from Lynchburg to the State line of Tennessee, a distance of 205 miles. About 60 miles of this road are completed, and the whole line is under contract for completion during the year 1854. The means for its construction are furnished jointly by the State and individual subscriptions, in the proportion of three parts by the former to two by the latter. When completed, this road will form a conspicuous link in one of the most magnificent lines of railroad in the world, both as regards its length and importance.

The prospects of the local business of the above road are favorable. It traverses a fertile portion of Virginia, abounding, moreover, in most of the valuable minerals, such as iron, coal, lead, salt, etc. At present, there is no more secluded portion of the eastern or middle States than the country to be traversed by the above road; all its great resources remain undeveloped, from the cost of transportation to a market. When this road shall be opened, no section will display more progress, nor furnish, according to its population, a larger traffic.

The friends of this project propose also to make a portion of its line the trunk of a new route, from the navigable waters of the Ohio to those of the Chesapeake. At a distance of about 75 miles from Lynchburg, the Virginia and Tennessee road strikes the great Kanawha near Christiansburg. From this point to the navigable waters of the river the distance is only 86 miles. As the Virginia and Tennessee road is to be connected by railroad with both Richmond and Petersburg, the short link described will alone be wanting to constitute a new outlet for western produce to tide-water. That this link must be supplied at no distant day can hardly admit of a doubt. Should the State extend aid to it, as well as to the Central line, both may be opened simultaneously.

There are numerous other important lines of railroad in Virginia, among which may be named the line running through the State from

north to south, made up of the *Richmond, Fredericksburg and Potomac, Richmond and Petersburg, and Petersburg and Weldon* roads; the *South Side, the Richmond and Danville, the Seaboard and Roanoke, the Orange and Alexandria, and the Manasses Gap* railroads.

The first-named line forms the great route of travel through the State from north to south. Its revenues are chiefly derived from passenger traffic; its direction not being favorable to a large freight business. The whole line is well managed and productive, and is daily improving in value, from the extension of both extremes of the great system of which this is the connecting link.

The *South Side* and the *Richmond and Danville* roads are works of importance, from the extent of their lines, the connexions they form, and their prospective business. Starting from two, the most considerable, towns in eastern Virginia, situated at the head of navigation on two important rivers, they cross each other diagonally about midway between their respective termini, thus giving a choice of markets to the country traversed by either. The former constitutes the extension eastward of the Virginia and Tennessee line, and opens an outlet for that work to Richmond and Petersburg. The latter will also secure to the same cities the trade of important portions of southern Virginia and North Carolina, and will undoubtedly be extended eventually into the latter State, and form a junction with the *North Carolina* railroad, at or near Greensboro', forming, in connexion with the *North Carolina and Charlotte* and *South Carolina* railroads a new and independent interior route between Richmond and Petersburg and the southern States.

The *Seaboard and Roanoke* railroad is also a line of much consequence, and may eventually become a work of great importance, depending, however, upon the future progress of Norfolk, its eastern terminus. The excellence of the harbor of Norfolk has led to great expectations in reference to the future growth of that city. Its position has been compared with that of New York, and it bears a relation to the Chesapeake bay, and the rivers entering it, similar to that of the former to the Hudson river and Long Island Sound. No portion of the country possesses greater commercial capabilities than eastern Virginia, and it would seem that the numerous rivers by which it is watered would develop a trade sufficient to build up a large commercial town. Such has not been the result, however inexplicable the cause.

The great seats of commerce lie farther north, and the seaports of Virginia, instead of being depôts from which are distributed to the consumers the products of the State, are merely points *en route* to the great northern markets. Her people being devoted chiefly to agriculture, no large towns have grown up within her territory. Should, in time, a greater diversity of pursuits secure the consumption, by her own people, of the surplus products of her soil, Norfolk could not fail to become an important commercial town. The Seaboard and Roanoke road would be her great arm of inland communication, combining, as it does, with the roads penetrating the interior of the State, and of North Carolina. As it is, it is a road of much consequence, and essential to the symmetry of the railroad system of the State, and will

always transact a large business, even under a continuance of the present condition of things in the State.

The other leading roads in Virginia are the *Orange and Alexandria* and the *Manasses Gap* railroads. The former extends from Alexandria to Gordonsville, on the Central road, a distance of about 90 miles. It is an important line, in that it connects the central portions of the State with the Potomac and the cities of Alexandria and Washington. It will form a portion of the line already described, traversing central and western Virginia and eastern Tennessee. To complete such a connexion, only a short link, extending from the central road near Charlottesville, is necessary. There cannot be a doubt that the legislature of Virginia will allow the construction of this link, and aid it with the liberality extended toward similar works.

The *Manasses Gap* road branches off from the *Orange and Alexandria* road about 25 miles after leaving Alexandria, and is to be extended into the valley of Virginia through the gap in the Blue ridge above named. A portion of the line is already in operation. It is intended to carry this road up the valley to Staunton; there to form a junction with the Central line. The *Winchester and Potomac* road, at present a short though productive local work, will also probably be extended so as to connect with the above road—thus forming a line through the whole extent of the valley of Virginia, and connecting with the *Baltimore and Ohio* road at Harper's Ferry, and with the Potomac at Alexandria.

NORTH CAROLINA.

Population in 1830, 737,987; in 1840, 753,419; in 1850, 868,903. Area in square miles, 45,000; inhabitants to square mile, 15.62.

Railroads in North Carolina.

The State of North Carolina has, on the whole, accomplished less than any eastern State in railroad enterprises, when we take into consideration the extent of her territory, and the great necessity for such works to the proper development of her resources. Her inaction has been owing in part to the want within her own territory of a large commercial town, which in other States not only becomes the centre of a well-digested system of railroads, but, by concentrating the capital, renders it available to the construction of such works.

Of the roads in operation the most important is the *Wilmington and Weldon* road, extending from Wilmington to Weldon, and traversing nearly the whole breadth of the State from north to south. This is a work of the greatest convenience and utility to the travelling public, and must, from its direction and connexion, always occupy an important position in our railroad system. It is a road of comparatively low cost, upon a very favorable route, and is beginning to enjoy a lucrative traffic. It has been an unproductive work from the faulty character of its construction—it being one of the pioneer works of the South, and

originally laid with a flat bar; but this superstructure has given place to a heavy rail, and the road is now in a condition to compare favorably with our best works.

The only other road in operation in the State is the *Raleigh and Gaston*, which connects the above places by a line of 87 miles. It is strictly a local work, and, from the faulty character of its construction, has been unsuccessful. It bids fair, however, to become a much more important road from its prospective connexion with the *North Carolina Central* road, now in progress. When the last-named road shall be opened, and the *Raleigh and Gaston* shall have received an improved superstructure, it cannot fail, it is believed, to become a productive work, and one that will sustain an important relation to the travel and business of the country. Through the *Central*, it will be brought into communication with the *Charlotte and South Carolina* road, and form, for both, their trunk lines north.

The only considerable work in progress, lying wholly within the State, is the *North Carolina Central* railroad. It commences on the Neuse river, near Goldsboro', taking a northwesterly direction, running through the towns of Raleigh, Hillsboro', Greensboro', and Lexington, to Charlotte. For the greater part of its line it traverses a fertile territory, and will secure railroad accommodations to a large and rich section of the State. It will prove of great utility, and is much wanted to develop the resources of the State, and demonstrate its capacity to supply railroads with a profitable traffic. Its entire length is 223 miles. At Charlotte, it will unite with the *Charlotte and South Carolina* railroad, which will insure to it the character and advantages of a through route. The estimated cost of the road is about \$3,000,000; of which sum the State furnishes \$2,000,000. The whole line is under contract, to be completed at the earliest practicable moment.

SOUTH CAROLINA.

Population in 1830, 581,185; in 1840, 594,398; in 1850, 668,507.
Area in square miles, 24,500; inhabitants to square mile, 27.28.

South Carolina Railroads.

This State furnishes a good illustration of the correctness of the previous remarks, in reference to the influence of a commercial capital in promoting and giving character to works of internal improvement for the country dependent upon it. Large cities collect together the surplus capital of the surrounding country, and a mercantile life trains men up for the management of enterprises calling for administrative talent, and involving large moneyed operations.

No sooner had the people of this country commenced the construction of railroads, than the city of Charleston entered upon the great work of that State—the *South Carolina* railroad. This was one of the first projects of the kind undertaken in this country, having

been commenced in 1830. Its main trunk extends from Charleston to Hamburg, on the Savannah river, opposite Augusta, Georgia. It has two branches; one extending to Columbia, the political capital of the State, and the other to Camden. The entire length of the road and its branches is 242 miles. Its cost has been a little less than \$7,000,000.

This road not only bears an important relation to all the interests of the State, but has given birth to other extensive lines of road, and forms very important connexions with them.

At Augusta a junction is formed with the *Georgia* railroad, by means of which a communication is opened with the railroads of that State, which are soon to be extended to all the neighboring States. Already have the Georgia lines reached the Tennessee river; and by the first of May next they will be carried forward to Nashville, the capital of the State of Tennessee, whence railroads are in progress toward Louisville and Cincinnati. From Atlanta, the western terminus of the Georgia railroad, a line of railroad is nearly completed to Montgomery, Alabama, which will soon be pushed forward to the Gulf of Mexico on the one hand, and to the Mississippi on the other.

By means of the Tennessee and Kentucky roads alluded to, Charleston is now about to realize the celebrated project of the *Charleston and Cincinnati* railroad. The history of this scheme is well known. It originated in the bold idea of making that city the commercial emporium of the great interior basin of the country, particularly the lower portion of it. To effect this object, a continuous line of railroad, under one organization, was proposed, in as direct a line as possible, to the city of Cincinnati. This project attracted, for a time, much interest in the States of South Carolina, Tennessee, Kentucky, and southern Ohio. It was believed to be entirely practicable, and large sums were expended in reconnaissances and surveys of the routes. We now see the accomplishment of the scheme, upon the original plan, to have been, at the period when it was commenced, impracticable. As far as the means and the engineering skill of the country were concerned, the project was premature. Its magnitude was beyond the ability of all the interests that could be brought to bear upon it. The termini being given, the route assumed was the shortest possible line between them. The route selected, therefore, could not command the means of the country, applicable to a road between the cities named; and, as might have been expected, the original project fell through. The different sections, however, upon the most practicable line, as far as means were concerned, commenced the construction of detached links, having in view local objects alone. These are now so far advanced that the formation of the whole line may be regarded as secured.

By the more circuitous route by way of Nashville and Louisville, the means for a railroad from Charleston to Cincinnati are now provided, and the whole route is either in operation or in progress. From Charleston to Nashville, a distance of about 600 miles, the line will be completed by the first day of May next. Upon the line from Nashville to Louisville, a distance of 180 miles, working surveys are now in progress, preparatory to placing this entire link under contract. Louisville and Cincinnati are soon to be united by means of the *Louisville*

and *Lexington* and the *Covington and Lexington* railroads. The former is in operation; the latter will be completed next year; and the city of Charleston, without any expenditure other than that requisite for the construction of roads within her territory—excepting a small loan to the *Nashville and Chattanooga* road—sees the great project, for which she so zealously labored, on the eve of accomplishment.

A more direct, and apparently appropriate, line, than that above described, is one traversing the entire length of the State of South Carolina, in a northwesterly direction, crossing the northeastern corner of Georgia and the western portion of North Carolina, running down the Little and up the Great Tennessee rivers, to Knoxville; thence by the Cumberland Gap, or some practicable pass in its vicinity, through Danville and Lexington, Kentucky, to Cincinnati. The only portions of this line for which the means are certainly provided, are those extending from Charleston to Anderson, in South Carolina, a distance of 243 miles, and from Cincinnati to Danville, a distance of 128 miles, making in all 371 miles, and leaving about 350 miles to be provided for. That this direct line will be accomplished cannot be doubted. A considerable portion of the country traversed can provide sufficient means for its construction, and the necessary balance will be supplied by connecting lines and by private interests. For that portion of the link, unprovided for, between Anderson and Knoxville, it is believed that the legislature of the State of South Carolina will extend liberal aid. The *South Carolina* and the *Greenville and Columbia* roads, forming the lower portions of this great chain, are also expected to render efficient support. That portion of it through the State of Tennessee will undoubtedly receive the benefit of the recent internal improvement act of that State, which appropriates \$8,000 per mile to certain leading lines—a sum sufficient, with what private means can be obtained, to secure its construction. The link from Danville, Kentucky, to the boundary line of Tennessee, traverses a region of vast mineral resources. It is believed the amount lacking to complete this link, beyond the means of the people upon it, will eventually be furnished by parties interested in the *whole* as a *through* route. Active measures are in progress upon the entire route to secure the necessary surveys, to provide the means of construction, and to awaken the minds of the people to the importance of the work.

The other important projects in South Carolina are the *Greenville and Columbia*, the *Charlotte and South Carolina*, the *Wilmington and Manchester*, and the *Northeastern* road, extending from Charleston to a junction with the Wilmington and Manchester road. The Charlotte and South Carolina and the Wilmington and Manchester roads lie partly in North Carolina, but they are appropriately described as a portion of the South Carolina system.

The *Greenville and Columbia* road extends from Columbia, the terminus of the Columbia branch of the *South Carolina* railroad, to Greenville, a distance of about one hundred and twenty-three miles. It has two branches—one extending to Pendleton, and the other to Anderson court-house. The leading objects in its construction are of a local character; though, as before stated, it is intended to make it a portion of a through line to the Mississippi Valley. The road traverses one of the

best portions of the State. It has been built at a low cost, owing to the favorable nature of the country traversed, and the enterprise promises to be highly remunerative. A considerable portion of this line is in operation, and the whole will be completed at an early day.

There is in progress from this road a branch of some magnitude extending to Laurens, and a portion of it is in operation.

The *Charlotte and South Carolina* railroad has been briefly alluded to. Its line extends from Charlotte, the most important town in western North Carolina, to Columbia, the capital of South Carolina, and is about one hundred and ten miles long. It is an important link between the other roads of the States, and, with them, between those of the northern, southern, and southwestern States. Its local business will be lucrative, as it traverses a rich country without suitable avenues to market. Like most of the southern roads, it has been constructed at a low cost. It is nearly completed, and will be shortly opened.

Connected with this road, at Chester, is a branch road, called the *King's Mountain* railroad, in operation and extending to Yorkville, a distance of about twenty-five miles.

Wilmington and Manchester Railroad.—The chief object of this line is to supply the link for the connexion of the roads of the States of South Carolina and Georgia with those of the north. It is this object which gives it general importance, though its principal revenues will undoubtedly be derived from local traffic, which the country traversed will probably supply. The road is about one hundred and sixty-two miles long. Its construction is essential to the convenience of the travelling public, and will add largely to the traffic of all the connecting lines. A glance at the accompanying map will well illustrate its relations to other roads. Although a first-class road, it is constructed at the minimum cost of southern roads. The whole line is under contract and well advanced; some portions of it are opened, and the whole is in progress to completion with all practicable dispatch.

The only project of any considerable public importance, not already noticed, is the *Northeastern* road, extending from Charleston to the Wilmington and Manchester road, at a point between Marion and Darlington. The object of this road is to secure to Charleston a more direct outlet, and to place her in a line of travel between the North and the South. Without such a work, the tendency of the *Wilmington and Manchester* road would be to divert the *through* travel from that city, and would consequently threaten her with the loss of a portion of her business and public consideration. To fortify her position, this city also proposes to construct a railroad direct to Savannah. By these works she will place herself on the convenient line of travel between the extremes of the country.

The length of this first-named line will be about one hundred miles. Its cost will be between \$1,500,000 and \$2,000,000. The work is light, the only difficult point being the crossing of the Santee river. The route is now under survey, and will be commenced as soon as practicable. The road may be regarded as a Charleston project, and that city will contribute largely to its construction.

GEORGIA.

Population in 1830, 516,823; in 1840, 691,392; in 1850, 905,999. Area in square miles, 58,000; inhabitants to square mile, 15.62.

The State of Georgia has distinguished herself for the extent, excellence and successful management of her railroads. In these respects she ranks first among the southern States. Her success is mainly owing to the fact, that her great lines of railroad were completed within a comparatively brief period after they were undertaken. From the sparse population in the South, and the absence of large towns in the interior, the completion of a road is necessary to success. Until the connexions proposed are formed, the work is generally unprofitable. Successive links, as they are opened, do not yield a large revenue, as is the case with many northern lines, which find between two neighboring villages a remunerating traffic. To this fact is, in some degree, to be attributed the failure in the South of many of the projects of 1836 and 1837. Portions only of the lines of railroad commenced at that period were completed. The commercial revulsions which followed checked their further prosecution. The several links brought into use were not of sufficient length or importance to develop and command a remunerative business; and, in some instances, projects were abandoned even after a portion of their lines had been opened for business. The reverses which have been alluded to, were chiefly confined to the projects of the newly-settled southern and western States. These States were then a wilderness as compared with their present condition. At that period success was impossible, not only from the lack of capital adequate to the enterprises, but of those qualities necessary to superintend and carry out these enterprises, and which can only result from experience. The effect of the reverses sustained, was to discourage for a time all attempts to construct railroads. But the long period which has since elapsed has brought with it greater means; a wider experience; the successful examples of other States; more distinct and better-defined objects; and a more intimate acquaintance, and hearty co-operation among people interested in such works. The operation of time has settled our commercial depôts, and established the convenient channels of commerce and travel. At an earlier period these were assumed in the projects undertaken, and the results frequently proved these assumptions to be wide of the truth. New lights have arisen as guides to renewed efforts. The southern people are again inspired with confidence and hope; and the movement now going on throughout the southern States, founded upon a proper knowledge of their wants and abilities, and guided by wider experience and more competent hands, is destined to achieve the most satisfactory results.

The success of the Georgia roads, as already stated, was owing to the fact that, after a severe struggle, her leading lines were completed without great delay. As soon as they were brought into use they at once commenced a lucrative business, yielding a handsome return upon the cost, and have proved of inestimable benefit to the people of the State. Their roads have not only enabled them to turn their resources to the best account, but have done much to develop that spirit of enter-

prise and activity for which the people of Georgia are particularly distinguished.

The leading roads in operation in Georgia constitute two great lines, representing, apparently, two different interests. The *first* extends from Savannah, the commercial capital of the State, to the Tennessee river, a distance of 434 miles, and is made up of the *Georgia Central, Macon and Western*, and *Western and Atlantic* roads. The latter, by which the railroad system of the State is carried into the Tennessee valley, is a State work. The second line traverses the State from east to west, crossing the other nearly at right-angles, and is made up of the *Georgia* and the *Atlanta and La Grange* railroads. This line may be considered as an extension, in a similar direction, of the *South Carolina* railroad, and rests on Charleston as its commercial depot, as does the former on Savannah. To a certain extent the Western and Atlantic link may be said to be common to both lines. The first described line, however, has important branches, which connect it with a much larger portion of the State than the latter. At Macon it receives the *Southwestern* railroad, an important line, already constructed to Oglethorpe, which will be continued to Fort Gaines, on the Chattahoochee. A branch of this line is in progress to Columbus, an important town on that river, and the principle depot of trade for western Georgia and eastern Alabama. Upon the completion of these roads the *Central* line will extend to the northern and western boundaries of the State, and will receive an important accession to its already flourishing traffic.

The three great roads of the State, which have been in operation for a comparatively long period—the *Central*, the *Georgia*, and the *Macon and Western*—have, for many years past, been uniformly successful, and take high rank among our best managed and best paying roads, averaging, for a series of years, eight per cent. dividends. Notwithstanding their imperfect mode of construction, which has required repairs equal to an entirely new superstructure, their cost per mile is less than the average of roads throughout the country. This is owing in part to the favorable character of the country for such enterprises, and the prudent and skillful manner in which they have been constructed and managed. All these have proved profitable works, chiefly from their local traffic. The rapid extension of connecting links, which must use the above as their trunk lines to market, must, in the ordinary course of business, add very largely to their present considerable revenues.

Among the most important roads in progress in the State, may be named the *Waynesboro'*, the *Southwestern*, the *Muscogee* and the *Atlanta and La Grange*.

The object of the *Waynesboro'* road is to effect a communication, by railroad, between Savannah and Augusta, the latter the terminus of the South Carolina and Georgia railroads, and situated at the head of navigation on the Savannah river. A portion of this line is already in operation, and the whole is nearly completed. It is an important connecting link between other roads, and will greatly add to the facilities of business and travel in the southeastern portion of the State.

The *Southwestern* road will provide an outlet for the rich planting

district of southwestern Georgia, one of the best cotton-growing regions in the South. This road has already reached Oglethorpe, and is to be extended to the Chattahoochee. It will then have an outlet in each direction of trade. The proposed extension of the road is regarded as the appropriate line to supply railroad accommodation to the southwestern portion of the State. The *Southwestern* is already in possession of a large revenue from local traffic alone. This will be materially increased by the farther extension of its own line, and of connecting roads.

The *Muscogee* road extends from the city of Columbus, eastward, to its junction with the *Southwestern*, a distance of 71 miles, striking the latter about Fort Valley, 28 miles from Macon. It traverses a rich planting country, and is an important work, both as a through and local road. At Columbus it will ultimately form a connexion with the roads now in progress and operation in Alabama. Its *through* traffic, derived from the business centring at Columbus alone, will constitute a valuable source of revenue. It is nearly completed, and its opening is regarded as an event of considerable importance to other roads in the State.

The *Atlanta and La Grange* bears pretty much the same relation to the *Georgia* as does the *Muscogee* to the *Central* line. It extends from Atlanta, the terminus of the *Georgia* and *Western and Atlantic* roads, to *West Point*, the eastern terminus of the *Montgomery and West Point* road, a distance of 86 miles. A portion of this road is already in operation, and the whole is well advanced. Its completion will extend the Georgia system of roads to Montgomery, Alabama. As a connecting link, it is justly regarded as a work of much public utility. It traverses a very beautiful and highly cultivated portion of the State, and cannot fail to have, with all the roads of the State, a lucrative local traffic.

The only important road in Georgia already in operation, and not particularly noticed, is the *Western and Atlantic*, extending from Atlanta to the Tennessee river. To the State of Georgia must be awarded the honor of first surmounting the Great Alleghany or Appalachian range, and of carrying a continuous line of railroad from the seacoast into the Mississippi valley. From the difficulties in the way of such an achievement, it must always be regarded as a crowning work. Wherever accomplished, the most important results are certain to follow. The construction of the *Western and Atlantic* road was the signal for a new movement throughout all the southern and southwestern States. By opening an outlet to the seaboard for a vast section of country, it at once gave birth to numerous important projects, which are now making rapid progress, and which, when completed, will open to the whole southern country the advantages of railroad transportation. Among the more important of these may be named the *Memphis and Charleston*, the *East Tennessee and Georgia*, and the *Nashville and Chattanooga* roads, already referred to. The former will open a direct line of railroad from Memphis, an important town on the Tennessee river, to the southern Atlantic ports of Charleston and Savannah, and will become the trunk for a great number of important radial branches. The *Nashville and Chattanooga*, traversing

the State of Tennessee in a northwesterly direction, has given a new impulse to the numerous railroads which are springing into life, both in Tennessee and Kentucky. These railroads will soon form connexions with those of Ohio, Indiana, and Illinois, and thus all the northern and western States will be brought into intimate business relations with the southern cities of Charleston and Savannah. Through the *East Tennessee and Georgia* road a connexion will be formed with the line traversing the United States from north to south. The influence of such a connexion upon the growth and prosperity of these cities, as well as of the country brought into communication with them, can hardly be estimated.

A railroad is also proposed from St. Simon's sound, on the Atlantic—said to be a good harbor—to Pensacola, in Florida. One object in the construction of this road is to build up the town of Brunswick upon that sound. As this road would connect two good harbors, one upon the Atlantic coast and the other upon the gulf, it will prove an important work. It would also open an extensive territory at present but slightly developed, for the want of a suitable outlet.

A railroad is contemplated from Savannah to Pensacola. Its object is to open a communication between that city and the southern portion of the State, and to attract the trade of a large section now threatened to be drawn off by rival works. The project has its origin in the supposed benefit it would confer upon the city of Savannah, which is expected to aid largely in its construction.

FLORIDA.

Population in 1830, 34,730; in 1840, 54,477; in 1850, 87,401. Area in square miles, 59,268; inhabitants to square mile, 1.47.

In another part of this report full notice is given to this State, embracing the works of internal improvement therein, whether constructed, in progress, or contemplated to be made, and also those heretofore made and now abandoned. It would be superfluous to repeat that notice here. Reference is made, therefore, to the communications of citizens of this State, contained in the *Appendix* at the end of this report, to the documents accompanying the same, and to comments of the undersigned, prefixed thereto, for full information on these and other subjects respecting this State. A paper respecting the "Gulf of Mexico" and the "Straits of Florida," prepared from notes furnished by a distinguished and intelligent engineer officer of the United States, is likewise inserted in the *Appendix*, and contains important matter relating to this State.

ALABAMA, MISSISSIPPI, AND LOUISIANA.

The roads of these States belong to a general class, from the similarity of their direction and objects, and from the intimate relations exist-

ing between many of their important lines. As already stated, the great lakes are the radial points of the internal improvement system of this country. In conformity with this fact we find, that on reaching the Gulf of Mexico the general direction of the great lines extending into the interior gradually changes, in harmony with this fact, and that those arising from the Gulf of Mexico are at right angles both to *this* and our great *northern* lake boundary.

In examining the character and prospective business of roads running at right angles to the parallels of latitude, compared with those following the same parallels, some marked points of difference are found. In the latter case, where there is no variety of pursuits, and where the whole population is engaged in agriculture, there can be little or no local traffic. The products being identical, *all* the surplus is the same in *kind*. But upon a route following a meridian of latitude, an entirely different rule prevails. Such routes traverse regions abounding in a diversity of productions, all of which are regarded as essential to the wants of every individual in the community. Such lines may be said to coincide with the *natural* routes of commerce, over which a large traffic must always pass, although the territory traversed may be entirely devoted to agriculture. The grains, provisions, and animals of the north are wanted by the southern States engaged in the culture of cotton, rice, sugar and tobacco; and these last-named products are received by the people of the north in exchange for what they have to sell. In this country, therefore, the routes running east and west may be termed the *artificial*, those running north and south the *natural* routes of commerce. It is this fact that gives particular importance to the great line of communication which it is proposed to extend from the Gulf of Mexico to the lakes, thus uniting a country the extremes of which abound in the fruits of the tropics, and in the products of high northern latitudes.

A railroad extending from the Gulf of Mexico constitutes a great national route of commerce, and furnishes a channel of distribution over the whole country, for the vast variety of products of the regions traversed, and at the same time constitutes an outlet for such surplus as may not be required for domestic consumption. Such are the extent and range of human wants, that they require the whole aggregate production of every variety of soil and climate for their supply. Owing to the variety of *climate*, this country is capable of producing nearly every article used in ordinary consumption, and an abundance of all that are of primary importance. Upon the completion of a railroad from the Gulf of Mexico to Lake Michigan, a person living midway between the two will be enabled to have his table daily supplied with the luxuries of both extremes—the delicious fruits of the tropics, and the more tempered but equally valuable products of northern latitudes. The differences of climate will then, practically, cease to exist. The speed of the railway train will scatter over the whole country, freshly plucked, the fruits of every latitude, and one climate will practically exist for *all*, in the possession of an abundance of the products of *each*.

Extended lines of railroads are equally important in another point of view. It always happens that while in the aggregate there is an abundance of production for the wants of *all*, there will be failures of

crops in different portions of the country. Such must be the case in a country of so vast an area as our own. With ordinary roads only, it is found impossible so to distribute the surplus produced as to secure abundance at points where production has failed. The limit to economical transportation over the ordinary roads is measured by a few miles. The greatest extremes of want and abundance, therefore, may exist in adjoining States. All these evils are remediable by railroads, so that they will not only secure to us a practical uniformity of climate, but of seasons also, giving to us the greatest variety, and at the same time the greatest certainty, of uniform supply.

ALABAMA.

Population in 1830, 309,527; in 1840, 590,756; in 1850, 671,671. Area in square miles, 50,722; inhabitants to square mile, 15.21.

Mobile and Ohio railroad.—The first of the great works of the character we have described is the Mobile and Ohio railroad, extending from Mobile, on the Gulf of Mexico, to the mouth of the Ohio river, a distance of 594 miles. From Mobile it will be extended down Mobile bay to a point where a depth of $20\frac{3}{4}$ feet of water is reached at low tide, making the *whole* length of line 609 miles. The route traversed is remarkably favorable. There are no grades in the direction of the heavy traffic exceeding 30 feet to the mile. The highest point of elevation above the gulf is only 505 feet. No bridges are required above 130 feet long. The estimated cost of the road, with a liberal outfit, is \$10,000,000. Of the whole line, 33 miles are already in operation; but the work is in progress upon 279 more, and the balance will be immediately placed under contract. It is intended to have the whole line completed within three years from the present time. The company are fast securing ample means for its construction, which are materially strengthened by a recent liberal donation of land by the general government. That portion of the line through the State of Tennessee is provided for by the recent internal improvement act of that State. The work is under the most efficient management, and its completion within the shortest practicable period is unquestioned.

The importance of this work, both to the city of Mobile and the whole southern country, can hardly be over-estimated. By means of it the produce of the South may, with the greatest expedition, be brought alongside of ships drawing $20\frac{3}{4}$ feet water. The route traversed is nearly equidistant from the navigable waters of the Tombigbee river on the one hand, and the Mississippi on the other. It traverses a region deficient in any suitable means of transportation—one of the richest portions of the United States. Flanking, as it will, a very large portion of the best cotton lands in the country, it must secure to Mobile a large supply of this article, ordinarily sent to New Orleans. From the ease and cheapness with which the planter will be enabled to forward his staple to market, the road will stimulate the production of cotton to an extraordinary extent. It will also develop numerous other

resources now lying dormant, and will give rise to a greater *variety* of pursuits, so essential to the best interests of the South. This work cannot fail to give extraordinary impulse to the growth of Mobile, and to secure to it a prominent rank among the principal commercial cities.

Another great line of railroads commencing in Alabama, though at present resting upon the Alabama river at Selma, to be eventually carried to Mobile, is the *Alabama and Tennessee River* railroad. The line of this road extends from Selma to the Tennessee river at Gunter's Landing, a distance of 210 miles. The more immediate object of its construction is to accommodate the local traffic of the route traversed, although a large business is anticipated from the connexions hereafter to be formed.

It is proposed to extend this road from Jacksonville to Dalton, Georgia, to connect with the great line already described, traversing the entire country, and passing through northern Georgia, eastern Tennessee, and central and western Virginia, and to which the above road will form the southern trunk, and connect this great line with the Gulf of Mexico.

The *Alabama and Tennessee* railroad will also form a link in another important chain of roads, extending from the gulf to the great lakes. From Gunter's Landing, its northern terminus, it will be carried forward to the *Nashville and Chattanooga* road at Winchester, by the Winchester and Alabama road, now in progress. From Winchester to Nashville the *Nashville and Chattanooga* road is now in operation. From Winchester two routes are proposed—one by way of Nashville and Louisville, a portion of which is in operation, and the balance amply provided for; and the other by way of McMinnville and Sparta, Tennessee, and Danville and Lexington, Kentucky. From Winchester to McMinnville a road is in progress, as is one from Cincinnati to Danville, on the northern portion of the line. The link unprovided for is about 250 miles long. The Tennessee portion of this is embraced in the internal improvement act of that State, and vigorous measures are in progress to secure the means requisite to the work, both in Tennessee and Kentucky. When these connecting lines shall be completed, the Alabama and Tennessee road will sustain the relation of a common trunk to all.

The *Alabama Central* railroad, commencing in the State of Mississippi, and extending to Selma, is the appropriate extension, east, of the *Mississippi Southern* railroad, designed to traverse the State of Mississippi centrally from west to east. This line has been placed under contract from the State line to Selma. It is proposed to extend it still farther eastward, so as to form a connexion at Montgomery with the *Montgomery and West Point* road. By the completion of the above work and its connecting lines, a direct and continuous railroad would be formed, extending from the Atlantic ports of Charleston and Savannah to the Mississippi river at Vicksburgh, and traversing, for a greater portion of the distance, a region of extraordinary productiveness. Its importance as a through line of travel will be readily appreciated from an examination of the accompanying map. The whole of this great line, with the exception of the link from Selma to Montgomery, which will, for the present, be supplied by the Alabama river, is in progress.

Another line of very considerable magnitude is the proposed road

from *Girard*, a town upon the Chattahoochee river, opposite Columbus, to Mobile, under the title of the *Girard* railroad. A portion of the eastern division of this road is under contract. Its whole length is about 210 miles. It traverses, for a considerable part of its length, a rich planting region, only sparsely settled, for the want of suitable avenues. This line would form a very important extension of the Muscogee and the Georgia system of roads. Of its eventual construction there can be no doubt, though the means applicable to the work may not secure this result immediately. The line occupies a very important through route, and the project will be likely to receive the attention of other parties interested in its extension, so soon as they shall be released from their present duties, by the completion of the works upon which they are now occupied.

The *Memphis and Charleston* railroad, the line of which traverses the great Tennessee valley in Alabama from east to west, has already been briefly noticed. It commences at Memphis, the most important town upon the Mississippi between New Orleans and St. Louis, and passing through portions of Tennessee, Mississippi, and Alabama, forms a junction with the Nashville and Chattanooga road in the north-eastern portion of the last named State. Its length is 281 miles; the whole line is under contract. Its estimated cost is about \$3,000,000. Nearly the whole cost of the road is subscribed in *stock*; and, as ample means for construction are already provided, the work will be urged forward toward completion with all practicable dispatch.

The above line includes two of the old railroad projects of 1837, the *Lagrange* and the *Tuscumbia and Decatur*. The former of these was abandoned after its line was nearly graded; the latter was completed with a *flat* rail, and has for late years been worked by horses as the motive-power. The original object of the last named road was to serve as a portage around the "Muscle Shoals," which in low water are a complete obstruction to the navigation of the Tennessee river. Both of the above roads have been merged in the *Memphis and Charleston* road, and are now portions of it, and their direction coincides with that of the great line. Their adoption will diminish largely the cost of the latter.

The Memphis and Charleston road, as part of a great line connecting, by a very direct and favorable route, the leading southern Atlantic cities, Charleston and Savannah, with the Mississippi river, may be urged as of national importance, and must become the channel of a large trade and travel. Its western division will form a convenient outlet to the Mississippi river, for that portion of the Tennessee valley; and will save the long circuit at present made by way of the Tennessee, Ohio, and Mississippi rivers. For the eastern part of this great valley, it will afford a convenient outlet to the Atlantic ports. It will, when completed, form a part of the shortest practicable line of railroad between the Mississippi and the Atlantic—a fact in itself sufficient to establish its claims to public consideration. For the greater part of its length it traverses the "Tennessee valley," one of the most fertile districts in the United States. This road will add largely to the commercial importance of Charleston and Savannah, by securing to

them a portion of a large trade now drawn off to the Mississippi for want of an eastern outlet.

The only considerable work in operation in Alabama is the *Montgomery and West Point* railroad. This being one of the early projects of the South, was unfortunate in its original mode of construction, and has consequently been unproductive till within a few years. Under its present efficient management the road has been completely renovated; and now properly takes rank among the leading southern projects. It traverses a fertile and productive region, and has a large local business. It occupies an important position to the great through line of travel between the North and the South. Travellers from Mobile and New Orleans can reach Montgomery by steamboat, at nearly all seasons of the year. From that point the line of travel is carried forward to the Boundary line of Georgia, by the above railroad. From West Point to the Georgia roads the distance is less than 100 miles; and this link will shortly be supplied by the Atlanta and Lagrange railroad. The route of the Montgomery and West Point railroad is identical with that of a great line of travel, and is already in possession of a large through business, which will be much increased by the progress of southern railroads. It may be here stated, that it is proposed to connect the last portion of this road with Columbus, so as to form a junction with the *Muscogee* railroad. Such an improvement would constitute the *Montgomery and West Point* road the trunk of two great eastern lines. It is also proposed to extend a line of railroad from Montgomery to Mobile. Although there can be no doubt of the ultimate realization of this last project, it is not yet sufficiently matured to demand further notice.

MISSISSIPPI.

Population in 1830, 136,621; in 1840, 375,651; in 1850, 600,555. Area in square miles, 47,156; inhabitants to square mile, 12.86.

The only important work in operation in Mississippi is the *Southern* railroad, extending from Vicksburg to Brandon, a distance of about sixty miles. This, like the *Montgomery and West Point* railroad, was one of the early projects of the South, and has experienced a similar history. By the original plan it was proposed to make this part of a line extending through the States of Mississippi and Alabama to Georgia, and, in connexion with the roads of that State, to the Atlantic. As was the case with so many southern roads, the scheme proved a failure. It is, however, reviving under circumstances that promise full success. As already seen, a greater part of the Alabama portion is either completed or in progress; and operations are about to be commenced upon the unfinished Mississippi section. When completed, this line will prove a work of great public utility. There is none in the country for which there is greater apparent necessity. The whole route traverses one of the richest planting districts in the south; and as the people on its line can readily furnish the necessary means, its early construction is not to be doubted.

Of the proposed lines in this State the most important is the *New Orleans, Jackson, and Northern*, by means of which the city of New Orleans aims at opening a communication with the roads in progress in the southern and western States. The proposed northern terminus of this great work is *Nashville*, the capital of the State of Tennessee. The length of the road will be about five hundred miles. It is regarded with especial favor by the people of New Orleans, and is one of the great works by which that city proposes to restore to herself a trade which has in a measure been lost; to turn again the tide of western commerce in her favor; and to develop the immense resources of an extensive region of country, to the commerce of which she may justly lay claim. The magnitude of this project is well suited to the greatness of the objects sought to be accomplished. After a long period of supineness, the city of New Orleans is at last fully awakened; and as an evidence of the interest already excited, and an earnest of future efforts, she has subscribed \$2,000,000 to the stock of the above road, and is adopting the most vigorous and effective measures to secure its early construction. With the assistance offered by New Orleans, the people on the line of the road can readily furnish the balance necessary for the work. It traverses a region of great wealth and productivity, the inhabitants of which are alive to the importance of the work, and stand ready to contribute freely whatever may be required of them. When the great interest that the city of New Orleans has at stake in the success of the above work, and the local means that can be brought to bear upon it, are considered, its early construction cannot be doubted. The route is remarkably favorable, and the road can be built, for a greater part of the distance, at the minimum cost of southern roads. The line of this road has not been definitely located, but will probably pursue a pretty direct course by way of Jackson and Aberdeen, Mississippi, and Florence, Alabama.

The next great line in the State is the *Mississippi Central*, extending from Canton in a northerly direction, and passing through Holly Springs to the State line of Tennessee. Thence it is proposed to extend it to Jackson, in the latter State, there to form a junction with the Mobile and Ohio road, and the proposed line from Louisville, Kentucky, to Memphis. At Canton it will unite with a road now in progress to Jackson, and, in connexion with this short link, will constitute the legitimate extension, *northward*, of the New Orleans and Jackson line. Although the work of construction has not yet commenced, ample means have already been provided by the counties, and the wealthy planters upon its line. The object of the road is to open an outlet for the rich cotton lands traversed by it, which are now deprived of all suitable means of sending their products to a market. Whenever railroads are constructed in the south, they diminish so largely the cost of transportation, and consequently increase the profits of the planter, that a necessity is imposed upon other districts to engage in their construction, as the means of competing successfully with those in possession of such works.

The above road, with its connecting links, will constitute an important line of *through* travel between New Orleans and the northern States.

Another road of considerable importance is proposed through the northern part of the State, commencing at Memphis, Tennessee, and passing through Holly Springs and the northern tier of counties to the Tennessee river. One of its leading objects is the accommodation of a very rich and productive planting district. The line of the *Memphis and Charleston* road will also traverse a small portion of the northeastern corner of the State.

LOUISIANA.

Population in 1830, 215,739; in 1840, 352,411; in 1850, 517,739. Area in square miles, 46,431; inhabitants to square mile, 11.15.

The State of Louisiana, having in the Mississippi river a convenient channel not only for the trade and travel of its own people, but for opening to them the interior commerce of the country, has neither attempted nor accomplished much in works of artificial improvement. Before railroads were brought into use, the river afforded the best known mode of transportation, both for persons and property, and long habit had produced a conviction that it could not be superseded by any other channels or routes of commerce. No representations could awaken the people of New Orleans to a sense of the importance of following the example of other cities, and of strengthening their natural position, by artificial works, till a diminished trade—the result of the works of rival communities—rendered the necessity of undertaking similar improvements too apparent to be longer delayed. Although the projects of the northern and eastern States, by which they sought to reach the trade of the Mississippi basin, had been only partially accomplished, yet the influence which they exerted, even in their infancy, in diverting the commerce of that great valley from its *natural* and accustomed channels, has been so marked and decided, that, for a few years past, the trade between New Orleans and the distant portions of the great valley has diminished—at least has not increased—notwithstanding the rapid increase of the West in population and production. Such a fact was too startling not to arouse the whole community to a sense of the necessity of taking the proper steps to avert a calamity threatening the loss of their trade and commercial importance; and the people of New Orleans are now taking the most efficient measures to repair the consequences of their neglect, and are busily engaged in the prosecution of two *great* works, by means of which they propose to reestablish and retain the hold they once had upon the trade of the Mississippi valley.

The leading project now engaging the attention of the people of Louisiana, and particularly those of New Orleans, is the *New Orleans and Nashville* railroad, by constructing which they propose to connect themselves not only directly with a region of country capable of supplying the largest amount of trade, but with the numerous railroads now in progress in the south and west. The length of this road will not be far from 500 miles. It will traverse, as is well known, a very fertile

and productive region, and at its northern terminus will be brought into communication by railroad with every portion of the country. It is believed that this road will exert a strong counteracting influence to the efforts now made to draw off the trade of the Mississippi valley toward other cities. The whole line is now under survey, and will be placed under contract as soon as practicable, when the work of construction will be urged forward with the greatest possible dispatch.

The other leading project, dividing the attention of the State with that described, is the *New Orleans and Opelousas* railroad. The object of this road is to accommodate the trade and travel of the country traversed, and eventually to form the trunk of two other great lines; one extending into Texas, with the expectation that it will eventually be carried across the continent to the Pacific; and the other in a northerly direction, through Arkansas, to St. Louis. These extensions, however, form no part of the present project, which is limited to the territory of the State.

The route of this road traverses the great sugar-producing district of Louisiana, from which transportation to a market, on account of the impossibility of constructing good earth-roads, involves a heavy expense and great delay. For the immense products of this portion of the State, the road will constitute a suitable outlet in the convenient direction of trade. The work of construction will be commenced immediately, as ample means are prepared for this purpose.

The above are the two leading works of the State, and alone require particular description. Most of the projects that will be constructed within the State, for some years to come, will probably be based upon the above lines.

The influence which railroads are calculated to exert upon the commerce, and in this manner upon the public sentiment of a community, has been remarkably illustrated in the present condition of the trade of New Orleans; and in the extraordinary revolution which a conviction of the necessity of these works, as a means of maintaining their prosperity and commerce, has effected in the political organization of that city and the State. So long as commerce was confined entirely to natural channels, New Orleans occupied a position possessing greater advantages than any other city on this continent. She held the key to the commerce of its largest and most productive basin, watered by rivers which afford 50,000 miles of inland navigation. This basin is now the principal producing region of those articles which form the basis of our foreign and domestic commerce.

The ability, therefore, to monopolize this trade, will be the test of commercial supremacy among numerous competitors. Before the construction of artificial channels, New Orleans enjoyed a *natural* monopoly of the trade of the Mississippi valley. But it has already been demonstrated that in the United States *natural* channels of commerce are insufficiently matched against those of an *artificial* character. The progress of the latter has already made serious inroads upon a trade, to which the merchants of New Orleans formerly supposed they had a prescriptive right. There can be no doubt that this trade is to be turned toward the eastern cities, unless it can be restored to its old routes by the construction of channels better suited to its wants than

the Mississippi river and its tributaries. As already stated, the people neither of New Orleans, nor of the State, could be induced to act till the danger to be averted became imminent. But as, in the southern States, works of the magnitude proposed cannot be executed by private enterprise, it was found, so far as Louisiana was concerned, that neither the credit of the State, nor that of the city of New Orleans, could be made available to the works proposed; that of the State from a constitutional inhibition, and that of the city because it had already been dishonored. Under these circumstances, it was felt that the first step to be taken was to remove the disability on the part of the State, and to restore the credit of the city to a point at which it could be made available for the carrying out of plans designated to promote its growth and prosperity. Both objects have already been accomplished. The constitution of the State has been remodelled, so as to permit extension of aid to railroad projects. A much greater change has been effected, as far as New Orleans itself is concerned. Up to a recent period that city was divided into three *municipalities*, each having a distinct *political* organization. Each of these municipalities had contracted large debts, the payment of which had been dishonored. Their credits, of course, could not be made available for any works of improvement. It was seen that the proper and only course for the accomplishment of the results aimed at, was to consolidate the different organizations into one body, and pay off old liabilities by new loans resting upon the credit of the *whole* city. All this has been effected. The result has been magical. The credit of the city has been completely restored. The new loan, to pay off outstanding liabilities, commanded a handsome premium, and the city is now in a position to extend efficient aid to her proposed works. As the loss of her business and her credit could be directly traced to the indifference with which she regarded all works of internal improvement, she proposes to restore *both* by calling to her assistance all the agencies supplied by modern science in aid of human efforts and in the creation of wealth.

In addition to the recent loan of \$2,000,000 referred to, the city has voted \$2,000,000 in aid of the *New Orleans and Nashville*, and \$1,500,000 to the *New Orleans and Opelousas* roads. These sums will probably be increased, should it be found necessary to the accomplishment of their objects. Both works are to be pushed forward with all the dispatch called for by the exigencies demanding their construction.

There are two or three short roads in operation in this State, of a local character, and other lines are projected; but they are not sufficiently matured to call for particular notice in this report.

TEXAS.

Population in 1850, 212,592. Area in square miles, 237,321; inhabitants to square mile, 0.89.

The State of Texas has been too recently settled to allow time for the construction of extensive lines of railroad. It must, however, soon become an active theatre for the progress of these works, which are

not only very much needed, but for which the topographical features of the State are favorable. The surface of the greater part of it consists of level, open prairies, which can be prepared for the superstructure of railroads at a slight expense. The soil is of great fertility, capable of producing large quantities of sugar and cotton, which must ultimately be forwarded over railroads to market, from the absence of navigable rivers.

The most prominent projects, at the present time, occupying the attention of the people of this State, are the proposed road from Galveston to the Red river, and the extension westward of the *New Orleans and Opelousas* railroad. The line of the former of these extends from Galveston in a generally northern direction, between the Brazos and Trinity rivers, to the Red river, which forms the northern boundary of the State. It will be about four hundred miles long. Through its whole length it traverses a fertile region, well adapted to the culture of cotton. This portion of Texas is entirely wanting in any natural outlet for its products. It already contains a large and thriving population, capable of supplying a lucrative traffic to a road. Towards this project the State has made a grant of lands equal to 5,000 acres per mile of road, and will, if necessary, extend farther aid. These lands are a gratuity to the company constructing the road. Measures are now in progress which will probably result in placing the whole of this important work under contract. When completed it will prove of great benefit to the people upon its route, and to northern Texas; will add a large area to the *available* cotton-producing district of the South, and will greatly increase the commercial importance of Galveston, the principal seaport of the State.

The other work referred to traverses the State from east to west, connecting at its eastern terminus with the *New Orleans and Opelousas* road. The above is proposed, not only as an outlet for the trade and commerce of the central portion of the State, but as part of a great line of railroad connecting the Gulf of Mexico with the Pacific. It is claimed that through Texas is to be found the appropriate line for such a work. Should such prove to be the fact, the proposed line will coincide with the route of the *national* road, as far as the territory of Texas is concerned. Apart, however, from all considerations of its becoming a portion of the Pacific project, the necessity for a railroad traversing the State from east to west is so urgent, that its speedy construction may be considered certain.

No State in the Union is making more rapid progress than Texas, and the lapse of time will surely bring with it all the improvements we find in older States. The value of such works is fully appreciated, and there is every disposition to encourage their construction by liberal grants of land, of which the State holds vast bodies. The only remaining work in progress in the State is the *Buffalo, Bayou, Brazos, and Colorado* road, extending from Harrisburg, on Buffalo bayou, to the Brazos river, a distance of thirty-two miles. The object of this road is to divert the trade of that river to Galveston bay. This trade has already become important, and the above work will open for it an outlet in a convenient direction to the principal seaport of the State.

There are numerous other projects engaging the attention of the peo-

ple in various portions of the State; but there are none, except those described, of which the direction and objects are sufficiently defined, to fall within the scope of this notice. When the great area of Texas, the favorable character of its territory for the construction of railroads, its resources, and the dense population it will soon contain, are taken into consideration, there can be no doubt that it will, ere long, become an active theatre of railroad enterprise and success.

In addition to those named, the following projects are attracting more or less attention throughout the State, viz :

1. The *Texas Western* railroad, to run from Corpus Christi to such points on the Rio Grande as may be deemed expedient, in the direction of El Paso.

2. The *Goliad and Aransas Bay* railroad.

3. The *Lavaca* railroad, to run up Guadalupe valley.

4. The *San Antonio and Mexican Gulf* railroad, to run from some point on the coast between Galveston and Corpus Christi to San Antonio.

5. The *Brazos and Colorado* railroad, from Austin to Galveston bay.

6. The *Henderson and Burkville* road, from Burkville to Henderson.

7. The *Vicksburg and Austin City* road.

8. The *Vicksburg and El Paso* road in about 22° latitude.

ARKANSAS.

Population in 1830, (Territory,) 30,388; in 1840, 97,574; in 1850, 209,639. Area in square miles, 52,198; inhabitants to square mile, 4.01.

This State has heretofore been regarded as too remote, and too thinly settled, to become the theatre of railroad enterprises. A number of important projects, however, are now attracting great attention and interest among her people. The leading of these are the proposed road from Little Rock to the Mississippi river, opposite Memphis, with a branch to Helena; a road from Little Rock to Shreveport, on Red river; and the line running from St. Louis to New Orleans. The projects are rapidly assuming a definite shape. The want of a dense population, and consequently of means for the execution of enterprises of magnitude, may, for the present, delay the construction of roads in this State; but, as in other western States, they will follow close upon the wants and the ability of the people of Arkansas to construct them.

TENNESSEE.

Population in 1830, 681,904; in 1840, 829,210; in 1850, 1,002,625. Area in square miles, 45,600; inhabitants to square mile, 21.98.

The remarks by which the notice of the Kentucky improvements is prefaced are appropriate to those of Tennessee. The early projects of this State were equally unfortunate; they shared a similar fate,

and produced the same results, so far as the public mind was concerned. It required the same efforts to restore to the people of the State confidence in their ability to execute these works, and arouse the public mind to a sense of their value. This object has been fully accomplished. An elaborate system has been devised, adapted to the wants of every portion of its territory, and toward the construction of it the State guaranties a credit to the amount of \$8,000 per mile, for the purchase of iron and equipment, upon the condition that the companies prepare the road-beds, and defray all other charges of construction. The State retains a lien upon the whole property, as security for the amount advanced. The companies embraced in the internal improvement act are the following: The Chattanooga and Charleston, the Nashville and Northwestern, the Louisville and Nashville, the Southwestern, the McMinnville and Manchester, the Memphis and Charleston, the Nashville and Southern, the Mobile and Ohio, the Nashville and Memphis, the Nashville and Cincinnati, the East Tennessee and Virginia, the Memphis, Clarksville, and Louisville, and the Winchester and Alabama railroads—making, in the aggregate, about 1,000 miles of line. This act is believed to be judicious on the part of the State, as it will secure the construction of most of the projects coming within its provisions, without the risk of loss. By the use of the credit of the State, railroad companies will be enabled to save a large sum in discounts and commissions, which other roads are compelled to pay, upon the sale of their own securities.

The most prominent road in the State, at the present time, is the Nashville and Chattanooga railroad, connecting the above places by a line of 151 miles. Chattanooga is already connected by railroad with the cities of Charleston and Savannah. About 100 miles of the above road are completed, and it is expected that by the first of January next the Tennessee river will be reached, and that the whole line will be completed in a few months after that event.

The above road is the appropriate extension of the Georgia and South Carolina lines into the Mississippi valley, to which it opens an outlet on the southern Atlantic coast. For the want of other lines of communication, the Mississippi river and its branches have been the outlet of the trade of Tennessee. The completion of the roads now in progress will liberate this trade from the long circuit it has been compelled to take, by way of the Cumberland and Tennessee rivers, to market, and bring it in direct communication with its best customers, the cotton producing portions of the southern States.

The road is important, not only for the reasons stated, but as a connecting link between two great systems of railroad occupying the northern and southern States. At Chattanooga and Winchester this road will connect with the railroads of Charleston, Georgia, and Alabama. Its northern terminus, Nashville, is the radiating point of a number of important roads, all of which will soon be in progress, extending towards Cincinnati, Louisville, Evansville, and the Mississippi river.

This road has communicated a new impulse; and, in fact, it may be said to have given birth to most of the important projects in progress in the central portion of the State. It constitutes the channel of com-

munication with other roads, and supplies them with necessary outlets and connexions; without which there would be no sufficient inducement to warrant their construction. It has been prosecuted with vigor and energy, and its affairs have been managed with an ability that has contributed not a little to raise the confidence of the southern people in their capacity to undertake and prosecute successfully railroad enterprises.

Railroads in East Tennessee.—The eastern portion of the State of Tennessee has no geographical connexion with the rest of the State, and its railroad projects make up no part of the general system. The most important of these projects are the East Tennessee and Georgia, and East Tennessee and Virginia roads. Together they traverse the entire State from north to south, by a line of about 240 miles, of which 15 miles lie within the State of Georgia.

East Tennessee and Georgia Railroad.—This road commences at Dalton, and is completed to Loudon, on the Tennessee river, a distance of 80 miles. It is in progress to Knoxville, its northern terminus, a farther distance of 30 miles, making the whole length of its line 110 miles. This was one of the early projects of the South, under the title of the *Hivawsee* railroad, which broke down after the expenditure upon it of a large sum. A few years since it was recommenced under new auspices, and has been carried forward successfully to its present termination.

East Tennessee and Virginia Railroad.—The line of this project commences at Knoxville, where it will form a junction with the road above described, and extend in a northeasterly course to the Virginia State line, a distance of 130 miles. Here it will meet the Virginia and Tennessee railroad. The entire line of the former is under contract, to be ready for the iron as soon as the connecting roads shall be opened. The line of the East Tennessee and Virginia road could not be brought into profitable use, and would, in fact, hardly be accessible without the opening of the connecting roads above referred to. In addition to the general provisions of the State, in aid of railroads, the sum of \$300,000 was granted to this road for the purpose of building several expensive bridges. It is believed that the work will be completed within three years from the present date.

The above roads traverse a very fertile, but comparatively secluded portion of the country. In addition to its agricultural resources, it is rich in the most valuable minerals. Its great distance from market has proved a serious obstacle to its prosperity; but, with the avenues which the above roads will supply, it must soon become one of the flourishing portions of the country, and the seat of a large manufacturing, as well as an agricultural interest.

The above roads derive their chief public consideration from their connexion with the great national line which has been already described, and of which they form an important link. This great line will form the shortest and most direct route between Mobile and New Orleans, and the North; and must consequently become one of the most important routes of travel in the whole country. The lower part of this line will undoubtedly be connected with Chattanooga by a short branch, giving connexion with the roads intersecting at that point.

The Tennessee and Alabama road is a work of much consequence, as it will be connected with the Nashville and Chattanooga road at Winchester, with the Memphis and Charleston at Huntsville, and with the Alabama and Tennessee at Gunter's Landing. From Winchester to Huntsville the distance is about 46 miles. For this distance the whole line is under contract, and well advanced towards completion.

From Winchester a road is also in progress to McMinnville, a distance of about 35 miles. From this point it is proposed to extend a railroad northerly, through Central Tennessee, by way of Sparta, for the purpose of forming a junction with the southern extension of the Lexington and Danville railroad by way of Burkesville, Kentucky. This is a project entitled to State aid. It will be seen that, with its connexions, it would form a direct route for a railroad between the northern and southern States.

Another proposed line, radiating from Nashville, is the Nashville and Northwestern railroad, extending from that city to the Mississippi river, near the northwestern angle of the State. This project also is entitled to State aid, and is regarded as essential to the system which Tennessee has proposed for herself. Its line traverses an excellent region of country, and would furnish an outlet for it in the direction either of Nashville or of the Mississippi river. The portion of this line towards Nashville is an expensive one; and this fact may, for the present, delay the commencement of the work.

The internal improvement act of the State contemplates the construction of *three* roads extending from Nashville in southern and southwestern directions—the Nashville and Southern, the Nashville and Southwestern, and the Nashville and Memphis roads. Of these the first-named has made the most progress, its route being under survey preparatory to placing it under contract. It is intended to make this road a portion of the New Orleans and Nashville line. Its line traverses one of the best portions of the State, able to supply abundant means for the work, and its construction may be regarded as beyond any reasonable doubt.

The Nashville and Southwestern road will probably extend from Nashville to the bend of the Tennessee river. For a portion of the distance, this and the Nashville and Southern may be united in one trunk line. At the Tennessee river the above road will form a junction with the Mobile and Ohio road, and, through this, with the Memphis and Charleston road. By means of these connexions continuous lines of railroad will be formed, uniting Nashville with Memphis, New Orleans, and Mobile.

The Nashville and Memphis road will take a more westerly direction than either of the two last named. Its object, in addition, to the accommodation of the local traffic upon its route, is to open the shortest practicable communication between the capital of the State and its principal commercial town. The construction of this road is believed to be demanded on the considerations above stated. Its proposed line traverses a very excellent section, capable of affording a large trade; and the city of Memphis must always remain the *entrepôt* of a large portion of the merchandise imported into the State, and the point to

which must be forwarded a large amount of its surplus products designed for exportation.

The Nashville and Louisville road is a very important work, and will be more particularly described with the roads of the State of Kentucky, a comparatively small portion only of the line of this road being in Tennessee. For this project sufficient means for construction have been provided, and the work is to be immediately placed under contract.

The line of the Mobile and Ohio railroad traverses Western Tennessee from north to south, and will supply valuable accommodations to that portion of the State. This road may be regarded as an Alabama project, and has been particularly described in the notice of the roads of that State. The Tennessee division is immediately to be placed under contract, and as it runs through a rich planting district, abundant means can be readily raised for its construction, in addition to the State appropriation.

The proposed Memphis, Clarksville, and Louisville railroad is another important project in West Tennessee. It will probably intersect the Louisville and Nashville road at Bowling Green, Kentucky. In connexion with the latter, a very direct line of road will be formed between Memphis and Louisville, which will constitute a convenient avenue from the former city, in a northeasterly direction, and which will become a leading route of travel in the southwestern States. It traverses a fertile section of country, capable of supplying a lucrative traffic. It is probable that this road may be constructed as a branch of the Louisville and Nashville road.

KENTUCKY.

Population in 1830, 687,917; in 1840, 779,828; in 1850, 982,405. Area in square miles, 37,380; inhabitants to square mile, 26.93.

This State commenced, some years since, a system of improvement founded principally upon the plan of rendering navigable her principal rivers—the Green, Licking, and Kentucky. Although large sums were expended upon these works, they have, with the exception of the improvements on the Green river, proved of little value. They are almost entirely unremunerative, as far as their tolls are concerned; although the Green river improvements have been of great advantage to the country traversed by it, in the outlet they have opened to a market. As a system they have proved a failure, and all idea of the prosecution of works of a similar kind has long since been abandoned.

Railroads of Kentucky.

Louisville and Lexington railroad.—The only railroad in operation in the State is the line from Louisville to Lexington—made up of the Louisville and Frankfort and Frankfort and Lexington roads. These roads were commenced at an early period in the railroad history of the country; and it has been only after repeated efforts and failures that

they have been recently completed. The projects shared the fate of all the pioneer western roads, having been abandoned, and their completion postponed for many years after they were commenced. The length of these roads is 93 miles, and the cost about \$2,500,000. The disastrous results which attended the enterprises referred to exerted a most injurious effect upon the public mind of the State. Discouraged by the failures which had been sustained, the people became almost indifferent to the subject of internal improvements, except so far as the construction of Macadamized roads was concerned, for the number and excellence of which the State is justly celebrated. When the public mind of the West was again turned to the subject of railroad construction, it was with the utmost difficulty that the people of Kentucky could be convinced of the importance of these works, or induced to take any steps toward their construction. The losses suffered on account of the Louisville and Frankfort, and Frankfort and Lexington railroads, were fresh in mind; and the people distrusted the success of the *new* projects from experience of the *old*. The example of the neighboring States, whose success in their recent efforts demonstrated the capacity of the West not only to build railroads, but to supply a lucrative traffic to them, and the rapid progress of those regions of country enjoying the advantages of these works, gradually inspired confidence, and aroused the people to action; and the State of Kentucky is now one theatre of the most active efforts to secure the construction of railroads. Every part of the State is fully alive to the subject, and its surface will soon be as thickly checkered with lines as are the States of Ohio and Indiana.

The leading lines in the State, now in progress, are—

1. *The Louisville and Nashville railroad.*—The line of this road will be about 180 miles long. Its route has been determined, and will pass through a very fertile portion of the State, capable of supplying an immense traffic to a railroad, and entirely wanting in suitable outlets to markets, excepting that portion of the route near Bowling Green. The connexions it will form will be of sufficient importance to give the work a national character, as it will probably be the most conspicuous connecting link between the roads of the two extremes of the confederacy. The road is to be placed immediately under contract; and as ample means are already provided for this purpose, its construction, at the earliest practicable period, may be set down as certain.

A very important branch from the above road—exceeding in length even the main trunk—is the proposed Memphis, Clarksville, and Louisville road, which has already been described under the head of “Tennessee.” This road will probably leave the Nashville and Louisville road at Bowling Green. It will be seen that the two would form a very direct line between Louisville and Memphis. The Memphis extension is regarded with great favor by the people of Louisville, and by the friends of the Louisville and Nashville projects. As a large portion of the proposed extension is embraced in the State of Tennessee, it will come in for the State aid; and as it traverses a rich section of country, and will receive the efficient support of Louisville, there can be no doubt of its speedy construction.

Another line of road proposed, for the purpose of connecting Cin-

cinnati with Nashville, and attracting much attention in central and southern Kentucky, is composed of the Covington and Lexington line, through the towns of Bowling Green, Kentucky, and Gallatin, Tennessee. A reference to the annexed map will at once show the important relation it bears to the railroad system of the whole country. The city of Nashville is to be the centre of a great southern system of railroads radiating in every direction toward all the leading southern cities situated on the Atlantic coast and the gulf. In a few months this city will be in direct communication, by railroad, with the cities of Savannah and Charleston. Roads are also in progress to Mobile and New Orleans, to various points on the Mississippi, and to other portions of the State. The city of Louisville will be no less favorably situated, with reference to the railroads of the northern and eastern States. On the north and west, the New Albany, and Salem and Jeffersonville roads, will open a communication with the roads of Ohio, Indiana, and Illinois, and with the leading cities of all these States. On the east, the line of railroad to Lexington will connect with all the railroads radiating from that point, some of which will open outlets to the eastern States, and to the great Atlantic markets.

The cost of this road will amount to about \$5,000,000. Sufficient means have been already provided to warrant its construction. The city of Louisville has subscribed to its stock to the amount of \$1,000,000, and the counties on its line have taken stock with equal liberality. The route traversed by this road runs through one of the most fertile and densely settled portions of the State.

The Covington and Lexington, and Danville and Nashville.—The two first links, having an aggregate length of 136 miles, are already in progress. Active measures are in progress to secure the necessary means for the last. This route will pass through Glasgow, an important town in southern Kentucky. The upper portion of this line may be made the trunk of two important branches, one extending nearly direct in a southerly course through the State of Tennessee, (taking the towns of Sparta and Winchester in its route,) to Huntsville, Alabama, where it will form a junction with the Memphis and Charleston road; thence it will be extended to Gunter's Landing, in order to connect with the Alabama and Tennessee river road. The portion of this line from Winchester, south, is already in progress. The Tennessee division is embraced in the general facility bill. At Winchester, this line will have a southeasterly outlet, by means of the Nashville and Chattanooga railroad.

The other branch referred to is the proposed road to be constructed through southeastern Kentucky and eastern Tennessee, to Knoxville, there to connect with the lines of railroad centring at that point. The importance of this route, for a railroad, has always been recognised, and that section now under discussion formed a part of the old Cincinnati and Charleston project, which attracted so much attention through the southern and western States many years since, and which has been referred to in another part of this report. Measures are in progress to secure the means for this line. The great obstacle in the way of its immediate construction is the scanty population and want of means on the line of the route. The importance of this link, how-

ever, to the connexion lines, now on the eve of completion, must secure to it such foreign aid as shall be necessary to its success.

The next line in order is the *Maysville and Lexington* railroad. This, though started as a local project, is now proposed as a part of a great through line, connecting the most remote portions of the country. At Lexington it will form a junction with all the lines centring at that point. From its eastern terminus, Maysville, the Maysville and Big Sandy railroad will carry it forward to Portsmouth, on the Ohio river. From the latter place the Scioto and Hocking Valley railroad is in progress, which pursues, for some fifty miles, the same general direction with the connecting Kentucky line, till it forms a junction with the Hillsboro' and Cincinnati, and Cincinnati and Marietta roads, the former of which is to constitute the extension, westerly, of the Baltimore and Ohio, and the latter of the Pennsylvania Central road. To the mouth of the Big Sandy river, the Maysville and Big Sandy railroad will connect the former with the Virginia Central road, which it is proposed to carry across the mountains, terminating on the Ohio, at this point. These combinations will secure to the Maysville and Lexington road an important place in a great line of railroad, traversing the country from one extremity to the other, in the convenient direction of business and travel. With the exception of the Maysville and Big Sandy road, all the links necessary to this great line are in progress. The Maysville and Lexington railroad will probably be opened for business during the year 1853.

Lexington and Big Sandy railroad.—This proposed road is attracting much attention in Kentucky, particularly that portion of the State to be traversed by it. By reference to the accompanying map, it will be seen that it would form a convenient portion of the great line of road just referred to. Measures are in progress to raise the means necessary for its construction, with good promise of success. As a local work, it will prove to be of great benefit to the country traversed, deprived as it is of suitable and convenient avenues to market.

Henderson and Nashville railroad.—This line is the legitimate extension, southward, of the Wabash Valley railroad. As a connecting link between other roads, a reference to the annexed map will give a better idea of its importance than any description. The southern shore of Lake Michigan will attract to itself all the lines of railroad running from the Gulf of Mexico in a northerly direction. Between this lake and the cities of New Orleans and Mobile, the great route of travel will probably always be by way of Nashville. The route will, apparently, be the shortest, and most convenient and agreeable to the traveller, whether for business or pleasure. It coincides with the great route through the Wabash valley, and has the advantage of taking in its course the leading commercial towns in the interior of the country. These facts must always attach particular importance to the Henderson and Nashville railroad as a through route, and in this respect it can hardly be exceeded by any road of equal length in the United States. In a local point of view the road is important, and its prospects flattering, as it traverses a region of great fertility, and already distinguished for the extent and value of its productions.

A road is also in progress from Louisville to Shelbyville, which may

eventually be extended to Frankfort. A road is also proposed from Harrodsburg to Frankfort. Another is projected from Paris, on the Maysville and Lexington road, via Georgetown, to connect with the Louisville and Frankfort railroad, for the purpose of cutting off the detour by way of Lexington.

The only project remaining to be noted is the Louisville and Cincinnati road, which is now beginning to attract much attention, not only in the State, but in the above cities. The necessity of the road is daily becoming more and more apparent. Cincinnati and Louisville are soon to become central points in widely extended and distinct systems of roads, extending to the great lakes on the one hand, and to the Gulf of Mexico on the other. The public convenience and the wants of commerce require that this connecting link should be supplied. The travel between the above cities is already great, and is carried almost entirely upon steamboats. The time now occupied by a trip is about twelve hours. The distance by river is 150 miles. By the proposed road it would be reduced to ninety-five miles, and the time to four hours. Active measures are now in progress to provide the necessary means for this work, and to place it under contract.

OHIO.

Population in 1830, 937,903; in 1840, 1,519,467; in 1850, 1,980,408. Area in square miles, 39,964; inhabitants to square mile, 49.55.

In considering the works of improvement projected in the interior, for the purpose of opening outlets for products, a marked difference is found between such and works constructed by our Atlantic cities for the purpose of securing to themselves the interior trade of the country. Although these last were designed to reach and accommodate this trade, they took their character and direction rather from the supposed advantage they were to secure to the cities which mainly furnished the means for their construction, than from that to the country traversed. As far as practicable, they aimed at a monopoly of all the trade within their reach; but, with roads projected in the interior for the purpose of opening *outlets* to a market a different principle prevails. The ruling motive in such a case is, so to shape the project as to secure the cheapest *access* to the *best* market, or to a *choice* of markets, and to escape the monopoly which the markets themselves sought to impose. The leading improvements projected in the interior, therefore, often have a more national character, and are constructed with more reference to the wants of the whole community, than those of the East.

The value of works facilitating and cheapening transportation can be fully estimated only when they are considered in reference to that portion of our population residing in the interior. As already stated, we have few markets, and those far removed from the great producing regions. The early settler in the western States of necessity engaged in agriculture, and so long as he was without means of forwarding his surplus to a market, the gratification of his wants was limited to what his own hands could supply. The time had not arrived for a diversity

of pursuits in his own neighborhood, and he was too remote to avail himself of those of the older States. The cost of transportation placed it beyond his means to purchase from abroad, and his surplus was, therefore, comparatively worthless after the supply of his own immediate wants. Thirty years ago, the West offered but few inducements to the settler, as he was compelled to sacrifice all the social and many of the physical comforts afforded in the less fertile, but better settled and richer States of the East. Without variety of industrial pursuits, and without commerce, no amount of surplus could add much to his wealth or his means of enjoyment. This portion of the country therefore advanced very slowly, until the construction of the Erie canal, by which a market was thrown open, and its vast productive capacity rendered available. An instantaneous and mighty impulse was imparted to it, under the influence of which all its interests have moved forward with constantly accelerating pace up to the present time.

The completion of the Erie canal, in connexion with the great lakes, gave a navigable water line from New York to Chicago, a distance of 1,500 miles, and opened a market to the whole country within reach of this great water line. In order to profit by this outlet, the western States lying upon the lakes immediately commenced the construction of similar works to connect with it the more remote portions of their territory. At that period, canals were regarded as the most approved mode of transportation. Hence the system of internal improvement in the West almost exclusively embraced the construction of canals. The early projects of the States of Ohio, Indiana, and Illinois, were, with a very few exceptions, of this character, though their further progress has since been entirely superseded by railroads.

In reviewing the public works of the West, the State of Ohio, in some respects, constitutes an appropriate starting point, as she was the first to enter upon, and the only one to execute, what she originally proposed. After a severe struggle, her great system of canals was completed, and the result has been to place her immeasurably in advance of all her sister States in wealth, in population, and in general prosperity. The rapidity of her progress has been the marvel of the country. In a very few years she rose from obscurity to the first rank among her sister States in population, in wealth, in credit, and in consideration both at home and abroad.

Canals of Ohio.

Ohio canal.—This work was commenced in 1825, and was completed in 1832. It extends from Portsmouth, on the Ohio river, to Cleveland, on Lake Erie, a distance of 307 miles. It ascends the valley of the Scioto nearly to Columbus, when it takes an eastern direction, striking into the valley of the Muskingum, passing through the towns of Hebron, Newark, Coshocton, New Philadelphia, and Massillon, in this valley. Crossing the summit of Akron, it falls into the valley of the Cuyahoga river, which it pursues to Cleveland. The highest point in the canal at Akron is 499 feet above the Ohio river at Portsmouth, 405 above Lake Erie, and 973 above the Atlantic ocean.

The canal is 4 feet deep, 40 wide, has 147 locks, and an aggregate lockage of 1,220 feet.

This canal has several branches or navigable feeders, of which the following are the principal:

The *Columbus branch*.—This branch extends from the point at which the canal leaves the Ohio valley to Columbus, a distance of 10 miles.

The *Lancaster branch*.—This is a lateral branch, extending from the main trunk southerly to the town of Lancaster, the capital of Fairfield county, a distance of 9 miles.

The *Athens extension* or *Hocking canal* is a prolongation of the Lancaster branch. It has a southeasterly course through the counties of Fairfield, Hocking, and Athens, to the town of Athens, a distance of about 56 miles.

The *Zanesville branch*, extending from the main canal to the town of Zanesville, on the Muskingum river, a distance of 14 miles, connects it with the *Muskingum improvement*, by means of which another channel is opened to the Ohio river at Marietta.

The *Walhonding branch* extends from the main canal, near Coshoc-ton, upon the Walhonding river, a distance of 25 miles.

The *Miami canal*.—This work extends from Cincinnati to Lake Erie, at Manhattan, a distance of 270 miles. The principal towns through which it passes are Hamilton, Dayton, Troy, Sidney, Defiance, and Toledo. This last town is generally considered as the northern terminus of the canal, although it is carried to Manhattan, 4 miles below it. This canal was commenced in 1825, and completed in 1832. It has a width of 40 and a depth of 4 feet; its summit-level is 510 feet above Cincinnati, and 411 feet above Lake Erie, and the number of its locks is 102. This canal, from Lake Erie to the Indiana State line, forms the lower trunk of the Wabash and Erie canal, extending to Evansville, on the Ohio river. There are also connected with this canal in Ohio branch lines measuring 45 miles in length.

The following table shows the length and cost of the Ohio canals constructed by the State:

	Length.	Cost.
The Ohio canal and branches.....	340	\$4,695,203
The Walhonding canal	25	607,268
The Miami canal and branches.....	315	7,454,726
The Hocking Valley canal	56	975,480
The Muskingum improvement	91	1,627,318
	827 miles.	15,359,995

In addition to the above works, owned by the State of Ohio, are the following private works:

The *Sandy and Beaver canal*.—This work commences at Bolivar, on the Ohio canal, and extends to the Ohio river, at the mouth of the Beaver river, a distance of about 76 miles. The cost of this work was about \$2,000,000. A portion of it is in the State of Pennsylvania.

The *Mahoning canal*.—This canal commences at Akron, pursues the left bank of the Cuyahoga river, running through the town of Ravenna, thence into and along the valley of the Mahoning to its confluence with

the Beaver canal, in Pennsylvania, a short distance from the State line. The length of this canal is about 77 miles, and its cost something like \$2,000,000. It was, before the construction of railroads in Ohio, and still is, an important channel of communication between Pittsburg and Cleveland and the interior of Ohio, and supplies the latter city with the important article of coal, which is found in the greatest abundance and of the best quality in the Mahoning valley.

In the vast number of railroad projects which have sprung up in Ohio within a few years, and which are absorbing public attention, the canals of the State have sunk into comparative insignificance. The former have, however, been the great cause of its unexampled prosperity, as they supplied the demand of its people for a cheap and comparatively expeditious route to market, and enabled them to turn to immediate account their large resources. It is probable that they may still continue to be the carriers of the more bulky and less valuable kinds of property, and in this manner prove of utility, though of smaller comparative importance. Although railroads may take from the canals a large portion of their traffic, the former will probably develop a still larger trade in articles of merchandise, for which the canals are the appropriate channels; so that the interests of the two systems of improvement, instead of clashing, will be found to be in strict harmony. The canals, unfortunately, are not first-class works, so far as their construction and capacity are concerned, and during periods of great drought occasionally fall short of water.

Railroads of Ohio.

The railroads of Ohio may be said to belong to *two* distinct and well defined periods in the history of the internal improvements of the State. The *first* class includes those commenced during the great speculative movement of 1836 and 1837, which were, for a considerable lapse of time, the only projects of the kind attempted in the State. These were—

1. The *Little Miami* railroad, commenced in 1837 and completed in 1846, was originally laid out with a flat rail, which has since been replaced by the heavy H or T rail. It extends from Cincinnati to Springfield, a distance of 84 miles, and has cost, up to the present time, about \$2,500,000.

2. The *Mad River and Lake Erie*, commenced in 1836 and completed in the latter part of 1846, extends from Sandusky, on Lake Erie, to Springfield, a distance of 134 miles, where it forms a junction with the Little Miami road, constituting a continuous line of railroad from Lake Erie to the Ohio, which was the first to connect these water-courses. A portion of this road was opened in 1838. It was originally laid with a flat rail, which has since been replaced by one better adapted to a heavy traffic.

3. The *Mansfield and Sandusky* railroad was commenced in 1836, and a portion of it opened in 1838. It was completed to Mansfield in 1847. Like all the early Ohio railroads, it was first laid with the flat bar, which has since given place to the heavy rail.

4. The *Lake Erie and Kalamazoo* extends from Toledo, on Lake

Erie, to Adrian, where it forms a junction with the Michigan Southern railroad, to which it forms an outlet to the roads of Ohio. The length of this road is about 33 miles. It was commenced in 1836, and completed in 1845. Its superstructure was, in the outset, a flat rail, which has recently, since the completion of the Michigan Southern road, given place to a heavy bar.

These are the only roads commenced, under the stimulus of the great movement already referred to, the original plans for which were finally accomplished. All other projects fell to the ground in the commercial revulsions which followed. These failures, and the long delay in completing the roads already described, were in part owing to the financial embarrassments which succeeded, but yet more to the limited amount of capital, and to the want of engineering skill and experience brought to bear upon them. Notwithstanding all the embarrassments and losses to which they were subjected, it is believed that they are all now yielding a profitable return upon their entire cost.

It may not here be out of place to remark, that the numerous failures in the first efforts of the new States to construct works of internal improvement were not the result of *accident*, but a matter of *necessity*. The schemes were all premature; neither the means, nor the engineering and practical talent, essential to success, existed. The country had not been settled a length of time sufficient to designate the sites that were to become the great depots of trade, or the convenient routes for travel and business. At this distance of time, it is easy to see that the failure of many of the works undertaken in the West and South, not only by the States but by individuals, was unavoidable; and that with the lights we now possess, their construction would have been postponed until a condition should have arisen more favorable to success. These failures were no just cause of reproach to the States in which they occurred, except so far as the debts created have been repudiated, or no provisions made for the liabilities as they fell due.

These reverses cut short the progress of railroads and canals, with a few exceptions, for a number of years. The people were disheartened, and in many cases disgusted, with their ill success, and became comparatively indifferent to the subject of internal improvements. Years elapsed before the western States recovered from the disastrous effects of the previous reverses, in which nearly every individual in the community had been involved. Indeed, it required years to replace the various losses sustained. When this was accomplished, and the lapse of sixteen years had brought a larger population, increased production, and ampler means, the necessity of avenues, suitable to the increasing wants of the country, came to be more and more strongly felt. To meet this demand, the works now in progress were commenced. These movements constitute the *new* era in the history of our internal improvements. Both the old and the new system had its peculiar characteristics. The first proposed in the newly settled States either anticipated the wants of the country, or was in advance of the conditions necessary to success. It was borrowed from the old, and applied to the new States, where an entirely different state of things existed; and was, in fact, an attempt to apply a principle deduced from known data to circumstances wholly uncertain.

The works more recently commenced rest on a very different foundation. They were constructed, and are adapted, to supply wants which actually exist. An unsound policy has given place to one perfectly healthy and legitimate, following requirements, and controlled by wants, the extent and nature of which are well understood and defined.

The railroads in progress and operation in Ohio at the present time make an aggregate length of line of about 3,000 miles; the face of the country favoring their construction in every part of it. These projects are pretty uniformly distributed over the State. There are no lines of *pre-eminent* importance, because travel and commerce are not, as in some other States, forced into particular channels by the natural configuration of the country. So homogeneous are the physical characteristics of the different portions of the western States, that a detailed description of *one* line of road will serve to give a distinct idea of all. In this region, *local* considerations are a sufficient inducement to the construction of numerous and important lines, and frequently a through route is made up by a combination of what were in the outset entirely distinct and separate projects. In noticing the roads of Ohio, therefore, an effort will be made rather to give a clear idea of the whole system, than to burden the report with similar details of different projects.

In addition to the roads of exclusively local character, there are numerous great lines traversing the entire State from north to south and from east to west. These great lines or routes are composed as follows:

Through-lines running from north to south.

1. Composed of the *Cincinnati, Hamilton and Dayton*, and *Mad River and Lake Erie* railroads.
2. Composed of the *Little Miama, Columbus, and Xenia*, and *Cleveland and Columbus* railroads.
3. Composed of the *Mansfield and Sandusky, Columbus and Lake Erie*, and *Scioto and Hocking Valley* railroads.
4. *Cleveland and Wellsville* railroad.
5. A fifth line will soon be added to the above, formed by the *Cincinnati, Hamilton and Dayton*, and the *Dayton and Michigan* roads, now in progress from Dayton to Toledo.
6. An additional line will probably be formed without much delay; the lower portion of it composed of the *Cincinnati, Hamilton and Dayton*, or the *Little Miami*, the central portion of the *Springfield, Mount Vernon and Pittsburg*, and the northern division of the *Cleveland and Pittsburg*, and *Akron Branch* railroads. It is proposed to extend this branch so as to form a junction with the Ohio and Pennsylvania roads, probably at Wooster.

It is also probable that a railroad will be constructed in a short period from Cleveland to Zanesville, and thence southward to the Ohio river, either at Marietta or Portsmouth. Measures are also in progress to construct a road from Columbus, down the valley of the Scioto to its mouth. The above roads would form two additional north and south lines. Efforts are also making to construct a road from Dayton to Cin-

cinnati, between the *Little Miami* and the *Cincinnati, Hamilton and Dayton*. Should they prove successful, a portion of another through-line will be formed.

Through-lines running from east to west.

1. Composed of the *Cleveland, Painesville and Ashtabula*, and the *Junction* railroads. This line will follow the lake shore for its whole distance. From Cleveland it will be carried westward by another line composed of a portion of the *Cleveland and Columbus*, and *Toledo, Norwalk and Cleveland*. The whole of this last named line will be in operation during the present year.

2. Composed of the *Ohio and Pennsylvania*, and the *Bellefontaine and Indiana* roads. Both of these are well advanced towards completion, and it is intended to have them in operation by the first of January next.

3. Composed of the *Ohio and Pennsylvania*, and the *Ohio and Indiana*, extending from the western terminus of the former to Fort Wayne, Indiana.

4. Composed of the *Stuebenville, Indiana and Columbus*, and the *Columbus, Piqua, and Indiana* roads. These will form a continuous line of railroad through Ohio, and also from Philadelphia and Baltimore, to the Mississippi river, having a uniform guage throughout.

From Columbus an additional line will be formed by means of the *Columbus and Xenia*, the *Dayton and London*, and the *Dayton and Western* roads.

5. Composed of the *Ohio Central and Columbus*, and *Piqua and Indiana* roads. An additional line from Columbus, by the line running through Dayton, is described above.

6. Composed of the *Ohio Central*, and the *Cincinnati, Wilmington and Zanesville* roads.

7. *Cincinnati and Marietta* railroad. It is also contemplated to extend this road to Wheeling, thus forming a continuous line from Cincinnati to Wheeling under one charter.

8. *Hillsboro' and Cincinnati* railroad, extending from the Ohio river, opposite Parkersburg, is proposed as the direct continuation of the Baltimore and Ohio railroad to Cincinnati. From the latter place all the roads terminating there will be carried to the Indiana State line, by the Ohio and Mississippi railroad.

The great lines which have been thus briefly described embrace the most important projects in the State. All of them present the same general characteristics. The results achieved by the lines in operation may be safely predicated of those in progress; and these so well illustrate the value of such works to the community, and as investments of capital, that a detailed account of their objects, cost, and prospective revenues, is unnecessary. Reference to the annexed maps will, taken in connexion with the history of the roads in operation, convey a sufficiently correct idea of the various projects that compose the system above described.

There are many roads in progress not particularly connected with the above lines, the objects of which require a brief notice, viz :

Ohio and Mississippi railroad; the leading object of which is the connexion of Cincinnati and St. Louis, the two great cities of the Mississippi valley, by the shortest practicable line. A glance at the map will sufficiently demonstrate the value of such a work to the commerce and travel of the country. At the present time the communication between these cities is carried on by means of the Ohio and Mississippi rivers, and it is well known that the navigation of these is always seriously obstructed and often totally suspended at certain seasons of the year. At best, the route is tedious and expensive, and uncomfortable at all times, and often very unhealthy. The distance by water is more than twice as great as by land. A direct line of railroad between these great cities is one ranking first in importance among our leading works. It is easy to see that the principal routes of travel must be those connecting great cities by the shortest lines, since the travel, whether of business or of pleasure, necessarily tends from one to another of these. Familiar illustrations of the fact will readily occur to every reader. In going westward, Cincinnati is a necessary point in the route of every traveller. That city, also, is consequently a converging point of the great lines of road leading westward from the eastern cities of Boston, New York, Philadelphia, and Baltimore. After reaching Cincinnati, another leading point toward which travel is attracted is St. Louis. Hence the necessity of the above road, and the important relations it bears to the railroad system of the country, and to the great routes of travel.

The length of this road will be about three hundred and thirty miles. For the greater part of this distance the route is very favorable to cheap construction. Through its whole length it traverses a fertile and productive region, without any outlet except that formed by the Wabash river, which the above road crosses at Vincennes. In addition to its through-travel, this road will be the channel of a vast local traffic; and these, when combined, cannot fail to yield a lucrative income.

The whole road is under contract for completion within two years from the first of January, 1853; and the work of construction is in rapid progress. The project has received the hearty co-operation and support of the cities of Cincinnati and St. Louis, the former having subscribed \$600,000, and the latter \$500,000, to the work, in their corporate capacities, in addition to large private subscriptions.

By the people of Baltimore, the above work is regarded with hardly less favor than by Cincinnati and St. Louis. By the former, it is regarded as the direct extension westward of their great line, which is to be carried forward to Cincinnati by the Hillsboro' and Marietta roads. It will be seen that these three roads make up one grand and symmetrical line, of about nine hundred miles, extending from tide-water to the Mississippi river.

The *Hamilton and Eaton* road, extending from Hamilton to Richmond, Indiana, though a valuable local work, derives its chief importance from the fact that it constitutes the trunk of two extensive lines in progress, the Indiana Central and the Cincinnati and Chicago roads, both of which connect with it at Richmond. This road has just been

opened for travel. The connecting lines above-named are in progress—the former for its entire length, and the latter as far as the Wabash river, to Logansport.

The *Greenville and Miami* road extends from a point on the Dayton and Western road, about fifteen miles west of Dayton, to Union, the eastern terminus of the Indianapolis and Bellefontaine road. It occupies at present a conspicuous position, from the fact that it is the first Ohio road to form a connexion with those of Indiana. It is already in operation to Greenville, from which point the work is in rapid progress; so that the simultaneous completion of this and the Indianapolis and Bellefontaine road, as far as Union, may be expected by the first of December next, giving an outlet by railroad from Jeffersonville, (opposite Louisville, Kentucky,) Terre Haute, Lafayette, Madison, and numerous other important points in Indiana, to the railroads of Ohio, and, consequently, to those of the eastern States.

The *Iron* railroad is a short road, connecting the numerous iron manufacturing establishments of southern Ohio with the river. This road will probably be extended northward, to form a connexion with the Scioto and Hocking valley railroad.

By the *Cleveland and Mahoning* road, it is proposed to open a new channel of communication between Cleveland and Pittsburg, through the valleys of the Mahoning and Beaver rivers. One of the principal objects in its construction is to open a new outlet for the coal-fields of the Mahoning valley, from which Cleveland is now chiefly supplied with coal. Measures are in progress to place this work immediately under contract.

A line of road of considerable importance is also proposed, commencing near Mansfield, and extending in a generally northeasterly direction, through Warren to the Ohio State line, to be continued through Pennsylvania to the Erie road at or near Olean, constituting a new line of communication between the railroads of Ohio and those of the East.

INDIANA.

Population in 1830, 343,031; in 1840, 685,866; in 1850, 988,416. Area in square miles, 33,809; inhabitants to square mile, 29.23.

The State of Indiana, in emulation of the example of her sister States, commenced, in 1836, the construction of an elaborate system of internal improvement, of which a comparatively small portion only has been accomplished. It consisted partly of canals, and partly of railroads. The canals proposed were the Wabash and Erie, the Central, the White Water, the Terre Haute and Eel River, and a canal from Fort Wayne to Michigan City. The railroads proposed to be constructed by the State were the Madison and Indianapolis, and the Lafayette and Michigan.

The *Wabash and Erie* canal is the most important of the works of public improvement undertaken in the State. It commences at the Ohio State line, and extends to Evansville, on the Ohio river, a distance of three hundred and seventy-nine miles, and four hundred and sixty-seven miles from Toledo, on Lake Erie. When completed, it will

form one of the longest lines of canal in the world. From Toledo to Fort Wayne it has a depth of four feet, and a width of sixty. Below this point, it is only three feet deep and forty-five wide. Its locks admit boats of a capacity of about sixty tons. It is to be opened for traffic through its whole length in the ensuing spring.

This work was completed by the State as far as Lafayette, a distance of two hundred and thirty miles from Toledo, and two hundred and forty-nine from the Ohio. When the State became, from the embarrassment of its affairs, unequal to its farther construction, a conditional agreement was made with the bondholders of the State for its completion; the latter reserving the right to resume the work, upon the payment of the sum which the bondholders had agreed to receive in addition to the cost of completing it. It is believed that the canal will again pass into the hands of the State, by the ultimate payment of the whole of her debt. Although the construction of the canal was one of the causes of the financial embarrassments of the State, the work has proved one of the efficient means by which she has recovered from them and reached the high position she now holds as a leading State in the confederacy. As far as excellence of soil is concerned, no State possesses superior resources. The canal opened an outlet for her products, and gave her the use of means, which up to its opening lay dormant, from the difficulty and cost of reaching a market. The rapid increase in the exports of Indian corn will illustrate the value of improvements which facilitate transportation. The exports of this article from the Wabash valley, from insignificance, rose to millions of bushels in a very few years after the opening of the canal; and Toledo, its terminus on Lake Erie, is now the chief port of export for this article.

Railroads in Indiana.

The failure of the State to carry out her proposed system of public improvements, and the financial troubles in which she became involved, put an end for a time to all enterprises of the kind, whether of a public or private character. Some years were required to make good the losses resulting from the great expansion of 1836-'37, and to allow the public mind to recover from the discouraging influence of the reverses sustained. As in Ohio, lapse of time brought greater means, a more enlarged capacity to superintend and execute works of magnitude, better defined objects, and a traffic necessary for the support of extensive lines of improvement. The system proposed by the State was, in fact, in advance of the conditions required to sustain it. It anticipated a state of things which did not exist. In commencing the new movement, which has resulted so successfully, her people have *followed* and not *anticipated* their wants. They have taken up only such enterprises as were sanctioned by the clearest evidence of their necessity, and which could command sufficient support to insure success. The result has been uniformly favorable; and the State of Indiana, which but two or three years since had hardly a mile of railroad within her limits, now takes rank with our leading railroad States, and is soon to be third or fourth in the extent of her works. Her credit and means have ad-

vanced with equal pace, and, though one of the new States, she already occupies a prominent position in the confederacy.

There is no State in the Union that presents so symmetrical a system of railroads as Indiana. Nearly all her great lines radiate from the geographical centre and capital of the State. By this means they are all brought into intimate business relations with one another, an arrangement which must promote to a great degree the advantages of each. Indianapolis is soon to be the point of intersection of eight important roads, viz: the Jeffersonville, Madison and Indianapolis, Lawrenceburg and Indianapolis, Central, Bellefontaine, Peru, Lafayette, Terre Haute, and the New Albany and Salem roads. All these roads will be carried, in their respective directions, to the boundary lines of the State. Their focus is in the great lines of railroad running from the eastern States to the Mississippi river, and from the Ohio to the great lakes. It is impossible to conceive a system better devised for the promotion of the interests of the people of the State, or of the railroad companies.

All of these great lines, while they have their appropriate and ample belts of fertile, productive, and well-settled territory for local traffic, occupy important routes for through business and travel. The Jeffersonville opens a communication between the central portions of the State with Louisville, the second city of the Ohio valley; the Madison and Indianapolis forms a similar connexion with Madison, an important town, favorably situated on the Ohio river for commanding the trade of the interior; the Lawrenceburg forms the connecting line between Indianapolis and Cincinnati; the Central is the direct extension, westward, of the leading lines running through central Ohio; the Indianapolis and Bellefontaine opens the outlet to the great lakes and the lines of road traversing northern Ohio; the Peru connects the capital and central portions of the State with the Wabash canal, which is now the great commercial avenue for the State; the Lafayette connects the most important town in the northwestern part of the State with the central portions, and will soon constitute a link of the great line extending to Chicago; the Terre Haute is the connecting line between the railroad system of the State and St. Louis and the railroads of Illinois; the New Albany and Salem will connect the cities of Louisville and New Albany, and the lower portions of the State, with the interior, by a line lying to west of the Jeffersonville road, and will also constitute an unbroken line of some two hundred and eighty-five miles between Lake Michigan and the Ohio river.

With the exception of the New Albany and Salem, all the above roads having the same general direction may be said to be complements of each other. The Central and the Terre Haute roads constitute, in a business and commercial point of view, *one* line; so with the Lawrenceburg and Lafayette, and the Jeffersonville and Peru. In this manner, a system of railroads will be found adapted to promote the highest good of all the members to it, and to develop to the utmost the wealth and resources of the State, and at the same time fitted to become a portion of a still wider system embracing the whole country.

The system we have described occupies an area in the central portions of the State about one hundred and fifty miles square. In length of line and relative importance, there is great uniformity in the various

roads that compose it. They all occupy favorable routes; are all calculated to benefit each other; and will be rivals for the same trade in a slight degree only. The northern and southern portions of the State will also be well supplied with railroad accommodations. In the southern portion, the most important road in progress is the Ohio and Mississippi, which traverses it from east to west. This work has already been sufficiently noticed under "the railroads of Ohio." The south-western corner of the State is traversed by the Evansville and Illinois road, which is already completed to Princeton, and is in progress to Terre Haute. When this last point is reached, a connexion will be formed with the Central system, which will be brought into communication with Evansville, the most important and flourishing town upon the lower Ohio, and also with a railroad now in progress leading from Henderson, upon the opposite bank of the river, in Kentucky, to Nashville, Tennessee, in order to connect with the roads terminating in that city.

The *New Albany and Salem* road is an important work for southern Indiana. At or near Orleans it will form a connexion with the Ohio and Mississippi railroad, and will thus constitute a convenient and direct route between the cities of New Albany, Louisville, and St. Louis. This road will also supply railroad accommodations to an extensive and important, but comparatively isolated portion of western Indiana. In the northern part of the State, it will perform a still more important office in opening, and that shortly, a communication between the central and northern portions of Indiana and the city of Chicago. The line of this road extends from New Albany to Michigan City, (with a branch to Indianapolis) and thence to Chicago, making its entire length about three hundred and fifteen miles. A part of this line will be composed of the Crawfordsville and Wabash road, which has been merged in the former. Three distinct portions of it are in operation, viz: from New Albany to Orleans; from Crawfordsville to Lafayette; and from Michigan City to Chicago. The unfinished portion is well advanced, and much of it will be finished before 1853, when the whole will be completed.

An important work in the northern part of the State is the Indiana Northern road, and which will be noticed with the Michigan Southern road, of which it forms a part. These two roads constitute a leading line, as they unite the most southerly portions of Lakes Erie and Michigan, two important points in the geography and commerce of the country. The great lakes occupy a basin extending 500 miles from north to south, and oppose an insuperable barrier to the direct extension westward of the lines from the northern States. All these are deflected southwardly, to avoid Lake Michigan. Such is the fact with a large number of roads in reference to Lake Erie; consequently, a line connecting the southern shores of these lakes cannot fail to be a work of the first importance, not only to the travel and commerce of the country, but to its business and revenues. The great favor with which this project is regarded by the public is undoubtedly due in part to the above considerations. The Northern Indiana road traverses a portion of the State celebrated for its fertility, which will secure to it a large local, as well as through traffic.

Among the proposed roads, probably the most important is the Wabash Valley line, which is to extend to Toledo, Ohio, to the boundary line of Illinois. A glance at the accompanying map will convey a better idea of the value of such a work, and the intimate relation it will bear to the commerce and travel of the country, than any attempted description. It will be seen that Toledo is the most salient point on Lake Erie for all the country lying to the west and southwest of it. It has already become a place of great commerce, by means of the Wabash canal, and must always be a leading point in the routes both of business and travel. A line of railroad connecting Toledo and St. Louis would coincide for a long distance with the course of the Wabash river. The valley of this river is celebrated for its fertility, and is filled with large and flourishing towns, which owe their existence and traffic to the canal, and are the depôts of trade for the surrounding country. In this manner an ample business has been already developed for the support of a first-class railroad.

Another important project is the projected road from Fort Wayne to Chicago. This is proposed as the legitimate extension of the Ohio and Indiana railroad, which has already been noticed under the roads of Ohio. These roads would constitute a direct line between the great city of the Northwest and the railroads of central Ohio. The importance of such an avenue must be apparent upon the slightest examination of the probable routes of travel and trade in the West. The great tide of emigration which is flowing thither from the middle States and Ohio is directed upon Chicago, which is the great point of its distribution over the unoccupied lands of the new States. This city must also become an important business and commercial point for all the western States. The above line is also regarded as the appropriate extension to Chicago of the great Philadelphia and Baltimore lines, which will be extended to the eastern terminus of the former, in central Ohio.

An important road is in progress, commencing at Richmond, the western terminus of the Dayton and Western, and Hamilton and Eaton roads, and extending to the Wabash river, at Logansport, which it is intended ultimately to carry forward to Chicago. As a through-route, its object is to connect Cincinnati and Chicago. Locally, it may be regarded as a Cincinnati road, penetrating a very rich and productive section of the State. It is under contract from Richmond to the Wabash, by way of Newcastle. It will be seen that, for the country traversed, it will constitute a very direct and convenient outlet to its great market, Cincinnati; and it is so situated as to command, to a great extent, the traffic of the territory lying to the north of its line. The route proposed by this road, it is believed, will constitute the shortest route between Cincinnati and Chicago.

It is also proposed to construct a branch from the Jeffersonville road, commencing at or near Columbus, and extending as far north as Union, the eastern terminus of the Indianapolis and Bellefontaine road, and probably to Fort Wayne. This extension is favored by the city of Louisville, Kentucky, as affording means of connecting herself with the roads running east and west through Ohio, and of securing a portion of their trade and travel, which otherwise would be drawn to Cincinnati.

The branch to Fort Wayne would probably run through Muncie, on the Bellefontaine road, and in this manner a connexion would be formed between Fort Wayne and Indianapolis. The route for such a road has been surveyed and found favorable, and active measures are in progress to raise the necessary means for its construction.

The above are the leading projects of the State. There are several others of minor consequence, among which may be named the Shelbyville, Knightstown, and Rushville branches. There are others proposed, but not sufficiently advanced to call for particular notice.

MICHIGAN.

Population in 1830, (Territory,) 31,639; in 1840, 212,267; in 1850, 397,654. Area in square miles, 56,243: inhabitants to square mile, 7.07.

The State of Michigan, so early as 1836, while in her very infancy, matured and commenced an elaborate system of internal improvements, by means of railroads and canals. Of the latter none have been constructed: in fact, they were hardly commenced. Of the great lines of railroads, two, the most important, have been completed, with some deviation from the original plans.

1. The *Michigan Central* railroad commences at Detroit, and runs generally in a western direction, to Lake Michigan. It is then deflected southward and carried around the southern shore of Lake Michigan to Chicago, the whole length of line being 282 miles. It was completed to Lake Michigan, at New Buffalo, two or three years since, but was extended to Chicago within a few months only. This work is in every point of view most important, saving the necessity of a long and expensive detour by way of Mackinaw, in travelling from east to west, and having proved of great convenience to the travelling and business public. This road was commenced by the State of Michigan, under whose auspices about 125 miles of the eastern portion of it were constructed. The State becoming embarrassed in consequence of the injudicious management of her affairs, the road was sold to a private company in the latter part of 1846, by whom the work of construction was immediately resumed, and prosecuted with great vigor to its termination, at Chicago. Since its completion it has proved very productive. Its importance as a great through-link between the East and the West will be greatly increased by the construction of the great Western railroad of Canada, which will be completed during the coming year. When that road shall be opened, a direct route, in connexion with the above roads, will be afforded to the travel from the eastern States to Chicago, the great central point of the northwestern trade and travel.

2. *Michigan Southern Railroad*.—Like the Central road, the Michigan Southern was formerly a State work, and as such was opened to Adrian, 36 miles from Monroe, its eastern terminus. On the failure of the State, its farther progress was abandoned; but after a lapse of some years it was sold to a private company, by whom it has, in connexion with the

Indiana Northern road, been recently extended to Chicago. The distance between the termini is 243 miles. It was originally intended to carry this road through the southern tier of counties to New Buffalo; but this plan was abandoned by the present company, and, after running about 130 miles in Michigan, the line was deflected into Indiana, and on this portion constructed under a charter granted by that State. This road is also connected with Toledo, on Lake Erie, and will be shortly connected with the railroads of Ohio; and it may be confidently expected that by the first of January next a continuous line of railroad will exist from New York to Chicago, a distance of nearly 1,000 miles. The Michigan Southern and Indiana Northern may both be regarded as belonging to one interest, and as forming in fact one line. Though recently opened for business, its prospects are very favorable. In the hands of its present managers, it has been prosecuted with energy and success; and, as the general direction of its line coincides with the southern shores of Lakes Erie and Michigan, it is difficult to find a more important line of road. Its success since its opening fully justifies the sagacity and foresight of the parties by whom its extension was planned and executed.

The local trade both of the Central and Southern roads is supplied by an ample belt of fertile, well-settled and highly productive country, which alone would yield sufficient support, entirely independent of through traffic. Both are intended to form important parts of independent through-routes from Boston and New York to Chicago—one on the north, the other on the south shore of Lake Erie—and must become intimately identified with important routes of commerce and travel.

A railroad from Green Bay to Lake Superior is an important project, and will prove of great convenience to the mining districts on the southern shores of the latter, which for a considerable portion of the year are inaccessible. This work is indispensable to the proper development of the vast mineral resources of that great region. Its route is the best that could be adopted for immediate exigencies. The line of the road is under survey; and it is believed that its construction will be immediately commenced, an amount of business being already developed on its northern terminus sufficient to furnish a considerable traffic.

A road is also proposed, and will, undoubtedly, in a few years be constructed, extending from Detroit to Toledo, with a view to enable the Great Western railroad of Canada to form a connexion with the lines of the United States.

ILLINOIS.

Population in 1830, 157,445; in 1840, 476,183, in 1850, 851,470. Area in square miles, 55,405; inhabitants to the square mile, 15.36.

There is a remarkable similarity between the histories of the States of Indiana and Illinois, so far as their respective systems of internal improvements are concerned. Both systems were commenced about

the same period; both States became involved in similar financial embarrassments; and both abandoned the prosecution of their respective works—most of which have been either discontinued entirely, or have passed into private hands. While this parallel exists between the two, Illinois labored under the disadvantage of being a much newer State, possessing smaller means, and consequently requiring a longer time to recover from her embarrassments. As in her first efforts she imitated the examples of Ohio and Indiana, so she is again following closely in their footsteps, in the new career upon which she has just entered.

The Illinois and Michigan Canal.—This canal is almost the only improvement which Illinois has to show for the vast debt she has incurred for her public works. It has passed into the hands of her bond-holders, and has been completed by them in a manner very similar to its kindred work; the Wabash and Erie canal. It extends from Chicago to Peru, at the head of navigation on the Illinois river. It was commenced in 1836, and completed in 1848. It is 60 feet wide, and 6 feet deep. The locks have a capacity for boats of 150 tons. Its length is 100 miles, and its summit-level is 8 feet only above Lake Michigan. The original plan was to feed it directly from the lake; but as this involved a very large expenditure, it was abandoned.

The canal was opened in the fall of 1848, since which time it has done a successful business. Like the Wabash canal, its direction coincides with the usual route of commerce and travel. It is hardly possible to conceive a more favorable route for such a work. It connects the lakes with the navigable waters of the Mississippi at their nearest approach to each other. Between these great water-courses an immense trade must always exist. The former penetrates high northern regions, and the latter traverses a country abounding in many tropical productions. With the canal they constitute a *natural* route of commerce; and as the eastern are the great markets for the products of the western States, this work must form one of the leading channels of commerce between these two divisions of the country. All that was wanting to secure a large portion of the products of the Northwest to the lake and Erie canal routes was an outlet for them. This the Illinois canal first supplied. The effect of its opening has been, in fact, to turn an immense tide of business from its old channel, by the Mississippi river, to the new one by the lakes.

The influence of this work is already seen in the impulse it has given to the growth and trade of Chicago; in the change it has effected in the direction of the products of Illinois, and other western States, to market, and of merchandise imported into the same sections of country.

Were its capacity equal to the business which will soon be thrown upon it, and were the Illinois and Mississippi navigable at all seasons of the year, there can be no doubt that the canal would be able to engross a large portion of the trade of the country west and southwest of Lake Michigan, and north of the Ohio and Missouri rivers. As it is, it is preparing the way for a great diversion of that trade to the lakes and the northern route. The railroads now in progress in Illinois will soon come to its aid, and supply the want of an uninterrupted navigation in the western rivers.

Railroads in Illinois.

The system of improvements first proposed by the State in eighteen hundred and thirty-six contemplated a very large number of railroads, traversing every portion of the State. The more important of these were the Illinois Central, the Edwardsville and Shawneetown, the Quincy and Danville, the Alton and Terre Haute, the Mount Carmel and Alton, and the Peoria and Warsaw roads. After the expenditure of large sums upon these lines they were all ultimately abandoned, and the improvements made have mostly fallen into the hands of private companies. No portion of any of the lines commenced has been opened, with the exception of the link in the Quincy and Danville railroad, extending from Springfield to the Illinois river. With a few exceptions, the work done upon the various proposed lines is of little value to the companies which have resumed their construction.

The recent railroad movement in Illinois dates only two or three years prior to the present time. It has the same general character as those already noted in Ohio and Indiana. The construction of roads in this State *follows* instead of *anticipating* the wants of the community, and proceeds in a legitimate and business-like manner, which promises the most satisfactory results.

The State of Illinois is one of the largest States of the confederation in area, and probably is unsurpassed by any in the extent of her resources. Over her whole surface she has a soil of inexhaustible fertility, a large portion of which covers vast beds of coal, in connexion with an abundant supply of iron ore. The richness of her lead mines is well known. Her commercial advantages are equal to those of any western State. Upon her western boundary is the Mississippi river; upon her southern, and a large portion of her eastern border, are the Ohio and Wabash. The northern part of the State is washed by Lake Michigan, which is accessible by ships of three hundred tons burden from the ocean. Her central portions are penetrated by the Illinois river, one of the most favorable in the West for the purposes of navigation. All these water-courses afford convenient outlets for the products of her soil, and contribute incalculably to her prosperity.

The city of Chicago has now become, and must always remain, the emporium of the State. It is the great pivot upon which the railroad system of the State turns. Most of the lines in progress are constructed with express reference to this point. All running in a northerly and southerly direction look to that city as the northern terminus. The same may be said of those traversing the northern portion of the State in an easterly and westerly direction. The principal exceptions to this rule are the Ohio and Mississippi railroad, running from Cincinnati to St. Louis, the Terre Haute and Alton railroad, and the proposed roads from Peoria and Springfield to Lafayette, in Indiana. There will undoubtedly be other roads constructed in different portions of the State, having no direct reference to Chicago; but such only are referred to as are already in progress.

The great line, traversing the State from north to south, will be the Illinois Central railroad. This road was commenced by the State in 1837, but was soon abandoned, with all other projects of a similar

character. It commences at Cairo, at the junction of the Ohio and Mississippi rivers; and, after running in nearly a direct northerly course for about 120 miles, divides into two branches, one branch running to the extreme northwest corner of the State, by way of Peru, on the Illinois river; and the other in a very direct course to Chicago. Its whole length will be 700 miles—a greater extent of line than any other chartered line in the United States. The construction of this road is secured by recent munificent grants of lands by the general government, which amount to 2,500,000 acres, most of which lie upon the immediate line of the road. The road will be completed in about four years from the present time; and, when constructed, will constitute a grand central avenue through the State, from north to south, which must in the end become the trunk of many connecting and dependent roads.

The progress made by the Central road, and the certainty of its early completion, has given a great impulse to the public sentiment of the State in favor of similar projects. Numerous lines are in progress or projected in every portion of it. The line itself will supply a vast amount of railroad accommodation to the people of Illinois. As a State work it is a magnificent project. It is equally conspicuous as a part of a great national line. In connexion with the Mobile and Ohio railroad it forms a direct and uniform line of railroad, extending north and south for a distance of more than 900 miles, traversing, in this distance, great varieties of climate and production. By taking the above route a traveller may pass from latitude 29° to 42° north in a little more than 24 hours. A road possessing such advantages cannot fail to command an immense traffic and travel, in addition to its local resources.

With the exception of the Central railroad, most of the great routes of travel and commerce through the State must run from east to west. The more important of these are the following:

Galena and Chicago.—This is the longest line of railroad in operation in the State. It is now completed to Rockford, a distance of 95 miles. At Freeport, 124 miles from Chicago, it will form a junction with the Illinois Central road, by which it will be carried forward to Galena, 180 miles from its eastern terminus. This road has been one of the most successful and productive works of the kind in the United States. It was not embraced in the original system marked out by the State; and affords a striking illustration of the wisdom of adapting railroad projects to the known wants of business, rather than of attempting to anticipate such wants by the construction of a system founded on doubtful contingencies.

The easterly portion of the above line forms the trunk of two other roads, one of which, the St. Charles branch, extends from its junction with the Galena and Chicago road, in a very direct course, to the Mississippi river, at Albany; and the other, the Aurora branch, which is under contract, to Galesburg, (the northerly point on the Peoria and Oquawka railroad,) a distance of about 125 miles. This road will be carried still further, in a southwesterly direction to Quincy, by means of the Central Military Tract and the Northern Cross roads, also in progress of construction. The distance from Quincy to

Galesburg, by the above road, is about 120 miles, making the entire distance between Chicago and Quincy about 280 miles. It is understood that the Michigan Central railroad will extend efficient aid to the last named line.

The Galena and Chicago railroad has exerted a very decided influence in promoting the growth of the city of Chicago, which advanced in population from 4,470 to 40,000 from 1840 to 1852.

Rock Island and Chicago railroad.—This road follows the valley of the Illinois and its branches, from Chicago to Peru, a distance of 100 miles; from which place it takes a more westerly direction, to Rock island, a distance of eighty miles, making the whole length of line 180 miles. The first division to Peru will be completed by the first of January next, and the whole in season for the winter business of 1853. It is, in many respects, an important line. It will connect Chicago with the head of navigation on the Illinois river, between which points an immense travel and trade must always exist. It has the great advantage of striking the Mississippi river upon the same parallel of latitude with the southern shores of Lakes Erie and Michigan, and at the best point for bridging that river below St. Anthony's Falls. Rock island is very nearly in the same parallel with Council Bluffs, the proposed point for carrying a railroad across the Missouri, running westward toward the Rocky mountains. The grade and curves of this road are favorable, and it will undoubtedly become one of the most important avenues of trade and travel extending westward from Chicago. The means for its construction are furnished chiefly by eastern capitalists, who took up the project on account of the strength of its position.

Peoria and Oquawka railroad.—The next line of railroad traversing the State, from east to west, is the Peoria and Oquawka, commencing at the Mississippi river opposite Burlington, the largest and most commercial town in Iowa, and running to Peoria, on the Illinois river. The distance between the two points is about 80 miles. From Peoria it is proposed to extend this road easterly, striking the Wabash valley at Lafayette, or at Logansport, or at both these places. The first division only of this great line, extending from the Mississippi to the Illinois, is in progress. But when the importance of the proposed extension is considered, and the relation it will sustain to the railroads of the States lying eastward, no doubt can be entertained of its commencement and construction at no distant day.

Northern Cross railroad.—This name is usually applied to the line of road commencing at Quincy, on the Mississippi river, extending to the Indiana State line near Danville, Illinois, and running through Naples, Springfield, and Decatur. This is one of the projects embraced in the State system of improvements; and upon it a much larger amount of work was done than upon any other line. The work executed by the State has since passed into the hands of private companies, by one of which the portion of the line extending from Springfield, the capital of the State, to the Illinois river, and commonly known as the Springfield and Meredosia railroad, has been completed. The portion of the above line from Quincy to the Illinois is also in progress, by another company. From Springfield eastward, the work of construction is also about to be resumed. From Decatur, two branches will

probably be constructed, one extending to Terre Haute, and the other in a more northerly direction towards Lafayette. It may be stated, that the westerly division of this road, extending from Quincy to Clayton, will form the base of the line of railroads now in progress to Chicago, under the title of the Central Military Tract and Aurora Branch railroads, already referred to.

Alton and Sangamon railroad.—This important line of railroad extends from Alton to Springfield, the capital of the State, a distance of 72 miles. It has been recently opened for business. It forms an appropriate outlet from the central portions of the State to the Mississippi river. Its local consequence is greatly increased by the prospect of its becoming a link in the line of railroad from Chicago to Alton and St. Louis. By reference to the annexed map, it will be seen that Springfield lies very nearly on a direct line between the above cities. The division of this line from Springfield to Bloomington is already under contract, from whence it will be carried direct to Chicago, or unite with the Rock Island road at Morris. This connexion would form a very direct and convenient route between the termini named. The cities of Chicago and St. Louis will probably always remain (with the exception of Cincinnati) the great cities of the West; and the line that will connect them possesses, to a certain extent, a national importance. The fact that it connects Lake Michigan with the Mississippi on a great and convenient route of travel between them, cannot fail to give it rank among our leading works.

In the central portion of Illinois are several lines having a general eastern and western direction. Among the more important of these may be named the Western and Atlantic, the Terre Haute and Alton, and a road from Terre Haute to Springfield, the capital of the State.

The Atlantic and Mississippi road is now the only link wanting in a great chain of railroads extending from St. Louis to the Atlantic. Its line is identical with the convenient route between that and all the leading eastern cities. It may be regarded as the *Mississippi* trunk of all the roads in central Ohio and Indiana running east and west. The importance of this road to the general system of the country is well shown by the accompanying map. The city of St. Louis is one of the great depots of trade in the interior, between which and the Atlantic cities there exists a vast commerce and travel. As a through-route, there is none in the country offering better prospects of a lucrative traffic. It is regarded with great favor by the public, and there can be no doubt that its stock will be eagerly sought by eastern capitalists. The whole line will be placed immediately under contract for completion, within the shortest practicable period.

The country traversed by the road is a very fertile portion of the State, and will supply the usual amount of local traffic for a western road.

Terre Haute and Alton railroad.—This project has the same general direction and object with the one last described. One of the leading objects in its construction is to promote the increase of the city of Alton, its Mississippi terminus. It traverses a fertile and well cultivated portion of the State, and is sufficiently removed from the Mississippi and Atlantic to command a large local trade. The whole line of this road

is under contract for completion within three years from this time, and several portions of it are in progress.

The proposed road from Terre Haute to Springfield, it will be seen, is an important link to connect the roads of Indiana with the Central Illinois and with the Northern Cross roads. Measures are in progress to place this road under contract, which promise its speedy completion.

A railroad is also proposed from Mount Carmel, on the Illinois river, to Alton. This is one of the projects which were included in the State system of 1837. A portion of the eastern end of this line was graded by the State. These improvements have gone into the hands of a private company, by which the road will be completed from Mount Carmel to Alton, a distance of about twenty miles. This road will probably be extended to Princetown, Indiana, in order to form a connexion with the Evansville and Illinois road.

The Ohio and Mississippi road, one of the most important projects in the State, has already been noticed under the head of Ohio.

MISSOURI.

Population in 1830, 140,455; in 1840, 383,702; in 1850, 382,043. Area in square miles, 67,380; inhabitants to square mile, 10.12.

No effort was made in this State toward the construction either of railroads or of canals till within a recent period. This was partly owing to the fact of its being a frontier State, in which the necessity of railroads is less felt, than in those so situated as to become thoroughfares for their neighbors; and partly to the sparseness of the population in nearly every portion of the State. At the session of the legislature of 1851, the State agreed to lend its credit for two great lines of railroad: the *Pacific* road, commencing at St. Louis, and running to the west line of the State, on the south side of the Missouri river; and the *Hannibal and St. Joseph's* road, extending from the Mississippi to the Missouri, on the north side of the latter, and connecting the places named. The amount of aid voted was \$2,000,000 to the former, and \$1,500,000 to the latter; the loans not to become available until each company should have obtained \$1,000,000 of private stock, and then only so fast as equal portions of stock subscriptions should be paid up and expended. When either company shall have expended \$50,000, they are entitled to call upon the State for its bonds to an equal amount, as security for which the latter holds a lien upon the road and all the property of the companies. The State aid will probably be increased to meet one-half the cost of both roads. Although local considerations are the primary motive in the construction of the above roads, the projectors look to their ultimate extension to the Pacific ocean. Although their eastern termini are somewhat widely separated, they approach each other as they proceed westward, and would meet beyond the Missouri river, if prolonged in their general directions. As local roads, they are of great importance. They will, when completed, add much to the convenience of the emigrant and pioneer, by materially reducing the long and tedious journey on foot from the Mississippi to the western

boundary of our settled territory. In connexion with the great lines of railroad lying to the east, they would form a part of a line across the continent, from one ocean to the other. Every mile we advance westward, is so much gained toward the accomplishment of a work destined to be the crowning achievement of modern energy and science. Private enterprise will soon have accomplished so much, as to leave the portion that must devolve upon the general government a comparatively easy task. If private companies with their unaided means can accomplish more than half of this work, certainly what remains is not of such vast magnitude as to intimidate the collective energies and power of a great nation.

Rapid progress is now making in the construction of the above roads; and there can be no doubt of their speedy completion.

In addition to the original object of the Pacific railroad, its eastern portion will probably be made the trunk of a branch extending to the mineral districts of the southwestern portions of the State, which are extremely rich in iron, lead, and copper. These great resources still remain undeveloped, from the want of a suitable outlet, which the above road will create; and measures are now in progress for its construction. It is also proposed to make this branch a portion of a great line from St. Louis to New Orleans, upon the west side of the Mississippi. This latter project is attracting much attention, and though the means do not now exist for its construction, the eventual realization of this project can hardly be doubted.

WISCONSIN.

Population in 1840, (Territory,) 30,945; in 1850, 305,191. Area in square miles, 53,924; inhabitants to square mile, 5.65.

The State of Wisconsin, though in 1840 it numbered only 30,000 inhabitants, is already in possession of a first-class line, a considerable portion of which is in operation—the Milwaukie and Mississippi railroad. This line of road commences at Milwaukie, the leading town in the State, and extends in a westerly direction, running through the capital to the Mississippi, at Prairie du Chien, a distance of about 200 miles. It is already in operation to Whitewater, a distance of 50 miles, and will be completed to Rock river during the coming autumn. It was commenced in 1850, and owes its birth and prosecution to the enterprise and capital of the city of Milwaukie. It is the most northerly railroad yet projected, running from Lake Michigan westward, with the advantage of offering the cheapest outlet for all the country lying north and west of its terminus on the Mississippi river. It traverses a most beautiful region of country, and bids fair to become a successful and lucrative road, as it occupies a favorable route, and will be constructed at low cost. It is distinguished by being constructed at a much earlier period in the history of a State than any similar work; and it is certainly a wonderful illustration of the rapid growth of the Western country, that in the short space of ten years a wilderness has been reclaimed and brought into high cultivation, and been filled with a thriving and

prosperous people, in possession of all those contrivances in aid of labor and in promotion of social and material advantages, the results of modern science and skill, and of which many richer and older communities have not as yet availed themselves. As the tide of emigration moves westward, it carries with it all the distinguishing characteristics of the eastern States; so that a person may travel to the very verge of western settlement without being conscious of any change, save in the natural features of the country.

Another important line projected in Wisconsin is the Fond du Lac and Rock River Valley railroad, extending from Fond du Lac, on Lake Winnebago, in a southwesterly course to Janesville, whence it takes a southeasterly course to Chicago. The entire length of this road is about 215 miles. It is in course of construction at both ends, and a portion of the line, near Fond du Lac, will soon be in operation. From Fond du Lac, it is in contemplation to extend a branch to the western extremity of Lake Superior, for which a favorable route is said to exist. This extension would even now be of great utility in giving access to the vast extent of fertile country lying west of the great lake, which is becoming an attractive field for emigrants; and should Congress favor this proposed line by a grant, its immediate construction would be the result. Such a road will ultimately be found indispensable to the settlement of a large portion of the Minnesota Territory, and will probably receive encouragement from the general government, for the purpose of promoting this object and opening to a market an important and valuable portion of its domain.

The whole route of the Fond du Lac and Rock River Valley railroad runs through an extremely fertile country. One of the objects of the road, from which it will derive lucrative employment, is in the distribution over the State of the lumber which grows upon the rivers flowing into Lake Winnebago. Works are now in progress which will soon allow vessels navigating Lake Erie to reach Lake Winnebago, adding much to the business and prosperity of the above road.

Works are also in progress for uniting the Wisconsin and Fox rivers by a canal, which shall admit steamboats of the capacity of those navigating the rivers. By reference to the maps it will be seen that these rivers approach each other very nearly, the distance between them being less than two miles, and the separation consisting only of a strip of low land, submerged at high water, and allowing the passage of small boats from one to the other. This canal is nearly completed, and when opened will allow the passage of steamboats from the lakes to the Mississippi river.

A railroad is also proposed from Dubuque, on the Mississippi river, to Lake Michigan, passing through the southern tier of counties in the State. Such a road would make the town of Janesville a point from which it would be carried forward, by roads in progress, to the towns of Chicago and Milwaukie.

IOWA.

Population in 1840, (Territory,) 43,112; in 1850, 192,214. Area in square miles, 50,914; inhabitants to square mile, 3.77.

No railroad has yet been commenced in Iowa, though several companies have been organized for their construction. It will be recollected that some ten years since the State had only about 50,000 people. It has now probably about 300,000, most of whom are settled in the neighborhood of navigable rivers; and on this account the necessity of railroads has not been so much felt as it would otherwise have been. As Iowa is one of the most fertile States of the West, ranking among the first in extent and natural resources; and as the surface of its soil is well adapted to the cheap and expeditious construction of railroads, and the State is filling up with great rapidity, with an enterprising and vigorous people, we cannot expect that she will long be behind her sister States in the construction of works so important to the prosperity and progress of any people.

The most important of the proposed roads in Iowa are the lines leading from Rock Island to Council Bluffs; from Dubuque to Keokuk; and from Burlington to the Missouri river. The first of these extends west upon the parallel of the southern shore of Lake Michigan. Rock Island is believed to be the best point for the passage of the Mississippi river, and Council Bluffs for that of the Missouri. These facts show the prospective importance of this line.

The object of the Dubuque and Keokuk line is to cut off the bend in the Mississippi river, and to avoid the rapids, which are a serious obstruction to navigation.

The project from Burlington to the Missouri has the same general object as the Rock Island and Council Bluffs road. No one of the above projected improvements has been commenced, though measures for the purpose are in progress.

 RAILROADS IN THE BRITISH PROVINCES.

As the provincial railroads are to be intimately connected with those of the United States, a brief notice of the former will be appropriate to this report.

A few railroads only have been constructed in the British provinces, for the reason that these works were not particularly required to aid in the improvement of property; the numerous rivers, lakes, and bays supplying cheap and convenient *media* for this purpose. The principal settlements of New Brunswick and Nova Scotia are upon the immediate borders of navigable tide-water. The narrow belt of arable land to which the population of Canada is confined is traversed for its entire length by the lakes and the St. Lawrence river. The various water-courses described will continue to be the principal channels and routes of commerce, even after the construction of railroads parallel with them.

The roads in progress and contemplated in the provinces, therefore, are, with one or two exceptions, being constructed chiefly with a view

to passenger traffic. They are fortunate, however, in the fact that their lines correspond to routes over which already passes a large travel, and which the roads themselves must immensely increase.

Of the roads under consideration, the most important, in some respects, is the St. Lawrence and Atlantic, extending from Montreal to the boundary line of the United States, a distance of about 130 miles, when it connects with the Atlantic and St. Lawrence railroad, extending to Portland. This work was briefly described in the notice of the roads in the State of Maine. The original object in its construction, as far as the Canadas were concerned, was to open a winter outlet for the trade of Montreal, and in this manner to add to the business of the Canadian canals, by which unbroken navigation from the upper lakes is secured to the city. These works have, to a certain extent, failed to realize their highest usefulness, or to justify public expectation, for want of an avenue to the Atlantic coast other than through the Gulf of St. Lawrence. The navigation of the St. Lawrence being closed for a considerable portion of the year, the late receipts of produce have to be held till spring before they can be sent to a market. The losses arising from this delay, embracing the charges for warehousing, interest, insurance, &c., and the decline in the price of the staple, which is often ruinous to the holder, have tended to turn this trade into other channels, to restrict the business of this route, and to increase that of its great rival, the Erie canal. To remedy this evil, by securing an uninterrupted communication at all times with navigable tide-water, is one great object of this proposed road. There can be no doubt that this, or a work similar in character and objects, is necessary to secure all the results anticipated from the canals.

The St. Lawrence and Atlantic road is in operation to Sherbrook, a distance of 91 miles from Montreal, and is in a state of such forwardness that no doubt is entertained of its completion by July next.

The Quebec and Richmond railroad is a work designed to place the city of Quebec in the same relation that Montreal sustains to the St. Lawrence and Atlantic railroad, and at the same time with the latter, to unite these cities by a continuous railroad line. From the isolated position of Quebec in the winter season, this road will prove a great benefit to her commerce, as well as a great convenience to the travelling and business community. Its entire line is under contract, to be completed early in 1854.

Another proposed work attracting great interest in Canada is the line extending from Montreal to Hamilton, following the immediate bank of the St. Lawrence and of Lake Ontario. This road would run parallel with the great route of commerce in the Canadas, is required by the wants of travel, and in the winter season would be the channel of a large trade. It must at all seasons of the year command a lucrative traffic from the numerous cities and villages through which it would pass. This work has now come to be considered indispensable to the interests of Canada, and is to receive such aid from the government as will secure its speedy construction. It is to be placed under contract without delay.

The Great Western railroad, traversing the peninsula of Canada, is one of the most important works in the provinces. It extends from

Niagara Falls, by way of Hamilton, to Windsor, opposite Detroit, a distance of two hundred and twenty-eight miles. It traverses a country the fertility and productiveness of which is not exceeded by any portion of Canada or the United States. Its chief public attractions, however, are the relations it bears to railroads in the United States. It will be seen by the accompanying map that for the railroads of New England and central New York it cuts off the long circuit by way of the southern shore of Lake Erie between the East and the West. On this account the road has received important aid from parties in the United States interested in having it opened. Ample means are provided for this work, and it is expected that it will be completed by the first of January, 1854.

The Buffalo and Brantford railroad was projected for the purpose of securing to Buffalo the trade of the country traversed by the great Western, and with the additional object of placing that city *en route* of the great line of travel between the eastern and western States. Buffalo is the largest town within reach of, and affords, probably, the best market for, the Canadian peninsula, with which it will be conveniently connected by the above road. This city, too, is a necessary point in the route of nearly every person visiting any portion of the country bordering Lake Erie, and it is highly important that egress should be had from it in every direction. The road is in progress, and will be completed simultaneously with the great Western.

The chartered line of this road extends to Goderich, on Lake Huron, to which it will probably be extended soon after reaching Brantford.

The Toronto and Lake Huron road connects Lake Ontario with Lake Huron by the shortest practicable line between the two, and will form for persons going to Lake Superior or Lake Michigan, by way of Mackinaw, a much shorter line than by way of Detroit. In this respect it bids fair to occupy an important relation to a leading route of travel and commerce. It traverses, too, a very fertile district, alone capable of supplying a lucrative traffic. A portion of this line is opened for business, and the unfinished part will be soon completed.

A road is also under contract from Toronto to Guelph; but as this is a work of local importance, a particular description of it is not required.

The roads connecting Montreal with those of New York and Vermont are sufficiently noticed with the works of those States.

LOWER PROVINCES.

European and North American railroad.—Under this title is embraced the proposed road extending from Bangor, Maine, and Halifax, Nova Scotia, a distance of about five hundred miles. The principal object to be effected by its construction is to constitute it a part of the great line of travel between America and Europe. The distance from New York to Halifax is equal to one-third of the entire distance from the former to Liverpool; and as the proposed road pursues the same general direction with the route of the steamers, some of which touch regularly at Halifax, it is believed that *this* portion of the route to Europe

would be made by railway. It was upon this assumption that the above project was proposed. As far as the provinces are concerned, it has met with great favor, as it is believed it will develop the abundant resources known to exist within them, and secure those social advantages which are intimately connected with the progress of comparatively isolated districts, in population, commerce, and wealth. The New Brunswick portion of the above road is already under contract to a company of eminent English contractors, and the work in progress. Measures are also in progress to the same end as far as the Nova Scotia division is concerned. The greater part of its line through both provinces traverses a region much more fertile and productive than any considerable portion of our eastern States, from which it is believed a large and profitable business will be secured both to the road and to the cities of Halifax and St. John.

A project for a railroad from Halifax to Quebec, skirting the shores of the gulf and river St. Lawrence, has recently attracted much attention throughout the provinces, as well as in England, but this project may now be regarded as abandoned. A portion of the northern end of this line may be constructed down the St. Lawrence for a distance of about one hundred miles below Quebec. It is also proposed to extend a branch from the European and North American railroad along the Gulf of St. Lawrence to Bathurst. A road is also in progress from St. Andrews to Woodstock, on the river St. John; but as its importance is mainly *local*, a particular description is not required.

ECONOMICAL VIEW OF THE RAILROADS OF THE UNITED STATES.

The first step toward a correct idea of our railroads, as far as their uses, objects, costs, and results, are concerned, is a thorough understanding of the social and industrial character of our people, the geographical and topographical features of the country, the uniformity in the pursuits of the great mass of our people, and the great distance that separates the consuming from the producing regions.

Assuming the occupied area of that portion of our territory east of the Rocky mountains to be 1,100,000 square miles, at least 1,050,000 are devoted to agriculture, while not more than 50,000 are occupied by the manufacturing and commercial classes. These compose a narrow belt of territory lying upon the seacoast, extending from Baltimore to the eastern part of Maine, and are more widely separated from the great producing regions than any other settled portion of the country. The great peculiarity that distinguishes our own from older countries is, that we have no *interior* markets. The greater part of our territory has not been long enough settled for the development of a *variety* of industrial pursuits, which constitute them. So entirely are our people devoted to agriculture, and so uniformly distributed are they over the whole country, that some of our largest States, Tennessee and Indiana for instance, had no towns in 1850 containing a population of over 10,000.

This homogeneity in the pursuits of the great mass of our peo-

ple, and the wide space that separates the producing and consuming classes, as they are popularly termed, necessarily implies the *exportation* of the *surplus* products of *each*. The western farmer has no home demand for the wheat he raises, as the surplus of all his neighbors is the same in *kind*. The aggregate surplus of the district in which he resides has to be exported to find a consumer; and the producer for a similar reason is obliged to *import* all the various articles that enter into consumption which his own industry does not immediately supply; and farther, as the markets for our agricultural products lie either upon the extreme verge of the country, or in Europe, the greater part of our domestic commerce involves a *through* movement of nearly all the articles of which it is composed.

In older countries this necessity of distant movement, as will be the case in this, in time, is obviated by the existence of a great variety of occupations in the same district, which supply directly to each class nearly all the leading articles that enter into consumption.

It is well known that upon the ordinary highways the economical limit to transportation is confined within a comparatively few miles, depending of course upon the *kind* of freight and character of the roads. Upon the average of such ways, the cost of transportation is not far from 15 cents per ton per mile, which may be considered as a sufficiently correct estimate for the whole country. Estimating at the same time the value of wheat at \$1 50 per bushel, and corn at 75 cents, and that 33 bushels of each are equal to a ton, the value of the former would be equal to its cost of transportation for 330 miles, and the latter 165 miles. At these respective distances from market, neither of the above articles would have any commercial value, with only a common *earth* road as an avenue to market.

But we find that we can move property upon railroads at the rate of 1.5 cent per ton per mile, or for one-tenth the cost upon the ordinary road. These works therefore extend the economic limit of the cost of transportation of the above articles to 3,300 and 1,650 miles respectively. At the limit of the economical movement of these articles upon the *common* highway, by the use of railroads, wheat would be worth \$44 50, and corn \$22 27 per ton, which sums respectively would represent the actual increase of value created by the interposition of such a work.

The following table will show the amount saved per ton, by transportation by railroad over the ordinary highways of the country:

Statement showing the value of a ton of wheat, and one of corn, at given points from market, as affected by cost of transportation by railroad, and over the ordinary road.

	Transportation by railroad.		Transportation by ordinary highway.	
	Wheat.	Corn.	Wheat.	Corn.
Value at market.....	\$49 50	\$24 75	\$49 50	\$24 75
10 miles from market.....	49 35	24 60	48 00	23 25
20.....do.....	49 20	24 45	46 50	21 75
30.....do.....	49 05	24 30	45 00	20 25
40.....do.....	48 90	24 15	43 50	18 75
50.....do.....	48 75	24 00	42 00	17 25
60.....do.....	48 60	23 85	40 50	15 75
70.....do.....	48 45	23 70	39 00	14 25
80.....do.....	48 30	23 55	37 50	12 75
90.....do.....	48 15	23 40	36 00	11 25
100.....do.....	48 00	23 25	34 50	9 75
110.....do.....	47 85	23 10	33 00	8 25
120.....do.....	47 70	22 95	31 50	6 75
130.....do.....	47 55	22 80	30 00	5 25
140.....do.....	47 40	22 65	28 50	3 75
150.....do.....	47 25	22 50	27 00	2 25
160.....do.....	47 10	22 35	25 50	75
170.....do.....	46 95	22 20	24 00	.....
180.....do.....	46 80	22 05	22 50	.....
190.....do.....	46 65	21 90	21 00	.....
200.....do.....	46 50	21 75	19 50	.....
210.....do.....	46 35	21 60	18 00	.....
220.....do.....	46 20	21 45	16 50	.....
230.....do.....	46 05	21 30	15 00	.....
240.....do.....	45 90	21 15	13 50	.....
250.....do.....	45 75	21 00	12 00	.....
260.....do.....	45 60	20 85	10 50	.....
270.....do.....	45 45	20 70	9 00	.....
280.....do.....	40 30	20 55	7 50	.....
290.....do.....	45 15	20 40	6 00	.....
300.....do.....	45 00	20 25	4 50	.....
310.....do.....	44 85	20 10	3 00	.....
320.....do.....	44 70	19 95	1 50	.....
330.....do.....	44 55	19 80	.....	.....

The value of lands is affected by railroads in the same ratio as their products. For instance, lands lying upon a navigable water-course, or in the immediate vicinity of a market, may be worth, for the culture of wheat, \$100. Let the average crop be estimated at 22 bushels to the acre, valued at \$33, and the cost of cultivation at \$15, this would leave \$18 per acre as the net profit. This quantity of wheat (two-thirds of a ton) could be transported 330 miles at a cost of 10 cents per mile, or \$3 30, which would leave \$14 70 as the net profit of land at that distance from a market, when connected with it by a railroad. The value of the land, therefore, admitting the quality to be the same in both cases, would bear the same ratio to the assumed value of \$100, as the value of its products, \$14 70 does to \$18, or \$82 per acre; which is an

actual creation of value to that amount, assuming the correctness of the premises. The same calculation may, of course, be applied with equal force to any other kind and species of property. The illustration given establishes a principal entirely correct in itself, but of course liable to be modified to meet the facts of each case. Vast bodies of the finest land in the United States, and lying within 200 miles of navigable water-courses, are unsaleable, and nearly, if not quite, valueless for the culture of wheat or corn for exportation, from the cost of transportation, which in many instances far exceeds the estimate in the above table. Under such circumstances products are often fed out to live stock, and converted into higher values which will bear transportation, when the former will not. In this manner, lands are turned into account, where their immediate products would otherwise be valueless. But in such cases, the profit per acre is often very small; as, in the districts best adapted to the culture of corn, it is considered more profitable to sell it for 25 cents per bushel than to feed it out to animals. It will be seen that at this price thrice its value is eaten up by the cost of transportation of 165 miles.

In this manner, railroads in this country actually add to the immediate means of our people, by the saving effected in the expenses of transportation, to a much greater extent than cost. We are, therefore, in no danger from embarrassment on account of the construction of lines called for by the business wants of the community, as these add much more to our active capital than they absorb. Only a very few years are required to enable a railroad to repay its cost of construction in the manner stated.

Railroads in the United States exert a much greater influence upon the value of property, than in other countries. Take England for example. *There* a railroad may be built without necessarily increasing the value of property or the profits of a particular interest. Every farmer in England lives in sight of a market. Large cities are to be found in every part of the island, which consume the products of the different portions of it almost on the spot where they are raised. Railroads are not needed to transport these products hundreds and thousands of miles to market; consequently they may be of no advantage to the farmer living upon their lines. So with many branches of manufactures. These establishments may be situated immediately upon tide-water, and as the fabrics are mostly exported, they would not be thrown upon railroads in any event. Such works may exist in that country without exerting any perceptible influence in adding to the value of the property of a community. The cases of the two countries would be parallel, were the farmer in the neighborhood of Liverpool compelled to send everything he could raise to London for a market, or were their manufacturing establishments so far from the consumers of their goods, that their value would be sunk before these could be reached. We have in this country what is equivalent to manufacturing establishments in Great Britain, in good order and well stocked for business, a fertile soil, that will produce bountifully for years without rotation or dressing. All that the farmer has to do is to cast his seed on the soil and to reap an abundant crop. The only thing wanting to our highest

prosperity is markets, or their equivalents, railroads, which give access to them.

The actual increase in the value of lands, due to the construction of railroads, is controlled by so many circumstances, that an accurate estimate can only be approximated, and must in most cases fall far short of the fact. Not only are cultivated lands, and city and village lots, lying immediately upon the route affected, but the real estate in cities, hundreds and thousands of miles distant. The railroads of Ohio exert as much influence in advancing the prices of real property in the city of New York, as do the roads lying within that State. This fact will show how very imperfect every estimate must be. But taking only the farming lands of the particular district traversed by a railroad, where the influence of such a work can be more directly seen, there is no doubt that in such case the increased value is many times greater than the cost of the road. It is estimated by the intelligent president of the Nashville and Chattanooga railroad, that the increased value of a belt of land ten miles wide, lying upon each side of its line, is equal to at least \$7 50 per acre, or \$96,000 for every mile of road, which will cost only about \$20,000 per mile. That work has already created a value in its influence upon real property alone, equal to about five times its cost. What is true of the Nashville and Chattanooga road, is equally so, probably, of the average of roads throughout the country. It is believed that the construction of the three thousand miles of railroad of Ohio will add to the value of the landed property in the State at least five times the cost of the roads, assuming this to be \$60,000,000. In addition to the very rapid advance in the price of farming lands, the roads of Ohio are stimulating the growth of her cities with extraordinary rapidity, so that there is much greater probability that the above estimate will be exceeded, than not reached, by the actual fact. We are not left to estimate in this matter. In the case of the State of Massachusetts, what is conjecture in regard to the new States has with her become a matter of history. The valuation of that State went up, from 1840 to 1850, from \$290,000,000 to \$580,000,000—an immense increase, and by far the greater part of it due to the numerous railroads she has constructed. This increase is in a much greater ratio to the cost of her roads than has been estimated of those of Ohio.

We have considered the effect of railroads in increasing the value of property in reference only to lands devoted to agriculture; but such results do not by any means give the most forcible illustration of their use. An acre of farming land can at most be made to yield only a small annual income. An acre of coal or iron lands, on the other hand, may produce a thousand-fold more in value than the former. These deposits may be entirely valueless without a railroad. With one, every ton of ore they contain is worth one, two, three, or four dollars, as the case may be. Take for example the coal-fields of Pennsylvania. The value of the coal sent yearly from them, in all the agencies it is called upon to perform, is beyond all calculation. Upon this article are based our manufacturing establishments, and our government and merchant steamships, representing values in their various relations and ramifications, equal to thousands of millions of dollars. Without coal

it is impossible to conceive the spectacle that we should have presented as a people, so entirely different would it have been from our present condition. Neither our commercial nor our manufacturing, nor, consequently, our agricultural interests, could have borne any relation whatever to their present enormous magnitude. Yet all this result has been achieved by a few railroads and canals in Pennsylvania, which have not cost over \$50,000,000. With these works, coal can be brought into the New York market for about \$3 50 per ton; without them, it could not have been made available either for ordinary fuel or as a motive power. So small, comparatively, are the agencies by which such immense results have been effected, that the former are completely lost sight of in the magnitude of the latter.

What is true of the Pennsylvania coal-fields, is equally true of all others to a greater or less extent. The coal-fields of Alabama may be made to bear the same relation to the Gulf of Mexico and to the manufactures of the southern States, as have those of Pennsylvania to the North. The Gulf of Mexico is to become the seat of a greater commerce than the world ever yet saw upon any sea; and this commerce, and all the vast interests with which it will be connected, will to a very great extent owe its development and magnitude to the coal-fields that slope toward the gulf.

INCOME OF OUR RAILROADS.

Having shown the influence of our railroads in creating values, which greatly exceed their aggregate cost, the next point to be considered is the *income* of these works.

As both the income of our roads and the influence which they exert, in increasing values, must bear a close relation to each other, the facts that have already been established in reference to the latter necessarily involve the idea of a large business upon our roads. The value of lands depends upon their capacity to yield a very large surplus for transportation.

There is no other country in the world where an equal amount of labor produces an equal bulk of freight for railroad transportation. One reason is, that the great mass of our products is of a coarse, bulky character, of very low comparative value, and consisting chiefly of the products of the soil and forest. We manufacture very few high-priced goods, labor being more profitably employed upon what are at present more appropriate objects of industry. The great bulk of the articles carried upon railroads is grains, cotton, sugar, coal, iron, live stock, and articles of a similar character. The difference between the value of a pound of raw and manufactured cotton is measured frequently by dollars, yet both may pay the same amount of freight. Wheat, corn, cattle, and lumber, all pay a very large sum for transportation in proportion to their values.

Again, for the want of domestic markets, the transportation of many of our important products involves a *through* transportation. Take, for instance, a cotton-producing State like Mississippi. Nearly the whole industry of this State is engaged in the cultivation of this article. Of the immense amount produced no part is consumed or used within the

State. The entire staple goes abroad ; but as the aggregate industry of the people is confined to the production of one staple, it follows that all articles entering into consumption must be imported ; so that, over the channels through which the cotton of this State is sent to market, an equal value or tonnage must be imported, as the case may be. This necessity, both of an inward and outward movement, equal to the whole bulk of the surplus agricultural product, is peculiar to the United States, and is one of the reasons of the large receipts of our roads. While this is the case, it is equally true that newly settled sections of country will often supply a larger amount of traffic than an older one. There can be no doubt that an equal amount of labor would produce four times as much corn and wheat in Illinois as in Massachusetts ; consequently, a man living in the former would contribute four times as much business to a railroad as one in the latter. In clearing the soil, it often happens that the transportation of lumber supplies a larger traffic for two or three years than agricultural products for an equal length of time.

It is, therefore, a great mistake to suppose that, because a country is new, it cannot yield a large traffic to a railroad. In the southern and western States only one year is frequently required to prepare the soil for crops, which may be renewed, the same in kind, for a long series of years. The amount raised, and consequently the surplus, is much larger in the more recent than in the longer settled portions of the country. In the more recent, too—the number of inhabitants being the same in both cases—the amount sent to distant markets is greater from the fact that there is no diversity of pursuits, which in older communities supply from a limited circle nearly all the prime necessities of life that enter into consumption. In newly settled districts, all these are often imported from distant markets at a very heavy cost of transportation.

The general views above stated, in reference to the earnings of the railroads in the United States, are fully borne out by the result. Investments in these works have probably yielded a better return, independently of the incidental advantages connected with them, than the ordinary rates of interest prevailing throughout the country. Such is the case with the roads of Massachusetts, the State in which these works have been carried to the greatest extent, and have cost the most per mile, and amongst which are embraced a number of expensive and unproductive lines.

The following statement, compiled from official returns, shows the cost, expenses, and income of all the railroads of this State for four years previous to January 1, 1852 :

Years.	Cost.	Expenses.	Income.
1848	\$46,777,009	\$3,284,933	\$6,067,164
1850	51,885,556	3,410,324	6,300,662
1851	56,106,083	4,002,847	7,287,342
Total	154,768,648	10,698,104	19,655,168

The above table includes several expensive works opened too recently for the development of a larger business, and of course presents a much more unfavorable view of the productiveness of these works than would be shown by an average for a longer period.

The most productive railroads in Massachusetts are those connecting the manufacturing and commercial towns, while the most unproductive are those depending upon the *agricultural* interests for support. The agriculture of this State supplies nothing for *export*; on the contrary, there is hardly a town that does not depend upon other and distant portions of the country for many of the more important articles of food. The small surplus raised is wanted for consumption in the immediate neighborhood of production. Where there are no manufacturing establishments upon a route, the movement of property upon New England roads is limited, and hence the comparative unproductiveness of what may be termed *agricultural* lines. In the eastern States other sources of business make up for the lack of agricultural products for transportation, and the aggregate investment is productive. In the southern and western States the soil supplies a very large surplus for exportation, affording often, per mile, a greater *bulk* for transportation than is supplied to eastern roads, either from agriculture, manufacture, or commerce. The cost of the former, however, will not on the average, equal one-half that of the latter; and as the rates of charges are pretty uniform upon all, and if anything higher upon the *southern* and *western* than upon the *eastern* roads, the revenues of the former must of course be very much greater than the latter. Such is the fact. The greater income of the one results, both from a larger traffic, which the western country in particular is adapted to supply, and from the higher rates of charges in proportion to the cost of the respective lines of the two different sections of the country. Numerous illustrations of this fact might be readily given. The earnings of the Cleveland and Columbus road have been greater than those of the Hudson river since the opening of their respective lines, though the former is only 135 miles long and cost \$3,000,000, while the latter is 144 miles and cost \$10,000,000. Railroads in the newly settled portions of the country, as a general rule, command a much larger traffic, and of course yield a better return upon their cost, than those of the older States. Assuming the revenues per mile of the roads of the two divisions of the country to be equal, their net income will be in the ratio of their cost, which may be stated at two to one in favor of western and southern roads.

MODE OF CONSTRUCTION.

By far the greater number of our roads in progress are in the interior of the country—in our agricultural districts, that do not possess an amount of *accumulated* capital equal to their cost. A business adequate to the support of a railroad may exist without the means to construct one. The construction of a railroad, too, creates opportunities for investment which promise a much greater return than the stock in such a work. While, therefore, our people are disposed to make every reasonable sacrifice to secure a railroad, they prefer, and in fact they find it

more for their interest, to borrow a portion of the amount required, than to invest the whole means directly in the project. They can better afford to secure the co-operation of foreign capital, by offering high premiums for its use, than to embarrass themselves by making a permanent investment of too large a proportion of their own immediate means. These facts sufficiently explain the reasons why the borrowing of a considerable portion of the cost of our roads has become so universal a rule.

It is only by the co-operation of capitalists residing at a distance, and having no interest in the collateral advantages due to railroads, that the great majority of our works could have been constructed. In the outset, money was furnished slowly and cautiously, and then only upon the most unquestioned security. As the result began to demonstrate the safety and productiveness of these investments, capital was more freely afforded, and became less exacting in its conditions. The result has been, that a confidence in the safety of our railroads, as investments of capital, has become general, not only in this country, but in Europe; and companies whose means and prospective advantages entitle them to credit, find no difficulty in borrowing a reasonable sum upon the security of their roads, with which to complete them. The amount usually borrowed for our roads in progress averages from \$5,000 to \$10,000 per mile. The general custom requires that a sum equal to the one sought to be borrowed shall be first paid in, or secured for construction. A road that will cost \$20,000 per mile is considered as sufficient security for a loan of \$10,000 per mile; and as the cost of new works will not much exceed the former sum, the latter is not, as a general rule, considered so large as to create distrust as to the safety of the investment, on account of the magnitude of the loan.

This rule, which establishes the proportions to be supplied by those engaged in the construction, and capitalists, is well calculated to promote the best advantage of both parties. The fact that the people on the line of a contemplated road are willing to furnish one-half of the means requisite for construction, and to pledge this for an equal sum to complete the road, is sufficient evidence that in the opinion of such people, the construction of such work is justified by a prospective business. The interest they have in it also is a sufficient guarantee that its affairs will be carefully and prudently managed. The large amount paid in and at stake divests the project of all *speculative* features. Where the advantages and success are merely contingent, prudent persons do not usually hazard large sums. The lender has, therefore, all the guarantees of safety, both from the character of the project and its prospective income and proper management.

It is on this account that the credits furnished by municipal bodies for the construction of railroads should be resorted to only in extreme cases. Individuals making up the aggregate community may be induced to vote the credits of the latter in aid of a project, when they by no means could be induced to venture their own capital in its success. In this manner projects may be set afoot the consummation of which are not justified by these commercial and pecuniary considerations, which are the only safe guides of action in such cases. Railroads are purely *commercial* enterprises, and their construction should be made to

depend upon the same rules of conduct that control the building of ships, or the erection of manufacturing establishments.

The safety of the securities offered to the public will be readily seen from a comparison of the earnings of our railroads with the sum necessary to meet the interest on the loans. Allowing the sum borrowed to equal \$10,000 per mile, it would require from \$600 to \$700, according to the rates, annually, to meet the accruing interest. But the net earnings of our new projects more than treble this amount, leaving for dividends on stock a sum equal to double that paid on loans. That such will be the result, as far as our new and less expensive works are concerned, for some years to come, till a greater abundance of money shall have lowered the rates of interest, and the competition of new works shall have reduced the rates charged for persons and property, there cannot be a doubt.

Below is given a table of the gross and net earnings of several of our new roads, and of the same class as those that are now coming into market for money :

Roads.	Total earnings, as per last re- port.	Net earnings.	Per mile.
*Cleveland and Columbus.....	\$341,680 96	\$239,969 28	\$1,710
Little Miami.....	487,815 89	297,457 57	3,541
Columbus and Xenia	211,631 37	150,055 58	2,778
Michigan Central	1,100,043 00	461,364 80	2,116
Madison and Indianapolis.....	386,078 00	185,080 60	2,378

* For six months only.

Cost of Railroads in the United States.

With the exception of those in the States of Massachusetts and New York, it is difficult to get at the exact cost of our roads. The companies within the States named are required by law to return to their legislatures the cost of their respective lines. To ascertain the cost of other roads, resort must be had to the published statements of their affairs. These statements, though generally to be relied upon, are uniform neither in their character nor in the time at which they make their appearance; and some of our largest companies make no exhibit of their affairs save to their own stockholders.

It may be here stated that it is in the power of the general government to supply the lack of information which at present exists in reference to our railroads, by requiring all companies with whom contracts are made for transportation of the *mails* to return to the Post Office Department full and accurate statements of their cost, income, debts, expenses, &c., &c. Such returns, made in a proper manner, would be exceedingly advantageous in many points of view. They would show annually the extent to which these works are carried, their cost, income, expenditures, mode of conducting the various works, &c., &c. The returns of their business operations would afford a great amount

of useful information, in reference to the internal commerce of the country, which could be obtained from no other sources. The great lack of correct statistical knowledge upon this subject is felt and acknowledged by all; and there seems to be no other mode of obtaining this correctly than by the one pointed out. The returns, too, by collecting all the existing information upon the subject of railroad management, could not fail to exert the most beneficial influence, by making public whatever is valuable in the experience of each company.

The cost of our roads depends very much upon the character of the country through which they are built. Those in the New England States are the most expensive, not only from the greater difficulty of construction, but from the greater cost of right of way, land, &c. The general surface of the country is unfavorable. It becomes better adapted to these works on going south, though the roads of all the eastern States, as far south as Maryland, cost much higher, per mile, than those of the southern or western States. The difference in the cost between the roads of the two sections of the country is confined principally to the items of grading, bridging, and lands. In the States of Indiana and Illinois, the cost of these items, upon long and important lines, will not often exceed \$5,000 per mile; while in the eastern States the average for the same is four or five times greater. The Mississippi valley consists of an immense plain, presenting but a few obstacles to the easy construction of a railroad. The same may be said of the greater portion of the southern Atlantic and Gulf States. Throughout the country, except in the eastern States, the lands required for right of way, depots, and stations, are either given gratuitously, or are had at very low cost; the owners being sufficiently remunerated in the incidental advantages resulting from these works.

The average cost of the roads of the States of Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, and Maryland, is not far from \$40,000 per mile. The cost of those of the States not enumerated is not far from \$20,000 per mile. The average for the whole country will not exceed \$30,000 per mile, including full equipment, and everything necessary for their efficient operation. This would give for one road, completed and in progress, the following as the total cost:

Roads completed, 12,821 $\frac{1}{4}$ miles, at \$30,000 per mile. .	\$384,630,000
Roads in progress, 12,628 $\frac{1}{2}$ miles, at \$20,000 per mile .	252,560,000
Total.....	<u>637,190,000</u>

It is believed that an extent of line equal to the whole number of miles now in operation will be completed within three years from the present time, at which period the cost of our roads will equal the above sum.

The probable extent to which the construction of railroads will be ultimately increased in this country, is an interesting subject of speculation. At the present time they are very unequally distributed. In Massachusetts, for instance, we find one mile of railroad to every six square miles of territory. The same ratio applied to the area in which

these works are in progress, would give 183,000 miles of railroads against 26,000 miles, which is not far from the extent of line in operation and progress at the present time. It would give to the State of Ohio nearly 7,000 miles, where there are not one-half of this number either in operation, in progress, or contemplated. It would give to Illinois 11,000 miles, and nearly the same amount to Virginia. Both of these States have not more than 4,000 miles in operation and progress.

There can be no reason why the State of Ohio should not, in time, and in fact as soon as they can be reasonably constructed, have the same number of miles of railroad, in proportion to its area, as Massachusetts; nor why the western States of Michigan, Indiana, Illinois, Wisconsin, Iowa, and Missouri should not have the same number of miles of railroad, their areas compared, as Ohio. They are equally well adapted to these works, and the same necessity exists for their construction in the former as in the latter. The only element wanting to secure a similar result is *time*, which will supply population, and develop their resources to an equal extent. There is no reason why railroads should not keep pace with the progress of the States in population and wealth, nor why, when they have reached the present position of Ohio, they should not boast an equal number of miles of railroad.

The area of the States above named is equal to 400,000 square miles. To supply these with railroads, to the same extent that we now find in Ohio, including those in progress, would require 26,000 miles of road. The same ratio that we find in Massachusetts would require more than 66,000 miles. Now, no one acquainted with the resources and wants of the southwestern States, and the character of their people, can doubt that, in time, an equal area will call for an equal extent of lines, and that the construction of these roads will proceed with equal pace with their population.

The probable rapid expansion of these works is well shown by a comparison of Georgia with other southern States. In the former there are about one thousand miles of road in operation, all of which are lucratively employed. Now, the States of North Carolina, Alabama, Mississippi, Louisiana, Tennessee, and Kentucky will all compare favorably with Georgia in population, in wealth, in extent, and in natural resources. Railroads are just as much needed by the former as by the latter. They would cost no more per mile. They would pay equally well, and would accomplish as much in improving the condition of their people. But the aggregate length of line of all these States is not equal to the extent of railroad which we find in Georgia. Here, then, is a field where at least five thousand miles of railroad are shown to be needed, for no one can doubt that railroads in the States named will be equally as useful and productive as those of Georgia.

But even Georgia is very poorly supplied with railroad facilities. Not one-half of her territory, and hardly one-half of her population, are within reach of them. A very large proportion of her products are wagoned, or sent down her rivers at great expense, to inconvenient markets. Her area is at least eight times greater than that of Massachusetts. The latter State has one mile of railroad to every six square

miles of territory. The same ratio would give to Georgia 9,600 miles of railroad, equalling two-thirds the whole extent of lines in the United States, and to the States named, including Georgia, (embracing an area of 390,000 square miles,) more than 65,000 miles of railroad. There can be no doubt that, in the States named, ten thousand miles of railroad are needed to meet the immediate commercial wants of the people, and that this extent of road would find lucrative employment.

Tabular statement showing the number of miles of railroad in progress and in operation in the United States.

MAINE.

Roads.	Miles in operation.	Miles in progress.
Androscoggin and Kennebec.....	55	.....
Atlantic and St. Lawrence.....	121	30
Buckfield branch.....	13	.....
Bangor and Piscataquis.....	12	.....
Kennebec and Portland.....	60	.....
Bath branch.....	9	.....
Portland, Saco, and Portsmouth.....	51	.....
Calais and Baring.....	6	.....
Machias port.....	8	.....
York and Cumberland.....	10	43
Androscoggin.....	20	.....
Penobscot and Kennebec.....	.....	55
Total.....	365	128

NEW HAMPSHIRE.

Boston, Concord, and Montreal.....	71	22
Coheco.....	28	.....
Concord.....	35	.....
Concord and Claremont.....	25	.....
Contocook Valley.....	14	.....
Great Falls and Conway.....	13	.....
Manchester and Lawrence.....	26	.....
New Hampshire Central.....	26	.....
Northern.....	82	.....
Portsmouth and Concord.....	47	.....
Sullivan.....	25	.....
Wilton.....	15	.....
Cheshire.....	54	.....
Ashuelot.....	23	.....
Eastern.....	16	.....
White Mountain.....	.....	20
Total.....	500	42

VERMONT.

Roads.	Miles in operation.	Miles in progress.
Connecticut and Passumpsic River	61	.....
Rutland and Burlington.....	119	.....
Vermont Central.....	164	.....
Rutland and Washington.....	12	.....
Vermont Valley.....	24	.....
Bennington branch.....	6	.....
Western Vermont.....	53	.....
Total.....	439	.....

MASSACHUSETTS.

Berkshire.....	21	.....
Boston and Lowell.....	28	.....
Boston and Maine.....	83	.....
Boston and Providence.....	53	.....
Stoughton branch.....	4	.....
Boston and Worcester.....	69	.....
Cape Cod branch.....	28	.....
Dorchester and Milton.....	3	.....
Eastern.....	58	.....
Essex (Salem to Lawrence).....	21	.....
Fall River.....	42	.....
Fitchburg.....	67	.....
Fitchburg and Worcester.....	18	.....
Lowell and Lawrence.....	13	.....
Nashua and Lowell.....	15	.....
New Bedford and Taunton.....	33	.....
Newburyport.....	15	.....
Norfolk County.....	26	.....
Old Colony (Boston to Plymouth).....	45	.....
Petersboro' and Shirley.....	23	.....
Pittsfield and N. Adams.....	20	.....
Providence and Worcester.....	44	.....
South Shore.....	11	.....
Stony Brook.....	13	.....
Western (Boston to Albany).....	117	.....
Worcester and Nashua.....	46	.....
Vermont and Massachusetts.....	77	.....
Housatonic branch.....	11	.....
South Reading branch.....	9	.....
Salem and Lowell.....	17	.....
Grand Junction.....	7	.....
Harvard branch.....	1	.....
Lexington and West Cambridge.....	7	.....
Connecticut River.....	52	.....
Troy and Greenfield.....		42
South Reading branch.....	9	.....
Charles River branch.....		12
Stockbridge and Pittsfield.....	22	.....
Palmer and Amherst.....		25
Total.....	1,128	79

RHODE ISLAND.

Roads.	Miles in operation.	Miles in progress.
Stonington	50	.....
Providence, Hartford, and Fishkill .....	.....	32
Total	50	32

CONNECTICUT.

Hartford and New Haven.....	62	.....
Hartford, Providence, and Fishkill	50	96
Housatonic.....	98	.....
Middletown branch.....	10	.....
Naugatuck.....	62	.....
New Haven Canal.....	45	.....
New London, Willimantic, and Palmer.....	66	.....
New London and New Haven.....	50	.....
New York and New Haven.....	76	.....
Norwich and Worcester.....	66	.....
Collinsville branch.....	11	.....
Air-line.....	.....	102
Danbury and Norwalk	24	.....
Middletown branch.....	10	.....
Total	630	198

NEW YORK.

Albany and Schenectady.....	17	.....
Albany and West Stockbridge.....	38½	.....
Attica and Buffalo	31½	.....
Buffalo and Niagara Falls.....	22	.....
Cayuga and Susquehanna.....	33	.....
Hudson and Berkshire.....	31½	.....
Hudson River.....	144	.....
Lewiston	3	.....
Long Island.....	98	.....
New York and Erie.....	464	.....
New York and Harlem.....	130	.....
Northern	118	.....
Oswego and Syracuse.....	35	.....
Rensselaer and Saratoga	32	.....
Rochester and Syracuse.....	104	.....
Saratoga and Washington.....	39½	.....
Saratoga and Schenectady.....	22	.....
Schenectady and Troy.....	20½	.....
Skaneateles and Jordan	5	.....
Syracuse and Utica.....	53	.....
Corning.....	14	.....
Buffalo and Rochester.....	76	.....
Troy and Greenbush.....	6	.....
Utica and Schenectady	78	.....
Watertown and Rome	97	.....
Albany and Northern.....	.....	33
Albany and Susquehanna.....	.....	143
Buffalo and State Line.....	69	.....
Buffalo and New York	90	.....
Buffalo, Corning, and New York.....	45	87
Canandaigua and Elmira.....	67	.....
Plattsburg and Montreal.....	25	.....
Rochester and Niagara Falls.....	76	.....
Rutland and Washington.....	64	.....

NEW YORK—Continued.

Roads.	Miles in operation.	Miles in progress.
Sackett's Harbor and Ellisburg.....		17
Troy and Boston.....	32	8
Canandaigua and Niagara Falls.....		97
Syracuse and Binghamton.....		76
Sodus Bay and Southern.....		35
Potsdam, Watertown, and Southern.....		75
Lake Ontario and Auburn.....		75
Genesee Valley.....		100
Buffalo and Olean.....		75
Lebanon Springs.....		53
Total.....	2,148½	874

NEW JERSEY.

Belvidere and Delaware.....	15	40
Burlington and Mount Holly.....	6	
Camden and Amboy.....	64	
Morris and Essex.....	35	45
New Jersey.....	31	
New Jersey Central.....	64	
Trenton branch.....	6	
Union.....	33	
Total.....	254	85

PENNSYLVANIA.

Alleghany Portage.....	36	
Beaver Meadow.....	36	
Carbondale and Honesdale.....	24	
Columbia and Philadelphia.....	82	
Westchester branch.....	9	
Corning and Blossburg.....	25	
Cumberland Valley.....	52	
Hazleton and Lehigh.....	10	
Little Schuylkill.....	20	
Extension to Tamenend.....		6
Mine Hill.....	30	
Mount Carbon.....	7	
Pennsylvania.....	214	36
Philadelphia, Reading, and Pottsville.....	92	
Philadelphia and Norristown.....	17	
Germantown branch.....	6	
Philadelphia and Trenton.....	30	
Philadelphia, Wilmington, and Baltimore.....	98	
Schuylkill Valley.....	25	
Summit Hill and Mauch Chunk.....	25	
Whitehaven and Wilkesbarre.....	20	
Williamsport and Elmira.....	21	
Franklin.....	22	
Dauphin and Susquehanna.....	16	
Strasburg.....	7	
Lykens Valley.....	16	
Nesquehoning.....	5	
Room Run.....	5	
Chester Valley.....		22
Lehigh, Delaware, Schuylkill, and Susquehanna.....		40
Pine Grove.....	5	

PENNSYLVANIA—Continued.

Roads.	Miles in operation.	Miles in progress.
Beaver Meadow.....	12	.....
York and Cumberland.....	25	.....
Sunbury and Erie.....	.....	240
Lackawanna and Western.....	50	.....
Catawissa, Williamsport, and Erie.....	.....	93
Delaware and Susquehanna.....	.....	48
Philadelphia and Westchester.....	.....	25
Pennsylvania Coal Company.....	47	.....
Hempfield.....	.....	78
Allegheny Valley.....	.....	180
Columbia branch.....	19	.....
Hanover branch.....	13	.....
York and Wrightsville.....	13	.....
Lancaster and Harrisburg.....	37	.....
Susquehanna.....	.....	50
Pittsburg and Steubenville.....	.....	42
Franklin Canal.....	26	.....
Northeast.....	18	.....
Total.....	1,215	915

DELAWARE.

New Castle and Frenchtown.....	16	.....
Wilmington branch.....	.....	11
Total.....	16	11

MARYLAND.

Annapolis and Elkridge.....	21	.....
Baltimore and Ohio.....	304	75
Washington branch.....	38	.....
Frederick branch.....	3	.....
Baltimore and Susquehanna.....	57	.....
Westminster branch.....	10	.....
Total.....	433	75

VIRGINIA.

Richmond and Danville.....	65	75
Richmond and Petersburg.....	22	.....
Clover Hill.....	15	.....
South Side.....	50	60
Manasses Gap.....	.....	75
Petersburg and Roanoke.....	60	.....
Seaboard and Roanoke.....	80	.....
Appomatox.....	9	.....
Winchester and Potomac.....	32	.....
Virginia Central, including Blue Ridge.....	104	75
Virginia and Tennessee.....	50	155
Orange and Alexandria.....	40	50
Richmond, Fredericksburg, and Potomac.....	76	.....
Greenville and Roanoke.....	21	.....
Northwestern.....	.....	120
Total.....	624	610

NORTH CAROLINA.

Roads.	Miles in operation.	Miles in progress.
Gaston and Raleigh	87	.....
Wilmington and Weldon	162	.....
North Carolina Central		223
Weldon and Cleveland		25
Total	249	248

SOUTH CAROLINA.

South Carolina	241	.....
Greenville and Columbia	163	.....
Charlotte and South Carolina	110	.....
King's Mountain	25	.....
Laurens	15	16
Spartanburg and Union		60
Wilmington and Manchester	45	117
Total	599	193

GEORGIA.

Central	191	.....
Georgia	175	.....
Macon and Western	101	.....
Western and Atlantic	140	.....
Southwestern	50	59
Rome branch	20	.....
Muscogee	51	21
Atlanta and Westpoint	52	35
Milledgeville	17	.....
Eaton and Milledgeville		20
Wilkes county		18
Athens branch	39	.....
Waynesboro'	21	50
Savannah and Pensacola (estimated)		300
Brunswick and Pensacola (estimated)		300
Total	857	803

FLORIDA.

St. Mark's and Tallahassee	23
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ALABAMA.

Montgomery and West Point	88
Mobile and Ohio	33	30
Alabama and Tennessee	40	160
Alabama Central		50
Memphis and Charleston		281½
Girard		220
Total	161	741½

MISSISSIPPI.

Roads.	Miles in operation.	Miles in progress.
Raymond.....	7	.....
St. Francis and Woodville	28	.....
Vicksburg and Brandon	60	.....
Mobile and Ohio		273
Mississippi Central		180
Canton and Jackson.....		25
New Orleans, Jackson, and Northern.....		400
Total.....	95	878

LOUISIANA.

Carrolton.....	6	.....
Clinton and Port Hudson.....	24	.....
Lake Pontchartrain.....	6	.....
Mexican Gulf.....	27	.....
*New Orleans, Jackson, and Northern.....		180
New Orleans and Opelousas.....		
Total.....	63	180

* See Mississippi.

TEXAS.

Buffalo Bay, Brazos, and Colorado.....		32
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TENNESSEE.

Nashville and Chattanooga.....	105	54
East Tennessee and Georgia.....	80	30
East Tennessee and Virginia.....		130
Winchester and Huntsville.....		46
Mobile and Ohio.....		119½
Nashville Southern.....		100
McMinnville branch		30
Total.....	185	509½

KENTUCKY.

Frankfort and Lexington.....	29	.....
Louisville and Frankfort.....	65	.....
Maysville and Lexington.....		67
Covington and Lexington.....		97
Lexington and Danville.....		36
Louisville and Nashville.....		180
Mobile and Ohio.....		39
Louisville and Nashville.....		95
Shelbyville branch.....		18
Henderson and Nashville.....		130
Total.....	94	662

MISSOURI.

Roads.	Miles in operation.	Miles in progress.
Pacific.....		315
Hannibal and St. Joseph's.....		200
Total.....		515

OHIO.

Cleveland and Columbus	135	.....
Columbus and Lake Erie.....	60	.....
Dayton and Springfield branch.....	24	.....
Findlay branch.....	16	.....
Little Miami.....	84	.....
Mad river.....	134	.....
Sandusky and Mansfield.....	56	.....
Xenia and Columbus.....	54	.....
Bellefontaine and Indiana		118
Cincinnati and Marietta.....		265
Cleveland and Pittsburg.....	100	.....
Cleveland N. and Toledo.....		87
Cleveland P. and Ashtabula.....	72	.....
Columbus U. and Piqua		102
Cincinnati W. and Zanesville.....		160
Cincinnati H. and Dayton.....	60	.....
Dayton and Western.....	42	.....
Greenville and Miami.....	20	11
Hamilton and Eaton.....	42	.....
Hillsboro' and Cincinnati.....	37	.....
Iron.....	25	25
Junction.....		110
Ohio and Indiana.....		131
Ohio and Mississippi.....		20
Ohio and Pennsylvania.....	134	51
Ohio central.....	59	82
Scioto and Hocking valley.....		120
Steubenville and Indiana		150
Springfield, Mount Vernon, and Pittsburg.....		110
Dayton and Michigan.....		140
Hudson and Akron branch.....		50
Franklin and Warren branch		30
Cincinnati and Dayton.....		52
Carrolton branch.....		20
Tuscarawas branch		20
Total.....	1,154	1,854

MICHIGAN.

Central	228	.....
Southern.....	133	.....
Pontiac.....	25	.....
Tecumseh branch.....	8	.....
Erie and Kalamazoo.....	33	.....
Total.....	427	.....

INDIANA.

Roads.	Miles in operation.	Miles in progress.
New Albany and Salem, with branch round Lake Michigan.....	140	175
Jeffersonville.....	66	.....
Madison and Indianapolis.....	86	.....
Shelbyville branch.....	16	.....
Rushville branch.....	20	.....
Knightstown branch.....	27	.....
Lawrenceburg and Indianapolis.....	.....	90½
Indiana Central.....	.....	72
Newcastle and Richmond.....	.....	100
Indianapolis and Bellefontaine.....	83	.....
Peru and Indianapolis.....	22½	50
Terre Haute and Indianapolis.....	72	.....
Evansville and Illinois.....	26	74
Indiana Northern.....	135	.....
Ohio and Mississippi.....	.....	170
Lafayette and Indianapolis.....	62	.....
Wabash Valley.....	.....	200
Total.....	755½	931½

ILLINOIS.

Illinois Central.....	.....	699
Galena and Chicago.....	92	35
Rock Island and Chicago.....	50	131
Central Military Tract.....	.....	125
Peoria and Oquawka.....	.....	85
Ohio and Mississippi.....	.....	145
Northern Cross.....	.....	54
Sangamon and Morgan.....	54	.....
Alton and Sangamon.....	72	.....
Aurora branch.....	13	75
St. Charles branch.....	7	.....
O'Fallon's Coal road.....	8	.....
Bellville and St. Louis.....	.....	20
Terre Haute and Alton.....	.....	165
Mississippi and Atlantic.....	.....	145
St. Louis and Chicago.....	.....	75
Alton and Mt. Carmel.....	.....	17
Total.....	296	1,771

WISCONSIN.

Milwaukee and Mississippi.....	50	150
Fon du Lac and Rock Island Valley.....	.....	240
Total.....	50	390

RECAPITULATION.

States.	Miles in operation.	Miles in progress.
Maine	365	128
New Hampshire.....	514	42
Vermont	439	.....
Massachusetts.....	1,128	79
Rhode Island.....	50	32
Connecticut.....	630	189
New York.....	2,148 $\frac{1}{4}$	874
New Jersey.....	242 $\frac{1}{4}$	85
Pennsylvania.....	1,215	915
Delaware.....	16	11
Maryland.....	433	75
Virginia.....	624	610
North Carolina.....	247	248
South Carolina.....	597	193
Georgia.....	857	794
Florida.....	23	.....
Alabama.....	161	641 $\frac{1}{2}$
Mississippi.....	95	378
Louisiana.....	63	180
Texas.....	.....	32
Tennessee.....	185	479 $\frac{1}{2}$
Kentucky.....	94	663
Missouri.....	.....	515
Ohio.....	1,154	1,854
Michigan.....	427	.....
Indiana.....	755 $\frac{1}{2}$	933
Illinois.....	296	1,771
Wisconsin.....	50	390
Total.....	12,808 $\frac{1}{4}$	12,612

PART V.

C A N A D A .

Area in acres : Canada East, 128,659,684 ; Canada West, 31,745,535 ; total, 160,405,219 acres. Population in 1851, 1,842,265.

The province of Canada, one of the most extensive, populous, and wealthy offshoots of a colonizing nation, has been justly termed "the brightest jewel in the Crown of England." Though stretching in longitude from the centre of the continent to the shores of Labrador, and in latitude from the waters which flow into the northern ocean to the parallel of Pennsylvania, it derives its importance not so much from great area, diversity of climate, and productions, as from geographical and commercial position.

From tide-water upon the St. Lawrence to Lake Superior, this province adjoins, and even penetrates, so as to divide, one of the most commercial as well as important agricultural portions of the United States. The shortest land-route between the heart of New York and Michigan is through the peninsula of Canada West, which embraces one-half the coast of the most commercial body of fresh water on the globe.

The "diversity of production" ascribed to Canada may at first appear incorrect, inasmuch as the name is associated with the rigors of a northern climate. This mistaken idea originated in the fact that the eastern or historical portion of Canada is foremost in the mind—a part substituted for the whole ; while the western or modern section of the province is known only to actual visitors. The romantic narratives of Jacques Carter and Champlain, the early trials and struggles of the Jesuit Fathers, and of Frontenac, De Sales, and others of the old noblesse of France, with the stirring incidents of the wars of the Algonquins and Iroquois, have, to the great majority of the people of the United States, been the chief medium of information respecting this, England's most important colony.

It is true that in Eastern Canada there are extremes of climate unknown in the northwestern States. But it will be found that the mean temperature varies but little in the two regions. The intense cold of the winter makes a highway to the operations of the lumberman over and upon every lake and stream, while the earth and the germs of vegetation are jealously guarded from the injurious effects of severe frost by a thick mantle of snow. The sudden transition from winter to summer, melting the accumulations of ice and snow in every mountain stream, converts them into navigable rivers, *downward*, for bearing, in the cheapest and most expeditious manner, the fruits of the lumberman's winter labor to its market on tide-water. The *commencement* of vegetation is delayed by the duration of the snow, but its maturity is reached about the same period as in the western country, because there

has been a smaller loss of caloric during the winter, less retardation from a lingering spring, and more rapid growth from the constant action of a strong and steady summer heat.

Whatever exceptions may be taken to the climate of Eastern Canada, it must be remembered that it embraces the greater portion of the white-pine-bearing zone of North America, the invaluable product of which can only be obtained by those conditions of climate, (the abundant ice and snow,) which have given it such imaginary terrors. There is scarcely one article or class of articles from any one country in the world which affords more outward freight, or employs more sea tonnage, than the products of the forests of British North America.

While these conditions of climate and production give necessarily a commercial and manufacturing character to the eastern province, the milder climate and more extensive plains of Western Canada afford a field for agriculture, horticulture, and pastoral pursuits unsurpassed in some respects by the most favored sections of the United States. The peninsula of Canada West, almost surrounded by many thousand square miles of unfrozen water, enjoys a climate as mild as that of Northern New York. The peach tree, unprotected, matures its fruit south and west of Ontario, while tobacco has been successfully cultivated for years on the peninsula between Lakes Erie and Huron. During the last two years, Western Canada has exported upwards of two millions of barrels of flour, and over three millions of bushels of wheat, and at the present moment the surplus stock on hand is greater than at any former period. There is probably no country where there is so much wheat grown, in proportion to the population and the area under cultivation, as in that part of Canada west of Kingston.

The commercial position of Canada West as a "portage" or "stepping-stone" between the manufacturing and commercial States on the Atlantic and the agricultural and mineral ones of the northwest, is illustrated by the Welland canal, the Great Western, and the Ontario and Huron railways.

Among the prominent features of Canada, her military position is worthy of notice. She is the most northern power upon this continent; and in configuration upon the globe she presents a triangular form, the apex of which forms the extreme southing, and penetrates the United States frontier; while the base is remote, and rests upon the icy regions of the north.

Flanked by the inhospitable coast of Labrador upon the east, and by the almost inaccessible territories of the Hudson's Bay Company on the west, she can only be attacked "in front;" when, retiring into more than Scythian fastnesses on the Ottawa and Saguenay, and keeping up communication with the strong fortress of Quebec, she can maintain prolonged and powerful resistance against foreign hostile invaders.

Viewing Canada as a whole, it may be described as a broad belt of country lying diagonally along the frontier of the United States, from northeast to southwest, from Maine to Michigan, and between the 42d and 49th parallels of north latitude. The great river St. Lawrence presents itself conspicuously as a leading feature in its physical geography, traversing, in a northeasterly course, the grand valley which it drains in its mighty career to the ocean.

The very beautiful map of the basin of the St. Lawrence hereunto appended, and prepared expressly for this report, by Thomas C. Keefer, esq., a civil engineer of high standing and eminent abilities, attached to the Canadian Board of Works, may be relied upon for its accuracy.

An attentive consideration of this new and excellent map is respectfully solicited. It presents many points of interest, exhibiting, as it does, at one view, the mighty St. Lawrence, the chain of "fresh water Mediterraneans," of which it is the outlet, and which are indeed a geographical wonder, as also their position and relation to the States of the West, and the vast and fertile valley of the Mississippi, with the various outlets to the sea, of this valuable section of North America.

COMMERCE OF CANADA.

Before the close of the last century the commerce of Canada had reached a respectable position. The St. Lawrence was then the only outlet of Canada, and also of that portion of the United States lying upon and between Lakes Ontario and Champlain; and the port of Quebec received indifferently American and Canadian produce for exportation to the West Indies and British North American colonies.

Although Upper Canada then scarcely produced sufficient food to support her own immigration, the lower province was already a large exporter of wheat, and continued so until the ravages of the Hessian fly reduced her to her present position of an importer from the upper province.

Mr. Keefer, in his Prize Essay upon the Canals of Canada, says:

"A wise and liberal policy was adopted with regard to our exports previous to 1822. The products of either bank of the St. Lawrence were indifferently exported to the sister colonies, as if of Canadian origin; and those markets received not only our own, but a large share of American breadstuffs and provisions. Our timber was not only admitted freely into the British markets, but excessive and almost prohibitory duties were imposed upon importations of this article from the Baltic, for the purpose of fostering Canadian trade and British shipping. The British market was closed, by prohibition, against our wheat until 1814, which was then only admitted when the price in England rose to about two dollars per bushel—a privilege in a great measure nugatory; but the West Indies and lower provinces gave a sufficient demand so long as the free export of American produce was permitted by this route. As early as 1793, our exports of flour and wheat by the St. Lawrence were as high as 100,000 barrels, and rose in 1802 to 230,000 barrels. The Berlin and Milan decrees, and English orders in council thereon, of 1807; President Jefferson's embargo of 1808, with increased duties levied upon Baltic timber, gave an impulse to the trade of the St. Lawrence, so that the tonnage arriving at Quebec in 1810 was more than ten times greater than in 1800. The war of 1812 and 1815 naturally checked a commerce so much dependent upon the Americans; and we therefore find but little increase of the tonnage arrived in 1820 over that of 1810. In 1822 the Canada Trade Acts of the imperial parliament, by imposing a duty upon Amer-

ican agricultural produce entering the British American colonies and the West Indies, destroyed one-half of the export trade of the St. Lawrence; and the simultaneous abundance of the English harvest forbade our exports thither.

“As a recompense for the damage done by the Trade Act of 1822, our flour and wheat, in 1825, were admitted into the United Kingdom at a fixed duty of five shillings sterling per quarter. The opening of the Erie and Champlain canals at this critical juncture gave a permanent direction to those American exports which had before sought Quebec, and an amount of injury was inflicted upon the St. Lawrence, which would not have been reached had the British action of 1825 preceded that of 1822. The accidental advantages resulting from the differences which arose between the United States and Britain, on the score of reciprocal navigation, (which differences led to the interdiction of the United States export trade to the West Indies, and reduced it from a value of \$2,000,000, in 1826, to less than \$2,000 in 1830,) restored for a time our ancient commerce. The trade of the St. Lawrence was also assisted by the readmission *free* in 1826 (after four years exclusion) of American timber and ashes for the British market, and by the reduction of the duty upon our flour for the West India market, and therefore rapidly recovered, and in 1830 far surpassed its position of 1820.

“In 1831 there was a return to the policy which existed previous to 1822. United States products of the forests and agriculture were admitted into Canada *free*, and could be exported thence as Canadian produce to all countries, except the United Kingdom; and an additional advantage was conferred by the imposition of a differential duty, in our favor, upon foreign lumber entering the West Indian and South American possessions. Our exports of flour and wheat by sea in that year were about 400,000 bushels—chiefly to Britain, where a scarcity then existed, and for the first time exceeding the flour export of 1802. This amount, in consequence of a demand nearer home, and the ravages of the fly in Lower Canada, was not again exceeded until 1844. Between 1832 and 1839 a scarcity and a great demand for breadstuffs arose in the United States, and the crops in England being unusually abundant between 1831 and 1836, the order of things in the St. Lawrence was reversed, so that in 1833 wheat was shipped from Britain to Quebec. A farther supply came also from Archangel. These imports in 1835 and 1836 amounted to about 800,000 bushels. A similar demand in 1829 had turned our exportation of breadstuffs inland to a very large amount; yet, notwithstanding these fluctuations of our exports, the shipping and commerce of the St. Lawrence rapidly increased in importance and value, with no continued relapse, down to the year 1842. The revulsion in 1842 was general, being one of those periodical crises which affect commerce, but was aggravated in Canada by a repetition of the measures of 1822, not confined this time to the provision-trade only, but attacking the great staple of Quebec—timber. The duties on Baltic timber, in Britain, were reduced, the free importation of American flour was stopped by the imposition of a duty thereon, and our trade with the West Indies annihilated by the reduction of the duty upon American flour brought into those islands. By

imposing a duty of two shillings sterling per barrel upon American flour imported into Canada, and reducing it in the West Indies from five to two shillings, an improvement equal to five shillings sterling per barrel was made in the new position of American flour exported from the Mississippi, Baltimore, and New York. The value of our trade with the West Indies in 1830 (during the exclusion of the Americans) amounted to \$906,000; and in 1846, it was \$4,000.

“Our export to the lower provinces (Nova Scotia, New Brunswick, Cape Breton, &c.) was at its highest point in 1836, since which time it has fluctuated, but never reached its position of that year. It will be remembered that at that time the Americans were importing breadstuffs, and could not, therefore, compete with Quebec in the supply of these provinces. The act of 1842 was nearly as destructive to our trade with the gulf provinces as with the West Indies; but since the opening of our canals, there is a marked increase in this trade. In 1841 (before the passing of the Gladstone act) our export trade with the lower provinces was worth \$456,000 annually, which amount fell off to \$204,000 in 1844. In 1845 the enlarged Welland and Beauharnois canals were opened, and since that period it has gradually recovered, so that, since the opening of the enlarged Lachine canal, it has exceeded its position of 1841, and is now increasing every year. As the interruption of our trade with the West Indies by the Canada Trade Act in 1822 was followed in 1825 by the permanent admission of our breadstuffs into the British market, and by the concessions in 1826, so its second interruption, or rather destruction, in 1842, was succeeded in 1843 by the important privilege of exporting American wheat, received, under a comparatively nominal duty, as Canadian, without proof of origin, in the British market. This measure was a virtual premium of about six shillings sterling per quarter upon American exports to Britain through the St. Lawrence; but, inasmuch as it was an indirect blow at the English Corn Laws, it contained—like a bombshell—the elements of its own destruction. This very partial measure rapidly swelled our exports of flour and wheat, so that in 1846 over half a million of barrels, and as many bushels, of these two staples were shipped from Canada by sea.

“The injury threatened to the timber trade of the St. Lawrence by the act of 1842 was averted by the subsequent railway demand in England, so that our exports of this article have been greater since that period than before.

“In 1846 steps were taken in the British legislature which led to the withdrawal of that preference which the St. Lawrence had so fitfully enjoyed as the route for American exports to England; and the new system came into full operation in 1849. The intermediate demand, resulting from the failure of the potato crop, has thrown much uncertainty upon the final tendency of this important change in our relations with the mother country; and as a necessary consequence, the ancient system of ‘ships, colonies, and commerce’ has fallen to the ground. In 1847 the control of our customs was abandoned by the imperial legislature, and the last and most important measure, which has relieved us from the baneful effects of the British navigation laws, came into operation on the 1st of January, 1850.”

It will thus be seen that previous to 1846 the colonial policy of the British government, although vacillating and contradictory, encouraged the sea-trade of Canada by affording a market for her productions, and discouraged exports inland to the United States. Likewise, by imperial control over the colonial tariff, the mother country established differential duties against importations inland, thus throwing the supply of Western Canada into the ports of Montreal and Quebec and the contraband dealers on the western frontier.

Nearly the whole revenue from customs being collected in Lower Canada, although an equal and even greater consumption was claimed for the upper province, a controversy respecting the division of this revenue became annually more and more severe, with the increased population and demands of Canada West, and was the subject of frequent appeal to, and of adjustment by, the mother country. The insurrection of the French population, and consequent suspension of the constitution of Lower Canada, was taken advantage of to bring about a legislative union of the two provinces, which accordingly took place in 1841, and put an end to the dispute about the division of the revenue. Perhaps the remembrance of this altercation had some influence upon the subsequent action of the Canadian legislature upon the subject of differential duties. The imperial government formally abandoned all control over the Canadian tariff in 1847, and, in their next session, the colonial legislature abolished the differential and prohibitory duties on imports inland; thus placing the mother country in the same relative position as foreigners. The commercial interest of the lower province yielded to this policy from sympathy with the free-trade movements in England; while it is probable that the western province supported the measure as a means of emancipation from the monopoly of their imports by Montreal and Quebec.

The repeal (by the abolition of the British Corn Laws) of all privileges in favor of Canadian breadstuffs in the British markets, the hostile tariff of the United States, and the trammelled condition of the St. Lawrence navigation, (yet unfreed from the restrictions of the British Navigation Laws,) fell heavily upon the Canadians. The scanty supply of vessels in the St. Lawrence, (hitherto a "close borough," for British shipping only,) and the abundant supply of outward freights afforded by the timber coves of Quebec, had so enhanced all other freight outward, that nothing but the premium offered by the British Corn Laws made the route through the St. Lawrence more favorable than by New York, even with the burden of the United States tariff. When, therefore, this premium was withdrawn, and the English market was no longer the most profitable, the exports of Canada West (the surplus-producing section of the province) turned toward New York. The proximity of this city to the wheat-exporting districts of Canada, and the facilities of exporting and importing in bond, by New York canal and other internal artificial avenues, produced such a diversion of Canadian exports of flour and wheat that the quantity so sent to New York in 1850 exceeded, largely, that exported by sea through the St. Lawrence.

The following statement will show the relative export of Canadian flour and wheat inland and by sea :

Flour and wheat exported from Canada in 1850 and 1851.

Exported to and through—	1850.		1851.	
	Flour.	Wheat.	Flour.	Wheat.
	Barrels.	Bushels.	Barrels.	Bushels.
Buffalo	19,244	66,001	10,860	101,655
Oswego	260,872	1,094,444	259,875	670,202
Ogdensburg	32,999	.....	30,609	18,195
Lake Champlain.....	90,988	192,918	11,940	626
Total exported inland.....	404,103	1,353,363	313,284	790,678
Montreal and Quebec	280,618	88,465	371,610	161,312
Total exported.....	684,721	1,441,828	684,894	951,990
Decrease in inland export to United States.....			90,819	562,695
Increase in sea export from Canada.....			90,992	72,847

The following statement shows the amount of Canadian flour and wheat imported, the amount bonded for exportation, and the amount entered for consumption at each port of entry :

Ports.	Total imported 1851.		Total bonded 1851.		Total duty paid 1851.	
	Flour.	Wheat.	Flour.	Wheat.	Flour.	Wheat.
	Barrels.	Bushels.	Barrels.	Bushels.	Barrels.	Bushels.
Buffalo.....	10,860	101,655	10,763	88,316	97	13,339
Oswego.....	259,875	670,202	258,657	661,409	1,218	8,793
Ogdensburg	30,609	18,195	30,587	17,773	22	422
Lake Champlain.....	*11,940	626	11,940	.....	.....	626
At other ports.....	313,284	790,678	311,947	767,498	1,337	23,180
	88	5,664	.....	.....	88	5,664
	313,382	796,342	311,947	767,498	1,425	28,844

* From Canada return of exports.

It will be seen that there is a *decrease* in the importation from Canada in 1851, and an increase in her exports by sea, which do not, with respect to wheat at least, counterbalance the deficiency of inland exports. As the Canadian wheat crop of 1851 exceeded that of any former year, the presumption is that the low prices which ruled during last year retained much of the surplus in the province.

The fact, however, that, of the flour exported from Canada, the number of barrels which were sent to the United States in 1850 exceeded the total exports by sea in that year, and that in 1851 this was reversed,

is very significant, considering that the Canadians are now trading upon equal terms with the United States in the markets of the mother country and those of other foreign States. To elucidate this, I must refer to the

INTERCOLONIAL TRADE.

The export of flour from Canada, *by sea*, to the British North American colonies of Nova Scotia, New Brunswick, and Newfoundland, since 1844, has been as follows :

	Barrels.
1844	19,530
1845	26,694
1846	35,152
1847	66,195
1848	65,834
1849	79,492
1850	140,872
1851	154,766

The amount exported to these colonies, in bond, through New York and Boston, in 1851, was—

	Flour.	Wheat.
	<i>Barrels.</i>	<i>Bushels.</i>
New York	86,689	6,798
Boston	4,590	.....
Total	91,279	6,798

making the total exports to these colonies 246,039 barrels—an increase of over twelve-fold in eight years.

The substitution of Canadian for American flour in the consumption of the “lower colonies” has been brought about by the opening of the ship-canals on the St. Lawrence, aided by a reciprocity arrangement between these colonies and Canada; and because the exclusion of the latter from the American domestic market has forced Canadian flour through the St. Lawrence, to compete in the foreign markets of the United States.

The articles of wheat and flour have been taken, for the sake of convenience, to illustrate the export-trade of Canada, its direction and distribution. The remarks above, however, apply to all other provisions of which she produces a surplus.

In the import-trade, sugar, one of the leading articles of consumption, may be taken to illustrate a change as favorable to Canada as that in the export of flour. In 1849 the value of sugars imported from the United States was double that from the lower colonies. In 1851 the value from the United States was \$258,848, and from the colonies \$269,300. In 1849 nearly one-half of the sugar was imported, inland, from and through the United States—the proportion being 5,152,000

pounds, out of the total importation of 11,613,000 pounds. In 1850 the importation rose to 15,736,000 pounds, of which the United States furnished 5,522,000 pounds, or a little more than one-third. In 1851 the number of pounds imported was 20,175,046, of which 5,640,000 pounds were from the United States, and 5,880,000 pounds from the lower colonies.

The imports of sugar into Canada in 1851 were:

From British colonies.....	\$269,300
“ United States	258,848
“ Other foreign countries.....	226,316
“ Great Britain.....	171,140
	<hr/>
	925,604
	<hr/>

With respect to the *route* of importation, the inland import in 1849, as we have seen, nearly equalled that by sea; but in 1851 the value of sugars imported by sea was \$712,408, against \$278,468 by inland routes. Canadian vessels load at the lake ports with breadstuffs and provisions, which they carry, without transhipment, to Halifax or St. John, Newfoundland, exchanging there for a return cargo of sugars, molasses, fish, and oils. This trade is, of course, confined to British vessels; and as fish and other products of Nova Scotia and New Brunswick, and the flour, provisions, &c., of Canada, are exchanged duty-free, a direct free-trade between the maritime and agricultural districts of British North America is now in full operation, from which Newfoundland only is excluded—the necessities of that government forbidding her from taking off the duty on Canada flour. Her fish and oil are therefore treated as foreign in the Canadian ports.

The subjoined statement shows the progressive imports into Canada of sugars from the British North American colonies:

1849.....	£28,716	\$114,864
1850.....	51,317	205,268
1851.....	67,325	269,300

It appears from the foregoing that the commerce of Canada is at present in a state of transition. No certain predictions can now be offered to show how far her efforts at commercial independence will be successful, or what influence she may be enabled to exert over the general commerce of the western lakes and adjoining districts. A short review of her position and resources will be the best mode of presenting this question.

THE COMMERCIAL PORTS OF CANADA.

Quebec.—In latitude 46° 48' north, longitude 71° 12' west. Population in 1851, 42,052.

Quebec is the most ancient, as well as the most important, port of Canada, and embraces the outports of Gaspé, New Carlisle, the Magdalen Islands, and several in the river below Quebec. The province of Canada extends eastward to the Straits of Belle-Isle, embracing the

island of St. Paul, (between Newfoundland and Cape Breton,) the Magdalen islands, the Bird rocks, and Anticosti. In the Magdalens a sub-collector is stationed, who reported some \$226,000 worth of exports in 1848; but no return of imports is taken, and no duties, apparently, are levied. The other islands are occupied only for light-houses and relief stations.

The harbor of Quebec is not unlike that of New York—the island of Orleans serving as a barrier from a northeast sea, and, like Long Island, affording two channels of approach. A frontage of about fifteen miles on both sides of the river not only affords the necessary wharves, but coves of sufficient magnitude to float some thirty to forty millions of cubic feet of timber, about eighty millions of superficial feet of deals, besides staves, lathwood, &c. A *fresh* water tide, rising eighteen feet at “springs,” offers no impediment to the shipment of timber, the great business of the port, the vessels so engaged being anchored in the stream, (which affords good holding-ground,) where their cargoes are floated to them at every tide. The tide extends ninety miles above Quebec, and the water does not become perfectly salt until an equal distance is reached below; thus there is a fresh-water tide of one hundred and eighty miles beyond the salt water, and sea navigation to Montreal, ninety miles farther, or two hundred and seventy miles from salt water. The river navigation may be said to terminate about one hundred and fifty miles below Quebec, (where pilots are first taken,) but the combined gulf and river navigation extends upwards of seven hundred miles before we reach the Atlantic, with which it has no less than three connexions. The most northern of these—the straits of Belle-Isle—is in navigable order about five months, and affords a passage to Liverpool more than two hundred miles shorter than the route by Cape Race, making the distance from Quebec more than four hundred miles shorter than from New York. By using this passage the navigable route between the foot of Lake Ontario and any port in Britain is as short as that from New York harbor to the same port. The middle channel, by which the Atlantic is reached, is about fifty miles wide, and contains St. Paul’s island, which, with its two light-houses, affords an excellent point of departure. By this channel Quebec is brought nearer to any port in Europe, Africa, or the Indian ocean, than New York. The southern passage is known by the name of the Gut of Canso, and is invaluable to the fishing, coasting, and West India trade.

The gulf of and river St. Lawrence have been most elaborately surveyed by the accurate and accomplished Captain Bayfield, Royal navy, an inspection of whose charts is indispensable to a correct appreciation of the commercial qualities of this navigation. The exclusive monopoly by British ships of this route hitherto, the buoyant character of the cargo—timber, the ignorance of the masters, and excesses of the men, have been more fruitful causes of disaster than the natural contingencies of the route. Heretofore, in many instances, old and un-serviceable vessels, commanded by men whose pay was less than that of a good mechanic, were sent out in September for a cargo of timber. A month of dissipation in Quebec sent the crew to sea diminished in numbers by desertion, with weakened physical powers, and insufficient

clothing. When, therefore, the cold November blasts in the gulf were encountered, for want of ordinary exertions, strength, and intelligence, the vessel went ashore. Notwithstanding, considering that over half a million of tons of shipping annually enter the St. Lawrence, it will be found that the per-centage of losses has been no greater than that of the British and Irish channels, or the keys of Florida.*

The tonnage inward and outward, by sea, from Quebec and Montreal, for 1851, with the number of disasters within the gulf and river, was as follows :

Ports.	INWARD.			OUTWARD.			TOTAL.			Number of disasters.
	No. of vessels.	Tons.	Men.	No. of vessels.	Tons.	Men.	No. of vessels.	Tons.	Men.	
Quebec	1,305	533,821	17,765	1,394	586,093	19,300	2,699	1,119,914	37,065	11
Montreal	231	55,660	2,181	195	37,568	1,540	426	93,228	3,721	...
Total	1,536	589,481	19,946	1,589	623,661	20,840	3,125	1,213,142	40,786	11

The disasters at Key West, for the same year, were about fifty in number, and on the upper St. Lawrence, between Lake Superior and Montreal, two hundred and sixty-three; where, says the reporter, "five steamers, three propellers, and thirty-seven sailing vessels went out of existence entirely."

Six hundred and eighty-eight sailing vessels, numbering 125,726 tons, and four steamers, giving 1,462 tons, form the list of wrecks of vessels belonging to the United Kingdom for 1850.

Such an extent of land-locked navigation as the St. Lawrence presents between the pilot-ground (near the Saguenay) and the Atlantic would be, in thick weather, or snow storms, considered hazardous, were it not for the great width of beating-ground, (nowhere less than twenty-five miles, and averaging over fifty,) the absence of all shoals or reefs in or near the channel, and the admirable soundings displayed by the charts.

The trend of the Atlantic coasts of Newfoundland and Cape Breton converge upon St. Paul's island, a lofty and picturesque rock, for which a vessel may stand bold in a fog. Inside of St. Paul's a bank, with sixty fathoms, leads, by a direct line on its outer edge, clearing Anticosti, into the chops of the St. Lawrence; northward of this line is deep water; southward, regular soundings; so that, in thick or foggy weather, the lead is an unerring guide. On entering the river the south shore gives uniform soundings all the way to the pilot-ground, the water shoaling so regularly that a vessel may at any point determine her distance from the shore within a mile by the lead alone, while at all points she may approach this shore within this distance.

* See Part X for statements of timber trade, and tonnage employed.

The admirable position of Pointe des Monts, (with a light-house one hundred feet above the water,) projecting with a bold shore several miles from the general trend of the north shore, forms, with its anchorage on both sides, a common point of departure for inward and outward-bound vessels.

The recent application of steam to ocean commerce greatly enhances the value of this navigation; particularly with reference to communication with Britain, the great centre of European steam navigation and commerce. The two great drawbacks to ocean steam navigation are, the quantity of fuel which must be carried and the resistance which a heavy sea offers to progress whether the wind be fair or foul. On the St. Lawrence route these are reduced to a minimum. The distance from the coast of Ireland to St. John, Newfoundland, or to the straits of Belle-Isle, is under 1,700 miles; and coal is found in abundance, and of excellent steaming qualities, at several points in the Gulf of St. Lawrence. The remainder of the voyage to Quebec will be made in comparatively smooth water, as the steamer will run under the shelter of either shore, according to the direction of the wind.

This notice of the position of the port of Quebec with reference to steam navigation with Europe has been deemed essential at this time, inasmuch as the government of Canada are now receiving proposals for the establishment of a line of screw-steamers to ply upon this route during the season of navigation, and to communicate with the terminus of the railroads from Canada, at Portland, for the present, and Halifax as soon as the scheme of a grand intercolonial railway from Quebec to Halifax shall have been carried out.

It may now be proper to allude to the inducements which lead to this course—in other words, to the

SEA-TRADE OF CANADA.

The great staple of Quebec is timber, and hitherto her trade has been chiefly confined to this staple, Montreal being the point where the agricultural exports of the upper province are exchanged for the supplies of foreign goods required for the same districts. The timber is chiefly supplied by the Ottawa river, (which, with its numerous and important tributaries, drains an area of over ten thousand square miles of the finest pine-bearing land,) and also from the north shore of Lake Ontario, which is drained by a remarkable chain of lakes emptying through the rivers Otonabee and Trent, into the Bay of Quinte, (thus escaping the open water of Ontario,) from which the rafts are floated to Quebec. Thus, by the simple and inexpensive process of rafting, timber is borne by the current, at a cost of three or four cents per cubic foot, to Quebec, from a distance of six hundred miles—even from the lands drained by Hudson's bay and Lake Huron. The annual supply varies with the export, but seems capable of almost illimitable extension. In 1846 the supply of square timber exceeded thirty-seven millions of cubic feet; that of sawed deals, sixty millions of feet, board measure; besides some fifty thousand tons of staves, lath-wood, &c.; the whole (at the usual rate of forty cubic feet to the ton) amounting to

one million six hundred and fifty thousand tons, and worth, at the ruling prices of that year, between five and six millions of dollars. Reducing the cubic to superficial measure, for the sake of comparison with Albany and Bangor, the supply of square timber and deals (exclusive of staves, lath-wood, &c.) brought to Quebec in that year exceeded five hundred millions of feet. The stock wintered over exceeded twenty-one millions of cubic feet of timber, and the export twenty-four and a quarter millions, loading some thirteen or fourteen hundred vessels, of an aggregate tonnage of over half a million.

The following shows the number and tonnage of vessels inward and outward in Quebec, with the export of white-pine timber, (the leading article,) for the last eight years :

Year.	INWARD.		OUTWARD.		EXPORT OF WHITE PINE.
	Vessels.	Tons.	Vessels.	Tons.	Cubic feet.
1844	1,232	451,142	1,239	453,894	11,950,438
1845	1,489	576,541	1,499	584,540	15,828,880
1846	1,480	568,225	1,467	572,373	14,392,220
1847	1,210	479,124	1,215	489,817	9,626,440
1848	1,188	452,436	1,194	457,430	10,709,680
1849	1,184	465,088	1,243	481,227	11,621,920
1850	1,196	465,804	1,275	494,021	13,040,520
1851	1,305	533,821	1,394	586,093	15,941,600

The greatest number of ships outward in any year previous to 1851 was in 1845, when 1,499 cleared out, with a tonnage of 584,540. In 1851 the *number* of vessels outward is less, but the tonnage is greater, than that of any former year. It must be remembered that, since 1845, the duty upon Baltic timber in Britain has been reduced.

The value of exports from Quebec depends upon the market price of timber, which ranges nearly one hundred per cent. It was greatest in 1845, when the price of timber was highest, although the tonnage outward, which is the true measure of the commerce, was less than in 1851. The progress of the imports is an index of the prosperity of the port, as the articles are general merchandise, which do not fluctuate as much in value as the exports.

The following is a statement of imports for a series of years at the port of Quebec :

1841.....	£217,917	\$871,668
1842.....	216,670	866,680
1843.....	402,227	1,608,908
1844.....	655,869	2,623,476
1845.....	712,398	2,849,592
1846.....	750,983	3,003,932
1847.....	796,917	3,187,668
1848.....	574,208	2,296,832
1849.....	438,673	1,754,692
1850.....	686,441	2,745,764
1851.....	833,904	3,335,616

The progress of exports inland, which for 1851 includes transit goods for United States, is shown as follows:

Year.	By sea.	Inland.	Total exports	
1849.....	\$4,833,872	\$130,988	£1,241,215	\$4,964,860
1850.....	5,027,180	162,912	1,297,523	5,190,092
1851.....	5,621,988	755,588	2,594,394	6,377,576

The imports of 1851 are exclusive of railway and other iron, imported in transitu, for western States, valued at \$750,000.

The imports at Quebec in 1851 greatly exceed those of any former year, and the whole business of the port, import and export, for the past year, probably equalled its best ones when under the protective policy of the mother country.

In order, however, to present the sea-trade of Canada, it becomes necessary to treat Quebec and Montreal as one port. The value of the exports of Quebec is generally more than double those of Montreal, while the imports of the latter are double those of Quebec. This latter difference is sensibly lessening in favor of Quebec, as that city is now becoming the point of transhipment for goods in transit to western States, which will relatively greatly increase the value of her imports; while, as she will always be the timber mart, no corresponding decline of her exports is to be anticipated. Ships of the largest burden are brought up to Quebec by the tide, but the approach to Montreal is limited by the shallowness of water in Lake St. Peter, giving at low water only *thirteen* feet, and is burdened with a towage against the current of the river. The work of deepening Lake St. Peter is now in progress, with fair prospects of success, and in another year or two vessels drawing fifteen feet water may come to Montreal.

Vessels loading at Montreal are frequently obliged to lighter a portion of their cargo through the lake, and are, therefore, re-cleared at Quebec. Again, imports in the large ships which stop at Quebec are lightered up to Montreal; thus rendering it almost impossible to separate the commerce of the two ports.

Again, by means of the ship-canal, the inland lake and river ports of Canada carry on a direct trade by sea; and, although the regulations require their exports to be reported at tide-water, their direct imports are not noticed at Montreal or Quebec, but are passed up under a "frontier bond," and entered at the port of destination.

In the following statement the imports in transit for the United States and those under frontier bond for Upper Canada ports are included:

Gross trade of ports of Montreal and Quebec.—Imports and exports, 1851.

Imports at Quebec.....	\$4,091,204	Exports from Quebec	\$5,623,988
Imports at Montreal.....	9,177,164	Exports from Montreal.....	2,503,916
Imports direct per inland ports, not reported elsewhere.....	3,144,316	Exports from inland ports di- rect, not reported elsewhere .	4,512
Total imports at and through Montreal and Quebec.....	16,412,684	Total exports by sea and inland navigation.....	8,132,416

which makes the gross value of the export and import trade of Montreal and Quebec for 1851 amount to \$24,545,100.

Ship-building.

There are in Quebec about twenty-five ship-building establishments, and eight or ten floating docks, capable of receiving largest-class vessels. The class of vessels built range from 500 to 1,500 tons and upwards, and there has been lately established a resident “Lloyd’s surveyor,” to inspect and class the ships.

The average cost is as follows :

Hull and spars.....	\$22 to \$30 per ton.
Complete for sea.....	32 to 40 “

The number built were, in

1848, 24 square-rigged, 18,687 tons,	} and smaller craft, making, in all	{	Total tons.
1849, 28 “ “ 23,828 “			19,909
1850, 32 “ “ 29,184 “			24,396
1851, 40 “ “ 38,909 “			30,387
			40,567

Trade and tonnage.

The tonnage cleared outward to the lower colonies was :

Year.	Quebec.	Montreal.	Total.
1851	10,021	8,524	18,545
1850	12,588	9,819	22,407

The value of exports to the colonies by sea, and via the United States, and imports therefrom, has progressed as follows :

Year.	Exported by sea.	Exported in bond, via the U. S.	Total value of exports.	Total value of imports.
1849.....	\$116,581	\$32,359	\$148,940	\$48,917
1850.....	202,194	58,487	260,681	96,404
1851.....	241,791	119,353	361,144	124,350

The following is a summary statement of the sea and inland trade of Canada, contracted for 1851:

IMPORTS.		EXPORTS.		Total imports.	Total exports.
Sea.	Inland.	Sea.	Inland.		
\$15,324,348	\$8,681,680	\$8,081,840	\$3,259,888	\$24,006,028	\$11,341,728

Inland exports, \$3,259,888; imports, \$8,681,680. Total, \$11,941,568
 Sea exports, \$8,081,840; imports, \$15,324,348. Total, \$23,406,188

The exports inland are taken from the imports at United States custom houses. This makes the reported value of the sea nearly double that of the inland trade, and makes the gross trade of Canada, or the value of her exports and imports for 1851, amount to \$35,347,756, of which \$24,000,000 are imports, and only \$11,000,000 exports. In the exports there should be included the value of ships built for sale at Quebec, at least \$1,000,000 more in 1851, and for undervaluation of exports *inland* a much larger sum; so that a full estimate of the gross trade of Canada for 1851 will not fall short of a value of forty millions of dollars.

The published Canadian returns for 1850 contain no statement, either of imports in transitu for the United States, or those which pass up under frontier bond. There are, therefore, no means of comparing the above statement with former years. It has been shown heretofore that, in the staple of wheat and flour, there has been a marked gain by the sea at the expense of the inland trade; yet the importation inland has sensibly increased over that of 1850.

The imports *entered* at inland ports, compared with those *entered* at Montreal and Quebec, were as follows:

Ports.	1849.	1850.	1851.
Montreal and Quebec	\$6,523,232	\$8,931,868	\$12,552,780
Inland ports.....	5,491,336	8,050,200	10,697,660
Total.....	12,013,568	16,982,068	23,250,440

The value of imports from the colonies and "other foreign countries" was as follows:

Year.	Colonies.	Other foreign countries.	Total.
1849.....	\$195,668	\$167,296	\$362,964
1850.....	385,616	365,216	750,832
1851.....	497,400	939,976	1,437,376

Much of the imports returned as “from other foreign countries” is made *through* the British North American colonies. The rapid increase of the former is, in a great measure, due to the trade with the latter. Sugars, &c., the growth of the Spanish West Indies, purchased in Halifax, are reported from “other foreign countries,” in order to pass the lower invoice.

The arrival of foreign vessels at Quebec in 1850 and 1851, the only two years in which they have been permitted to carry to England, has been as follows :

	1850.	1851.
Norway.....	45 vessels.	47 vessels.
United States.....	24 do.	35 do.
Prussia.....	19 do.	21 do.
Russia.....	3 do.	8 do.
Sweden.....	1 do.	3 do.
Mecklenburg.....	0 do.	2 do.
Hanover.....	2 do.	1 do.
Portugal.....	1 do.	0 do.
Holland.....	1 do.	0 do.
	96 do.,	117 do.,
	(making 37,554 tons.)	(making 50,716 tons.)

The abundance of freight in the shape of lumber at Quebec, guaranteeing a full cargo outward to every vessel entering the port, must produce its effect on inward freights. More than three-fourths of the inward tonnage are now empty; but in railroad iron, salt, and coal, the imports are rapidly increasing since the completion of the canals has let down lake vessels to carry these articles inland. The present regulations prevent American vessels from descending below Montreal, and are injurious to this commerce.

Port of Montreal.

Latitude 45° 31' north, longitude 73° 35' west; population in 1851, 57,715.

This city, at the head of sea navigation proper, is the most populous in British North America. Although not accessible (like Quebec) to the largest class of shipping, its position for a varied and extensive commerce is more commanding, inasmuch as it is the centre of a more fertile area, more numerous approaches, and possesses within itself every requisite for the support of a large population.

Montreal is picturesquely situated at the foot of the “Royal mountain,” from which it takes its name, upon a large island, at the confluence of the Ottawa and St. Lawrence, which, both in fertility and cultivation, is justly considered the garden of Canada East.

The main branch of the Ottawa, which is the timber highway to Quebec, passes north of Montreal island, and enters the St. Lawrence about eighteen miles below the city. About one-third of its waters are, however, discharged into Lake St. Louis, and joining, but not ming-

ling, at Caughnawaga, the two distinct bodies pass over the Sault St. Louis and the Norman rapids—the dark waters of the Ottawa washing the quays of Montreal, while the blue St. Lawrence occupies the other shore; nor do they lose their distinctive character until they are several miles below Montreal.

The quays of Montreal are unsurpassed by those of any city in America: built of solid limestone, and uniting with the locks and cut-stone wharves of the Lachine canal, they present, for several miles, a display of continuous masonry which has few parallels. Like the levees of the Ohio and Mississippi, no unsightly warehouses disfigure the river-side. A broad terrace, faced with gray limestone, the parapets of which are surmounted with a substantial iron railing, divides the city from the river throughout its whole extent.

This arrangement, as well as the substantial character of the quays, is a virtue of necessity, arising from remarkable local phenomena. Montreal being the terminus of many miles of broken water, embracing the rapids of the St. Lawrence, an extraordinary quantity of “anchor” and “bondage” ice is brought down on the approach of winter, which is first arrested at the delta entering Lake St. Peter, forty miles below the city. The surface here, being covered by arrested ice, is quickly solidified, against which the ceaseless flood of coming ice is checked, drawn under, and finally arrested, until the whole river, for a distance of fifty miles, or more, is filled with ice, (as logs fill the boom in a mill-pond,) but packed, and jammed, and forced under, so as to occupy a considerable portion of the water-way of the river, which thereupon commences to rise in order to increase its area of discharge. The winter level of water in Montreal harbor remains permanently at a point some ten or fifteen feet above the summer one, covering the wharves, which are invisible until the departure of the ice. When the river has become sufficiently elevated to secure a passage for its waters, the floating masses on its surface are firmly bound together, presenting the rugged aspect of a quarry; and, after several convulsive throes, the surface attains a state of rest. The advent of spring again breaks the calm, when, after some magnificent displays of hydraulic pressure, the ice departs *en masse*, and in twenty-four hours the navigation is resumed.

It is while settling to rest for the winter, and when “waking up” on the approach of spring, that the majestic phenomenon of an “ice-shove” is seen. During the elevation of the vast volume of the St. Lawrence some ten or fifteen feet and its return again to its bed, momentary arrestations of both floating and submerged ice take place, when the river above instantly rises until a “head” of water is accumulated which is fearfully irresistible. The solid crust of ice on the surface, two or three feet in thickness, is summarily and suddenly lifted and forced right and left; a field of ice, perhaps of several square miles in area, is set in motion, and, crushing against the unyielding quays, is forced upward, until it is piled “mountains high” on the terrace in front of the city. No warehouses can be erected on the water’s edge without first placing an effectual barrier between them and the moving ice; and no craft of any description can be laid up for the winter in this harbor,

which present the unique spectacle of a thriving seaport, in which, for nearly five months, not a spar is to be seen.

Montreal occupies the centre of an extensive plain, cut in every direction by the St. Lawrence and Ottawa, with their tributaries, forming several large and fertile islands contiguous to the main one occupied by the city. This plain, although nearly one thousand miles by the river from the Atlantic, is scarcely elevated one hundred feet above tide-water, and, in the words of the provincial geologist, "constitutes the valley proper of the St. Lawrence, occupying a breadth of forty miles; the nature of the materials of which it is composed (a deep and highly leigated deposit of argillaceous, arenaceous, and calcareous matter) rendering it impossible to conceive of a region more fitted for the purposes of agriculture."

The sea tonnage of the port of Montreal was—

Year.	INWARD.			OUTWARD.		
	Number.	Tons.	Men.	Number.	Tons.	Men.
1850.....	211	46,156	1,944	207	45,954	1,914
1851.....	231	55,660	2,181	245	56,998	2,254

The aggregate tonnage at Montreal and Quebec is greater than the whole tonnage outward by sea, because vessels partly laden at Montreal are reloaded at Quebec. The above return refers only to vessels from and to sea.

The tonnage of the port, registered under the imperial act, comprises 185 vessels, making 20,000 tons.

The progressive value of imports and duties collected is—

Year.	Imports.	Duties.
1848.....	\$5,925,672	\$561,916
1849.....	6,183,892	767,404
1850.....	7,172,792	1,032,636
1851.....	9,179,224	1,256,760

A new tariff came into operation on the 25th of April, 1849, increasing the duties an average of about thirty per cent. on former rates.

The progressive exports have been—

Year.	By sea.	Inland.	Total.
1848.....	\$1,288,244	\$44,496	\$1,332,740
1849.....	1,610,944	90,016	1,700,960
1850.....	1,768,644	89,560	1,858,204
1851.....	2,231,500	272,416	2,503,916

The mode of keeping the provincial returns does not do justice either to the exports or imports of Montreal. Imports landed here for Toronto, Hamilton, and other inland ports, are not entered, but pass up under "frontier bond," and are scattered over the inland ports. No aggregate accounts of these are published, and their value can only be ascertained at inland ports. The nominal value passed up under these "frontier bonds," as given at Montreal for 1851, was \$1,805,140. At Quebec, the value of transit goods, both for foreign and domestic export, is not ascertained.

The exports do not include produce lightered over the bar in Lake St. Peter, or the cargoes of *foreign* vessels which must clear outward from Quebec. Fifty-three thousand barrels of flour, shipped at Montreal, are therefore included in the exports from Quebec for 1851. The total value thus taken from Montreal for 1851 was \$379,132.

The following are the countries imported from :

Great Britain	\$7,358,989
United States	1,081,372
British North American colonies.....	252,292
Other foreign States, viz: West Indies, France, Portugal, Spain, Belgium, Holland, Sicily, Spanish West Indies, and China.....	484,512
Total	9,177,164

The trade between Montreal and the lower colonies is shown by the following statement of the value of imports and exports, and number of barrels of flour sent in :

Year.	Total value of imports.	Total value of exports.	No. of bbls. of flour exported.	Remarks.
1849....	\$129,748	\$177,448	35,082	
1850....	236,864	435,736	77,461	
1851....	258,200	480,728	90,089	2,621 in foreign vessels, and therefore cleared from Quebec.

The exports for 1851, being all cleared outward, are much greater than in any former year; but the imports of 1843 and 1844 were greater, because at that time all imports for Upper Canada were entered inward at Montreal, but, since the opening of the St. Lawrence canals, a great portion of these pass upwards, and are credited to the different inland ports.

The trade between Montreal and the United States is divided with the frontier ports of St. John and Rouse's Point, on Lake Champlain, and cannot be separated.

The imports entered at Montreal and St. John from the United States were :

Year.	Montreal.	St. John.	Total currency.	Total dollars
1849.....	\$532,292	\$1,213,640	£ 436,483	1,745,932
1850.....	772,104	1,477,784	562,472	2,249,888
1851.....	1,081,372	1,947,452	757,206	3,028,824

The exports were :

Year.	Montreal.	St. John.	Total currency.	Total dollars.
1849.....	\$90,016	\$955,028	£261,261	1,045,044
1850.....	89,560	1,214,836	326,349	1,305,396
1851.....	272,416	905,276	294,423	1,177,692

The change here shown in the exports at St. John was caused chiefly by the movement of timber and lumber. Large quantities, in 1850, went to the Hudson river market through Lake Champlain; but, in 1851, the Quebec market was the most profitable, and thither all shipments tended.

Inland ports.

The trade of the inland ports is somewhat complicated by the manner of making the imports. These consist of four classes, viz: Imports purchased in the United States. 2. Imports imported in bond through the United States. 3. Imports by sea, via Montreal and Quebec, under frontier bond; and lastly, imports, coastwise, of purchases in Montreal and Quebec, of which no account is kept. The value of imports, as shown by the custom-house, gives an indication of the direct trade only; none of the importance of the consumption of the port.

There are about sixty-eight inland ports, of which about thirty are warehousing ones. Of these the trade of the greater number is exclusively with the United States, either in domestic or bonded articles. But the more important lake ports are rapidly establishing a direct trade by sea with the gulf ports and the lower colonies, and very probably will soon engage in the fisheries, for which they can fit out and provision at the cheapest rates.

As the trade between Canada and the United States is almost wholly conducted through the inland ports, a summary of that trade is here given. The imports, as shown by the custom-houses of each country, are taken as the true measures of the exports of the other.

The following statement shows the imports from, and exports to, Canada for the year 1851:

Imports.	Amount.	Exports.	Amount.
Duty-paying.....	\$1,624,462	Domestic.....	\$5,495,873
In bond.....	1,593,324	Foreign under bond.....	3,440,363
Free.....	94,464	Foreign not under bond.....	
Total.....	3,312,250	Total.....	8,936,236

The active intercourse between Canada and the United States may be seen from the following statement of the tonnage inward and outward in 1851:

	Inward.		Outward.		Totals.	
	American.	British.	American.	British.	Inward.	Outward.
Steam.....	1,224,523	845,589	753,318	564,089	2,070,112	1,317,407
Sail.....	139,867	202,939	153,670	206,361	341,906	360,031
Total.....	1,364,390	1,047,628	906,988	770,450	2,412,028	1,677,438

Inward and outward.

Steam, American.....	1,977,841	
British.....	1,409,678	
		3,387,519
Sail, American.....	293,537	
British.....	408,400	
		701,937
Total inward and outward, tons.....		4,089,456

The comparative values of exports and imports have been—

Year.	Imports from Canada.	Exports to Canada.
1849.....	\$3,582,059	\$4,971,420
1850.....	4,513,796	6,594,860
1851.....	3,312,250	8,936,236

The decrease in the imports from Canada has been explained by the increased quantity which has descended the St. Lawrence to Montreal.

The principal articles of import from Canada are flour, wheat, lumber, cattle and horses, oats, barley and rye, wool, butter, and eggs.

The principal exports to Canada are tea, tobacco, cotton and woollen manufactures, hardware, sugars, leather and its manufactures, coffee, salt, India-rubber goods, hides, machinery, fruits, and wooden ware.

Of the imports from Canada, \$1,593,324 worth were received in

bond, so that the value of Canada produce which paid duty was only about \$1,600,000, while that of domestic export to Canada, on which duties were levied, was \$5,495,873. The duty levied on imports from Canada for 1851 was \$373,496, while that levied on exports to Canada (including bonded goods) amounted to \$1,190,956.

The relative trade with the United States and other countries, at the leading inland ports, was as follows in 1851 :

Ports.	Population in 1851.	Total value of imports from all parts.	From the United States.	
			Value.	Duty collected.
Toronto.....	30,775	\$2,601,932	\$1,525,620	\$235,780
Hamilton.....	14,112	2,198,300	1,049,756	165,124
St. John.....	3,215	1,948,460	1,774,596	244,492
Kingston.....	11,585	1,026,292	915,912	62,584
Stanley.....	.....	292,636	284,872	47,232
Brockville.....	3,246	239,712	164,768	28,036
Prescott.....	2,146	122,452	105,936	11,316
Oakville.....	.....	212,844	42,576	5,284
Cobourg.....	3,871	142,376	125,464	13,940

The progress of the inland ports is shown by the values on imports for the following years :

Ports.	1848.	1849.	1850.	1851.
Toronto.....	\$788,900	\$1,315,452	\$2,538,888	\$2,601,932
Hamilton.....	941,380	1,123,024	1,583,132	2,198,300
St. John.....	1,106,692	1,213,640	1,477,784	1,948,460
Kingston.....	303,788	384,044	499,040	1,025,492
Stanley.....	151,608	156,220	208,452	292,636
Brockville.....	106,228	160,404	231,940	239,712
Oakville.....	27,660	31,076	41,564	212,844
Cobourg.....	52,268	68,424	87,244	142,376

The principal inland ports upon Lake Erie are Stanley, Dover, Dunnville, Sarina, and Sandwich; on Ontario, Toronto, Hamilton, Kingston, Belleville, Cobourg, Hope, Oakville, and Whitby; on the St. Lawrence, Brockville, Prescott, and Gananoque; and in Lower Canada, St. John, Phillippsburg, and Stanstead.

The population of Toronto has doubled in the last ten years, and is now 30,000. Hamilton, now containing 14,000, has been equally progressive. The imports show their commercial progress to have been equally rapid; and there can be little doubt that in Upper Canada the export of produce, and the import and consumption of all the substantial and necessary products of civilization, are as high per head as in the best agricultural districts of the United States.

There yet remains one route of importation to be noticed, viz: via Hudson's bay and Lake Superior. Nearly one-half of the imports at Sault Ste. Marie are by this route. It is impossible to say what may yet be done in this quarter. The distance from the shores of Superior

to those of Hudson's bay is no greater than that between the Hudson river, at Albany, and Lake Erie, at Buffalo; and the sea-route to Britain is shorter this way than by the lakes and Montreal, New York, or Boston. All the supplies and exports of the Hudson's Bay Company are carried by sea; and although the season of navigation is very limited, yet it embraces an important part of the year.

The two following tables are important as showing the imports and exports inland:

Dutiable imports (principal articles) into Canada from the United States in 1851.

Articles.	Value.
Tea	\$893,219
Tobacco	403,860
Cotton manufactures.....	565,124
Woollen...do.....	446,260
Hardware...do.....	318,844
Wooden-ware.....	53,724
Machinery	85,768
Boots and shoes.....	42,592
Leather manufactures	47,388
Hides.....	89,204
Leather (tanned)	126,232
Oil (not palm).....	47,804
Paper.....	32,996
Rice.....	19,920
Sugar.....	278,460
Molasses.....	19,296
Salt	79,816
Glass.....	18,828
Coal	38,652
Furs.....	44,264
Silk manufactures.....	80,768
India rubber...do.....	53,960
Dye-stuffs.....	12,680
Coffee.....	116,988
Fruit	81,144
Fish.....	7,544
Unenumerated.....	3,922,044
Total value of dutiable imports from the United States in 1851.....	7,943,384

Exports (principal articles) from Canada to the United States in 1851.

Articles.	Quantity.	Value.
Ashes.....barrels..	2,551	\$65,992
Lumber.....feet..	113,416	766,628
Shingles.....	12,374	20,732
Cattle, of all kinds and sizes.....head..	12,989	140,176
Horses.....do...	3,747	185,848
Wool.....pounds..	163,644	41,896
Wheat.....bushels..	708,400	491,760
Flour.....barrels..	331,978	1,181,484
Barley and rye.....bushels..	146,552	75,596
Beans and peas.....do...	85,200	41,588
Oats.....do...	517,405	135,708
Butter.....cwt..	3,560	38,004
Eggs.....dozens..	474,481	38,008
Unenumerated.....		1,705,664
Total value of exports to the United States.....		4,929,084

The above return is from Canadian customs, and exceeds, in the gross value, the amount of imports into the United States from Canada, as shown by the United States customs.

In concluding the notice of the inland trade, the following tables—showing the nature and extent of the “bonded” export and import between Canada and other countries, made inland via the United States, under the “drawback law”—are submitted:

Statement showing Canadian produce, &c., received in bond at New York and Boston in 1851.

Articles.	New York.		Boston.		Total value.
	Quantity.	Value.	Quantity.	Value.	
Flour....barrels....	250,352	\$846,814	28,763	\$96,256	.....
Wheat....bushels....	712,403	481,213	15,030	8,628	.....
Ashes... { barrels.....	2,000	} 62,562	151	2,521	.....
{ cases.....	6				
Butter.. { kegs.....	1,340	} 8,791	1,069	} 7,466	.....
{ tubs.....	23				
{ barrels.....	1				
Wine.... pipes.....	151	7,631	.....	.....	.....
Furs.... { cases.....	13	} 6,347	.....	.....	.....
{ puncheons..	3				
{ casks.....	3				
Peas.... { barrels.....	2,521	} 5,651	2,815	1,082	.....
{ bushels....	5,641				
Unenumerated.....		8,084	.....	3,488	.....
Value.....		1,427,093	.....	119,441	\$1,546,534

The following statement shows the value of goods transported in bond to Canada from the same ports:

Articles.	VALUE FROM		Total value.
	New York.	Boston.	
Dry goods.....	\$66,942	\$518,557	\$585,499
Railroad iron.....	108,534	.....	108,534
Sugars.....	107,049	.....	107,049
Books.....	20,306	9,075	23,381
Preserved fruit.....	27,776	936	28,712
Wine.....	15,820	.....	15,820
Hardware.....	19,516	16,709	36,225
Jewelry.....	2,255	28,046	30,301
Hides.....	16,029	3,162	19,191
Leather manufactures.....	13,158	560	13,718
Silks.....	16,206	.....	16,206
Cigars.....	19,007	338	19,345
Unenumerated.....	115,544	13,388	128,932
Total.....	548,142	590,771	1,138,913

The greater value of the imports is made through Boston; but of the exports through New York. Wheat and flour form the principal articles of bonded export. The following shows Canadian wheat and flour received and exported at New York for the last three years:

Year.	Received.				Exported.			
	Wheat.		Flour.		Wheat.		Flour.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	<i>Bushels.</i>		<i>Barrels.</i>		<i>Bushels.</i>		<i>Barrels.</i>	
1849.....	320,574	\$232,250	210,452	\$777,416	297,730	\$216,369	206,348	\$767,891
1850.....	723,553	504,715	282,280	1,086,218	667,132	475,311	252,037	966,549
1851.....	712,403	481,213	250,352	846,814	513,342	349,234	175,342	602,654
Total..	1,756,530	1,218,178	743,084	2,660,448	1,478,704	1,040,914	633,722	2,337,124

Totals in three years.

Articles.	Received.		Exported.	
	Quantity.	Value.	Quantity.	Value.
Wheat, bushels.....	1,756,536	\$1,218,178	1,478,704	\$1,040,914
Flour, barrels.....	743,084	2,660,448	633,722	2,337,124
Value.....	.....	3,878,626	.....	.....

The following returns, until 1849, include the export to Canada; after which a separate account with Canada was kept, and the last three years refer only to the lower colonies. It will be observed that since 1849 the "domestic" export has decreased, while the "foreign" (that is, Canada flour in bond) has increased. Thus it will be seen

that in 1849 the United States furnished for the consumption of the lower colonies more than three times the quantity of flour furnished by Canada, and that in two years thereafter Canadian flour gained the ascendancy; but, taking wheat and flour collectively, the supply of breadstuffs is about equally divided between the two countries:

Export of flour and wheat from the United States to the British North American colonies.

Year ending June 30—	Domestic.		Foreign, (from Canada.)		Total exports.	
	Flour, bbls.	Wheat, bus.	Flour, bbls.	Wheat, bus.	Flour, bbls.	Wheat, bus.
1846.....	310,091	545,068	.....	.....	310,091	545,068
1847.....	272,299	919,058	.....	.....	272,299	919,058
1848.....	274,206	309,789	7,054	2,703	281,660	312,492
1849.....	294,891	305,383	4,311	.....	299,202	305,383
1850.....	214,934	198,319	39,723	24,932	254,657	223,251
1851.....	200,664	216,971	79,806	24,259	280,470	241,230

Comparative export of Canadian and American flour to the lower colonies.

Year ending June 30—	AMERICAN.	CANADIAN.		TOTAL.
	Flour.	Flour by sea.*	Bounded via United States.†	Taken by lower colonies.
	<i>Barrels.</i>	<i>Barrels.</i>	<i>Barrels.</i>	<i>Barrels.</i>
1846.....	310,091	35,152	.....	345,243
1847.....	272,299	66,195	.....	338,494
1848.....	274,206	65,834	7,454	347,594
1849.....	294,891	79,492	4,311	378,694
1850.....	214,934	140,872	39,723	394,429
1851.....	200,664	154,766	79,806	435,236

* Year ending December 31.

† Year ending June 30.

Having noticed the sea and inland trade separately, a summary and comparative statement of the trade of Canada with all countries for the last three years is submitted. The value of exports to the United States for 1851 is here taken from Canadian returns, in order to compare with the like values of 1849 and 1850, which were taken from the same source.

Statement of the trade of Canada with all the countries for the years 1849, 1850, and 1851.

Year.	Great Britain, value.		United States, value.		British North American Colonies, value.		Other countries, value.		Total value with all countries.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
	1849.....	\$6,676,012	\$5,393,696	\$4,971,420	\$3,429,768	\$195,668	\$466,328	\$167,300	\$20,468	\$12,008,400	$9,310,260
1850.....	9,631,920	4,803,400	6,594,860	4,951,160	397,620	808,776	379,668	116,656	16,982,068	10,679,992
1851.....	12,876,828	6,731,204	8,936,236	4,939,280	497,400	967,164	939,976	168,364	23,250,440	13,262,376

Summary.

	Value of imports and exports.			Total in three years.
	1849.	1850.	1851.	
	Great Britain.....	\$12,069,768	\$14,435,320		$19,608,032	£11,528,265
United States.....	8,401,188	11,546,020	13,875,536	8,455,686
British North American colonies.....	661,996	1,194,396	1,464,564	830,239
Other countries.....	187,768	486,324	1,108,340	445,608
Total.....	21,320,660	27,662,060	36,056,472	21,259,798
				\$46,113,060
				33,822,744
				3,320,956
				1,782,432
				85,039,192

In none of the foregoing imports is the value of railroad iron, &c., brought via Quebec, in transit for the United States, included. Neither do the exports include the value of ships built at Quebec and sold in England.

The value of transit goods for the United States in 1851 was	\$750,000
The value of ships built for sale at Quebec, 3,900 tons, at £9, £351,000.....	1,404,000
	2,154,000
with which addition the gross trade of Canada for 1851 amounts to	\$38,200,256.

THE PUBLIC WORKS OF CANADA.

There is no country which possesses canals of the magnitude and importance of those in Canada. The elevation from tide-water to Lake Ontario (exceeding two hundred feet) is overcome by seven canals of various lengths, from twelve miles to one mile, (but in the aggregate only forty-one miles of canal,) having locks two hundred feet in length between the gates, and forty-five feet in width, with an excavated trunk, from one hundred to one hundred and forty wide on the water-surface and a depth of ten feet water.

From Lake Ontario to Lake Erie, an elevation of three hundred and thirty feet is surmounted by a canal twenty-eight miles in length, with about thirty cut-stone locks one hundred and fifty feet long, by twenty-six and a half feet wide, designed for propellers and sail craft. These locks will pass a craft of about five hundred tons burden, while those on the St. Lawrence have a capacity double this amount.

The total cost of this navigation may be set down at twelve millions of dollars.

The St. Lawrence canal was designed for paddle-steamers, which are required as tugs, or to ascend against the current; but from the magnitude of the rapids and their regular inclination, the aid of the locks is not required in descending the river. Large steamers, drawing seven feet water, with passengers and the mails, leave the foot of Lake Ontario in the morning, and reach the wharves at Montreal by daylight, without passing through a single lock. At some of the rapids there are obstacles preventing the descent of deeply-laden craft, but the government are about to give the main channel in all the rapids a depth of ten feet water, when the whole descending trade by steam will keep the river, leaving the canals to the ascending craft.

The time required for the descent of a freight-steamer from the head of Lake Ontario to Montreal is forty-eight hours; the rates of freight have ranged from twelve and a half cents (the lowest) per barrel, for flour, to twenty-five cents, including tolls. The upward trip requires about sixty hours, and the freight per ton ranges from \$1 50 to \$3 for heavy goods. The ruling freight on railroad iron last year from Montreal to Cleveland was \$2 50 per gross ton, and for the return cargo of flour thirty cents per barrel, tolls included in both cases.

These rates are yet fluctuating, as the long voyage is new, and are

so much influenced by the amount of up-cargo obtained that they cannot yet be considered settled. It is believed that the freight on flour from Lake Erie to Montreal (including tolls) will be brought down to twenty cents, and on iron up to \$2.

The construction of a ship-canal from the St. Lawrence to Lake Champlain, so as to bring the propellers of Chicago to Burlington and Whitehall, is now engaging the consideration of the Canadian government. This project originated with the Hon. John Young, chief commissioner of public works in Canada; and there is little doubt, from the favor it has received from the public, that it will be speedily accomplished. The cost would only be between \$1,500,000 and \$2,000,000, and its construction is indispensable to protect the revenues of the St. Lawrence canals from the competition of the Ogdensburg railroad. The construction of such a work must produce a corresponding enlargement of the Northern New York canal, whereupon there will be a connexion between Lake Erie and tide-water on the Hudson, via the St. Lawrence, which may be navigated, without transshipment, *downward* in four, and *upward* in five days.

The returns of trade on the Canadian canals give indication of decided and satisfactory progress in the leading articles of up and down freight. The receipts for tolls upon the Welland canal in 1851 are thirty-three per cent. higher than in 1850. On the St. Lawrence, although *tonnage* has increased, the *tolls* have not—the revenue being here reduced by rebatement of toll on cargoes which have passed the Welland.

The following shows the progress of leading articles of up and down freight on the Welland canal in 1850 and 1851:

Down Trade.

Articles.	1850.	1851.
Wheat.....bushels..	3,232,986	4,326,336
Corn.....do....	575,920	1,553,800
Flour.....barrels..	396,420	525,170
Coal.....tons..	5,053	6,462
Hams, lard, and lard oil.....pounds..	3,982,720	8,485,120

The increase is greater than shown by these figures—the column for 1850 being the whole down trade; while that for 1851 shows the entries at Port Colborne only—the whole down trade not being attainable.

Up trade.

Articles.	1850.	1851.
Railroad iron.....pounds..	75,803,840	156,784,320
Cast and wrought iron nails and spikes.....do....	16,486,400	26,093,760
General merchandise.....do....	17,958,080	24,064,320
Sugar, molasses, and coffee.....do....	7,781,760	19,350,320
Pig and scrap iron.....do....	6,648,320	14,519,680

Total British and foreign—18,874 vessels; 1,973,841 tons; toll, £6,407.

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

Welland canal.

	1848.	1849.	1850.	1851.
Tons	307,611	351,596	399,600	691,627
Passengers	2,487	1,640	1,930	4,758
Tonnage of vessels.....	372,854	468,410	588,100	772,623

St. Lawrence canal.

	1848.	1849.	1850.	1851.
Tons	164,627	213,153	288,103	450,400
Passengers	2,071	26,997	35,932	33,407
Tonnage of vessels.....	5,648	5,448	6,169	6,934

Chambly canal.

	1848.	1849.	1850.	1851.
Tons	17,835	77,216	109,040	110,726
Passengers	470	8,430	278	1,860
Tonnage of vessels.....	659	1,264	2,878	1,727

The receipts of 1851 were £76,216; expenses £12,286. Of the gross tolls the Welland produced £48,241, and the St. Lawrence £21,276.

But a most decided proof of the success of the Canadian canals is to be found in the frequent and important reductions which have been made in the tolls of the Erie canal since 1845, the year in which the enlarged Welland canal first came into serious competition with the route through Buffalo. The policy of the State of New York has been not only to obtain the largest possible revenue from her canals, but also to protect her own manufactures and products against competition from other quarters; and this she has been enabled hitherto most effectually to accomplish, by levying discriminating tolls. Thus foreign salt was excluded from the western States by a rate of toll about twice its whole value. The toll upon this article in 1845 was three cents per 1,000 lbs. per mile, or \$21 78 per ton of 2,000 lbs., (about *three* dollars per barrel;) while the toll upon New York State salt was only one-thirteenth part of that upon the foreign article. In 1846, (the first year after the

opening of the enlarged Welland canal,) the tolls on foreign salt were reduced one-half, and a still greater amount on New York State salt. The next year a further reduction of thirty-three per cent. took place; and in 1850 the toll was again reduced one-half, so that it is now only *one-sixth* the rate charged in 1845; but it is still subject to a tax five times as great as that paid by New York State salt.

In like manner railroad iron, in 1845, paid a toll of nine mills; in 1846 this was reduced to five mills; in 1850, to four mills; in 1851, to two and a half mills; and in 1852, to one and a half mill. Almost every other article of heavy goods and merchandise for up-freight has likewise undergone frequent and heavy reductions in toll on the Erie canal, since the Welland and St. Lawrence came into competition with it.

In the down trade, flour and wheat have been reduced thirty-three per cent.; corn and oats, from four and a half mills to two mills; pork, bacon, lard, and lard oil, from four and a half mills to one and a half mill; beef, butter, cheese, tallow, beer, cider, vinegar, from four and a half to three mills. Almost every other article of down-freight has undergone like reductions. Likewise the discrimination in favor of pot and pearl ashes and window glass manufactured in New York State has been abandoned; the State retaining only a discriminating toll against salt and gypsum from other States or countries.

There can be no question but that the whole western country would have been annually taxed, both upon their exports and imports, a much larger amount than is now paid by them, in order to swell the revenue of the Erie canal, had it not been for the healthful competition of the Canadian works. As an example: the reduction in the tolls on railroad iron since 1845 amounts to \$5 44 per ton of 2,000 lbs. The amount of this iron which reached Lake Erie in 1851 was—

By Erie canal to Buffalo	46,876,427
By Welland canal to Lake Erie	156,784,320
	203,660,747

equal to 101,830 tons of 2,000 lbs.; and the reduced toll on this one article would be \$553,955 20. It has been estimated by the late Hon. Robert Rantoul, jr., M. C., that the northwest will require 100,000 tons of railroad iron per annum for the next five years, upon which they will now pay more than half a million of dollars less, in tolls alone, than they would have paid before the enlarged Welland canal was opened.

Again: over 220,000 tons of wheat and flour, and 150,000 tons of corn, from western States, were shipped eastward from Buffalo in 1851, the reduction on the tolls of which amounts to \$512,830 from the rates of 1845; besides some 185,000 tons of wheat and flour, and 40,000 tons of corn which passed down through the Welland, to the most of which the reduced toll should be applied.

Thus the eastern States, in their imports of three articles from the West, as well as the western ones, in their import of one article from the East, have *each* obtained a reduction of transit dues amounting to over half a million of dollars, which is mainly to be ascribed to the construction of the ship-canals of Canada.

Again: the tolls on the Erie canal upon tobacco are four times greater if "going *from* tide-water" than if "going *toward*" it, by which policy it is hoped to draw this article from the lower Ohio, Missouri, &c., to the eastern States and the seaboard through this canal. This discrimination in direction has been abandoned in respect of other articles, and will follow with tobacco, because no similar distinctions are made on the Welland.

The auditor of the canal department, in his report on the tolls, trade, and tonnage for 1850, bears the following evidence to the influence of the Welland canal:

"The diversion of western trade from Buffalo to Oswego has also considerably affected the revenue. While there has been 36,475 tons *less* of this trade entered the canal at *Buffalo* in 1850 than in 1849, the western tonnage coming in at *Oswego* has *increased* by 41,664 tons."

The State engineer of New York, in his report of February, 1851, urging the necessity of the enlargement of the Erie canal, says that its full capacity will be reached in 1852, and, after remarking that the cost of transport is one and a half cent per ton per mile, says, "There are lines of communication now built, and in progress of construction, which can take freight at a *cheaper rate*;" and, after alluding to the Ogdensburg railroad, he says, "But there is another, and I apprehend a still cheaper route, *by water* to Lake Champlain, soon to come into competition *at the North*, which will produce as cheap or cheaper rates to Boston than the above. The freight by that route afloat on Lake Champlain may find cheaper transport to New York than to Boston. It will *not* pass through the Erie canal, and will be diverted from Albany by cheaper routes." Lastly, he says, "Canada and Boston have not yet perfected all their works. All will soon have their whole machinery in motion. Their plans are not the product of blindness or folly—they are the results of good judgment and a just appreciation of the great boon sought and the best means of attainment."

The effect of the Canadian navigation on the imports of western States is ascertained by the 50,000 tons of iron (American property) imported last year via Quebec. The large amount of tonnage entering Quebec in ballast in quest of timber will bring in coal, iron, slate, salt, and other heavy articles at about half the rates now charged on these articles to New York. While, therefore, ocean freights inward are so much less than at New York, the abundance of timber enhances all other freights outward to more than double that from New York. The position of the two ports is reversed: it is the outward voyage which pays at Quebec, while at New York flour has been carried *out* for six pence sterling per barrel to Liverpool.

When the effect of the repeal of the navigation laws brings more vessels into Quebec than are required for timber, outward freights from the lakes may pour down the St. Lawrence, and the rates of freight come down to a standard which will make the whole cost of shipment from the lakes to Europe via the St. Lawrence as favorable as via New York.

THE MAGDALEN ISLANDS.

This group of islands occupies a prominent position, almost in the centre of the Gulf of St. Lawrence, and directly in the track of vessels bound up the gulf for Quebec. Including the Bird and Brion islands, which evidently form part of the group, the whole length of the range is about fifty-six miles in an east-northeast direction.

Amherst island, the most southern of the chain, is nearly oval, nearly six miles in length, and three and a half in extreme width. Its harbor is the best in the chain, with a narrow but straight entrance, over a soft ooze bar, for vessels drawing eleven to twelve feet water. This island is eighteen leagues northwest of Cape Breton; the same northward of Prince Edward island. It is thirty-six leagues from the nearest point of Newfoundland, seventy-five leagues from the French settlements at St. Pierre and Miquelon, and one hundred and eighty leagues eastward of Quebec.

The central portions of the Magdalen islands rise into hills, varying from two hundred to five hundred and eighty feet above the sea, their tops are rounded. On the sides of these hills are found stratified deposits of sandstones and ochreous clays, with gypsum in the hollows and basins, and also occasionally in veins.

The water of many springs and rivulets is so salt as to be unfit for use; and although rock salt has not yet been found, yet it is believed to exist in these islands.

The gypsum forms an article of export. On one of the group it is found of exceeding fine quality, and very white, approaching to alabaster in purity.

The principal dependence of the inhabitants is upon the cod fishery, although they also prosecute the herring and seal fisheries to some extent.

There are at present upon these islands about two thousand inhabitants, the majority of whom are French Acadians.

The fisheries around the Magdalen islands are very excellent, and afford a profitable return to the industry of those who prosecute them. If arrangements were entered into by which our citizens could have the right of setting up fishing stations on these islands, and of prosecuting the various prolific fisheries in the surrounding seas, it would be of very great advantage to them, and open a wide field for their energy and enterprise. They would also gain the early and late fisheries, from which they are now debarred, whose advantages have been already mentioned.

These islands were formerly attached to the government of Newfoundland, but at present they are under the jurisdiction of the Canadian government. The whole group was granted by the British government to Admiral Sir Isaac Coffin, R. N., for distinguished services; by him they were bequeathed in strict entail to his nephew, Captain John Townsend Coffin, R. N., the present proprietor, and to his heirs male forever.

The value of the various products of the fisheries exported from the Magdalen islands in 1848 was \$224,000; but it is believed that this did not include large quantities of such products carried off in fishing

vessels not cleared at the custom-house. But even the amount mentioned is quite large as compared with the population, and furnishes proof of the bountiful abundance of the fisheries in the vicinity of the Magdalens, which need only the preserving industry, energy, and skill of our fishermen to be rendered a mine of wealth.

No. 1.—Statement exhibiting the number of American and foreign vessels, and also their tonnage, employed in the trade between the United States and Canada, which entered in and cleared from the lake ports annually, from 1833 to 1851, inclusive.

Years.	AMERICAN VESSELS.			BRITISH VESSELS.			TOTAL TONNAGE.					
	Entered.		Cleared.	Entered.		Cleared.	Entered.		Cleared.			
	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.	Tons.			
1833.....	1,184	176,596	1,224	189,571	315	60,605	305	56,894	1,499	237,201	1,529	245,465
1834.....	983	146,579	1,099	170,138	764	147,337	784	146,470	1,747	293,916	1,883	316,608
1835.....	2,072	335,229	2,101	335,254	1,574	271,630	1,584	276,266	3,646	606,859	3,685	611,520
1836.....	1,224	222,762	1,264	226,910	1,046	233,560	1,036	250,934	2,270	456,322	2,300	477,844
1837.....	1,129	206,027	1,138	212,093	1,186	249,993	1,176	269,778	2,315	456,020	2,314	481,871
1838.....	1,012	198,198	1,042	202,728	1,167	253,375	1,127	256,544	2,179	451,573	2,169	459,272
1839.....	2,695	290,355	2,746	291,138	1,319	212,846	1,320	224,990	4,014	503,201	4,066	516,138
1840.....	1,701	300,939	1,705	295,901	1,391	234,522	1,362	237,424	3,092	535,461	3,067	533,325
1841.....	1,951	328,685	1,978	330,061	1,557	260,110	1,596	275,242	3,508	588,795	3,574	605,303
1842.....	1,869	277,702	1,810	271,531	1,317	203,644	1,340	229,009	3,186	481,346	3,150	500,540
1843.....	1,052	188,049	996	179,591	783	120,693	771	128,365	1,835	308,742	1,767	307,956
1844.....	2,709	689,355	2,664	665,852	1,933	307,941	1,902	312,377	4,642	997,296	4,566	978,229
1845.....	2,514	646,045	2,635	653,916	1,695	281,101	1,629	273,464	4,309	927,146	4,264	921,380
1846.....	2,812	787,804	2,864	800,757	1,562	299,810	1,524	301,468	4,374	1,087,614	4,388	1,102,225
1847.....	2,135	618,443	2,132	806,398	1,546	273,178	1,550	273,336	3,681	891,621	3,682	889,743
1848.....	3,636	777,815	3,612	777,716	2,640	515,100	2,579	501,724	6,276	1,292,915	6,191	1,279,915
1849.....	5,339	906,813	5,300	890,204	2,767	537,697	2,775	563,649	8,106	1,444,510	8,075	1,458,883
1850.....	2,876	889,755	2,803	919,515	3,282	447,372	3,086	455,982	6,158	1,337,127	5,889	1,375,497
1851.....	2,925	1,013,275	2,634	927,013	3,634	514,383	3,621	516,883	6,559	1,527,658	6,255	1,443,896

At.

Compare any 2^d or 3^d Comparative statement of the foregoing.

No. 2.—Comparative statement of the total "movement" of property on the Welland, St. Lawrence, Chambly, and Burlington Bay canals, and St. Anne's Lock, for the year 1851 and three preceding years.

Description.	Welland.				St. Lawrence.				Chambly.			Burlington Bay.		St. Anne's Lock.		
	1848.	1849.	1850.	1851.	1848.	1849.	1850.	1851.	1848.	1849.	1850.	1851.	1850.	1851.	1850.	1851.
Forest..... tons.	52,902	78,556	107,835	240,644½	68,851	70,810	124,948½	232,073	16,564	61,164	88,919½	12,650½	16,500	18,500	49,890½	83,408
Vegetable food..... do..	136,056½	141,584	145,769	240,111½	81,807½	89,801	80,687½	95,689½	49	7,833	575	24,118½	18,819½	18,819½	7,729	1,176
Farm stock..... do..	45	30½	.....	36½	587½	893	1,261½	1,890	.....	18	9%	47½%	60%	60%	1,486%	289
Other agricultural pro- duce..... do..	11,244½	17,688½	18,165	14,672½	608	4,215	8,510%	9,535	88	64	686%	818	716½	716½	10	1,609
Merchandise, &c..... do..	45,354½	42,931	3,424½	41,406	4,315½	17,247	24,069½	29,619	1,805	6,764	2,965½	7,431½	11,326	11,326	4,450½	5,005
Manufactures..... do..	62,011½	75,856	99,090	145,756	3,600	31,047	45,625	79,024	859	1,843	3,167½	9,995½	10,385½	10,385½	8,785	4,441
Total..... do..	307,611½	351,596½	399,000	691,657½	159,267	218,153	283,103½	450,400½	18,885	77,210	110,726%	54,996%	58,107½	58,107½	59,889%	105,938
Passengers..... number.	2,487	1,640	1,938	4,758½	21,071	26,997	35,932	83,966	470	8,430	1,860	.....	.....	.....	1,550	14,180
Boats of all kinds, do..	8,280	2,273	4,761	4,916	5,643	5,443	6,169	7,326	659	1,264	1,842	.....	.....	.....	.....	1,984
Total tonnage of ves- sels..... do..	872,854	493,410	537,100	700,168	476,375	444,640	460,180	545,593½	22,822	128,643	90,893	473,690	.....	.....	124,302	101,938

No. 3.—Statement showing the value of imports into Canada, at each port, in 1851, with the countries from whence and the route by which imported.

Ports.	Total value im-ported from all parts.	From United States.	From Great Britain.	From British North American colonies.	From other countries.	Bonded im-ports.	Total value im-ported inland, via U. States.	Total value im-ported by sea, via St. Lawrence.
	Value.	Value.	Value.	Value.	Value.	Value.		
Amherstburg.....	\$15,884	\$14,616			\$768	\$852	\$14,616	\$768
Bath.....	9,884	8,504			504		8,504	880
Burwell.....	55,716						55,716	
Belleville.....	98,524	82,882					88,608	14,916
*Bonthead.....					140			
Chatham.....	51,696						51,696	
Chippewa.....	818,152	316,204	1,792		156	968	818,152	
Cobourg.....	142,876	142,464	14,840		2,072		125,464	16,912
Colborne.....	7,516						7,516	
Credit.....	8,556						8,556	
Dalhousie.....	98,100	65,816	26,568	5,756	460	32,784	65,816	32,784
Darlington.....	15,956	15,676	280			840	15,676	840
Dover.....	81,760	76,580	5,180			5,180	80,882	928
Dunnville.....	110,840	110,840				8,800	110,840	
Fort Erie.....	36,592						36,592	
Goderich.....	10,580						10,580	
*Grafton.....								
Hamilton.....	2,198,800	1,944,736	1,124,836	20,696	8,082	348,012	1,019,408	1,178,892
Hope.....	79,016	60,412	16,112	2,492		1,996	60,412	18,604
Kingston.....	1,026,292	915,912	98,204	8,580	8,596	31,520	919,794	106,568
Niagara.....	89,180	30,952	6,120	508	1,600	7,164	30,952	8,228
Oakville.....	212,840	42,576			170,264	17,968	42,576	170,264
Owen's Sound.....	840						840	
Penetanguishene.....	252						252	
Pictou.....	44,288	35,924	8,364			508	35,924	8,764
Que-nston.....	70,176	59,084	8,816	128	2,648	10,572	59,084	11,092
Rondeau.....	12,236						12,236	
Rowan.....	30,996					456	30,996	
Sandwich.....	173,728						173,728	
Sarnia.....	19,668						19,668	
Stamley.....	202,636	284,872	2,512	5,252		17,288	284,872	7,764
†Toronto.....	2,601,923	1,525,620	1,014,886	24,900	36,572	400,000	1,200,000	1,401,928
Wallington.....	2,623	2,580				48	2,623	
Whitby.....	31,596	29,948	1,648				29,948	1,648
Brockville.....	239,712	164,768	58,904		16,040	55,012	219,780	19,932
Maitland.....	1,100						1,100	
Corwall.....	23,124	11,952					23,124	
Coteau du Lac.....	2,564						2,564	
Dickenson's Landing.....	9,740					20,940	11,968	11,156
						8,064	9,740	

* No return. † The last three columns for this port are calculated from proportions at Hamilton, the collector of Toronto not being able to distinguish the route of his imports.

STATEMENT—Continued.

Ports.	Total value imported from all parts.	From United States.	From Great Britain.	From British North American colonies.	From other countries.	Bonded imports.	Total value imported inland, via U. States.	Total value imported by sea, via St. Lawrence.
	<i>Value.</i>	<i>Value.</i>	<i>Value.</i>	<i>Value.</i>	<i>Value.</i>	<i>Value.</i>		
Dundee.....	\$15,804	.....	.....	.....	.....	.....	\$15,804	.....
Gannaque.....	6,444	.....	.....	.....	.....	.....	9,444	.....
Mariatown.....	15,928	.....	.....	.....	.....	.....	15,928	.....
Prescott.....	122,448	105,996	\$16,512	.....	.....	\$1,848	107,780	\$14,668
Riviere aux Raisins.....	288	.....	.....	.....	.....	.....	288	.....
St. Regis.....	17,248	.....	.....	.....	.....	.....	17,248	.....
Clarenceville.....	7,004	.....	.....	.....	.....	.....	7,004	.....
Frelighsburg.....	25,820	.....	.....	.....	.....	.....	25,820	.....
Herford.....	8,592	.....	.....	.....	.....	.....	8,592	.....
Hemmingford.....	18,688	.....	.....	.....	.....	.....	18,688	.....
Huntingdon.....	7,864	.....	.....	.....	.....	.....	7,864	.....
Lacolle.....	17,984	.....	.....	.....	.....	.....	17,984	.....
Montreal.....	9,177,164	1,081,372	7,885,984	\$222,292	\$484,516	73,024	1,081,372	8,095,792
Phillipsburg.....	46,408	40,400	.....	.....	6,008	.....	46,408	.....
Potton.....	97,892	11,686	.....	.....	.....	.....	11,686	.....
Stanstead.....	1,948,460	1,774,592	186,604	804	.....	.....	97,892	.....
St. John.....	.....	.....	.....	.....	.....	.....	.....	.....
Sutton.....	4,676	.....	.....	.....	.....	.....	4,676	.....
Quebec.....	8,895,616	157,108	2,880,500	168,528	164,480	172,860	113,996	8,221,620
Napawee.....	22,120	.....	.....	.....	.....	.....	22,120	.....
La Beauce.....	5,956	.....	.....	.....	.....	.....	5,956	.....
Elgin.....	1,212	.....	.....	.....	.....	.....	1,212	.....
Wallaceburg.....	18,212	.....	.....	.....	.....	.....	18,212	.....
Bruce Mines.....	6,360	.....	.....	.....	.....	.....	6,072	288
Gaspé.....	53,852	.....	46,484	4,372	616	.....	1,880	51,472
New Carlisle.....	53,680	340	83,832	13,508	.....	.....	3,828	53,680
Sault Ste. Marie.....	12,124	1,292	10,862	.....	.....	.....	1,320	10,862
New Gaspe.....	8,928	.....	.....	.....	.....	.....	8,928	.....
Stamford.....	27,744	.....	.....	.....	.....	.....	27,744	.....
Millford.....	1,876	.....	.....	.....	.....	.....	1,876	.....
Total.....	23,250,440	8,936,286	12,876,828	487,400	939,976	1,240,828	8,788,712	14,461,728

MONTREAL, May 1, 1882.

THOS. C. KEEFER,

No. 4.—Statement showing the value of exports from Canada, at each port, in 1851, with the countries to which exported.

Ports.	Total value.	EXPORTED TO—			
		Gt. Britain.	B. N. American colonies.	U. States.	Other countries.
Amherstburg	\$79,408			\$79,480	
Bath	21,428			21,428	
Belleville	147,368			147,368	
Burwell	132,360			132,360	
Chatham	31,196			31,196	
Chippewa	7,528			7,528	
Cobourg	71,612			71,612	
Colborne	944			944	
Credit	201,852	\$20,584		181,268	
Dalhousie	356,072		\$11,160	317,296	\$27,616
Darlington	29,960			29,960	
Dover	151,404			151,404	
Dunnville	85,164			76,416	8,748
Fort Erie	31,276			31,276	
Goderich	3,264			3,264	
Grafton	3,992			3,992	
Hamilton	365,252		12,004	353,248	
Hope	100,408			100,408	
Kingston	421,016			421,016	
Niagara	2,088			2,088	
Oakville	122,880			122,880	
Owen's Sound	776			776	
Penetanguishene	3,736			3,736	
Pictou	17,808			17,808	
Queenston	28,444			28,444	
Rondeau	21,268			21,268	
Rowan	53,480			53,480	
Sandwich	39,836			39,836	
Sarnia	45,844			45,844	
Stanley	271,116		185,408	85,304	404
Toronto	327,368			327,368	
Wellington	22,884			22,884	
Whitby	201,164			201,164	
Brockville	70,648			70,648	
Maitland	3,592			3,592	
Bytown					
Cornwall	10,236			10,236	
Coteau du Lac	8,824			8,824	
Dickenson's Landing	4,132			4,132	
Dundee	12,944			12,944	
Gananoque	6,320			6,320	
Mariatown	24,008			24,008	
Prescott	32,960			32,960	
Riviere aux Raisins					
St. Regis	6,292			6,292	
Clarenceville	488			488	
Frelighsburg	16,296			16,296	
Hereford	15,452			15,452	
Hemmingford	11,180			11,180	
Huntingdon	4,308			4,308	
Lacolle	27,500			27,500	
Montreal	2,503,916	1,470,772	480,728	272,416	280,000
Philipsburg	88,968			88,968	
Potton					
Stanstead	40,128			40,128	
St. John	905,276			905,276	
Sutton					
Quebec	5,623,888	4,888,084	353,056	19,452	363,396
Napanee	43,196			43,196	

STATEMENT—Continued.

Ports.	Total value.	EXPORTED TO—			
		Gt. Britain.	B. N. American colonies.	U. States.	Other countries.
Beauce.....	\$6,416			\$6,416	
Elgin.....	4,784			4,784	
Wallaceburg.....	61,564			61,564	
Bruce Mines.....	67,644			67,644	
Gaspé.....	141,740	\$28,436	\$10,596	724	\$101,984
New Carlisle.....	80,100	27,968	7,592		44,540
Sault Ste. Marie.....	10,220			10,220	
New Castle.....	12,516			12,516	
Stamford.....					
Milford.....	10,480			10,480	
Bond Head.....					
Russelltown.....	5,992			5,992	
Total.....	13,262,376	6,435,844	1,060,544	9,039,300	826,688

The returns of exports from inland ports to other countries than the United States are very doubtful. None are reported from Toronto, the largest inland port. With respect to the route of such exports, it is presumed they were made via the St. Lawrence; in which case they should be included in those of Montreal or Quebec. But as these exports were obtained from the head office, it is to be inferred that they are direct exports from inland ports not included elsewhere. It is possible a portion of them may have been exported inland, in bond, through the United States, although all such exports are said to be reported as "to the United States."

THOS. C. KEEFER.

MONTREAL, May 1, 1852.

No. 5.—Comparative statement of imports inland, via United States, with imports by sea, via St. Lawrence, 1851, distinguishing the principal articles.

Articles.	SEA.		Total sea imports.	Inland imports via U. States	Total imports by sea and inland.
	Montreal and Quebec.	Direct at inland ports from sea.			
Tea	\$152,556	\$15,528	\$168,084	\$893,216	\$1,061,300
Tobacco	18,924	.....	18,924	403,860	422,784
Cotton manufactures...	2,218,364	799,968	3,018,332	565,124	3,583,456
Woolen...do.....	1,719,872	581,944	2,301,816	439,260	2,741,076
Hardware...do.....	1,237,340	389,868	1,627,208	318,844	1,946,052
Wooden ware.....	11,612	.....	11,612	53,724	65,336
Machinery.....	6,764	88	6,852	85,768	92,620
Boots and shoes.....	6,512	356	6,868	42,592	49,460
Leather manufactures..	26,196	26,960	53,156	47,388	100,544
Hides.....	1,164	.....	1,164	89,204	90,368
Leather, tanned.....	46,312	128	46,440	126,232	172,672
Oils, not palm.....	135,440	268	135,708	47,804	183,512
Paper.....	53,180	12,048	65,228	32,996	98,224
Rice.....	12,396	.....	12,396	19,600	32,316
Sugar.....	586,604	125,804	712,408	278,468	990,876
Molasses.....	60,968	.....	60,968	19,296	80,264
Salt.....	23,792	2,188	25,980	79,816	105,796
Glass.....	77,124	1,136	78,260	18,828	97,088
Coal.....	101,176	.....	101,176	38,652	139,828
Furs.....	82,116	7,916	90,032	44,264	134,296
Silk manufactures.....	401,904	5,588	407,492	80,768	488,260
India rubber do.....	156	233,168	233,324	53,960	287,284
Dyestuffs.....	38,916	.....	38,916	12,680	51,596
Coffee.....	13,632	.....	13,632	116,988	130,620
Fruit.....	53,552	752	54,304	81,144	135,448
Fish.....	71,260	.....	71,260	17,544	88,804
Unenumerated.....	4,159,580	940,608	5,100,188	4,780,372	9,880,560
Goods in transit for the United States.....	11,317,412	3,144,316	14,461,728	8,788,712	23,250,440
	755,588	.....	755,588	.....	755,588
	12,073,000	3,144,316	15,217,316	8,788,712	24,006,028

The large amount of "unenumerated" values renders this statement but approximate, because the enumeration of sea imports is much fuller than those inland, where, at some ports, no enumeration of articles is made.

THOMAS C. KEEFER.

MONTREAL, May 1, 1852.

No. 6.—Value of direct imports from sea at

Articles.	Amherstburg.	Bath.	Belleville.	Cobourg.	Dalhousie.	Darlington.	Dover.	Hamilton.	Port Hope.	Kingston.	Niagara.	Oakville.
Tea.....								\$7,528				
Tobacco.....								383,960				
Cotton manufacture.....			\$2,220				\$504	269,788			\$752	
Woollen manufacture.....	\$880		4,504					177,856	\$9,068		2,710	
Hardware.....			1,172	\$10,580					5,500		44	
Wooden ware.....												
Machinery.....												
Boots and shoes.....								12,960				
Leather manufacture.....												
Hides.....												
Leather, tanned.....												
Oils, not palm.....								5,620	428			
Paper.....												
Rice.....								53,076	2,288	\$10,712	508	
Sugar.....	\$640		200	1,560								
Molasses.....												
Salt.....								680				
Glass.....								586				
Coal.....												
Furs.....								3,256				
Silk manufacture.....			1,408				12				1,164	
Ind'a rubber do.....								113,168				
Dyestuffs.....												
Coffee.....												
Fruit.....										452		
Fish.....												
Unenumerated.....	128		5,612	4,772	\$32,784	\$280	112	150,464	1,320	95,404	8,044	\$170,264
Total value by sea...	768	880	14,916	16,912	32,784	280	928	1,178,892	18,604	106,568	8,228	170,264

The above statement is designed to show the principal articles which are imported direct from sea, at inland

MONTREAL, May 1, 1852.

inland ports, via the St. Lawrence, in 1851.

Pictou.	Queenston.	Port Stanley.	Toronto.	Whitby.	Brockville.	Cornwall.	Prescott.	St. John.	Bruce Mines.	Gaspe.	New Carlisle.	St. Marie.	Total.
			\$8,000										\$15,523
5,304			408,000	\$860	\$3,372								799,963
			288,000	789	1,096								581,944
			188,000		6,716								389,868
					88								88
			14,000		356								26,960
					128								128
			6,000		268								268
													12,049
			56,000		820								125,804
			800					\$708					2,188
			600										1,136
1,180			3,480										7,916
900					2,104								5,588
			120,000										233,168
								300					752
1,380	\$11,092	\$7,764	309,048		4,984	\$11,156	\$14,668		\$283	\$51,472	\$53,680	\$10,822 ^s	940,008
8,764	11,092	7,764	1,401,928	1,648	19,932	11,156	14,668	1,008	283	51,472	53,680	10,892	3,144,316

*Imported via Hudson's Bay.

ports, the names of the ports, and their comparative importance in this trade.

THOMAS C. KEEFER.

No. 7.—Comparative statement of imports of leading articles into Canada in 1850-'51, showing the countries from whence imported.

Articles.	Total value.		From Great Britain.		From United States.		From British colonies.		From other foreign countries.	
	1850.	1851.	1850.	1851.	1850.	1851.	1850.	1851.	1850.	1851.
Tea.....	\$935,768	\$1,049,493	\$167,583	\$92,976	\$727,360	\$888,264	\$8,420	\$2,904	\$32,400	\$65,254
Tobacco.....	423,482	425,096	554	4,084	421,800	415,800	464	2,882	644	2,380
Cotton manufactures.....	3,627,664	8,236,224	2,773,736	2,672,668	846,376	562,904	92	8	7,400	624
Woolen.....do.....	2,198,580	1,730,996	1,730,996	2,050,512	420,492	430,520	40	596	10,540	20,164
Hardware.....do.....	1,321,044	1,895,116	1,911,676	1,454,472	393,452	430,564	28	48	15,376	9,484
Wooden-ware.....	40,488	61,276	6,500	6,500	34,608	54,608	48	48	424	20
Machinery.....	76,144	83,012	1,340	6,860	74,804	76,152	.....	152	.....	.....
Boots and shoes.....	.....	49,256	.....	11,952	.....	37,152	.....	.....	.....	.....
Leather manufactures.....	134,572	167,568	35,082	41,368	97,040	64,576	.....	.....	2,740	1,644
Hides.....	210,176	172,192	.....	768	196,432	150,856	.....	.....	15,744	20,372
Leather (tanned).....	141,124	157,736	27,736	46,248	100,384	97,886	.....	1,104	12,404	12,548
Oils (not palm).....	159,120	137,736	79,920	100,308	61,424	52,128	.....	12,488	27,630	7,756
Paper.....	89,404	91,655	44,060	55,988	35,344	31,932	.....	.....	1,000	.....
Rice.....	31,672	28,848	6,908	11,648	24,864	17,188	.....	.....	.....	.....
Sugar.....	698,260	925,604	188,008	171,140	244,672	238,848	.....	.....	.....	.....
Molasses.....	86,472	82,368	684	2,404	16,380	19,272	.....	.....	.....	.....
Salt.....	91,800	109,300	21,044	27,524	68,320	79,086	.....	.....	.....	.....
Glass.....	83,482	95,692	42,816	53,848	27,256	18,256	.....	.....	.....	.....
Coal.....	90,728	141,928	55,392	97,844	34,428	42,580	.....	.....	.....	.....
Furs.....	61,652	120,116	36,208	78,780	27,182	41,288	.....	.....	.....	.....
Silk manufactures.....	555,840	658,692	394,104	578,016	150,628	72,648	.....	.....	.....	.....
India-rubber manufactures.....	86,716	54,128	36,496	156	36,496	53,972	.....	.....	.....	.....
Dyestuffs.....	58,520	53,844	13,388	88,780	36,192	14,382	.....	.....	.....	.....
Coffee.....	108,068	126,408	4,884	4,884	98,652	116,844	.....	.....	.....	.....
Fruit.....	108,648	147,748	18,408	29,440	82,388	53,564	.....	.....	.....	.....
Fish.....	86,256	108,624	.....	7,960	21,476	15,640	.....	.....	.....	.....
Unenumerated.....	5,633,308	10,610,928	3,078,548	5,217,580	2,231,052	4,888,976	.....	.....	.....	.....
	16,982,068	23,250,440	9,681,920	12,676,828	6,594,860	8,936,236	390,072	497,400	305,216	939,970

NOTE.—There is an apparent decrease in cotton and woollen manufactures, which arises from imperfect enumeration. The total imports of 1851 exceed those of 1850, and in the articles which pay specific duties, (tea, sugar, coffee, salt, &c.) and are therefore fully reported; there is a marked increase; also, in "unenumerated," there is nearly double the corresponding amount for 1851. Many collectors do not enumerate "ad valorem" goods, retail them as "goods at 12 per cent," &c., which embraces all manufactures. Great exertion was made in 1850 to enumerate the articles; but, then there, all manufactures were under the retail import. This partial enumeration explains the apparent decrease. The same increase which obtains on the total import should be applied to all manufactures to give the true import for 1851.

MONTREAL, May 1, 1852.

THOS. C. KEEFER.

No. 8.—Comparative statement showing the total value of imports and exports, at each port, in Canada, in the years 1850 and 1851.

Ports.	1850.		Total value of exports and imports.	1851.		Total value of exports and imports.
	Exports.	Imports.		Exports.	Imports.	
Amherstburg	\$23,228	\$23,572	\$51,800	\$79,490	\$15,864	\$94,864
Bath	36,112	17,260	53,372	21,428	9,384	80,812
Belleville	201,940	95,640	297,580	147,368	98,524	245,892
Burwell	91,816	19,904	111,720	132,360	55,716	188,076
Chatham	41,916	36,228	78,144	31,196	51,696	82,892
Chippewa	30,456	159,900	190,356	7,528	318,152	325,680
Cobourg	54,584	87,244	141,828	71,612	142,376	213,988
Colborne	2,212	4,044	6,256	7,944	7,516	8,460
Credit	298,132	2,568	240,700	201,852	8,556	210,408
Dalhousie	318,112	57,580	375,692	356,072	98,100	454,172
Darlington	66,336	16,280	82,616	29,960	15,956	45,916
Dover	108,640	62,048	170,688	151,404	81,760	233,164
Dunnville	15,604	59,092	74,696	85,164	110,840	196,004
Fort Erie	37,992	54,276	92,268	31,276	36,592	67,868
Goderich	13,872	7,108	20,980	3,264	10,550	13,844
Grafton	4,892	5,164	9,996	3,992	.....	3,992
Hamilton	352,892	1,583,132	1,936,024	365,252	2,198,300	2,563,552
Hope	129,028	58,296	187,324	100,408	79,016	179,424
Kingston	350,248	499,044	849,292	421,016	1,026,292	1,447,308
Niagara	11,128	62,996	74,124	2,088	39,180	41,268
Oakville	178,604	41,564	220,168	192,880	212,840	385,720
Owen's Sound	2,264	1,112	3,376	7,776	840	1,616
Penetanguishene	454	332	816	3,736	252	3,988
Pictou	14,008	31,660	45,668	17,800	44,288	62,096
Queenston	34,504	28,804	63,308	28,444	70,176	98,620
Rondeau	408	8,488	8,896	21,268	12,236	33,504
Rowan	36,856	18,668	54,924	53,480	30,996	84,476
Sandwich	35,936	55,736	91,672	39,836	173,728	213,564
Sarnia	8,336	21,300	29,636	45,844	19,668	65,512
Stanley	135,396	208,456	343,852	271,116	292,636	563,752
Toronto	270,228	2,538,892	2,809,120	327,368	2,601,928	2,929,396
Wellington	53,876	5,452	59,328	22,884	2,628	25,512
Whitby	137,612	28,984	166,596	201,104	31,596	232,760
Brockville	72,396	231,940	304,336	70,648	239,712	310,360
Maitland	6,364	2,208	8,572	3,592	1,100	4,692
Bytown	.....	5,468	5,468	.....	.....	.....
Cornwall	4,272	16,276	20,548	10,236	23,124	33,360
Coteau du Lac	12,300	332	12,632	8,824	2,564	11,388
Dickenson's Landing	3,868	11,428	15,296	4,132	9,740	13,872
Dundee	14,620	20,556	35,176	12,944	15,804	28,748
Gananoque	4,932	27,360	12,292	6,320	6,444	12,674
Mariatown	16,448	12,804	29,252	24,008	15,928	39,936
Prescott	23,400	57,696	81,096	32,960	122,448	155,408
Riviere aux Raisins	.....	784	784	.....	288	288
St. Regis	4,336	13,552	17,888	6,292	17,248	23,540
Clarenceville	4,992	6,072	11,064	498	7,004	7,492
Freighsburg	11,696	19,952	31,648	16,296	25,320	42,116
Hereford	43,576	700	44,276	15,452	3,532	18,984
Huntingford	12,144	10,048	22,192	11,180	13,688	24,868
Humtingdon	4,448	7,396	11,844	4,308	7,364	11,672
Lacolle	.....	13,550	13,550	27,500	17,984	45,484
Montreal	1,744,772	6,905,400	8,650,172	2,503,916	9,177,164	11,681,080
Phillipsburg	225,096	89,280	314,376	88,968	46,498	135,376
Potton	.....	15,644	15,644	.....	11,636	11,636
Stanstead	46,572	57,544	104,116	40,128	97,392	137,520
St. John	1,215,836	1,477,784	2,693,620	905,276	1,948,460	2,853,736
Sutton	.....	6,980	6,980	.....	4,676	4,676
Quebec	5,190,696	1,976,556	7,166,652	5,623,938	3,335,616	8,959,604
Napanee	.....	.....	.....	43,196	32,120	65,316
Beauce	7,676	4,132	11,808	6,416	5,956	12,372
Elgin	2,240	508	2,748	4,784	1,212	5,996
Wallaceburg	.....	13,812	3,812	61,564	13,212	74,776
Bruce Mines	40,616	7,684	48,300	67,644	6,360	74,004
Gaspé	116,828	49,912	166,740	141,740	53,352	195,092
New Carlisle	.....	.....	.....	80,170	53,680	133,780
Sault Ste. Marie	7,876	28,604	36,480	10,220	12,124	22,344
New Castle	37,404	8,040	45,444	12,516	3,928	16,444
Stamford	.....	.....	.....	.....	7,744	27,744
Milford	4,428	988	5,416	10,480	1,876	212,356
Bondhead	39,884	3,348	43,232	.....	.....	.....
Russelltown	.....	2,472	2,472	5,992	.....	5,992
	11,961,708	10,982,064	28,943,772	13,662,376	23,250,440	36,912,816

The exports at inland ports comprise only the value exported inland to the United States; all exports from inland ports down the St. Lawrence, whether to Montreal and Quebec, or to sea direct, are not reported, except at the seaports of Montreal and Quebec. This regulation has, in a few instances, been infringed.

In the above return the value of goods imported in transit for the United States via St. Lawrence (valued at \$756,000 in 1851) is not included, neither the value of ships built at Quebec for sale in England, valued at about \$1,404,000 in 1851; which items will give an addition to the trade of Quebec of \$2,200,000 in 1851, and of course the same addition to the whole trade of Canada for that year.

No. 9.—*Comparative statement of exports inland and by sea from Canada in 1851, showing the principal articles.*

Articles.	By sea from Montreal and Quebec.	From inland ports.	Total.
Ashes, pot and pearl.....	\$765,924	\$65,992	\$831,916
Ash timber.....	14,896	.....	14,896
Birch.....	18,464	.....	18,464
Deal ends.....	18,684	.....	18,684
Elm.....	196,426	.....	196,420
Oak.....	189,876	14,620	204,496
Pine, white.....	1,518,528	} 160,884	2,095,644
Pine, red.....	416,232		
Staves, standard.....	64,485	16,524	81,012
Staves, other.....	358,844	1,372	360,216
Plank and boards.....	937,480	774,116	1,711,596
Spars, masts, and handspikes.....	50,216	6,116	56,332
Lath and firewood.....	32,076	39,800	71,876
Shingles.....	260	20,732	20,992
Cows and other cattle.....	40	140,176	140,216
Horses.....	200	185,848	186,048
Wheat.....	144,184	491,760	635,944
Flour.....	1,450,148	1,181,484	2,631,632
Indian corn.....	26,056	.....	26,056
Barley and rye.....	440	75,596	76,036
Beans and peas.....	40,208	41,588	81,796
Oats.....	2,272	135,708	137,980
Butter.....	195,728	38,004	233,732
Eggs.....	.....	38,008	38,008
Wool.....	.....	41,896	41,896
Copper, fine and pig.....	.....	42,752	42,752
Copper ore.....	35,000	17,620	52,620
Unenumerated.....	1,359,372	1,808,704	3,168,076
From inland ports direct.....	7,836,036	5,339,300	13,175,336
From Gaspé and New Carlisle.....	265,924	.....	265,924
	221,116	.....	221,116
	8,323,076	5,339,300	13,262,376

The returns of exports inland are very imperfect, and will not correspond with the United States imports from Canada.

It will be seen at the bottom that there is a "direct export" from inland ports, which was neither to the United States nor from Montreal and Quebec. It is to be presumed that this was a cargo sent to sea from inland ports and not reported at Montreal or Quebec, although such report is compulsory on all inland craft proceeding to sea.

THOS. C. KEEFER.

MONTREAL, May 1, 1852.

No. 10.—Statement showing the value of imports, dutiable and free, into Canada from the United States, the amount of duties collected, the total value of exports, and the tonnage, steam and sail, inward and outward, at each port, in 1851.

Ports.	Value of dutiable imports from United States	Amount of duty collected.	Value of free goods imported.	Total value of imports dutiable and free.	VESSELS INWARD.				VESSELS OUTWARD.			
					American.		British.		American.		British.	
					Steam.	Sail.	Steam.	Sail.	Steam.	Sail.	Steam.	Sail.
					Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Amherstburg.....	\$15,384	\$1,856	\$15,384	36,318	237	3,280	\$79,480	No record	115	2,361	26,594	4,398
Bath.....	9,384	1,684	9,384	455	85	1,350	21,424	455	85	1,350	1,350	
Burwell.....	52,384	8,016	\$3,332	207	26,940	5,277	132,360	580	38,883	5,229	5,229	
Belleville.....	98,524	14,500	98,524	10,106	3,680	8,256	147,364	10,365	3,621	8,205	8,205	
Bondhead.....	43,160	6,208	8,556	115	1,852	26,854	31,036	115	2,361	26,594	4,398	
Chatham.....	148,044	16,008	170,108	318,152	220	34,300	7,528	928	751	18,963	1,243	
Chippewa.....	125,464	13,940	125,464	414	3,989	2,202	71,612	739	26,700	4,753	4,753	
Cobourg.....	7,456	892	20	8,556	220	34,300	1,959	460	152	190	111	
Colbourne.....	8,556	1,712	8,556	361	1,296	400	181,268	302	804	3,023	3,023	
Dalhousie.....	97,984	13,900	97,984	561	1,296	400	317,236	336	1,924	316	5,694	
Darlington.....	14,576	2,408	15,956	145	23,035	836	29,956	575	1,509	1,509	1,509	
Dover.....	73,320	10,756	8,440	25,639	8,831	5,730	151,404	25,629	8,831	5,730	6,569	
Dunnville.....	110,840	15,212	110,840	198	1,170	5,235	76,416	198	1,170	3,235	1,180	
Fort Erie.....	29,256	4,008	7,336	36,592	60	30	31,276	60	30	30	30	
Goderich.....	10,680	1,375	10,680	4,932	4,932	350	3,272	4,822	350	350	326	
Grafton. (No return)	1,049,756	165,124	1,049,756	72,824	7,448	10,718	353,248	72,454	6,623	868	10,718	
Hamilton.....	71,728	10,696	7,284	79,016	1,439	29,450	100,244	1,420	29,316	7,480	7,480	
Hope.....	742,232	62,584	172,680	85,912	370,467	85,912	421,016	400,722	22,205	1,266	27,366	
Kingston.....	38,084	1,096	39,180	148,889	1,037	801,427	2,088	1,409	196,438	12,332	12,332	
Niagara.....	40,760	5,284	1,816	42,576	840	607	122,876	776	1,409	196,438	12,332	
Oakville.....	780	124	60	840	7,950	607	776	7,950	249	150	471	
Owen's Sound.....	252	28	252	252	249	150	2,732	249	150	150	150	
Penetanguishene.....												

QUANTITY AND VALUE OF EXPORTS.

Articles.	Quantity.		Value.	
	1850.	1851.	1850.	1851.
<i>Product of the Mine.</i>				
Copper ore.....	243	1,205 1-5	\$14,580	\$44,000
Copper.....	55½	19 3-20	22,000	6,752
Fine copper.....		90½		36,000
Total product of the mine.....			36,580	86,752
<i>Product of the Seas.</i>				
Fish, dried.....	48,852	75,064½	112,636	179,680
Fish, pickled.....	5,432	13,407	27,816	52,452
Fish, fresh.....			4,924	13,380
Fish oil.....	1,058	8,498	672	3,776
Total product of the seas.....			146,048	249,296
<i>Product of the Forest.</i>				
Ashes, pot.....	31,959	27,944	945,748	689,984
Ashes, pearl.....	11,178	8,463	327,898	175,460
Timber, ash.....	1,713	3,018	6,852	14,904
Timber, birch.....	4,613	4,143	28,524	22,020
Timber, elm.....	38,212	35,644	221,276	196,584
Timber, maple.....	140	449½	632	1,740

Timber, oak.....do.....	30,446	40,976½	557,400	229,840
Timber, pine, white.....do.....	272,742	453,435	1,184,860	1,627,888
Timber, pine, red.....do.....	89,996	91,145	469,956	459,500
Timber, tamarac.....do.....	1,007	4,356½	5,023	5,660
Timber, walnut.....M. feet.....	708	1,194½	9,144	23,736
Timber, basswood, butternut, and hickory.....do.....	243	79	1,708	973
Staves, standard.....M.....	724	1,1957-10	71,192	83,076
Staves, other.....do.....	4,170	4,509½	275,260	369,376
Battens, knees, scantling.....pieces.....				
Freenails, &c.....do.....	472,184	729,059	35,428	44,240
Deals.....do.....	2,998,608	3,526,647	585,340	957,476
Planks and boards.....M. feet.....	122,240	120,175,596	797,180	836,552
Spars, masts, and handspikes.....pieces.....	32,206	9,482	61,060	56,404
Lath and firewood.....cords.....	6,067	17,356½	38,184	45,364
Shingles.....M.....	12,350	20,972½	15,528	31,520
Sawlogs.....number.....	27,095	34,425	12,692	32,168
Other woods.....do.....			24,492	45,456
Furs and skins.....do.....			77,580	112,340
Total product of the forest.....			5,442,936	6,063,412

Agricultural products.

Animals—				
Horses.....number.....	4,434	4,176	223,512	212,772
Cows.....do.....	8,301	9,171	94,544	115,032
Oxen.....do.....		219		4,944
Hogs.....do.....	1,184	3,403	2,152	8,260
Sheep.....do.....	13,757	16,762	18,212	23,696
Product of animals—				
Beef.....cwt.....	6,742	4,1501-7	26,832	19,036
Bacon and hams.....do.....	920	884½	8,880	2,823
Butter.....do.....	11,785	28,547½	122,268	262,400
Lard.....do.....		2,367½	3,788	13,280
Cheese.....do.....	171	409½	1,984	4,652
Pork.....barrels.....	3,335	11,160	29,496	71,968
Tallow.....do.....	600		9,652	
Candles.....pounds.....		164,800		8,080
Tongues.....kegs.....	43	108	176	420
Bones.....tons.....	23	61	168	1,276
Hides.....number.....		444	3,916	268

STATEMENT—Continued.

QUANTITY AND VALUE OF EXPORTS—Continued.

Articles.	Quantity.		Value.
	1850.	1851.	
Product of animals—			
Hoofs.....	20	7 1-10	\$160
Horns.....			604
Wool.....	276,691	410,101	80,504
Eggs.....	387,343	610,560	52,944
Beeswax.....	1,455	1,560	320
Honey.....		345	40
Total animals and their products.....			630,320
887,516			
Vegetable food—			
Wheat.....	1,295,029	933,756	687,180
Flour.....	650,439	668,623 ¹	2,633,300
Indian corn.....	60,313	51,503	26,428
Barley and rye.....	66,514	180,446	86,224
Meal.....	4,707	5,511	19,260
Biscuit.....	1,594	2,757	8,588
Beans and pease.....	258,901	172,837	100,100
Oats.....	667,652	497,027 ¹	134,404
Hops.....	29,182	72,223	6,316
Bran.....	1,522	1,312	572
Onions and other vegetables.....	1,354	1,865	1,000
Potatoes.....	18,011	24,634	7,492
Malt.....	47,592	14,333	8,556
Apples.....	3,536	3,969	6,652
Total vegetable food.....			4,184,136
3,766,388			

Other agricultural products—					
Flaxseed.....bushels.	21,159	8,021	21,876	7,840	
Other seeds.....do.	12,650	16,936½	29,808	29,384	
Balsam.....do.			2,072	728	
Tobacco.....pounds.		1,195		68	
Total other agricultural products.....			53,756	38,038	
<i>Manufactures.</i>					
Iron.....			11,160	21,244	
Cotton.....			1,708	14,196	
Woolen.....			804	1,536	
Wooden.....			5,192	4,756	
Leather.....			1,976	1,024	
Glass.....			84	432	
Hardware.....			764	5,788	
Whiskey.....gallons.	662	8,304	428	2,028	
Beer, ale, and cider.....	Barrels, 566	Galls., 17,932	3,124	2,352	
Other spirits from grain.....	294	514	368	2,508	
Vinegar.....do.	880	583	184	148	
Maple sugar.....pounds.	29,019	14,657	900	1,092	
Total manufactures.....			26,704	55,124	
Other articles and unenumerated.....			159,496	2,115,740	
Grand total.....			10,679,992	13,262,376	

STATEMENT—Continued.
TO WHAT COUNTRY EXPORTED.

Articles.	Great Britain.		North America.		United States.		Other foreign countries.	
	1850.	1851.	1850.	1851.	1850.	1851.	1850.	1851.
<i>Product of the Mine.</i>								
Copper ore.....	\$14,580	\$26,380						
Copper.....					\$17,620			
Fine copper.....					6,752			
					36,000			
Total product of the mine.....	14,580	26,380			22,500			
<i>Product of the Seas.</i>								
Fish, dried.....	4,640	27,488	\$3,572	\$16,772	8	30,880	\$104,508	\$135,416
Fish, pickled.....	792	1,312	304	9,688	25,932	30,824	924	10,620
Fish, fresh.....				476	4,924	12,900		
Fish oil.....	552	2,816		904	72	52	44	
Total product of the seas.....	5,788	31,616	3,840	27,848	30,940	48,784	105,476	146,040
<i>Product of the Forest.</i>								
Ashes, pot.....	584,968	614,112		25,380	360,776	50,492		
Ashes, pearl.....	246,124	169,128			81,700	6,328		
Timber, ash.....	6,852	14,844		60				
Timber, birch.....	8,524	22,016		4				
Timber, elm.....	221,276	196,288		296				
Timber, maple.....	628	1,616			4	120		
Timber, oak.....	251,004	189,700		18,468	6,396	21,672		
Timber, pine, white.....	1,055,096	1,525,480		3,420	129,764	96,988		

Timber, pine, red.....	469,956	558,096	1,404	276	3,592	
Timber, tamarac.....	4,752	2,068		9,144	23,016	
Timber, walnut.....		452	264	1,588	800	
Timber, basswood, butternut, and hickory.....	120	172		1,948	1,716	2,432
Staves, standard.....	68,432	62,076	200	1,248	1,732	2,920
Staves, other.....	202,012	352,852	8,372			
Pattens, knees, and scantling.....				28,980	41,848	
Treenails, &c.....	64,412	2,100	36	1,264	1,168	12
Deals.....	584,064	955,724	584	795,052	830,372	504
Plank and boards.....	916	3,420	704	7,844	6,116	
Spars, masts, and handspikes.....	53,012	50,020	108	1,932	13,956	
Lath and firewood.....	26,252	32,568	40	15,180	28,676	56
Shingles.....			292	12,692	32,008	
Sawlogs.....	1,552	3,548	160	22,912	41,460	396
Other woods.....	13,524	31,756	24	63,856	79,292	
Furs and skins.....			1,292			
Total product of the forest.....	3,885,500	4,683,076	10,544	1,542,784	1,253,580	3,320
<i>Agricultural Products.</i>						
<i>Animals—</i>						
Horses.....		200	100	223,412	212,572	
Cows.....		40		94,544	114,992	
Oxen.....				2,152	4,944	
Hogs.....				18,188	23,696	
Sheep.....	24					
<i>Product of animals—</i>						
Beef.....	19,528	9,464	7,032	268	696	
Bacon and hams.....	1,004	920	2,808	3,048	2,616	480
Butter.....	44,708	145,608	79,880	46,896	55,208	709
Lard.....		1,926	2,476	2,068	6,364	2,500
Cheese.....	1,860	4,224	1,792	8	16	
Pork.....	4,364	6,480	64,108	1,136	1,380	
Tallow.....			28	9,624		240
Candles.....		12	4,556		696	2,608
Tongues.....	132	340	48		28	
Bones.....	168	1,024			252	
Hides.....				3,916	268	
Hoois.....	464	160		3,916		
Horns.....	16	388		176	316	

STATEMENT—Continued.
TO WHAT COUNTRY EXPORTED—Continued.

Articles.	Great Britain.		North America.		United States.		Other foreign countries.	
	1850.	1851.	1850.	1851.	1850.	1851.	1850.	1851.
Product of animals—								
Wool				\$1,464	\$56,856	\$79,136		
Eggs				28	25,792	52,912		
Beeswax	\$164	\$120			172	200		
Honey		40						
Total animals and their products	72,396	170,872	\$64,664	144,464	490,652	565,884	\$2,604	\$6,292
Vegetable food—								
Wheat	66,156	142,532	13,548	87,656	992,424	457,088		
Flour	630,256	996,848	659,860	617,084	1,451,450	1,159,140	1,600	10,220
Indian corn	17,524	14,780	6,288	11,276	10,644	368		
Barley and rye			1,352	460	29,712	85,760		
Meal	80	2,368	14,800	14,884	1,148	2,004		
Biscuit	80	48	4,024	8,540	400			
Beans and peas	89,128	37,116	3,060	3,220	29,364	49,764		
Oats			3,304	2,552	131,332	131,552		
Hops				184	2,156	6,132		
Bran			120	20	408	548		
Onions and other vegetables	100	48	360	452	952	492		
Potatoes		260	102	392	4,460	6,836		
Malt			640	1,132	11,020	7,720		
Apples	3,016	3,500	1,080	1,248	2,076	1,904		
Total vegetable food	896,356	1,097,508	708,588	749,428	2,667,584	1,909,928	1,600	10,220
Other agricultural products—								
Flaxseed		328			21,876	7,512		
Other seeds	560	588	296	868	28,952	27,924		

Balsam.....	944	440	.....	.....	1,125	288	.....
Tobacco.....	.....	.....	.....	8	.....	60	.....
Total other agricultural products.....	1,504	1,356	296	880	51,956	35,788	.....
<i>Manufactures.</i>							
Iron.....	68	44	164	.....	10,924	21,200	.....
Cotton.....	340	.....	.....	12	1,708	14,196	.....
Woolen.....	760	88	1,264	1,372	460	1,520	.....
Woods.....	72	8	1,144	776	3,164	3,296	.....
Leather.....	44	.....	.....	338	756	236	.....
Glass.....	.....	4	.....	4,104	40	104	.....
Hardware.....	.....	.....	.....	1,836	764	1,680	.....
Whiskey.....	136	.....	168	1,128	120	192	.....
Beer, ale, and cider.....	120	56	2,312	.....	268	1,164	424
Other spirits from grain.....	.....	.....	.....	148	368	508	.....
Vinegar.....	.....	.....	176	.....	8	.....	.....
Maple sugar.....	12	112	.....	28	884	948	.....
Total manufactures.....	1,564	316	5,236	9,744	19,480	45,064	424
Other articles and unenumerated.....	15,700	419,704	12,660	30,440	125,744	1,195,788	2,448
Grand total.....	4,803,396	6,435,844	808,776	1,060,544	4,951,156	4,939,300	116,656
							826,688

The return for 1851 is not as full as for 1850; consequently there is an apparent decrease in detail, although there is a large increase in the gross exports. The "other articles and unenumerated" comprise omissions of enumerated articles, which (if known) would show an increase in articles, corresponding to the total increase, in almost every item of export.

THOS. C. KEENE.

MONTREAL, May 1, 1852.

No. 12.—Statement showing the value of the leading dutiable articles

Ports.	Tea.	Tobacco.	Cotton manufacts.	Woollen manufac- tures.	Hardware manu- factures.	Woodenware.	Machinery.	Boots and shoes.	Leather.	Hides.	Leather, tanned.	Oils, not palm.	Paper.
Annerstburg	\$1,412	\$200	\$ 92	8400	\$2,668	\$744	.....	.....	.....	\$2,236	.....	.....	.....
Bath	1,540	648	1,216	1,572	452	.....	.....	.....	.....	182	.....	.....	\$116
Burwell	5,74	1,841	4,560	1,932	6, 36	1,680	\$7,60	2,664	864	148	\$128	\$964	72
Belleville	17,320	7,588	8,968	10,132	8,484	744	4,472	2,928	140	264	1,552	968	1,940
Bandhead	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chatham	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chippewa	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coburg	12,828	4,138	6,584	12,976	7,596	1,712	5,872	1,724	288	1,820	1,752	.....	1,006
Coburne	.....	304	140	1,116	856	1,444	448	.....	958	.....	104	180	24
Credit	2,920	720	840	4	232	.....	.....	.....	648	68	.....	124	.....
Da-house	8,560	3,432	15,288	4,012	9,436	.....	.....	2,496	165	156	.....	1,448	812
Darlington	2,080	1,140	840	41	3,608	88	36	412	.....	.....	768	150	.....
Dover	9,096	3,472	8,584	6,608	6,816	1,452	1,832	.....	3,976	2,512	628	600	232
Dunville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Erie	1,096	704	2,360	2,392	4,363	1,680	316	576	188	20	2,524	124	168
Goderich	1,416	524	1,404	36	464	372	.....	344	.....	124	208	112	52
Grafton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hamilton	154,512	71,288	171,428	112,792	118,120	.....	.....	.....	.....	10,808	27,440	.....	8,676
Hope	14,164	5,612	.....	3,728	9,492	1,244	.....	1,688	164	.....	2,928	624	864
Kingston	.....	2,172	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kingsburg	3,568	828	2,260	4,088	2,468	.....	.....	.....	.....	.....	.....	.....	.....
O'ville	5,980	1,984	3,428	876	1,220	88	.....	1,416	.....	14,044	.....	152	288
Owen's Sound	16	4	4	12	.....	.....	.....	4	.....	.....	.....	4	.....
Panetanguishene	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pictou	1,932	76	6,232	4,932	1,228	.....	.....	456	.....	3,872	516	104	548
Queenston	1,860	500	4,096	4,096	2,708	980	1,296	.....	4,836	904	.....	256	472
Rondeau	2,100	444	572	1,622	1,672	.....	.....	628	80	.....	640	.....	28
Rowan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sandwich	3,156	1,472	.....	740	6,320	3,824	4,692	1,020	72	96	1,814	284	712
Sarnia	2,128	996	2,376	636	1,403	364	.....	1,180	.....	.....	492	140	88
Stanley	55,296	22,852	15,280	19,980	29,004	.....	12,592	12,376	2,536	5,960	4,120	.....	.....
Toronto	152,820	56,472	.....	.....	.....	.....	.....	.....	.....	24,676	.....	.....	.....
Wellington	172	.....	164	260	32	56	244	96	.....	144	.....	.....	28
Whitby	4,056	2,008	892	268	1,636	324	1,500	.....	976	4,612	20	68	760
Brockville	31,568	9,752	17,600	15,888	8,512	3,752	4,568	3,736	2,368	4,352	2,096	943	2,930
Maitland	20	.....	48	.....	.....	12	.....	.....	.....	.....	.....	.....	.....
Cornwall	1,180	824	412	1,528	552	660	.....	256	.....	340	.....	84	92
Coteau du Lac	332	40	500	424	.....	.....	.....	.....	.....	.....	332	.....	52
Dickenson's Land'g.	488	344	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dundee	732	212	1,016	5,168	624	1,248	.....	.....	528	.....	320	.....	48
Gananoque	796	388	332	224	76	708	448	364	24	268	8	.....	4
Mariatown	1,320	772	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Prescott	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Riviere aux Raisins	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Regis	20	32	24	.....	8,448	636	.....	.....	72	.....	68	.....	.....
Clarenceville	336	60	124	.....	444	872	384	492	36	.....	498	.....	20
Frelighsburg	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hereford	136	84	184	.....	1,464	.....	152	512	.....	.....	84	.....	.....
Hemmingford	2,220	812	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Huntingdon	340	140	548	164	880	340	112	120	1,960	44	84	.....	8
Lacolle	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Montreal	114,168	100,132	53,380	22,704	51,644	7,568	35,480	684	4,892	568	12,292	23,548	596
Phillipsburg	1,500	364	.....	.....	.....	.....	.....	.....	.....	9,884	.....	.....	.....
Pottcn	1,464	620	608	72	1,372	144	500	.....	276	.....	.....	16	.....
Stanstead	10,480	5,880	18,108	4,396	9,292	948	1,332	5,260	648	880	4,396	804	428
St. John	236,588	62,788	205,184	194,936	.....	15,908	.....	.....	18,208	.....	57,572	13,612	11,168
Sutton	440	316	472	80	884	8	256	28	48	.....	80	.....	.....
Quebec	18,552	26,784	1,988	1,392	4,376	4,964	32	148	.....	1,416	1,84	1,060	.....
Napanee	2,508	816	3,492	2,244	1,192	596	332	.....	1,284	480	604	575	.....
La Beauce	8	8	56	.....	24	.....	80	.....	88	.....	.....	.....	.....
Elgin	84	28	52	56	.....	.....	.....	.....	28	.....	.....	.....	.....
Wallaceburg	1,584	628	2,060	776	1,644	116	.....	780	.....	.....	164	260	32
Bruce Mines	.....	.....	100	.....	648	.....	1,676	.....	.....	.....	.....	.....	.....
Gaspé	208	432	.....	.....	.....	.....	.....	164	.....	.....	20	.....	.....
New Carlisle	60	96	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sault Ste. Marie	.....	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Castle	.....	40	33	588	576	48	248	.....	524	200	.....	.....	.....
Stamford	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Millford	12	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	563,216	408,860	565,124	420,260	818,844	13,724	53,768	42,592	47,388	89,204	126,232	47,864	32,986

From the above statement "free goods" have been excluded as far as practicable; in several ports, however, retaining only the gross values at the different rates of duties.

MONTREAL, May 1, 1852.

imported into Canada from the United States, at each port, in 1851.

Rice.	Sugar.	Molasses.	Salt.	Glass.	Coal.	Furs.	Silk manufactures.	India-rubber manufactures.	Dyestuffs.	Coffee.	Fruit.	Fish.	Unenumerated.	Total.
.....	\$880	.....	.....	.....	.....	.....	.....	.....	.....	\$752	.....	.....	\$6,480	\$15,384
.....	808	\$20	\$684	.....	\$284	.....	.....	.....	.....	40	.....	.....	1,292	9,384
.....	3,044	184	1,344	\$104	75	\$128	\$1,052	\$632	.....	208	\$480	\$912	10,772	52,384
\$244	5,296	204	3,836	.....	1,308	.....	761	432	\$1,360	156	392	.....	19,552	98,524
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43,160	43,160
560	812	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	147,232	148,044
4	3,532	100	2,912	828	940	.....	704	324	1,852	1,156	2,084	3,288	49,680	125,464
65	24	24	163	40	444	.....	.....	.....	20	40	52	28	1,750	7,496
220	864	56	1,608	152	.....	.....	.....	.....	20	128	30	.....	504	5,556
136	13,872	1,188	6,040	220	2,104	.....	436	.....	124	672	656	63	26,536	97,384
392	352	16	1,044	24	60	.....	156	44	20	103	208	.....	2,716	14,676
.....	4,524	2.2	1,636	152	896	.....	808	360	292	643	700	376	16,616	73,320
.....	3,020	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	107,220	110,840
86	264	132	252	280	116	72	.....	16	328	308	76	1,092	3,768	29,256
76	124	8	1,612	52	84	.....	.....	.....	.....	76	68	12	3,396	10,580
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	220,744	1,040,756
300	57,608	13,288	9,624	.....	4,668	19,836	.....	.....	.....	24,352	12,938	2,584	20,784	71,798
.....	2,420	64	3,804	784	.....	956	284	.....	.....	860	952	172	20,784	71,798
.....	3,460	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,924	.....	729,676	743,232
.....	4,500	264	272	.....	.....	.....	.....	.....	.....	643	512	.....	18,366	38,084
256	3,844	116	2,596	196	364	.....	72	.....	256	172	40	.....	4,192	40,760
.....	4	.....	384	8	.....	.....	.....	.....	.....	.....	.....	.....	840	780
.....	.....	.....	32	.....	.....	168	.....	.....	.....	.....	.....	.....	52	252
60	2,216	52	1,516	156	732	1,480	1,94	136	232	103	160	.....	13,192	42,732
.....	32	32	428	52	.....	.....	758	140	32	86	380	1,976	17,512	43,320
88	328	24	560	144	24	.....	120	36	144	152	144	4	2,612	12,226
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30,996	30,996
108	860	272	916	284	828	184	120	8	32	264	140	84	120,388	148,720
72	640	180	800	140	.....	.....	.....	.....	.....	272	412	20	7,404	19,668
.....	20,324	292	7,348	.....	.....	.....	.....	.....	.....	5,072	3,16	.....	6,400	270,692
4,804	64,140	1,944	17,692	24,324	.....	.....	.....	.....	.....	27,228	25,112	.....	1,127,508	1,525,620
.....	16	52	12	736	20	40	36	.....	.....	.....	20	.....	184	2,352
200	230	28	4,264	23	472	796	.....	84	40	52	364	63	2,112	26,456
424	280	140	1,652	2,220	1,040	920	1,684	984	764	752	1,128	1,084	20,364	141,556
.....	.....	.....	.....	.....	.....	.....	36	.....	.....	.....	.....	.....	324	452
.....	152	.....	.....	.....	.....	28	.....	.....	.....	52	4	.....	5,540	11,952
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	548	2,300
28	20	32	304	.....	.....	124	.....	56	.....	32	.....	.....	6,172	7,036
.....	32	28	188	.....	.....	.....	92	32	16	32	56	.....	4,500	14,556
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,936	6,200
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,564	14,132
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71,824	71,824
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	288	288
4	52	72	.....	4	8	.....	.....	8	.....	8	136	8	7,600	16,968
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,012	4,428
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18,263	18,268
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	880	8,532
16	136	132	.....	.....	24	.....	104	.....	8	.....	.....	.....	10,248	13,688
.....	84	36	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	888	5,932
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,464	16,380
4,952	37,564	5,496	.....	1,404	320	9,152	18,748	14,108	2,696	19,580	3,420	2,456	335,464	887,956
.....	830	224	44	.....	.....	.....	.....	.....	.....	56	528	.....	28,064	36,644
.....	4	.....	76	44	40	40	2	.....	24	.....	20	204	2,152	7,860
128	192	52	144	444	40	344	963	568	480	328	316	864	14,692	82,452
6,564	28,192	6,180	36	1,348	25,308	30,938	30,296	3,812	25,432	15,128	2,256	4	3,518	1,475,052
.....	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,856	3,984
756	4,984	824	.....	772	156	556	.....	5,480	36	7,380	1,876	20	54,868	140,564
48	344	156	1,223	224	1,092	44	220	.....	.....	124	48	.....	3,668	22,120
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,716	2,440
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60	1,108
60	388	168	.....	56	28	.....	116	.....	4	148	260	12	3,928	13,212
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,220	6,360
.....	140	172	.....	.....	620	.....	.....	.....	.....	84	.....	.....	660	1,830
.....	60	108	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	340
.....	8	.....	92	.....	.....	.....	.....	.....	.....	4	20	4	1,088	1,232
20	.....	4	396	48	.....	.....	16	.....	24	24	.....	32	1,104	3,928
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21,336	21,336
.....	92	8	416	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,024	1,534
19,920	278,468	19,206	79,816	13,828	33,652	44,264	80,768	53,960	12,680	116,988	31,144	17,544	3,963,040	7,971,830

no special returns of free goods were made. The enumeration is likewise very imperfect—some important ports

No. 13.—Statement showing the quantity and value of the principal arti

Ports.	Ashes, pot and perl.		Plank and boards.		Shingles.		Cows and other cattle.		Horses.		Wool.		Wheat.
	Quantity, barrels.	Value.	Quantity, M feet.	Value.	Quantity, millé.	Value.	Number.	Value.	Number.	Value.	Quantity, pounds.	Value.	Quantity, bushels.
Amherstburg.....	56	\$2,460											45,810
Bath.....			626	\$4,108									
Burwell.....					2,384	\$4,180							
Belleville.....	68	1,904	14,573	116,404	166	432							12,723
Bondhead.....													
Chatham.....	21	420											27,641
Chippewa.....			322	2,260	41	84	36	\$72	10	\$508	5,500	\$1,076	
Cobourg.....			1,120	8,612	122	768	31	2,620	41	4,180	13,615	10,476	
Colbourne.....													
Credit.....			1,905	9,524									45,230
Dalhousie.....			601	4,808									49,654
Darlington.....			1,128	7,483	338	508							6,573
Dover.....	5	200	9,271	59,580	502	736			16	1,140	3,856	936	18,590
Dunnville.....	192	4,760	3,696	25,372	945	1,180							19,997
Fort Erie.....	3	72					100	1,000	25	600			1,300
Goderich.....			86	844									
Grafton.....													
Hamilton.....	165	3,844	5,752	42,348	342	356					2,688	1,156	134,970
Hope.....			6,050	38,348	1,982	3,312	127	2,860	8	480			12,864
Kingston.....			8,202	63,948	850	2,420	3,499	30,072			159	3,848	3,518
Niagara.....													2,500
Oakville.....			2,637	15,820							1,318	328	99,323
Owen's Sound.....			10	48			51	400					
Penetanguishene.....			314	2,196	169	132	60	1,312					
Pictou.....			357	2,376			107	84					
Queenston.....			12	92	28	28	1,611	18,388	98	4,888	4,381	64	1,724
Rondeau.....											10,283	2,565	21,997
Rowan.....			7,521	34,080	91	220							
Sandwich.....	21	632					217	2,480	173	7,488	1,118	224	
Sarnia.....	763	18,128	919	10,224		792			20	800	4,552	1,188	
Stanley.....	6	144	44	704			356	712	10	620	20,908	3,692	45,243
Toronto.....		980	4,530	35,300				764					54,902
Wellington.....													
Whitby.....	305	6,100	4,541	45,408	1,502	2,256	100	400	6	420			50,165
Brockville.....							2,181	29,804	336	22,068	1,125	244	9
Maitland.....													
Cornwall.....							289	3,472	57	3,248	5,552	1,888	170
Coteau du Lac.....									99	4,884	667	168	
Dickenson's Landing.....			18	56			203	1,400					
Dundee.....					88	32	235	1,632	156	2,808	43	8	436
Gananoque.....			23	232	160	200	350	2,400	20	1,200			250
Mariatown.....	12	230					767	4,488	116	7,464			145
Prescott.....	89	2,492	404	1,192	200	200	248	3,216	28	1,956	8,720	1,904	
Riviere aux Raisins.....													
St. Regis.....							120	944	218	4,228			208
Clarenceville.....													
Freleighsburg.....			48	464			382	5,968	112	4,460	5,600	1,140	
Hereford.....							600	7,500	100	4,000	100	24	200
Hemmingford.....			700	5,600					21	976			
Huntingdon.....			130	828	865	272	157	792	51	1,240			420
Lacolle.....					32	52	33	468	82	4,052			
Montreal.....			271	1,296									20,426
Phillipsburg.....			12,320	51,420			16	116	549	27,256			
Potter.....													
Stanstead.....	7	148		32	19	8	1,014	15,296	371	11,096	1,226	240	182
St. John.....	836	23,368	19,502	124,656	2,046	2,124			962	57,400	68,338	9,424	
Sutton.....													
Quebec.....			1,040	8,916									
Napanee.....			4,206	34,012									
La Beauce.....									49	5,728			
Elgin.....							66	936	4	200			
Wallaceburg.....	2	60	468	7,476									3,371
Bruce Mines.....			16	160									
Gaspe.....			8	72	106	440							
New Carlisle.....													
Sault Ste. Marie.....													
New Castle.....			48	260			4	60					19,277
Stamford.....													
Milford.....			11	64			30	480	8	460	104	32	40
Russelltown.....													
Total.....	2,551	65,992	118,416	766,628	12,374	20,732	12,989	140,176	3,747	185,848	183,644	41,896	708,400

NOTE.—The reported exports from Canada serve to show from what ports the different articles are sent, and the real house statements on the United States frontier, and these last have been employed in estimating the trade between the MONTREAL, May 1, 1852.

cles exported from Canada to the United States, from each port, in 1851.

Wheat.	Flour.		Barley and rye.		Beans and pease.		Oats.		Butter.		Eggs.		Unenumerated, value.	Total value.
	Value.	Quantity, barrels.	Value.	Quantity, bushels.	Value.	Quantity, bushels.	Value.	Quantity, bushels.	Quantity, cwt.	Value.	Quantity, dozen.	Value.		
\$34,956													\$42,664	\$79,480
212	\$848	32,289	\$6,308	7,822	\$3,552	23,824	\$6,428						184	21,423
2,744	2,589	2,998	4,804	1,996	11,727	5,196	18,803	3,316	2	\$23			128,180	132,960
15,992			1,671	812					77	832			5,440	147,968
	8,056	31,776		2,649	1,316								12,064	31,196
			1,529	776	524	588				220			2,060	7,528
27,186	51,456	144,076	1,328	532									12,372	71,612
37,240	77,884	272,580											168	944
3,804	4,166	15,400			360	404	7,286	2,176					2,668	317,268
10,660	20 1 9	77,364											188	29,960
14,996	2,770	11,080	513	256									783	151,404
1,840	5	20	15,175	8,044	70	86	3,500	916	56	800	1,000	\$124	18,272	76,416
					200	120	200	32					3,992	3,492
107,976	42,417	168,620	8,642	9,828	500	248	1,779	1,800	135	1,080			15,992	353,248
8,060	10,769	42,496	5 3	208	660	340	90	24	50	628			3,444	100,408
2,440	4,096	13,948	6,518	3,036	4,438	2,176	32,072	8,496					290,020	421,016
2,000													88	2,088
78,052	8,506	31,896	1,495	896			1,270	316					572	122,880
	10	32			20	8	634	124	9	64			84	776
	8	28	1,312	5,856	13,735	7,376	154	40					56	3,786
1,140							1,562	392		296			1,400	17,808
12,092							26	8					3,296	28,444
	758	2,652											6,608	21,268
	400	1,600	566	420	451	386	435	104	67	936	10,251	1,024	16,528	53,480
	1,050	4,200			88	48	1,432	360	102	1,632	3,945	464	24,592	39,386
29,672	7,525	25,704	7,809	3,384	338	144	1,318	344	178	1,248			8,008	45,844
41,700	44,560	162,040											18,936	85,304
	203	832	10,773	5,800	34,736	15,936			2	32			86,584	327,368
31,736	29,514	109,196	2,400	1,200	780	320	8,010	2,164					284	22,884
	8	103	356	491	244	228			428	4,472	752	76	1,964	201,164
	100	400	1,040	480	650	700	4,000	1,312	27	308			13,148	70,648
130					392	208	4,726	1,180					392	3,592
							10,900	3,772					620	10,236
					229	112	2,332	568	2	24	150	12	1,960	4,182
272			1,373	425	488	152	15,746	4,060	4	44			3,508	12,944
188							410	104	50	600			1,396	6,320
116			10,821	5,420	542	252	7,621	1,960	261	3,100	1,000	76	852	24,008
	104	472			253	192	15,623	4,268	274	2,958			14,080	32,960
124					53	16		488	72				908	6,292
								280	100			1,953	196	488
	39	156			160	140	175	28	113	1,308			2,632	16,296
200							200	24	60	600			3,104	15,452
							2,500	624	65	728			3,252	11,180
316			5	4	21	12	1,726	844	52	468			532	4,308
							19,817	5,824	8	12,637	1,564		15,532	27,500
18,084	11,545	45,588		4	1,281	688	5,688	1,680					206,040	272,416
													10,140	88,968
132	2	8	97	28	567	276	3,365	1,048	323	2,964			8,843	40,128
	704	2,312	19,084	11,636			294,308	80,204	1,036	10,628	411,755	33,592	549,432	905,276
	1,325	5,800											5,236	19,452
			13,485	6,584	3,037	1,484	1,588	444					672	43,196
							440	156					456	6,416
1,936							3,452	864	145	1,604	700	68	1,112	4,784
	5	20											52,092	61,564
													67,464	67,644
													212	724
11,600					415	168							10,220	10,220
													428	12,516
28					325	132		125	32	33	364		8,844	10,480
													5,992	5,992

491,760,331,978 1,181,481 146,552 75,506 85,208 41,588 517,405 135,708 3,560 38,004 447,451 38,003 1,715,925 5,330,300

active export trade of different ports. The correct quantities and values are, however, ascertained from the custom-two countries. The inland imports of each country are the only true measure of the respective exports of each.

THOS. C. KEEFER.

No. 14.—Exports of the principal articles of Canadian produce and

Ports.	Ashes, pot and pearl.		Plank and boards.		Shingles.		Cows.		Horses.		Wool.		Wheat.
	Quantity, barrels.	Value.	Quantity, M feet.	Value.	Quantity, mille.	Value.	Number.	Value.	Number.	Value.	Quantity, pounds.	Value.	
Amherstburg.....	112	\$2,082											80,900
Bath.....	6	168	2,616	\$21,288	35	844							4,371
Burwell.....			14,375	83,372	3,332	3,924							
Belleville.....	235	9,464	10,648	85,184	92	92	1	\$16			9,812	\$1,928	30,686
Bonhead.....			221	1,324									50,144
Chatham.....	153	3,192									1,200	240	42,280
Chippewa.....			822	8,220	1,124	1,124	530	5,308	22	\$923	1,700	180	2,649
Cobourg.....	25	560	1,312	9,640	59	80	41	692	29	2,440	65,768	9,916	810
Cobourne.....													2,719
Credit.....			2,430	14,584									158,063
Dalhousie.....	149	3,590	1,007	9,076	4	4							14,985
Darlington.....			936	6,388	59	68							18,042
Dover.....	6	52	7,286	51,004	1,110	1,412	5	40	5	245	6,160	1,540	5,479
Dunnville.....	74	3,700	245	1,716	512	712							108
Fort Erie.....					3	4		2,576	24	1,000	9,330	1,848	11,580
Goderich.....	3	81											
Grafton.....			878	4,392	38	56	2	40					
Hamilton.....	163	3,764	4,794	33,296	395	420					13,000	2,704	97,440
Hope.....	16	400	6,027	38,412	356	368			28	1,624	3,684	540	47,424
Kingston.....	36	1,000	6,143	40,600			61	1,704	211	16,380	30,000	7,600	216,540
Niagara.....	70	400			200	200							7,406
Oakville.....	44	1,320	4,518	27,108									143,839
Owen's Sound.....			3	320									1,135
Penetanguishene.....			60	484									
Pictou.....			347	2,512	60	60							5,907
Queenston.....							349	3,076	104	3,254			33,649
Rondeau.....			50	408									
Rowan.....			4,982	23,776	42	60							
Sandwich.....	41	1,064			182	154	2,093	273	14,176	1,251	240		
Sarnia.....	50	1,690	466	2,796	61	140					2,630	460	
Stanley.....							20	240	5	300	38,035	7,100	
Toronto.....	56	1,080	276	3,092	261	1,352	1	12			72,000	17,812	122,321
Wellington.....							20	320	6	409			30,673
Whitby.....	236	6,943	2,597	20,296	277	416	20	820	6	409			69,000
Brockville.....	97	2,172					2,176	24,640	377	22,452	958	2,6	1,75
Maitland.....			8	56									1,421
Cornwall.....					30	32	18	236	30	1,600			1,410
Coteau du Lac.....									86	5,100			3,074
Dickenson's Land- ing.....			192	608	10	40	109	1,088	21	1,848			
Dundee.....			610	3,048	35	36	207	1,600	171	3,120			978
Gananoque.....			425	1,936	210	420							308
Mariatown.....					8	8	213	2,376	167	5,140			1,243
Prescott.....	345	6,472	113	1,052			196	2,072	91	4,944	224	68	23
Riviere aux Raisins.....									6	44	154	3,428	148
St. Regis.....													
Clarenceville.....													
Frelighsville.....			25	140			208	1,04	247	6,638			601
Hereford.....	10	200					2,100	25,500	12	6,652			530
Hammingford.....			800	6,400					16	760			
Huntingdon.....			108	60	164	182	55	700	41	1,668	67	12	491
Lacolle.....													
Montreal.....				17,886									
Phillipsburg.....	102	3,032	3,559	34,428	43	44	101	860	552	28,264	2,300	500	552
Potterton.....													
Quebec.....				14,276									
Stanstead.....	20	580	3	28					398	12,344	1,300	276	759
St. John.....	13,259	373,8	21,896	194,328	1,588	1,812	5	80	1,154	70,540	24,146	3,556	38,858
Sault Ste. Marie.....													
Gaspe.....			4	400									
Millford.....			34	200	8	12	23	324	2	120	636	144	1,477
New Cas le.....			5,769	30,348	2,142	2,384	7	96	1	40	90	20	1,700
Beauce.....													
Sutton.....													
Bruce Mines.....													
Total.....	15,685	437,276	116,56	795,636	12,198	15,168	6,608	77,500	4,236	215,068	286,691	56,830	1,205,593

The year 1850 was the first in which any return of exports inland was made. It is estimated that about 20 per cent frequent intercourse that full and regular reports of all outward cargoes are scarcely to be expected.

MONTREAL, May 1, 1852.

manufacture to the United States, by inland routes, in the year 1850.

Wheat.	Flour.		Barley and rye.		Beans and pease.		Oats.		Butter.		Eggs.		Unenumerated value.	Total value.
	Value.	Quantity, barrels.	Value.	Quantity, bushels.	Value.	Quantity, bushels.	Value.	Quantity, bushels.	Value.	Quantity, cwt.	Value.	Quantity, dozen.			Value.
\$23,172								2,000	\$400					\$25,604
3,424	1,444	\$5,164	10,223	\$4,172	2,579	\$1,152	2,124	424					\$686	26,472
24,548	18,756	75,024	3,604	1,440	3,728	1,864			50	\$488			26,496	113,792
87,608			309	124	160	644	1,675	386					1,592	201,940
32,134			1,909	956	327	164							428	39,884
1,934									9	104			9,176	45,912
280	5,716	23,344			448	200			2				12,568	30,416
2,176									4				7,424	54,580
103,548	30,000	123,000											86	2,212
13,112	69,570	278,280											36	237,132
13,356	12,141	45,708	742	288	248	96							460	304,432
4,052	17,105	47,248					80	20					432	66,136
100	2,878	7,704					100	24					3,016	108,632
10,712	1,360	5,336	5,122	1,496			2,022	536	49	160	1,203	\$112	1,844	15,600
5,320													11,200	36,380
80,316	52,890	210,416	12,003	3,472	1,242	588	30,603	6,944	112	1,500			1,528	6,922
47,000	7,685	30,740			514	260	141	36	150	1,800	72	12	120	4,832
124,904	22,925	93,032	3,778	5,064	6,108	3,736	148	40	576	5,576			8,680	352,100
5,596	1,270	4,932											6,836	127,923
182,743	3,679	14,716	1,333	800	51	32	4,110	1,096	88	1,056			88,060	388,696
460	39	160							4	28				11,123
4,732	564	2,456	3,000	1,700	543	272			6	68			72	178,940
25,252													1,292	2,260
														484
														484
														2,208
														11,068
														2,588
														34,500
														408
														12,836
			745	308	74	44	2,053	588	36	540	7,249	728	16,264	36,040
													2,400	7,336
40,256	10,000	40,616			1,297	372			416	4,164	250	20	26,880	119,948
115,308	34,348	137,392	4,501	2,148	2,785	1,344	165,951	33,188	124	1,044			27,188	341,340
36,584	2,643	10,512	5,64	3,428	5,816	3,172							176	53,872
51,732	13,500	54,000			500	232	10,000	2,000					1,248	137,612
1,068	237	1,012			116	60	436	92	942	11,244			10,364	73,284
6,196							45	16					88	0,856
1,408					359	348	3,294	644						4,263
5,048			300	240	922	468	12,320	3,424					20	12,300
														180
620	240	728	41	12	30	12	15,223	2,284	50	552			2,636	34,608
1,332													1,340	4,928
932	1	4	33	12	74	28	2,210	440	32	360			964	10,264
16	392	1,792					367	112	40	438			6,538	23,424
														640
108	20	80			169	44	2,270	388					4,908	4,988
														2,216
494	17	68			60	36	131	28	304	292			9,372	43,576
500	50	800			1,000	252			80	800			3,400	12,144
					63	32	4,567	712	31	312			484	4,444
232														18,704
6,032		58,636		40										36,684
492	16	72	14	4	305	320	1,451	388	256	2,384			63,620	78,436
		540												14,648
544	1	4	33	12	150	76	701	140	22	2,392			22,020	1,227,844
27,112	42,310	181,102	4,767	2,120	25,947	13,912	301,052	163,140	935	9,224	378,495	24,916	222,020	1,227,844
														7,956
1,180	8	32	970	388	188	92	26	8	34	384			208	608
1,360	454	1,936											1,544	4,428
													1,064	37,288
													444	444
													444	104
													4,032	4,022
992,780	452,530	1,453,376	62,591	29,768	56,519	29,292	655,029	157,352	4,712	46,328	387,269	25,738	637,948	5,009,480

cent. should be added to the above for the real over the reported exports. There are so many ferries and such

No. 15.—General statement showing imports into the port of Gaspé for the year ending January 5, 1852, distinguishing the countries from whence and the route by which imported.

Articles.	Total quantities.	Total value.	From Great Britain, value.	From U. States, value.	From British North American colonies, value.	From all other foreign countries, value.	Total value imported inland, via U. States.	Total value imported by sea, via St. Lawrence.
Coffee.....cwt.....	10 2 21	\$116	.....	\$80	\$32	.....	.....
Sugar.....do.....	103 0 15	616	\$136	136	340	.....	.....
Molasses.....do.....	926 3 15	2,012	.....	168	1,840	.....	.....
Tea.....pounds.....	5,368	1,432	1,140	204	84	.....	.....
Tobacco.....do.....	4,223	760	.....	432	328	.....	.....
Brandy.....gallons.....	25	64	64	.....	.....	.....	.....
Gin.....do.....	203	124	124	.....	.....	.....	.....
Run.....do.....	70	24	24	.....	.....	.....	.....
Wine.....do.....	20	12	12	.....	.....	.....	.....
Salt.....tons.....	2,265	4,208	3,540	.....	52	\$612	.....
Spices.....do.....	80	76	76	.....	4	.....	.....
Vinegar.....gallons.....	153	48	48	.....	.....	.....	.....
Oats.....barrels.....	7	48	.....	.....	48	.....	.....
Meal.....do.....	20	120	.....	.....	120	.....	.....
Flour.....do.....	25	124	.....	.....	124	.....	.....
Butter.....cwt.....	4 2 26	68	68	.....	.....	.....	.....
Meats.....do.....	68 0 0	520	.....	444	76	.....	.....
Fish.....do.....	.....	284	.....	.....	284	.....	.....
Glass.....do.....	.....	176	156	.....	16	.....	.....
Leather.....do.....	.....	356	312	20	16	.....	.....
Oil.....gallons.....	237	152	148	.....	.....	.....	.....
Candles.....do.....	.....	320	292	8	16	.....	.....
Seeds.....do.....	.....	4	.....	.....	4	.....	.....
Leather, boots and shoes.....	.....	3,916	3,728	164	24	.....	.....
Iron.....do.....	.....	1,812	1,800	.....	8	.....	.....
Corn-brooms.....do.....	.....	.....	.....	.....	.....	.....	.....
Coals.....tons.....	123	280	276	.....	4	.....	.....
Pitch and tar.....barrels.....	80	160	32	44	80	.....	.....
Pearlash.....do.....	.....	688	688	.....	.....	.....	.....
Philosophical instruments.....pes.....	23	34,768	33,772	156	836	.....	.....
Merchandise.....do.....	.....	53,348	46,480	1,880	4,372	612	\$1,880
.....do.....	.....	.....	.....	.....	.....	.....	\$51,564

No. 16.—General statement showing imports into the port of New Carlisle, district of Gaspé, for the year ending January 5, 1852, distinguishing the countries from whence and the route by which imported.

Articles.	Total quantities.	Total value.	From G. Britain.	From U. States.	From British N.A.colon's.
Coffee, greencwt..	12 2 27	\$164			
Sugar, refined.do..	1 22	4	\$4		\$164
other kinds.do..	172 0 5	900		\$60	840
Molassesdo..	434 0 17	1,016		108	904
Tea.pounds..	10,841	2,744	1,668	60	1,008
Tobacco, manufactured . . .do..	1,256	2,328		92	2,232
Snuff.do..	92	20		4	16
Wine.gallons..	35	28			28
Fruit, dried.do..		12			8
Spices.do..		32	28	4	
Vinegar.gallons..	589	76	76		
Cocoa and chocolate. . .pounds.	100	4			4
Glass.do..		4			4
Leather, tanned.do..		300	156		140
Oil, except palm.gallons..	459	344	344		
Pork, messcwt..	6	44			44
Manufact'd candles.do..		108	108		
cotton.do..		5,092	5,084		4
leather boots.do..		2,084	1,956		124
hardwaredo..		1,448	1,168		276
linen.do..		2,340	2,340		
wool.do..		5,120	5,120		
articles not enum'd.do..		6,684	5,524	4	1,152
Coaldo..		84	36		48
Dyestuffsdo..		24			24
Iron, bar, roddo..		192	192		
Iron, boiler plate.do..		16	16		
Iron hoops.do..		28	28		
Larddo..		96	116		
Leaddo..		76	76		
Pitch and tar.barrels..	84	220	32		188
Ropedo..		544	544		
Resin and rosinbarrel.	1				
Tallowdo..		4	4		
Other articles not enumerated.do..		1,256	1,256		
Free goods.do..		33,500	25,904	340	7,252
Total imports.do..		20,176	13,920	340	6,252
Free Goods.		53,680	39,828	340	13,508
Animals, pigs.number.	3	12			12
Books.do..	3				
Drawings.do..		32	32		
Maizedo..					
Sodado..					
Beefpounds..	200	8			8
Bread.cwt..	1,215	3,308	3,308		
Chocolatepounds..	175	16			16
Flourbarrels..	365	1,728	1,636		88
Fishcwt..	4,856	12,612			12,612
Millstones.number..	1	28			28
Oil, fish.gallons..	360	280			280
Porkpounds..	1,400	136			136
Saltbushels..	18,640	1,552	1,288		264
Wood.do..		440			440
		20,176	13,920		6,252

All the goods imported have been by sea.

J. FRASER, Collector.

No. 17.—*Abstract of the trade of the port of Quebec, showing the ships and tonnage employed, and the relative value of the imports, distinguishing foreign goods from goods of British produce and manufacture, during the year ended January 5, 1852.*

Countries from which vessels entered.	From place of entry.		Value of imports.		
			British.	Foreign.	Total.
	<i>No.</i>	<i>Tons.</i>			
United Kingdom.....	889	400,798	\$2,342,876		\$2,342,876
British North American colonies..	183	18,461	134,408		134,408
Gibraltar.....	2	581		\$340	
France.....	16	4,699		29,360	
Spain.....	37	13,294		8,264	
Portugal.....	1	299		6,428	
Sicily.....	1	129		5,368	
Amsterdam.....	1	212			
Antwerp.....	1	262		10,728	
Hamburg.....	6	1,436		3,000	
Norway.....	8	3,030			
Maderia.....	1	213			
Canton.....	1	315		9,012	
West Indies.....	13	3,588		27,316	
Value of sundry goods for warehouse.....				35,384	
United States.....	145	86,504		129,128	129,128
Total.....	1,305	535,821	2,477,284	264,316	2,741,600

*The value opposite foreign places, except the United States, is that which was entered for home consumption. The balance of \$35,348 was placed in the warehouse, for which no separate detail was kept.

CUSTOM-HOUSE, QUEBEC, *January, 1852.*

No. 18.—*Abstract of the trade of the port of Quebec, showing the ships and tonnage employed and the relative value of the exports, distinguishing foreign goods from goods of British produce and manufacture, during the year ended December 31, 1851.*

Countries for which the vessels cleared.	Vessels.		Value of exports in dollars.		
	No.	Tons.	*British.	Foreign.	Total.
United Kingdom.....	1,212	572,760	5,130,979	7,829	5,138,813
British North American colonies.	176	11,748	371,630	5,889	77,519
Portugal (Oporto).....	2	423	4,469		4,469
West Indies (Trinidad).....	1	231	4,977		4,977
Colombia (Porto Cabello).....	1	212	9,048		9,058
United States.....	2	704	5,774	6,350	2,134
	1,394	536,083	5,526,877	20,068	5,546,955

*The word *British* is used in contradistinction to the word *foreign*, most of the articles exported being of colonial growth and produce.

CUSTOM-HOUSE, QUEBEC, *January, 1852.*

No. 19.—Statement showing exports from Canada to the United States, at the port of Quebec, in the year ending January 5, 1852, distinguishing the amounts carried in British and American vessels, respectively.

Articles.	Total quantities.	Total value.		Vessels.				Vessels outward.							
		Value in British vessels.	Value in American vessels.	American steamers.		American sailing.		British steamers.		British sailing.					
				No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.				
Boards.....pieces.....	55,798	\$5,188													
Pine.....do.....	390	107													536
Flour.....barrels.....	1,335	6,361													
Boards.....pieces.....	25,404	2,689													
Deals.....do.....	6,436	1,402													
Planks.....do.....	22,414	2,713													1,171
Tamarack sleepers.....do.....	19,758	4,882													
.....		23,342	\$16,982	\$46,360	1	148	1	148	15	1,727					

Goods in transit to the United States.

Articles.	Total quantities.	Total value.
Railroad bars.....	150,289	\$732,067
Salt.....	21,448	1,162
Coals.....bushels.....		356
Brandy.....		204
Iron, bar, rod, &c.....		11,509
.....		745,238

* Via St. Lawrence.
 † Via inland, American vessels not being allowed to come down to Quebec.
 [Fractions omitted.]

No. 20.—General statement showing the imports into the port of Quebec for the year ending January 5, 1852, distinguishing the countries from whence and the route by which imported.

Articles.	Total quantities.	Total value via the U. States, inland.	Total value by sea, via St. Lawrence.	Total value of the whole.
ENTERED FOR CONSUMPTION.				
Coffee, green.....cwt..	1,207 2 26	\$3,100	\$8,796	\$11,896
Sugar, refined.....do..	1,274 2 24	.....	9,548	9,584
other kinds.....do..	25,371 0 1	.....	114,052	114,052
molasses.....do..	20,102 0 10	.....	27,064	27,064
Tea.....lbs..	310,260	15,592	55,296	70,888
Tobacco, unmanufactured.....do..	225,082	4,368	11,052	15,420
manufactured.....do..	91,583	7,284	3,932	11,216
Cigars.....do..	1,548	1,392	588	1,980
Spirits, brandy.....galls..	24,540	.....	17,732	17,732
Gin.....do..	27,591	442	9,280	9,732
Rum.....do..	7,065	.....	1,964	1,964
Whiskey.....do..	1,859	.....	1,180	1,180
Cordials.....do..	62	.....	100	100
Wine.....do..	65,525	952	30,640	31,592
Rice.....do..	.....	.....	7,464	7,464
Salt.....bushels..	314,322	.....	18,824	18,824
Fruit, green.....do..	.....	.....	3,232	3,232
dried.....do..	.....	1,192	7,584	8,776
Spices.....do..	.....	.....	6,360	6,360
Confectionery and preserves.....do..	.....	.....	708	708
Maccaroni.....lbs..	1,510	.....	148	148
Vinegar.....galls..	14,775	.....	1,812	1,812
Grains, barley and rye.....do..	.....	.....	136	136
Beans and pease.....do..	.....	.....	28	28
Meal.....do..	.....	.....	3,792	3,792
Flour.....bbls..	371	444	532	976
Provisions, butter.....cwt..	2 0 19	.....	8	8
Cheese.....do..	83 2 23	.....	1,068	1,068
Meats, salt.....do..	199 3 10	84	944	1,028
Hops.....lbs..	340	.....	40	40
Ale and beer.....galls..	10,552	.....	5,504	5,504
Cocoa and chocolate.....do..	.....	.....	732	732
Fish, salt and pickled.....do..	.....	16	29,128	29,144
fresh.....do..	.....	.....	2,156	2,156
Furs.....do..	.....	260	14,192	14,452
Glass.....do..	.....	372	24,856	25,228
Leather, tanned.....do..	.....	2,068	14,488	16,556
Oil of all sorts.....galls..	87,740½	68	49,152	49,220
Paper.....do..	.....	640	7,364	8,004
Seeds.....do..	.....	92	392	484
Manufactures, candles.....do..	.....	.....	3,588	3,588
cotton.....do..	.....	1,048	318,804	319,852
leather.....do..	.....	.....	8,536	8,536
India-rubber.....do..	.....	5,480	156	5,636
iron and hardware.....do..	.....	4,960	403,744	407,704
linen.....do..	.....	.....	75,644	75,644
silk.....do..	.....	.....	101,852	101,852
wood.....do..	.....	.....	9,164	9,164
wool.....do..	.....	1,492	339,080	340,572
Machinery.....do..	.....	.....	4,440	4,440
Articles not enumerated.....do..	.....	14,096	346,188	360,284
Burr stones unwrought.....do..	1,000	.....	1,300	1,300
Chain cables.....do..	.....	.....	43,724	43,724
Coals.....tons..	60,855½	.....	95,976	95,976
Dyestuffs.....lbs..	15,148	4	6,712	6,716
Flax, hemp, and tow.....tons..	391 19 2 18	3,304	19,244	22,548
Hides.....do..	.....	.....	1,164	1,164

STATEMENT—Continued.

Articles.	Total quantities.	Total value via the United States, inland.	Total value by sea, via St. Lawrence.	Total value of the whole.
ENTERED FOR CONSUMPTION.				
Junk and oakum cwt.	3,528 2 15		\$12,860	\$12,860
Lard kegs.	448	\$1,812		1,812
Lead			1,276	1,276
Ores of metals			200	200
Pitch and tar barrels.	2,195	476	3,916	4,392
Rope tons.	618 10 0 3		97,748	97,748
Resin and rosin barrels.	2,391	72	3,324	3,396
Steel tons.	33 17 0 22		5,012	5,012
Tallow		7,668	15,736	23,404
All other articles liable to duties			5,796	5,796
Pork, mess tons.	67 13 2 14	13,808		13,808
Leather, boots and shoes			600	600
<i>Free goods.</i>				
Maize barrels.	17,461		5,744	5,744
Other free goods		792	51,200	51,992
Value of sundry other goods entered for the warehouse		93,456	2,474,728	2,568,184
		20,536	746,888	767,424
		113,992	3,221,616	3,335,608
From Great Britain		£ 712,625		\$2,850,500
From the United States		39,277		157,108
From British North American colonies		40,882		163,528
From other countries		41,119		164,476
		<u>833,903</u>		<u>3,335,612</u>

NOTE.—Goods arriving at Quebec for transhipment to other ports are not comprised in this return.

CUSTOM-HOUSE, QUEBEC, January 21, 1852.

No. 21.—General statement showing imports into the port of Montreal for the year ending January 5, 1852, distinguishing the countries whence and the route by which imported.

Articles.	Total quantities.	Total value.	Great Britain.	United States.	British North American colonies.	All other foreign countries.	Total value imported in-land, via U. States.	Total value imported by sea, via U. States, via U. Lawrence.
			Value.	Value.	Value.	Value.		
Coffee, green.....cwt.....	2,497 0 27	\$24,348	\$1,140	\$19,512	.....	\$3,688	\$19,512	\$4,832
other.....do.....	5 1 3	64	.....	64	.....	.....	64	.....
Sugar, refined.....do.....	13,984 3 10	97,388	54,192	8,272	.....	34,924	8,272	89,116
other kinds.....do.....	87,418 1 26	402,766	69,488	28,892	\$149,528	154,960	28,892	374,880
molasses.....do.....	31,767 2 27	39,396	1,520	5,496	13,072	19,304	5,496	33,900
Tea.....pounds.....	842,568	206,532	42,332	99,276	1,008	53,908	109,276	97,256
Tobacco, unmanufactured.....do.....	347,075	16,652	22	16,616	.....	.....	16,616	32
manufactured.....do.....	646,124	80,312	2,436	77,876	.....	.....	77,876	2,436
Cigars.....do.....	5,936	6,340	216	5,532	.....	.....	5,532	808
Snuff.....do.....	1,170	172	.....	104	.....	64	104	64
Spirits—Brandy.....gallons.....	140,716 3-5	93,516	10,655	1,224	.....	.....	1,224	92,288
Gin.....do.....	46,627	13,324	8,132	.....	.....	.....	.....	15,324
other.....do.....	18,557	6,128	3,912	740	208	1,260	740	5,384
Whiskey.....do.....	18,058	8,160	7,704	.....	.....	.....	.....	7,704
Cordial.....do.....	636½	1,144	.....	152	.....	.....	152	992
Wine, under \$60 per pipe.....do.....	104,280	36,940	11,204	1,160	248	24,324	1,160	35,780
above \$60 per pipe.....do.....	44,920 2-5	35,400	17,152	616	.....	17,324	616	34,680
in cases.....do.....	4,800½	10,532	6,140	3,424	4	960	3,424	7,108
Salt.....bushels.....	70,199½	4,960	4,072	.....	.....	.....	.....	4,960
Fruit, green.....do.....	10,964½	5,460	.....	4,408	.....	.....	4,408	1,052
dried.....do.....	.....	45,688	31,892	4,008	1,268	8,516	4,008	41,676
Spice.....do.....	.....	30,620	20,152	9,148	356	960	9,148	21,472
Confectionary and preserves.....do.....	.....	1,552	760	340	.....	444	340	1,208
Maccaroni.....do.....	.....	5,248	.....	.....	.....	536	.....	536
Vinegar.....do.....	.....	48	244	.....	.....	5,004	.....	5,248
Animals—Horses.....number.....	1	.....	.....	48	.....	.....	.....	.....
Swine.....do.....	2	.....	.....	.....	.....	.....	.....	.....
Books—Foreign reprint of British copyright works.....do.....	.....	108	.....	.....	.....	.....	.....	108

STATEMENT—Continued.

Articles.	Total quantities.	Total value.	Great Britain.	U. States.	British N. A. colonies.	All other foreign countries.	Total value imported in-land, via U. States.	Total value imported by sea, via St. Lawrence.
		<i>Value.</i>	<i>Value.</i>	<i>Value.</i>	<i>Value.</i>	<i>Value.</i>	<i>Value.</i>	<i>Value.</i>
Coals.....		\$3,476	\$3,152	\$320		\$4	\$320	\$3,156
Dyestuffs.....		34,896	32,092	2,696		104	2,696	32,200
Flax, hemp, and tow.....		26,624	26,108	512			512	26,108
Hides.....		568		568			568	
Iron—Bar, rod, and sheet.....		322,696	320,804	792		1,096	792	321,900
Boiler, plate, and R. F. B.....		99,824	119,284	536			536	99,324
Pig, scrap, and old.....		106,348	105,132	956		256	956	105,392
Hoops.....		43,544	43,392	148			148	43,392
Junk or oakum.....		1,244	994	336			336	904
Lard.....		11,524		11,524			11,524	
Grease and scraps.....		4	4					4
Lead.....		3,884	3,884					3,884
Oil, coconut and palm.....		632	632					632
Pitch and tar.....		1,372	832	388	\$148		388	980
Rope.....		128	128					128
Resin and rosin.....		3,600	808	2,724	60		2,724	872
Steel.....		58,036	58,034	8			8	58,024
Tallow.....		57,020		57,020			57,020	
Other articles.....		55,832	52,520	3,312			3,312	52,520
Animals—Horses.....	2	156	96		60		1,208	156
Oxen and bulls.....	50	1,264	56					56
Sheep.....	11	84	84	1,208				84
Barley.....	8		8					8
Pooks.....	12							
Bushels.....		67,632	43,576	18,408		5,744	18,408	49,220
Busts and casts.....	348	348	204	140			130	204
Bread.....	28	28	28					28
Coals.....		2,040		2,040				2,040

Free.

	736	736	736	736	736	736	736
Cocoa and chocolate.....	1,724	1,724	1,724	1,724	1,724	1,724	1,724
Cotton-wool.....	21,140	10,132	11,000	11,000	11,000	11,000	11,000
Coin and ballion.....	5,024	3,540	1,730	1,730	1,730	1,730	1,730
Drawings.....	14,344	14,264	80	80	80	80	80
Donations.....	96	40	56	56	56	56	56
Farming implements.....	1,244	940	1,244	1,244	1,244	1,244	1,244
Fish, fresh.....	38,724	38,724	37,784	37,784	37,784	37,784	38,724
salted.....	24,046	24,046	24,048	24,048	24,048	24,048	24,048
Fish oil.....	1,024½	1,024	1,020	1,020	1,020	1,020	1,020
Do.....	35	35	35	35	35	35	35
Fur skins.....	29,136	29,136	29,136	29,136	29,136	29,136	29,136
Grindstones.....	1,688	1,688	1,688	1,688	1,688	1,688	1,688
Hoops.....	20	20	20	20	20	20	20
Meat.....	64	64	64	64	64	64	64
Maize.....	39,968	39,968	39,968	39,968	39,968	39,968	39,968
Manures.....	24	24	24	24	24	24	24
Models.....	1,020	1,020	1,020	1,020	1,020	1,020	1,020
Marine stores.....	96	96	96	96	96	96	96
Military stores.....	38,596	37,536	1,060	1,060	1,060	1,060	37,536
Military clothing.....	38,416	38,416	38,416	38,416	38,416	38,416	38,416
Philosophical instruments.....	328	328	328	328	328	328	328
Plaster.....	912	912	912	912	912	912	912
Potatoes.....	4	4	4	4	4	4	4
Poultry.....	14,876	14,876	14,876	14,876	14,876	14,876	14,876
Soda-ash.....	16	16	16	16	16	16	16
Specimens.....	4	4	4	4	4	4	4
Seeds.....	2,708	2,708	2,708	2,708	2,708	2,708	2,708
Settlers' goods.....	14,104	11,476	2,608	2,608	2,608	2,608	11,496
Trees, shrubs, &c.....	2,284	1,344	1,940	1,940	1,940	1,940	344
Wheat.....	179,952	179,952	179,952	179,952	179,952	179,952	179,952
bushels.....	215,283	215,283	215,283	215,283	215,283	215,283	215,283
Wine for officers' mess.....	2,093	2,093	2,093	2,093	2,093	2,093	2,093
gallons.....	2,093	2,093	2,093	2,093	2,093	2,093	2,093
	9,177,164	7,358,984	1,081,368	484,512	252,292	1,081,368	8,095,792

T. BOUTHILLIER, Collector.

CUSTOM-HOUSE, MONTREAL, February 2, 1852.

No. 22.—*An account of the staple articles, the produce of Canada, &c., exported in the year ended 1851, as compared with the year ended 1850.*

PORT OF QUEBEC.

Description of articles.	1851.		1850.	
	Quantity.	Value	Quantity.	Value.
Apples barrels..	716	\$2,404	588	\$1,764
Ashes, pot. do	3,082	86,900	2,434	6,720
pearl do	2,330	37,372	1,092	31,008
Ash timber tons	3,016	14,900	1,713	6,852
Barley minots	1,040	408	3,470	1,120
Battens pieces	4,898	1,960	5,583	2,080
Beef tierces	20	} 5,268	121	} 9,408
Beef barrels	564		692	
Birch timber tons	3,252	18,468	4,613	28,524
Biscuit cwt	1,302	4,376	1,035	2,944
Butter pounds	388,265	26,596	182,023	22,628
Deals, pine and spruce pieces	3,449,611	937,480	2,995,764	584,784
Elm timber tons	35,618	196,124	38,166	220,976
Flour barrels	141,143	570,876	151,094	643,028
Handspikes pieces	5,323	900	12,415	2,080
Hoops do			6,200	200
Lard pounds	45,472	2,256	4,320	392
Lathwood and firewood cords	5,507	32,080	4,423	26,252
Masts pieces	671	67,100	620	62,000
Meal (corn and oat) barrels	2,897	9,976	2,970	8,688
Oak timber tons	28,105	189,308	27,600	251,004
Oars pieces	9,074	4,536	17,435	8,720
Oats bushels	5,827	2,276	11,541	2,760
Pease and beans do	11,543	8,960	6,543	3,748
Pine timber, red tons	90,488	456,232	89,652	468,976
white do	410,091	1,508,528	326,033	1,055,096
Pork barrels	2,690	30,424	2,394	23,788
Shingles bundles	50	} 250	271	} 348
Shingles pieces	44,000		52,000	
Spars do	2,232	44,640	3,229	64,580
Staves M	236	34,076	452	58,340
other do	3,877	348,060	3,622	263,100
Tamarack wood tons	430	2,028	915	4,676
sleepers pieces	19,758	4,068	28,195	5,808
Furs and skins		12,208		11,788
		4,671,048		3,881,280

CUSTOM-HOUSE, Quebec, March 13, 1852.

No. 23.—*An account of the staple articles, the produce of Canada, &c., exported in the year ended 5th January, 1852, as compared with the year ended 5th January, 1851.*

PORT OF MONTREAL.

Description of goods.	Year ended January 5, 1852.	Year ended January 5, 1851.
Acetate of lime.....	38 casks.	909 barrels fresh.
Apples.....	515 barrels of fresh and 1 box dried...	14,844 barrels.
Ashes, pot.....	21,042 barrels.....	7,250 barrels.
Ashes, pearl.....	6,221 barrels.....	518 packages.
Bacon and hams.....	4 hlds. bacon; 5 hlds., 38 tierces, and 32 casks, 17 barrels, $\frac{1}{2}$ barrel, 3 boxes, and 450 loose hams; of these 5 hlds. and 12 loose hams foreign.	
Balsam.....	50 kegs Canada and 1 box cherry.	
Barley.....	2 barrels.....	19 barrels.
Beef.....	298 tierces, 670 barrels, and 12 half barrels; of these 28 barrels beef foreign.	1,853 barrels.
Beeswax.....	2 tierces and 1 cask.	
Biscuit.....	2,909 bags—1,468 Canada, 1,441 manufactured in bond.	65 barrels and 204 bags.
Bran.....		1,000 bushels.
Brandy.....	20 hogsheads (foreign.)	
Bread.....	491 bags.	
Bricks.....		8,000.
Brooms, corn.....	55 dozen, 1 package, and 1 broom.	
Butter.....	29,767 kegs, 4 barrels and 12 half barrels, 164 firkins and 251 tubs, 35 minots.	10,015 kegs.
Candles.....	113 boxes—10 British, 3 Canada, 100 manufactured in bond.	189 boxes.
Cast-iron ware.....	18 stoves and 8 pieces.	
Cheese.....	112 tierces, 77 barrels, 4 boxes, 2 packages, 1 cask, 1 case, 1 cheese.	133 packages.
Clocks.....	8.	
Corn, Indian.....	54,658 bushels and 200 bags.....	41,491 bushels.
Flour.....	230,466 barrels—224,463 Canada, 6,063 foreign.	129,740 barrels.
Furniture.....	11 packages.	
Furs and skins.....	15 packages, 16 casks, 8 cases, 1 pun. 1 tierce, 1 barrel, and 1 bale.	23 packages.
Glass.....	13 boxes and 9 $\frac{1}{2}$ boxes.	
Grease.....	43 kegs.	
Groats.....	29 half barrels.	
Hoops.....	7 tons, 2 cwt. and 5 pounds.	
Honey.....	3 boxes, 3 tins, and 1 case.	
Horns and bones.....	6,490 horns, and 51 tons, 6 cwt. bones.	35 tons horns and bones.
Lard.....	236 barrels and 188 kegs; of these, 200 barrels foreign.	4 barrels and 208 kegs.
Lumber, viz:		
Boards.....	6,907 pieces.....	7,487 pieces.
Deals.....	1,212 pieces.....	3,146 pieces.
Billets.....		622 pieces.
Handspikes.....	144.	18,032.
Maple.....	9 logs.	
Oars.....	875 pairs.....	1,367 pairs.
Sawed pine.....		338 pieces.
Walnut.....	5,000 feet.	
Staves, std. and barrel.	222,739 pieces std., 8,248 barrels.....	221,861 pieces std. and bbls.
Punchoon.....	292,183 pieces.....	375,400 pieces.
Heading.....	2,000 pieces.....	
Meal, Indian.....	1,531 barrels.....	1,472 barrels.
out.....	1,019 barrels and 12 half barrels.....	532 barrels.
Naphtha.....	11 cases and 8 casks.	

No. 23—PORT OF MONTREAL—Continued.

Description of goods.	Year ended January 5, 1852.	Year ended January 5, 1851.
Oats.....	.....	1,072 minots.
Oil cake.....	88 tons, 8 cwt., 3 qrs.....	200 tons, 7,608 pieces, and 24 barrels.
Onions.....	160 barrels and 24 bushels.....	328 barrels.
Ores, copper.....	415 tons, 5 cwt.	
Pails.....	25 dozen.	
Peas.....	61,476 bushels, 543 barrels, and 50 half barrels.	209,874 bushels and 496 bar- rels.
Pipes, tobacco.....	1 box.....	100 boxes and 65 half boxes.
Pork.....	3,732 barrels, 1 tierce, and 4 half bar- rels; of these, 1,734 foreign.	445 barrels.
Saleratus.....	116 boxes.	
Seed, viz:		
Clover.....	31 barrels.	
Timothy.....	26 barrels and 82 casks.	
Millet.....	6 barrels.	
Flax.....	19 barrels and 260 bushels.	
Soap.....	19 boxes.....	849 boxes.
Starch.....	201 boxes and 1 case pulverized.	
Sugar, maple.....	7 boxes.	
Sirup, maple.....	1 keg and 1 jar.	
Tongues.....	55 kegs and 4 barrels.	
Vinegar.....	50 barrels.....	44 casks.
Wheat.....	134,010 bushels.....	87,953 bushels.
Whiskey.....	14 hds. and 4 quarter-casks, (British.) 30 puncheons, British returned.	
Wooden manufactures	71 packages.	
Value.....	...\$1,834,112.....	...\$1,453,680.

In addition to the foregoing, the following goods were exported in foreign ships from this port, which vessels proceeded to Quebec to clear outward, under a license granted in virtue of an order of his excellency the Governor General, in council, of the 23d February, 1850, and whose cargoes will consequently be included in the exports from that port :

Description of goods.	Year ending January 5, 1852.
Apples	87 barrels.
Beef	25 barrels and 5 tierces.
Butter	183 kegs and 50 tubs.
Candles	600 boxes.
Flour	6,367 barrels and 613 half barrels.
Hams	6 tierces.
Lard	292 kegs.
Lumber, viz :	
Boards	340 pieces.
Planks	100 pieces.
Staves, standard	1,451 pieces.
puncheon	4,600 pieces.
Oat-meal	50 barrels.
Paper	18 bales
Pork	75 barrels.
Tobacco	25 boxes and 3,146 pounds foreign.
Wheat	1,928 bushels.
Value	\$29,804.

CUSTOM-HOUSE, MONTREAL, *January 6, 1852.*

R. H. HAMILTON, *Comptroller.*

No. 24.—Statement showing exports from Canada to the United States, at the port of Bruce, in the year ending January 5, 1852, distinguishing the amounts carried in British and American vessels, respectively.

Articles.	Total quantities.	Total value.	Vessels.		Vessels outward.						
			Value in British vessels.	Value in American vessels.	American steamers.		American sailing.		British steamers.		British sailing.
					No.	Tons.	No.	Tons.	No.	Tons.	
Fine copper.....	Tons. cwt. qrs. lbs.	\$36,000	\$36,000	1	364	4	478	.....	.....	3	100
Pig...do.....	19 5 0 0	6,752	6,752	.....	.....	.....	.....	.....	.....	.....	.....
Copper ore.....	440 10 0 0	17,620	17,620	.....	.....	.....	.....	.....	.....	.....	.....
Fish.....	1,487 barrels	6,268	4,828	.....	.....	.....	.....	.....	.....	.....	.....
Furs.....	800	800	\$1,440	.....	.....	.....	.....	.....	.....	.....	.....
Lumber.....	16,000 feet	160	160	.....	.....	.....	.....	.....	.....	.....	.....
Flour.....	5 barrels	20	20	.....	.....	.....	.....	.....	.....	.....	.....
Limestone.....	17 cords	16	16	.....	.....	.....	.....	.....	.....	.....	.....
		67,640	65,220	1	364	4	478	.....	.....	3	100

No. 25.—General statement showing imports into the port of Sault Ste. Marie for the year ending January 5, 1852, distinguishing the countries from whence and the route by which imported.

Articles.	Total quantities.	Total value.	From Great Britain.	From United States.	Remarks.
Coffee, green.....	Cwt. qrs. lbs.	\$4	Value. \$4	Value. \$4	Imported via Hudson's Bay and Lake Superior.
Sugar, refined.....	1 1 10	160	\$160	.....
Sugar, refined bastard.....	14 2 12	4	.....	.....
Molasses.....	1 0 23	4	.....	.....
Tea.....	1 0	.....	.....	.....
Tobacco, manufactured.....	476 pounds.....	148	148	.....
Cigars.....	134..do.....	12	.....	12	
Brandy.....	28..do.....	36	36	.....
Whiskey.....	28 gallons.....	32	32	.....
Wine.....	43..do.....	8	.....	8	
Fruit, dry.....	64..do.....	148	148	.....
Spices.....	green.....	28	28	.....
Cardinals.....	16	16	.....	16	
Vinegar.....	12	12	.....	.....
Horses.....	8 gallons.....	8	8	.....
Salt.....	6..do.....	8	8	.....
Flour.....	1.....	28	.....	28	
Beer.....	278 bushels.....	88	.....	88	
Fish, salt.....	11 barrels.....	40	.....	40	
Pork, mess.....	14 gallons.....	.....	.....	.....
Lumber.....	1 barrel.....	4	.....	4	
Hardware.....	21 cwt. 2 qrs. 12 lbs.	920	.....	920	
Cotton goods.....	4,900 feet.....	48	.....	48	
Woolen goods.....	.....	1,192	1,192	.....
Iron, bar.....	.....	1,356	1,356	.....
Rice.....	.....	4,560	4,560	.....
Unenumerated.....	16 barrels.....	16	16	.....
	.....	3,116	3,156	36	
		12,124	10,892	1,232	

NOTE.—The importations from the United States were all by open boats. Those from Great Britain, all via Hudson's Bay, Moose river, and Lake Superior, in boats and canoes.

CUSTOM-HOUSE, Port of Sault Ste. Marie, Canada West, January 30, 1852.

No. 26.—General statement showing imports into the port of *Hamilton* for the year ending *January 5, 1852, distinguishing the countries from whence and the route by which imported.*

Articles.	Total quantities.	Total value.	From Great Britain, value.	From United States, value.	From British North American colonies, value.	From all other foreign countries, value.	Total value imported in and via United States.	Total value imported by sea via St. Lawrence.
Coffee.....cwt..	2,216 0 25	\$24,348	.....	\$24,348	.....	.....	.....	.....
Sugar, refined.....cwt..	1,531 1 20	10,856	\$1,260	8,832	.....	\$764	\$4,280	.....
Sugar, raw.....cwt..	15,759 0 18	72,732	3,444	51,772	\$20,508	.....	23,956	48,772
Cigars.....lbs.	7,459	9,292	.....	9,292	184	.....	9,292	.....
Brandy.....galls.	7,754½	5,472	336	768	.....	4,176	768	1,900
Wines.....galls.	10,401½	6,252	488	4,944	.....	816	4,944	1,308
Tea.....lbs.	435,491	162,040	7,528	154,588	.....	.....	154,508	7,528
Tobacco.....lbs.	357,522	69,988	.....	61,988	.....	.....	61,988	.....
Salt.....lbs.	79,617	13,288	.....	13,288	.....	.....	13,288	.....
Fruit.....	.....	12,228	680	11,544	.....	.....	11,544	680
Spices.....	.....	2,828	348	2,480	.....	.....	2,480	348
Cotton manufactures	.....	523,384	383,956	171,428	.....	.....	171,428	383,956
Fish.....	.....	2,544	.....	2,544	.....	.....	2,544	.....
Glassware.....	.....	10,160	536	9,620	.....	.....	9,620	536
Hardware and iron.....	.....	279,248	177,856	101,388	.....	.....	101,388	177,856
Leather.....	.....	40,612	12,956	27,440	.....	212	27,652	12,956
Linen.....	.....	66,320	56,436	9,884	.....	.....	9,884	56,436
Silks.....	.....	133,004	113,168	19,836	.....	.....	19,836	113,168
Woolens.....	.....	384,132	269,788	115,988	.....	1,552	114,344	269,788
Paper.....	.....	14,300	5,620	8,676	.....	.....	8,676	5,620
Books.....	.....	548	.....	548	.....	.....	548	.....
Hides.....	.....	10,808	.....	10,808	.....	.....	10,808	.....
Railroad iron.....	.....	16,728	.....	16,728	.....	.....	16,728	.....
Furs.....	.....	7,920	3,252	4,664	.....	.....	4,664	3,252
Other articles.....	.....	295,920	87,152	207,564	.....	600	207,564	87,152
.....	.....	2,198,300	1,124,836	1,044,732	20,692	8,032	1,018,404	1,178,892

No. 27.—General statement showing imports into the port of Toronto for the year ending January 5, 1852, distinguishing the countries from whence and the route by which imported.

Articles.	Total quantities.	Total value.	From Great Britain, value.	From United States, value.	From British N. Am'n colonies, value.	From all other foreign countries, value.
Coffee.....	22 3 18	\$27,228	.....	\$27,228	.....	.....
Sugar.....	2,427 0 8	92,009	\$3,416	64,136	\$24,444	.....
Molasses.....	18,962 2 18	1,944	.....	1,944	.....	.....
Tea.....	1,229 0 17	152,820	.....	152,820	.....	.....
Tobacco, cigars, and snuff.....	446 0 13	57,120	.....	56,472	.....	.....
Spirits and wines.....	311,228	21,624	2,736	18,508	.....	\$1,044
Salt.....	29,475	17,088	.....	17,088	.....	376
Fruits, spices, &c.....	102,735	25,108	.....	25,108	.....	.....
Cheese, hops, &c.....	4,492	4,492	.....	4,492	.....	.....
Fish, fur, glass, &c.....	53,360	8,408	8,408	44,948	.....	.....
Rice and seeds.....	4,764	4,304	.....	4,304	456	.....
Dry goods, hardware, &c.....	1,461,780	718,028	718,028	743,752	.....	.....
Other goods.....	552,972	250,772	250,772	269,052	.....	35,144
Broom-corn.....	2,640	2,640	.....	2,640	.....	.....
Burr-stones and block marble.....	11,880	11,880	.....	11,880	.....	.....
Coal.....	24,320	24,320	.....	24,320	.....	.....
Dye stuffs, tallow, and oil.....	35,244	304	304	24,936	.....	.....
Hides.....	24,672	24,672	.....	24,672	.....	.....
Other goods.....	38,440	31,156	31,156	7,284	.....	.....
		2,601,928	1,014,836	1,325,620	24,900	36,568

W. F. MENDELLE, Collector.

CUSTOM-HOUSE, PORT OF TORONTO, January 23, 1852.

No. 29.—General statement showing imports into the port of Kingston for the year ending January 5, 1852, distinguishing the countries from whence and the route by which imported.

Articles.	Total quantities.	Total value.	From Great Britain.	From United States.	From British N. A. colonies.	From all other foreign countries.	Total value imported inland via U. States.	Total value imported by sea via St. Lawrence.	Remarks.
Sugar, Muscovado.....cwt..	4,065 3 27	\$19,172	Value. \$8,460	Value. \$8,472	Value. \$2,112	Value. \$8,596	\$8,460	\$10,712	
Spices.....	604	376	132	472	448	268	268	132	
Dry fruit.....	3,876	3,876	1,036	2,824	448	938	938	448	
Brandy.....gallons.	7,123½	4,800	1,036	3,760	448	1,408	1,408	1,036	
Wine.....do..	2,179½	1,700	284	1,412	448	1,412	1,412	284	
Cigars.....	2,172	2,172	265,020	2,172	764	504	504	90,024	
Manufactures, &c.....	355,848	355,848	85,448	265,020	764	18,584	18,584	90,024	
Specific goods.....	85,548	85,548	85,548	85,548	.....	.....	.....	.....
Goods 30 per cent.....	4,552	4,552	.....	4,552	.....	.....	.....	.....
20 do.....	51,702	51,702	.....	51,702	.....	.....	.....	.....
2½ do.....	320,308	320,308	3,664	316,392	248	.....	.....	3,919	} Large amounts of iron, &c. exported to U. States.
Free goods.....	176,492	176,492	3,812	172,680	.....	.....	.....	.....
Total.....	.....	1,026,292	98,200	915,912	3,580	8,596	31,520	106,564	

No. 30.—*Abstract of merchandise received from the frontier districts adjoining Canada, and re-warehoused in the district of New York, during the year 1851.*

Articles.	Packages.	Value.
Ashes.....	2,593 barrels, 6 cases, 15½ barrels.....	\$62,562 00
Beef.....	100 tierces.....	1,025 00
Barley.....	987 bushels.....	354 00
Butter.....	1,340 kegs, 23 tubs, 1 barrel.....	8,791 00
Cotton and worsted.....	3 cases.....	1,105 00
Fire-engine.....	In 5 cases and 1 bundle.....	1,230 00
Furs.....	13 cases, 3 puncheons, 3 casks.....	6,347 00
Flour.....	250,352 barrels.....	846,814 00
Hams.....	16 casks.....	630 00
Leather.....	8 bales.....	519 00
Moccasins.....	7 cases.....	757 00
Oatmeal.....	200 barrels.....	666 00
Peas.....	2,439 barrels, 164½ barrels, 5,641 bushels.....	5,651 00
Skins, dressed.....	1 case.....	316 00
undressed.....	1 case.....	182 00
Wax.....	20 bales.....	1,300 00
Wine.....	91 pipes, 121 half pipes, 5 quarters.....	7,631 00
Wheat.....	712,403 bushels.....	481,213 00
		1,427,093 00

DISTRICT OF NEW YORK,
Collector's Office, March 22, 1852.

No. 31.—*Abstract of merchandise received from the frontier districts adjoining Canada, and re-warehoused in the district of Boston and Charlestown, during the year 1851.*

Articles.	Packages.	Value.
Flour.....	28,763 barrels.....	\$96,256 00
Ashes.....	151 barrels.....	2,521 00
Butter.....	1,069 kegs and tubs.....	7,466 00
Paper, writing.....	3 cases.....	465 00
Hams.....	30 casks.....	890 00
Peas.....	2,815 bushels.....	1,082 00
Wheat.....	15,030 bushels.....	8,628 00
Curiosities, fossil remains, &c.....	87 packages.....	2,133 00
		119,441 00

COLLECTOR'S OFFICE,
District of Boston and Charlestown, March 15, 1852.

No. 32.—DISTRICT OF NEW YORK.

Abstract of quantity and value of merchandise transported in bond to the frontier districts, to be exported to Canada, during the year 1851.

Articles.	Packages.	Value.
Books.....	68 cases and 2 boxes.....	\$20,306 00
Brushes.....	1 case and 2 casks.....	352 00
Beads.....	15 cases.....	1,979 00
Brandy.....	45 hogsheads, 10 baskets, and 75 casks.....	4,829 00
Burr-stones.....	2,829 pieces.....	3,359 00
Buttons.....	1 case.....	320 00
Camphor.....	9 casks.....	1,050 00
Cordials.....	50 boxes.....	143 00
Cassia.....	1,130 mats, 248 cases, and 5 packages.....	2,644 00
Coffee.....	200 bags.....	2,344 00
Cloves.....	11 bags.....	177 00
Corks.....	13 bags and 20 bales.....	997 00
Cut glass.....	3 cases.....	47 00
Dry goods.....	259 cases, 62 bales, and 1 package.....	66,942 00
Drugs.....	18 cases, 3 bales, 1 ceroon, and 4 casks.....	3,821 00
Earthenware.....	2 cases, 50 crates, and 2 casks.....	1,837 00
Engravings.....	1 case and 1 package.....	74 00
Furs.....	14 cases and 2 boxes.....	6,061 00
Fire-crackers.....	50 cases and 100 boxes.....	116 00
Fish.....	35 cases and 25 boxes.....	828 00
Flowers, artificial.....	3 cases and 2 packages.....	1,667 00
Ginger.....	6 bags.....	10 00
Gin.....	2 hogsheads.....	95 00
Glassware.....	17 cases and 400 demijohns.....	834 00
Glass bottles.....	3,000 bottles.....	16 00
Hardware.....	59 cases and 151 casks.....	19,516 00
Hemp, manufactures of.....	2 coils.....	84 00
Hides.....	7,474 hides.....	16,029 00
Hats, wool.....	6 cases.....	607 00
Iron, bar.....	300 bars.....	309 00
manufactures of.....	16 cases, 6 casks, 50 packages, and 30 kegs.....	5,320 00
sheet.....	340 bundles.....	1,265 00
Jewelry.....	5 cases.....	2,255 00
Leather.....	10 cases.....	2,722 00
Leather, manufactures of.....	43 cases and 3 bales.....	13,158 00
Looking-glass plates.....	2 cases.....	238 00
Musical instruments.....	9 cases.....	760 00
Molasses.....	245 hogsheads.....	2,826 00
Metal, manufactures of.....	37 cases and 1 cask.....	6,614 00
Nutmegs.....	6 kegs and 8 barrels.....	1,487 00
Oil cloth.....	3 cases.....	435 00
Oil.....	29 casks and 50 baskets.....	1,915 00
palm.....	39 casks and 1 case.....	1,979 00
paintings.....	2 cases.....	32 00
Preserved fruit.....	13,660 boxes, 1,571 barrels, and 937 packages.....	27,776 00
fish.....	77 cases and 10 barrels.....	1,329 00
Plants.....	1 box, (free).....	33 00
Paper hangings.....	2 cases.....	241 00
manufactures of.....	31 cases.....	3,104 00
Pimento.....	182 bags.....	1,626 00
Perfumery.....	1 case.....	168 00
Pepper.....	90 bags.....	336 00
Paints.....	50 casks.....	193 00
Railroad iron.....	29,098 bars.....	108,534 00
Rhubarb.....	5 cases.....	154 00
Rum.....	22 hogsheads and 18 casks.....	1,757 00
Silks.....	33 cases and 3 packages.....	16,206 00
Spices.....	3 cases and 96 bags.....	717 00
Cigars.....	746 packages, 53 boxes, and 220 cases.....	19,007 00
Sugars.....	2,484 hogsheads, 68 barrels, and 8 boxes.....	107,049 00
Soap.....	220 boxes.....	390 00

No. 32—DISTRICT OF NEW YORK—Continued.

Articles.	Packages.	Value.
Straw hats.....	6 cases.....	\$647 00
Sundries.....	73 cases, 1,223 hides, and 4 casks.....	20,059 00
Tin.....	1,108 boxes.....	8,271 00
Toys.....	7 cases and 1 cask.....	646 00
Tin plates.....	1,225 boxes.....	8,197 00
Tea.....	25 boxes and 157 chests.....	5,907 00
Tobacco.....	5 bales.....	118 00
Wine.....	181 casks, 445 baskets, and 36 pipes.....	15,820 00
Wood.....	1 case.....	19 00
Watches.....	3 cases.....	1,439 00
		548,142 00

No. 33.—PORT OF BOSTON.

Abstract of quantity and value of merchandise transported in bond to the frontier districts, to be exported to Canada, during the year 1851.

Articles.	Packages.	Value.
Books.....	52 cases, 1 bale, 3 chests.....	\$9,075
Dry goods.....	1,074 cases, 410 bales.....	518,557
Earthenware.....	9 crates.....	412
Plated ware.....	2 cases.....	491
Tea.....	48 chests.....	550
Straw hats.....	7 cases.....	1,224
Boots.....	2 cases.....	560
Raisins.....	615 boxes.....	877
Hardware.....	63 cases, 5 bales, 1 crate, 40 casks.....	16,709
Hides.....	800 cases, 15 bales.....	3,162
Jewelry.....	25 cases.....	28,046
Watches.....	2 cases.....	2,243
Tin plates.....	488 boxes.....	4,083
Cologne.....	6 cases.....	177
Cigars.....	3 cases, 20 boxes.....	338
Saddlery.....	2 cases, 3 casks.....	824
Sheet iron.....	6 bales, 3 bundles.....	101
Herrings.....	25 barrels.....	61
Lemons.....	50 boxes.....	68
Glass.....	2 boxes.....	279
Saltpetre.....	75 bags.....	497
Nutmegs.....	1 case.....	197
Salts of ammonia.....	1 case.....	43
Fish, preserved.....	10 boxes.....	111
Grapes.....	40 kegs.....	59
Hair seating.....	1 case.....	285
Seal skins.....	1 case.....	569
Musical instruments.....	2 cases.....	247
Plants.....	1 box.....	8
Pictures.....	2 cases.....	283
Perfumery.....	3 cases.....	204
Paper.....	4 cases.....	431
		590,771

No. 34.—*Abstract of quantity and value of Canadian flour exported from the port of Boston to all ports during the year 1851.*

16,688 barrels Canada flour; value \$57,926

No. 35.—*Abstract of the quantity and value of Canadian flour exported from the port of Boston to the British American colonies during the year 1851.*

4,590 barrels Canada flour; value \$14,961

No 36.—*Flour and wheat, the produce of Canada, exported from the port of New York to the British colonies, &c., in 1851; and also the value of all other Canada produce exported to the colonies and to Great Britain, &c.*

Articles.	Packages.	Value.
Ashes exported to Great Britain	1,543 barrels	\$40,542
Ashes exported to other ports	878 barrels	16,086
Butter exported to Great Britain	251 kegs	1,692
Furs	12 cases	3,690
Furs exported to other places	2 cases, 3 casks, 3 puncheons ..	2,975
Wax exported to other ports	20 bales	1,300
Beef exported to Great Britain	100 tierces	1,025
Flour	88,553 barrels	302,920
Flour exported to British provinces	86,689 barrels	299,414
Flour exported to other ports	100 barrels	350
Wheat exported to Great Britain	507,044 bushels	344,568
Wheat exported to British provinces	6,798 bushels	4,666

No. 37.—*Statement of the value and quantity of Canadian flour and grain received in bond at the port of New York, and the value and quantity exported, during the year 1851.*

Articles.	Packages.	Value.
Flour warehoused	250,352 barrels	\$846,814
Flour exported	175,342 barrels	602,684
Wheat warehoused	712,403 bushels	481,213
Wheat exported	513,842 bushels	349,234

No. 38.—*Total amount of wheat and flour in store, December 31, 1851.*

Articles.	Packages.	Value.
Flour in store	63,569 barrels	\$210,600
Wheat in store	278,516 bushels	180,969

No. 39.—*A comparative statement of the gross and net revenue received from custom duties in Canada, for the years 1848, 1849, and 1850.*

	1848.	1849.	1850.
Gross receipts of duties.....	\$1,336,116	\$1,778,188	\$2,463,776
Charges for collection.....	130,388	127,240	* 138,248
	1,205,724	1,650,948	2,324,528

* In this item is included the sum of \$9,832 for return duties.

No. 40.—*Statement showing the relative amount of business done in American and Canadian vessels at the undermentioned American ports, at which separate statements have been obtained, in 1850.*

	In American.	In Canadian.	In bond, and character of ves- sel not stated.	Totals.
Oswego.....	\$597,399	\$1,490,223	.....	\$2,087,622
Rochester.....	26,578	69,972	\$3,639	100,189
Buffalo.....	93,068	222,845	130,987	446,900
Total.....	717,045	1,783,040	134,626	2,634,711

No. 41.—Statistical view of the commerce of Canada, exhibiting the value of exports and imports from Great Britain, her colonies, and foreign countries, together with the tonnage of vessels arriving and departing, during the year 1850.

	COMMERCE.		NAVIGATION.*			
	Value of ex-ports.	Value of im-ports.	Vessels from sea.		Tonnage to and from foreign ports.	
			Tonnage to and from British ports.		Entered inward.	Cleared outward.
	Entered inward.	Cleared outward.	Entered inward.	Cleared outward.	Entered inward.	Cleared outward.
Great Britain	\$6,085,116	\$9,631,920	360,280	522,093	161,836	21,870
North American colonies	898,776	385,616				
British West Indies	8,376	4,448				
United States of America	5,031,156	6,594,860				
Other foreign countries	108,280	365,212				
	11,961,712	16,982,068	366,280	522,503	161,836	21,870

* This table of tonnage embraces merely the vessels arriving and departing from the ports of Quebec and Montreal; the inland ports are not included.

PART VI

NEW BRUNSWICK.

This province is situate between Canada and Nova Scotia, and abuts on the northeastern boundary of the United States, upon the line lately established under the Ashburton treaty. To the southward it is bounded by the Bay of Fundy, and is separated from Nova Scotia by a boundary line across the narrow isthmus which connects Nova Scotia with the continent of America. On the northeast New Brunswick is bounded by the Gulf of St. Lawrence and the Bay of Chaleur; it is divided from Canada by a line which follows for some distance the forty-ninth parallel of north latitude.

The area of New Brunswick is estimated at nearly twenty-two millions of acres; its population, by a census taken during the year 1851, is a little over one hundred and ninety-three thousand souls.

The great agricultural capabilities of New Brunswick, and its fitness for settlement and cultivation, are only now beginning to be known. The commissioners appointed by the imperial government to survey the line for a proposed railway from Halifax to Quebec, thus speak of New Brunswick in their report:

“Of the climate, soil, and capabilities of New Brunswick, it is impossible to speak too highly. There is not a country in the world so beautifully wooded and watered. An inspection of the map will show that there is scarcely a section of it without its streams, from the running brook up to the navigable river. Two-thirds of its boundary are washed by the sea; the remainder is embraced by the large rivers, the St. John and the Restigouche. The beauty and richness of scenery of this latter river, and its branches, are rarely surpassed by anything on this continent.

“The lakes of New Brunswick are numerous and most beautiful; its surface is undulating—hill and dale—varying up to mountain and valley. It is everywhere, except a few peaks of the highest mountains, covered with a dense forest of the finest growth.

“The country can everywhere be penetrated by its streams. In some parts of the interior, by a portage of three or four miles only, a canoe can float away either to the Bay of Chaleur or the Gulf of St. Lawrence, or down to St. John and the Bay of Fundy. Its agricultural capabilities and climate are described by Bouchette, Martin, and other authors. The country is by them—and most deservedly so—highly praised.

“For any great plan of emigration, or colonization, there is not another British colony which presents such a favorable field for the trial as New Brunswick.

“On the surface is an abundant stock of the finest timber, which in the markets of England realizes large sums annually, and affords an

unlimited supply of fuel to the settler. If the forests should ever become exhausted, there are the coal-fields underneath.

“The rivers, lakes, and seacoast abound with fish. Along the Bay of Chaleur it is so abundant that the land smells of it. It is used as a manure; and, while the olfactory senses of the traveller are offended by it on the land, he sees out at sea immense shoals darkening the surface of the water.”

This description of New Brunswick is given in an official report presented by two very intelligent officers of the royal engineers, who were sent out from England to survey the proposed railway route, and examine the country through which it would pass. They returned to England at the close of their labors, the results of which were laid before Parliament.

The principal river of New Brunswick is the St. John, which is four hundred and fifty miles in length from its mouth, at the harbor of St. John, to its sources, at the Metjarmette portage. It is navigable for vessels of one hundred tons, and steamers of a large class, for ninety miles from the sea, to Fredericton, the seat of government. Above Fredericton small steamers ply to Woodstock, sixty miles further up the river; and occasionally they make trips to the entrance of the Tobique, a farther distance of fifty miles. The Grand Falls of the St. John are two hundred and twenty-five miles from the sea. Above these falls the river has been navigated by a steamer forty miles, to the mouth of the river Madawaska, and from that point the river is navigable for boats and canoes almost to its sources. The Madawaska river is also navigable for small steamers thirty miles, to Lake Temiscouata, a sheet of water twenty-seven miles long, from two to six miles wide, and of great depth throughout. From the upper part of this lake to the river St. Lawrence, at Trois Pistoles, is about eighteen miles only, and propositions have been made for establishing a communication between the St. Lawrence and the St. John, either by railway or canal, across this route.

In connexion with the St. John is the Grand lake, the entrance to which is about fifty miles from the sea. This lake is thirty miles in length and from three to nine miles in width. Around the Grand lake are several workable seams of bituminous coal, from which coals are raised for home consumption and for exportation.

The harbor of St. John is spacious, and has sufficient depth of water for vessels of the largest class. The rise and fall of tide is from twenty-one to twenty-five feet, and there is a tide-fall at the head of the harbor which effectually prevents its being ever frozen over or in the least impeded by ice during winter. Few harbors on the northeastern coast of North America, if any, are so perfectly free from ice as St. John harbor. It is in latitude $45^{\circ} 16'$ north, longitude $66^{\circ} 4'$ west.

The Peticodiac is a large river flowing into the Bay of Fundy, near its northeastern extremity. It is navigable for vessels of any size for twenty-five miles from its mouth, and for schooners of sixty or eighty tons for twelve miles farther. On the lower part of this river a very valuable mineral has recently been discovered, and the seam is now worked to considerable extent. By some this mineral is designated “jet coal,” and by others it is considered pure asphaltum. It is black

and brilliant, highly inflammable, and yields a large quantity of gas of great illuminating power. The seam is worked at four miles from the bank of Peticodiac river, where it is navigable for sea-going vessels of large class.

On the gulf-coast of New Brunswick there are many fine ship harbors, each at the mouth of a considerable river; and from these harbors much fine timber is shipped annually to England.

The most southern of these harbors is *Shediac*, which is capacious, and with sufficient depth of water for vessels drawing eighteen feet. Captain Bayfield, R. N., marine surveyor in the Gulf of St. Lawrence, says that Shediac harbor is the easiest of access and egress on this part of the coast, and the only harbor of New Brunswick, eastward of Miramichi, which a vessels in distress could safely run for in heavy northerly gales as a harbor of refuge. Two rivers fall into Shediac harbor, which is fast becoming a place of importance. Should the proposed railway from St. John to Halifax be constructed, it will touch the gulf at Shediac, which will thus command a large trade as one of the great turning-points of the railway.

Cocagne harbor is ten miles by the coast, northwardly, from Shediac harbor. Within this harbor, which is at the mouth of a river of the same name, there is abundance of space for shipping, and good anchorage in five fathoms water. The tide flows seven miles up the Cocagne river. There is much good timber on its banks, and the port has every facility for ship-building.

Buctouche harbor is at the mouth of the Great and Little Buctouche rivers, nine miles by the coast northwardly of Cocagne. Formerly there was only twelve feet of water on the bar at the entrance to this harbor, but, owing to some unexplained cause, the water has gradually deepened of late years, and now vessels drawing thirteen feet have gone over the bar. There is much valuable timber on the banks of this river, and vessels up to fifteen hundred tons burden have been built at Buctouche.

Twenty miles north of Buctouche is *Richibucto harbor*, which is extensive, safe, and commodious. The river is navigable for vessels of large size upwards of fifteen miles from the gulf, the channel for that distance being from four to six fathoms in depth. The tide flows up the river twenty-five miles. The shipments of timber and deals from this port annually are becoming very considerable.

The extensive harbor of *Miramichi* is formed by the estuary of the beautiful river of that name, which is two hundred and twenty miles in length. At its entrance into the gulf this river is nine miles in width.

There is a bar at the entrance to the Miramichi; but the river is of such great size, and pours forth such a volume of water, that the bar offers no impediments to navigation, there being sufficient depth of water on it at all times for ships of six hundred and seven hundred tons, or even more.

The tide flows nearly forty miles up the Miramichi from the gulf. The river is navigable for vessels of the largest class full thirty miles of that distance, there being from five to eight fathoms water in the channel; but schooners and small craft can proceed nearly to the head of the tide. Owing to the size and depth of the Miramichi, ships can

load along its banks for miles; its trade and commerce are already extensive, and will undoubtedly annually increase.

At the northeastern extremity of New Brunswick, just within the entrance of the Bay of Chaleur, is the spacious harbor of *Great Shippigan*, which comprises three large and commodious harbors. Besides its facilities for carrying on ship-building and the timber trade, Shippigan harbor offers great advantages for prosecuting the fisheries on the largest scale. The general dryness of the air on this coast, and the absence of fog within the Gulf of St. Lawrence, are peculiarly favorable to the drying and curing of fish, in the best manner, for distant voyages. Owing to the erection of steam saw-mills at Great Shippigan, and the extensive fishery establishments set up there by Jersey merchants, there is considerable foreign trade. The dry fish are chiefly shipped in bulk to Messina and Naples, for which markets they are well suited.

Little Shippigan harbor lies between the islands of Mescou and Shippigan. It is an exceedingly good harbor, being well sheltered, with safe anchorage in deep water. The main entrance is from the Bay of Chaleur. It is half a mile in width, with eight fathoms at low water, which depth is maintained well into the harbor. This is not a place of any trade, but it is greatly resorted to by American fishing vessels which frequent the Gulf and the Bay of Chaleur, as it affords them perfect shelter in bad weather. There are great conveniences for fishing establishments in this fine harbor; and it would afford great facilities and advantages to our fishermen if they were permitted to land and cure their fish upon its shores.

Bathurst harbor is within the Bay of Chaleur, which in itself may be considered one immense haven ninety miles in length, and varying in breadth from fifteen to thirty miles. It is remarkable that within the whole length and breadth of the Bay of Chaleur there is neither rock, reef, nor shoal, and no impediment whatever to navigation.

The entrance to Bathurst harbor is narrow; but within, it is a beautiful basin, three miles and a half in length and two miles in breadth, well sheltered from every wind. In the principal channel there is about fourteen feet at low water. Vessels drawing more than fourteen feet usually take in part of their cargoes outside the bar, where there is a safe roadstead, with deep water, and good holding-ground.

No less than four rivers fall into Bathurst harbor, each of which furnishes much good timber. Ship-building is prosecuted in this harbor to some extent; and there is a considerable export of timber and deals to England and Ireland.

The entrance to the *Restigouche*, at the head of the Bay of Chaleur, is three miles in width, with nine fathoms water—a noble entrance to a noble river. The main branch of the Restigouche is over two hundred miles in length. Its Indian name signifies “the river which divides like the hand,” in allusion to its separation above the tide into five principal streams, or branches. These drain at least four thousand square miles of fertile country, abounding in timber and other valuable natural resources, the whole of which must find their way to the sea through the port of Dalhousie, at the entrance to the Restigouche. A crescent-shaped cove in front of the town of *Dalhousie* is well sheltered,

and has good holding-ground for ships in nine fathoms water. There are capital wharves and excellent and safe timber ponds at Dalhousie, affording every convenience for loading ships of the largest class.

From Dalhousie to Campbellton the distance by the river is about eighteen miles. The whole of this distance may be considered one harbor, there being from four to eight fathoms throughout in the main channel, which is of good breadth. At Campbellton the river is about three quarters of a mile in width. Above this place the tide flows six miles, but large vessels do not go farther up than Campbellton.

The country watered by the Restigouche and its branches is yet almost wholly in a wilderness state, and nearly destitute of population; but its abundant and varied resources, and the size and character of this magnificent river, must hereafter render the northeastern portion of New Brunswick of great consequence.

TRADE AND COMMERCE OF NEW BRUNSWICK.

The present value of the trade and commerce of this large and highly favored colony, as yet but very thinly peopled, will be best estimated by the following tables.

The value of the imports and exports of the whole province, in 1849 and 1850, is thus stated:

Countries.	1849.		1850.	
	Imports.	Exports.	Imports.	Exports.
Great Britain.....	\$1,507,340	\$2,319,070	\$1,988,195	\$2,447,755
British colonies—				
West Indies.....	5,560	57,360	11,565	90,350
British North America .	517,300	270,475	674,685	297,860
Other colonies.....		6,260	25,135	8,105
United States.....	1,322,810	257,910	1,310,740	387,000
Foreign States.....	114,825	96,235	67,335	59,020
Total.....	3,467,835	3,007,310	4,077,655	3,290,090

The following is an account of the vessels, and their tonnage, which entered inward and cleared outward at all the ports of New Brunswick, in 1849 and 1850:

Countries.	1849.				1850.			
	Inward.		Outward.		Inward.		Outward.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Great Britain.....	325	140,024	769	300,806	233	95,393	768	303,617
British Colonies.....	1,213	81,050	1,172	68,097	1,281	81,424	1,241	70,155
United States.....	1,304	182,007	928	84,742	1,457	242,104	937	87,925
Foreign States.....	51	13,106	25	3,769	68	17,701	25	3,826
Total.....	2,893	416,187	2,891	457,414	3,039	436,622	2,971	464,983

The number of new ships built in New Brunswick during 1849 and 1850 is thus stated :

	Vessels.	Tons.
In 1849.....	114	36,534
In 1850.....	86	30,356

The number and tonnage of vessels owned and registered in New Brunswick in the same years are as follows :

	On December 31, 1849.		On December 31, 1850.	
	Vessels.	Tons.	Vessels.	Tons.
At St. John.....	505	93,192	535	99,490
At Miramichi.....	90	7,464	92	6,282
At St. Andrew's.....	180	16,819	180	16,224
Total.....	775	117,475	807	121,996

The following tables and statements are given with the view of showing the trade of the port of St. John, and of the various other seaports of New Brunswick, during the years 1850 and 1851 :

No. 1.

Abstract of the trade of the port of St. John, showing the ships and tonnage employed, and the relative value of the imports, distinguishing foreign goods from goods of British produce and manufacture, during the year ending December 31, 1850.

From what countries.	Vessels inward.		Value of imports.		Total.
	Number.	Tons.	British.	Foreign.	
Great Britain and Ireland....	133	58,251	\$1,546,395	\$126,450	\$1,672,845
United States.....	694	145,095	196,405	877,350	1,073,755
British N. A. Colonies.....	815	45,153	304,115	85,455	389,570
British West Indies.....	12	1,514	10,200	.....	10,200
Foreign West Indies.....	19	2,908	.....	65,260	65,260
Foreign Europe.....	18	6,926	4,650	.....	4,650
South Sea Fisheries.....	1	292	20,485	.....	20,485
Totals.....	1,692	260,139	2,082,250	1,154,515	3,236,765

No. 2.

Abstract of the trade of the port of St. John, showing the ships and tonnage cleared outward, and the relative value of the exports, distinguishing foreign goods from goods of British produce and manufacture, during the year ending December 31, 1850.

To what countries.	Vessels outward.		Value of exports.		Total.
	Number.	Tons.	British.	Foreign.	
Great Britain and Ireland....	457	190,215	\$1,547,335	\$96,055	\$1,643,390
British N. A. Colonies	794	40,309	108,015	37,095	145,110
United States	405	45,214	187,355	106,200	293,555
British West Indies.....	37	5,141	54,245	355	54,600
Foreign West Indies.....	15	2,150	33,455	.....	33,455
South America.....	3	466	7,190	195	7,385
Australia	1	402	3,405	840	4,245
British Possessions in Africa ..	2	424	3,855	.....	3,855
Totals.....	1,714	284,321	1,944,855	240,740	2,185,495

No. 3.

Abstract of the trade of the port of St. John, showing the ships and tonnage entered inward, and the relative value of the imports, distinguishing foreign goods from goods of British produce and manufacture, during the year ending December 31, 1851.

From what countries.	Vessels inward.		Value of imports.		Total.
	Number.	Tons.	British.	Foreign.	
Great Britain and Ireland....	143	64,113	\$1,855,270	\$87,105	\$1,942,375
British N. A. Colonies	737	42,048	322,845	107,485	430,330
British West Indies.....	8	1,750	3,705	.....	3,705
Foreign West Indies.....	23	3,342	.....	105,610	105,610
United States	605	166,952	303,925	1,154,280	1,458,205
Foreign Europe	11	4,245	.....	26,510	26,510
Totals.....	1,527	282,450	2,485,745	1,480,990	3,966,735

No. 4.

Abstract of the trade of the port of St. John, showing the ships and tonnage cleared outward, and the relative value of the exports, distinguishing foreign goods from goods of British produce and manufacture, during the year ending December 31, 1851.

To what countries.	Vessels outward.		Value of exports.		Total.
	Number.	Tons.	British.	Foreign.	
Great Britain and Ireland....	440	208,889	\$1,915,210	\$17,080	\$1,932,290
United States.....	359	64,344	148,270	164,425	312,895
British N. A. Colonies.....	695	42,041	171,665	44,720	216,385
British West Indies.....	25	3,472	21,350	265	21,615
Foreign West Indies.....	21	3,688	53,105	1,040	54,145
South America.....	3	1,772	23,330	3,735	27,065
Australia.....	2	615	4,325	1,410	5,735
Totals.....	1,545	324,821	2,337,455	232,675	2,570,130

From these returns, it is apparent that the imports of St. John decreased in the year 1851, while the exports increased considerably—thus:

	1850.	1851.	
Total imports.....	\$3,966,735	\$3,236,765	Decrease, \$729,970
Total exports.....	2,185,495	2,570,130	Increase, 384,635

The following is an account of the timber and lumber cut on American territory, and floated down the river St. John, which was exported to the United States under certificate of origin, in the years 1850 and 1851, with their estimated value :

Articles.	1850.		1851.	
	Quantity.	Value.	Quantity.	Value.
Boards and scantling, M feet.....	2,658	\$27,670	2,784	\$35,775
Clapboards.....M.....	2,599	40,070	3,857	95,950
Shingles.....do.....	4,169	10,490	6,808	17,030
Palings.....do.....	40	355	113	615
Hackmatack timber.....tons.....	30	150	727	3,635
Laths.....M.....	20	20	215	270
Pine timber.....tons.....	1,324	8,965	565	3,955
Ship-knees.....pieces.....	553	400	.....	.....
Spars.....do.....	28	55	220	985
Total value.....	.....	88,175	.....	158,165

From the foregoing, it will be seen that the export to the United States of American timber and lumber, cut on the upper St. John, and shipped through the port of St. John, has very nearly doubled within the last year, and is understood to be annually increasing.

The following is an account of the principal articles of colonial produce, growth and manufacture, exported to the United States from the port of St. John, N. B., during the year ended 31st December, 1851, with their value :

Articles.	Quantity.	Value.
Boards and scantling.....M feet.....	2,997	\$37,285
Pickets and palings.....M pieces.....	331	1,655
Laths.....do.....	1,009	1,270
Shingles.....do.....	383	960
Clapboards.....M.....	150	3,750
Hackmatack timber and knees.....tons.....	466	2,695
Spars.....pieces.....	10	50
Staves.....M.....	643	8,035
Fire-wood.....cords.....	173	865
Lime.....hhds.....	238	390
Gypsum.....tons.....	1,652	2,120
Grindstones.....pieces.....	65	80
Ox horns.....hhds and crates.....	32	330
Potatoes.....bushels.....	8,900	6,180
Coal.....tons.....	195	900
Black lead.....cwt.....	152	325
Potash.....barrels.....	32	320
Sheepskins.....crates.....	123	5,275
Railway sleepers.....M feet.....	379	2,500
Pig iron.....tons.....	91	3,405
Oats.....bushels.....	4,800	2,400
Smoked herrings.....boxes.....	1,392	1,865
Mackerel.....barrels.....	10	60
Salmon, preserved.....packages.....	766	16,115
Salmon, fresh.....No.....	4,437	4,440
Shad.....barrels.....	184	1,345
Alewives and herrings.....do.....	6,892	21,565
Total value.....		125,080

The total value of the like description of articles exported from the port of St. John to the United States in 1850, was \$157,695; showing a decrease of that class of exportations to the extent of \$32,615 in the year 1851.

The following is a statement in detail of the various articles, the growth, produce, or manufacture of the United States, imported into the port of St. John during the year 1850, with the value of each description of articles:

Articles.	Quantity.	Value.
Apothecary ware	1,080 packages ..	\$15,761
Ashes.....	98,133 pounds.....	4,986
Ale and porter	3,148 gallons.....	628
Bricks.....	30,000.....	195
Books and stationery.....	1,761 packages ..	24,472
Bran	100 bags.....	50
Boats.....	4.....	142
Bread.....	1,253 cwt.....	5,892
Butter and cheese.....	233 cwt.....	1,826
Barilla.....	66 tons.....	1,827
Broom brush.....	53,954 pounds.....	3,856
Bark.....	30,606 .do.....	3,155
Soap and candles.....	10,060 .do.....	1,592
Coffee and cocoa.....	155,050 .do.....	22,636
Coal.....	2,321 tons.....	7,724
Indian corn.....	57,462 bushels ..	46,391
Canvass	10,194 yards.....	1,063
Cork	25 bags.....	191
Cattle.....	12 head.....	755
Clocks.....	2.....	42
Cement.....	515 barrels.....	481
Combs.....	16 packages ..	1,331
Copper and yellow metal.....	261 cwt	5,656
Cordage.....	329 packages ..	3,742
Carriages.....	20.....	1,041
Confectionary	11 cwt	181
Dyewood.....	1,243 cwt	1,803
Earthenware.....	70 packages ..	1,068
Furs.....	62 .do.....	3,115
Fruits and vegetables.....	4,771 .do.....	9,906
Dried fruits	1,140 cwt	9,358
Feathers.....	18 cwt	90
Fireworks.....	1 box.....	14
Furniture.....	1,214 packages ..	3,190
Wheat flour.....	37,082 barrels ..	180,738
Rye flour.....	14,300 .do.....	44,240
Fire engine.....	1.....	2,037
Groceries.....	505 packages ..	1,713
Glassware	1,109 .do.....	4,885
Glue.....	2 cases	
Grain, wheat.....	193,723 bushels ..	205,556
Haberdashery	1,576 packages ..	24,477
Hay.....	492 tons	4,857
Hair.....	2 bags.....	30
Hemp.....	118 bales.....	2,165
Hops.....	43 .do.....	942
Hides.....	78 .do.....	12,310
Iron, wrought and unwrought.....	276 tons.....	9,651
Iron castings.....	573 pack's, 752 pieces, and 453 cwt.....	7,934
Indigo.....	168 pounds.....	127
India rubber goods.....	272 packages ..	8,287
Jewelry	24 .do.....	2,125
Leather.....	1,128 .do.....	13,236
Lumber.....	1,995 feet.....	155
Lignumvitæ.....	55 tons.....	1,218
Lard.....	8,874 pounds.....	931
Live stock.....	1 horse, and 6 coops of poultry	191

Imports into the port of St. John—Continued.

Articles.	Quantity.	Value.
Matches	28 cases	\$170
Meal	8,118 barrels	24,657
Meat, salted	13,551 cwt.	86,616
Mahogany and rosewood	4,912 ft., 56 pieces, 4 packages	688
Mats	50 packages	370
Musical instruments	25 . . . do	1,212
Machinery, (planing, &c.)	27 . . . do	2,095
Molasses	77,629 gallons	8,295
Moulding sand	48 tons	77
Manure	75 barrels	222
Marble	33 tens	808
Nuts	301 packages	2,508
Minerals	1 package	10
Naval stores	2,260 barrels	4,376
Oil, fish	6,215 gallons	4,588
Oil, palm	78 cwt.	685
Oars	20 pairs	21
Plaster	240 barrels	310
Oakum	19 tons	1,861
Oysters	193 barrels	360
Prints	6 packages	100
Rice	209,048 pounds	8,042
Paint and putty	108 kegs and barrels	690
Sugar, refined	516 cwt.	4,387
Sugar, Muscovado	3,602 cwt.	20,317
Spirits	22,376 gallons	19,442
Spices	116 packages	676
Sirup	84 gallons	75
Stoves	1	25
Seeds	7,952 pounds and 24 pkgs.	1,392
Shot	2 cwt.	12
Scythe and grain stones	47 packages	353
Starch	19 boxes	78
Tallow and soap grease	3,072 cwt.	22,470
Tea	41,246 pounds	9,558
Tobacco	37,484 . . . do	68,356
Timber, locust	7 tons	142
Timber, pitch-pine and oak	1,677 .do	11,937
Treenails	58,818	972
Turpentine	2,235 gallons	858
Varnish	1,625 .do	708
Vinegar	15,999 .do	1,575
Wine	4,380 .do	2,922
Whalebone	3 packages	62
Wooden-ware	2,779 .do	12,378
Total value		1,120,582

The following is a detailed statement of the principal articles imported from the United States at the port of St. John, in the year 1851, with their value :

Articles.	Quantity.	Value.
Apothecaries' ware.....		\$27,025
Ale and porter.....	3,506 gallons.....	705
Ashes.....	1,001 cwt.....	5,490
Books and stationery.....		35,045
Butter and cheese.....	88 cwt.....	870
Bread.....	371 cwt.....	1,840
Barilla.....	66 tons.....	1,965
Broom-straw.....	159 cwt.....	1,430
Candles and soap.....	158 cwt.....	2,050
Coffee.....	1,007 cwt.....	13,720
Coals.....	1,816 tons.....	6,345
Cider and vinegar.....	123 barrels.....	295
Cordage.....	219 packages.....	2,640
Carriages.....	22.....	1,200
Dye wood.....	133 cwt.....	655
Earthen and glassware.....		9,910
Fruit and vegetables.....		11,590
Furniture.....		6,775
Dried fruit.....	1,395 cwt.....	8,845
Wheat flour.....	68,878 barrels.....	297,820
Rye flour.....	2,028...do.....	6,890
Musical instruments.....	13.....	530
Corn-meal.....	5,549 barrels.....	16,780
Wheat.....	157,900 bushels.....	149,325
Corn and other grain.....	40,246...do.....	34,385
Groceries.....		8,315
Haberdashery.....		158,295
Hides.....	254 bales.....	26,435
Hops.....	60...do.....	2,060
Hemp.....	217...do.....	8,190
Hardware.....		39,600
Wrought and cast-iron wares.....		11,045
India rubber goods.....	500 packages.....	12,935
Leather manufactures and leather.....		45,600
Salted meats.....	9,875 cwt.....	81,935
Molasses.....	27,600 gallons.....	6,610
Marble and other stone.....		1,740
Cabinet-wood, veneers, &c.....		4,010
Naval stores.....	1,840 barrels.....	3,500
Oysters.....	278...do.....	
Oil.....	12,832 gallons.....	5,610
Plaster.....	406 barrels.....	465
Palm oil.....	24 cwt.....	175
Rice.....	2,519 cwt.....	9,630
Seeds.....	212 bushels.....	2,905
Refined sugar.....	1,192 cwt.....	10,105
Brown sugar.....	2,515 cwt.....	16,010
Spirits.....	72,820 gallons.....	42,025
Tallow.....	4,182 cwt.....	36,020
Tea.....	5,259 chests, 84 lbs. each..	113,315
Treenails.....	211 M.....	2,980
Tobacco.....	3,777 cwt.....	82,460
Wood-wares.....		13,035
Lignumvitæ.....	21 tons.....	230
Wine.....	3,159 gallons.....	2,400
Copper.....	38 cwt.....	1,295
Hay.....	34 tons.....	335
Paints.....	15 cwt.....	480
Pitch-pine timber.....	4,228 tons.....	20,290
Live stock.....	1 bull.....	210
Machinery.....		1,375
Printing press.....	1.....	1,125
Fire-engines.....	2.....	1,590
Total value.....		1,422,930

From the two preceding tables it will be seen that the value of imports from the United States at the port of St. John in 1850 was \$1,120,582; and in 1851 was \$1,422,930; showing an increase in the latter year of \$302,348.

An examination of these tables will also show that the imports of coals and timber at St. John from the United States, both in 1850 and 1851, far exceeded the value of similar articles exported to the United States in those years.

The quantity of coals of colonial produce exported to the United States from St. John in 1850 was only 65 tons, while in that year the quantity of coals imported from the United States at the same port was 2,321 tons. The coals exported were of the soft, bituminous description, while those imported were anthracite, the use of which in this colony for steamboats and foundries, and also for domestic use, to which they have not yet been applied, would be largely increased if they were imported free of duty. In 1851 the coals exported amounted to 195 tons, and the import from the United States to 1,816 tons.

It will also be observed that New Brunswick imports from the United States large quantities of pitch-pine and other timber which are in much request for ship building and other purposes. In 1851 no less than 4,228 tons of pitch-pine timber, valued at \$20,290, was imported at St. John from the United States. The demand for pitch-pine, oak, locust, hickory, and black walnut, none of which are found in New Brunswick, would be greatly increased if they were free of duty; and various other descriptions of wood for cabinet work would also be sought after under the like circumstances.

The coals and timber of New Brunswick and the United States, differing, as they do, so widely in character and uses, may be fairly exchanged with each other, each having its own peculiar advantages for certain purposes.

The number of vessels belonging to the United States which entered at the port of St. John during the year 1851 was 92, of the burden of 37,308 tons. The largest of these vessels took cargoes of timber and deals from St. John direct to ports in the United Kingdom, earning fair freight. The number so employed in 1851 was 41, of the burden of 29,831 tons. The remaining 51 vessels, of the burden of 7,477 tons, were employed in voyages between St. John and the United States.

The number and tonnage of new ships built and fitted out at the port of St. John in 1850 and 1851 are as follows:

Year.	Number.	Tons.
1850.....	58	20,377
1851.....	74	38,960

Of the new ships built at St. John in 1851, fourteen, measuring 10,332 tons, were for owners in the United Kingdom, and twenty-one others, of the burden of 11,398 tons, were sold and transferred to other ports during the year. This amounts to 21,730 tons of shipping ex-

ported from St. John during the past year, estimated at \$800,000, which does not appear in the export returns.

A great improvement in the model and finish of New Brunswick built ships has taken place within a few years, and their value has thereby been greatly augmented in the English market. Larch timber, better known by its local names of hackmatac or tamarack, is now chiefly used in the construction of the New Brunswick ships; and this wood has been so greatly approved, that in 1850 the committee of underwriters at Lloyd's decided to admit hackmatac vessels to the red star class for six years. This year the same committee has further resolved to admit these vessels to the seven-years class. The resolution runs thus:

‘ Hackmatac, tamarack, juniper, and larch, of good quality, free from sap, and not grain-cut, will be allowed in the construction of ships in the seven-years class, for the following parts: Floors; first, second, and third foot-hooks and top-timbers; stem and stern post; transoms, knight-heads, hawse-timbers, apron, and dead-wood.’”

The number of vessels belonging to the port of St. John on the 31st day of December, 1850, was 535, of the burden of 99,490 tons. On the 31st day of December, 1851, the number was 518, of the burden of 94,810 tons; the decrease is attributed to a number of old vessels being sold during 1851.

The population of St. John being under 30,000 souls, the proportion of tonnage to population is unusually large.

An account of the numbers, tonnage, and men, of vessels that entered inward and cleared outward at the port of St. Andrews and its out-bays in 1850.

Place whence entered, or to which cleared.	Vessels.	Port.	Entered inward.			Cleared outward.		
			No.	Tons.	Men.	No.	Tons.	Men.
United Kingdom.....	British. {	St. Andrews....	8	2,374	89	16	4,966	169
		St. Stephens....	1	327	12	16	8,219	366
		Campo Bello....	3	736	27	1	598	20
		Magaguadario ..				16	7,076	229
		Total.....	12	3,437	128	49	20,859	784
United Kingdom.....	Foreign {	St. Andrews....				3	908	33
		St. Stephens....				3	1,042	33
		Magaguadario ..				2	1,235	37
		Total.....				8	3,185	103
British West Indies....	British. {	St. Andrews....	1	414	19			
		St. Stephens....	8	1,766	81	21	3,536	181
		Magaguadario ..				1	154	6
		Campo Bello....	2	242	13	1	227	11
		Total.....	11	2,422	113	23	3,917	198
British West Indies	Foreign..	St. Stephens....				2	250	12
Montevideo	British...	St. Stephens....				1	167	9
Island St. Martin.....	British...	Campo Bello....	2	250	13			
British N. A. Colonies..	British. {	St. Andrews....	14	572	44	14	751	54
		St. Stephens....	38	1,544	117	30	772	81
		Magaguadario ..	6	503	28	7	219	24
		Campo Bello....	15	434	53	23	644	77
		Total.....	73	3,053	242	74	2,386	236
United States.....	British. {	St. Andrews....	126	8,775	448	28	1,534	96
		St. Stephens....	23	8,228	264	1	707	15
		Magaguadario ..	103	7,664	401	108	2,657	284
		Campo Bello....	22	867	72	23	1,400	94
		Total.....	274	25,534	1,185	160	6,298	489
United States.....	Foreign {	St. Andrews....	339	33,901	2,026	332	32,885	1,986
		St. Stephens....	15	2,388	89	7	884	29
		Magaguadario ..	6	1,708	55	5	567	21
		Total.....	360	37,997	2,170	344	34,296	2,036
		Grand total.	732	72,693	3,851	661	71,358	3,867

The total amount of shipping owned at the port of Miramichi on the 31st day of December, 1851, was 93 vessels—7,466 tons. During 1851, the number of new vessels built on the gulf coast of New Brunswick was twenty-one, measuring 11,879 tons; of these four were over 1,000 tons each, and five were over 700 tons each.

The vessels which entered inward and cleared outward at Miramichi during the years 1850 and 1851 were as follows:

Countries.	1850.				1851.			
	Inward.		Outward.		Inward.		Outward.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Great Britain.....	42	16,438	95	34,886	48	19,017	104	39,146
British Colonies.....	118	10,695	92	4,888	124	10,305	100	5,581
United States.....	29	7,512	3	102	38	9,152	6	307
Foreign States.....	13	3,088	6	501	9	1,512	6	220
Total.....	202	37,733	196	40,377	219	39,986	216	45,254

The total value of imports and exports at Miramichi in 1851 is thus stated: Imports, \$347,990; exports, \$411,700.

Of the imports at Miramichi in 1851, goods and merchandise from the United States, of similar descriptions to those imported at St. John, were received to the extent of \$47,435.

The exports to the United States in 1851 were as follows:

Articles.	Quantity.	Value.
Alewives.....	1,337 barrels.....	\$4,160
Salmon.....	458....do.....	5,715
Shad.....	2....do.....	10
Bass.....	3....do.....	15
Herrings.....	55....do.....	155
Mackerel.....	2....do.....	15
Preserved salmon.....	73,736 pounds.....	13,050
Shingles.....	77,000.....	135
Total.....	.....	23,255

In the year 1850 five American ships, of the burden of 2,273 tons, took cargoes of timber and deals from Miramichi to London; and in 1851, six American ships, of the burden of 2,954 tons, also took cargoes to the United Kingdom from this port, under the provisions of the British navigation laws.

At the port of Dalhousie the value of imports in 1851 was \$128,570; of exports, \$152,015. There were 28,202 tons of pine timber exported to the United Kingdom in 1851. The shipping returns at this port are as follows: Inward, 108 vessels—21,774 tons; outward, 102 vessels—23,666 tons.

At Bathurst the value of imports in 1851 was \$77,850; of exports, \$115,090. Shipping, inward, 89 vessels—14,065 tons; outward, 79 vessels—15,991 tons.

At Richibucto the value of imports in 1851 was \$109,000, and the value of exports, \$133,155. Shipping, inward, 106 vessels—16,786

tons; outward, 105 vessels—18,305 tons. Among the vessels at Richibucto in 1851 were the following vessels not British:

Name of vessel.	Nation.	Whence.	Tons.	Cargo inward.	Whither bound.	Cargo.
Urania	Norwegian ..	Calais, France..	244	Ballast.....	London.....	Deals.
Cora	Prussian	New York	250	do	Hull.....	do.
Lollando	Norwegian ..	.....	361	do	Gloucester.....	do.
Louise	French .....	.....	183	do	do	do.
Fortuna	Norwegian ..	.....	345	do	do	do.
Christiana	do .....	.....	355	.....	Hull.....	Timber and deals.
Pacific	American.....	New York.....	191	.....	Belfast, Ireland.	Deals.
Florence	do	do	350	.....	Hull.....	.....
Paladin	Prussian	do	328	.....	Grimsby.....	Deals and spars.
Tjofna	Norwegian ..	do	414	.....	do	Deals.
Minerva.....	Russian	do	374	.....	do	do.
Mathilde Helena.	Mecklenburg.	.....	276	.....	Hull.....	Deals and spars.
Hévelius.....	Prussian	Halifax.....	364	British goods...	Cork.....	Deals.
Marthina	Norwegian ..	New York.....	344	Ballast.....	Fleetwood	do.

The trade of the colony of New Brunswick for the year 1851 is thus summed up:

Imports at St. John.....	\$3,749,585
Imports at ports on the Gulf	877,855
Imports at St. Andrews	225,000
Total imports in 1851	4,852,440
Total imports in 1850	4,077,665
Increase in 1851	774,775
Exports from St. John	\$2,055,130
Exports from ports on the Gulf.....	1,454,975
Exports from St. Andrews.....	270,000
Total exports in 1851.....	3,780,105
Total exports in 1850.....	3,290,090
Increase in 1851	490,015

Ships inward and outward in New Brunswick in 1851.

	Great Britain.		British Colonies.		United States.		For'n States.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Inward.....	273	113,665	1,275	87,965	1,453	274,594	57	12,926	3,058	489,150
Outward	815	347,757	1,182	73,280	950	111,772	34	5,719	2,981	538,528

Ships and vessels owned in New Brunswick, December 31, 1851.

	Number.	Tons.	Total.	
			Number.	Tons.
Sailing vessels—				
Under 50 tons.....	438	10,857	778	116,711
Above 50 tons.....	340	105,854		
Steam vessels—				
Under 50 tons.....	5	136	18	1,577
Above 50 tons.....	13	1,441		
Total.....			796	118,288

Number of new vessels built in New Brunswick in 1851.

	Number.	Tons.
St. John.....	60	28,628
Miramichi.....	21	5,603
St. Andrews.....	6	109
	87	34,350

An average of nearly 400 tons to each vessel.

The value of imports into the port of St. John and its outbays from the United States in 1851 was \$1,530,900, being an increase on the preceding year of \$365,000. Fully one-third of all the imports into New Brunswick are drawn from the United States, and the amount would be greatly increased under more liberal arrangements.

Fisheries of New Brunswick in the Bay of Fundy.

The following statement of the extent and value of the New Brunswick fisheries in the Bay of Fundy is from an official document, compiled with great care, in 1850, by a gentleman who, in that year, was appointed to visit and inspect the various fishing stations and establishments in the bay:

Grand Manan.—At this island there are twenty-four fishing vessels, with two hundred and ninety-one men; and ninety-four boats, with two hundred and eighty-two men. The precise quantities of cod, pollock, hake, haddock, and herrings are not stated, but the total catch is estimated at \$37,500.

Campo Bello.—At this island there are eleven fishing vessels, with fifty-two men; fifty boats, with one hundred men; and twenty-one weirs, attended by one hundred men. The catch of all these in 1850 is thus stated: 5,340 quintals of pollock, 1,750 quintals of cod, 5,100 barrels of herrings, 480 barrels of mackerel, 150 barrels of pickled haddock

and cod, 120 barrels of oil, and 40,000 boxes of smoked herrings. Total value, \$40,940.

West Isles.—At this group of islands (in the immediate vicinity of the boundary, near Eastport) there are twenty-seven fishing vessels, with one hundred and fifty-six men; two hundred boats, with five hundred men; and seven weirs, attended by thirty-five men. The catch of these in 1850 is thus stated: 20,800 quintals of pollock and hake, 3,750 quintals of cod, 3,500 barrels of herrings, 800 barrels of pickled cod and haddock, 450 barrels of oil, and 5,000 boxes of smoked herrings. Total value, \$51,060.

Harbor of St. John.—In this harbor there are about two hundred boats and five hundred men employed in the fisheries. The catch of 1850 is thus stated: 40,000 salmon, (exported to Boston, &c., fresh, in ice,) 14,000 barrels of alewives, and 1,200 barrels of shad. Total value, \$100,000.

Cumberland bay.—In the northeastern arm of the Bay of Fundy, known as Cumberland bay, there are two hundred and thirteen fishing boats, with five hundred and twenty men. The catch of 1850 is thus stated: 4,100 barrels of shad. Value, \$24,000.

At various smaller stations on the bay shore the fisheries for shad, salmon, herrings, cod, pollock, hake, and haddock, were, in 1850, estimated at the value of \$10,000.

Total value of New Brunswick fisheries within the Bay of Fundy, in 1850.....	\$263,500
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The free navigation of the river St. John.

The extent and navigable character of the river St. John have been already noticed.

From its mouth, at the harbor of St. John, in the Bay of Fundy, to its source, at the Metjarmette portage, in the highlands which separate Maine and Canada, its length, as already stated, is four hundred and fifty miles.

From the sea to the Grand Falls, the distance, as before mentioned, is about two hundred and twenty-five miles; up to that point, the river runs exclusively within British territory. About three miles above the falls, the due north line from the monument at the source of the St. Croix strikes the river St. John; from thence the boundary between Maine and New Brunswick is found in the middle channel or deepest water of the river, up to the St. Francis, a distance of seventy-five miles. In this distance the right bank of the St. John is within the State of Maine, and the left bank in the province of New Brunswick.

From the mouth of the St. Francis to a point on the southwest branch of the St. John, where the line run under the treaty of Washington intersects that branch, the distance is one hundred and twelve miles; and for that entire distance the river St. John is wholly within the State of Maine.

From the point just mentioned, to the monument at the source of the river on the Metjarmette portage, the distance is about thirty-eight miles. The right bank of the river only is in Maine, the left bank being within the province of Canada.

It is therefore apparent that nearly one-half of the extensive river St. John is within the United States, whose citizens thus become greatly interested in its navigation. Besides the main stream of the St. John, there are also large tributaries, some of them wholly, and others partially, within the State of Maine; and it has been estimated that there are one thousand three hundred miles of navigable water in the St. John and its tributaries, to be used in common by British subjects and American citizens.

The territory watered by the St. John and its tributaries comprises nine millions of acres in New Brunswick, about two millions in Canada, and six millions in the United States.

The portion within the United States is covered with timber of the most useful and valuable descriptions.

After the settlement of the boundary, by the treaty of Washington, in 1842, it was divided in nearly equal proportions between the States of Maine and Massachusetts, each of which has since sold a number of townships for lumbering purposes, and granted permits for the like object to a large extent.

The whole of the timber and lumber cut within this district (with the exception of a small quantity which is floated down the Penobscot) finds its way to the seaport of St. John. On being shipped from thence, it has been subject to an export duty, since the 1st May, 1844, at the following rates: on every forty cubic feet of white pine timber, twenty cents; on every forty cubic feet of spruce timber, fifteen cents; and the same on every forty cubic feet of hackmatac, hard-wood timber, masts, or spars; and the sum of twenty cents on every thousand superficial feet of saw-logs, sawed lumber, or scantling.

This export duty is paid by all timber and lumber alike in New Brunswick, and in every part of the province. It was imposed in consequence of the difficulty and expense of collecting stumpage in New Brunswick; and in the local act which first passed in that colony all timber and lumber cut by American citizens, within the limits of the United States, and floated down the river St. John, was expressly excepted from its operation. But, upon its opinion of the law officers of the Crown in England, this act did not receive the royal assent, because it was held that such an exception was contrary to the letter and the spirit of the treaty of Washington, which expressly provides by its 3d article "that all the produce of the forest, in logs, lumber, timber, boards, staves, or shingles, or of agriculture not being manufactured, grown on any of those parts of the State of Maine watered by the river St. John, or by its tributaries—of which fact reasonable evidence shall, if required, be produced—shall have free access into and through the said river, and its said tributaries having their source within the State of Maine, to and from the seaport at the mouth of the said river St. John, and to and round the falls of said river, either by boats, rafts, or other conveyance;" "*that when within the province of New Brunswick, the said produce shall be dealt with as if it were the produce of said province.*"

The refusal of the Crown to assent to the colonial act was based upon the principle that neither the legislature of New Brunswick nor the imperial government had either the right or the power to make any dis-

inction between the produce of the United States floated down the river St. John and the produce of New Brunswick. If it were once conceded that a distinction could be drawn, such distinction could be carried out so as to operate very disadvantageously upon American produce. The British government in such case might maintain that such timber and other articles in the United States floated down the St. John were subject to foreign duty on importation into England, while similar articles from New Brunswick were admitted at a nominal duty only.

After this construction of the principle of the treaty, the legislature of New Brunswick passed a second act rendering all timber and lumber exported from the province alike subject to the export duty ; and this act has been in operation since May 1, 1844.

The following is a statement of the quantities of timber and lumber being floated down the river St. John during the present season of 1852 :

100,000 tons white-pine timber, at \$6 per ton.....	\$600,000
10,000 tons hackmatac timber, at \$7 per ton.....	70,000
50,000,000 white pine logs, at \$6 per thousand.....	300,000
20,000,000 spruce logs, at \$5 per thousand.....	100,000
5,000,000 pine boards, at \$15 per thousand.....	750,000
15,000,000 cedar and pine shingles at \$3 per thousand....	45,000
5,000,000 pieces clapboard, at \$16 per thousand.....	80,000
	1,945,000
Total.....	

As prices are advancing, the value of the produce of the forest above given may be safely stated at two million of dollars.

In any agreement for the free navigation of the St. John by citizens of the United States, it should be stipulated that their lumber cut within American territory, and floated down the St. John, should not be subject to export duty if shipped from thence to the United States. Such a stipulation would only be just and fair, and would relieve our citizens from the payment into the treasury of New Brunswick of the large sums they now contribute annually toward the support of the government of that colony.

All the timber which floats down the St. John is collected in one boom. Each piece is clearly and distinctly marked, and can be immediately recognized by its owner ; if not so marked, it is forfeited to the Boom Company. Crown officers are appointed to examine the whole of the timber which comes down the St. John, and that which is cut within the limits of the United States is readily recognised by them. There could, therefore, be no difficulty in identifying such timber and lumber when shipped, and in relieving it from export duty, if an agreement to that effect should be entered into between the respective governments.

The St. John is navigable by large steamers and by sea-going vessels of 120 tons, up to Fredericton, which is eighty miles from the Bay of Fundy. In 1848 Fredericton was created a port of entry, and in 1851 two vessels entered there from Boston. It is stated that not

less than fifty thousand passengers were transported between St. John and Fredericton by steamers in 1851.

Above Fredericton the river is navigable for small steamers to Woodstock, a distance of sixty-five miles, and from thence to Grand Falls, about seventy-five miles farther up. The river is also occasionally navigated by small steamers during the season.

In 1849 the legislature of New Brunswick granted the sum of \$40,000 towards improving the navigation of the St. John between Fredericton and the Grand Falls; this amount to be expended at the rate of \$8,000 per annum for five years. The expenditure commenced in 1850. The navigation is already greatly improved; and, in a few years, it is believed the river below the Grand Falls will be quite freed from obstructions, and rendered navigable from thence to the sea for light draught steamers.

In taking the census of 1851 it was found that there are in New Brunswick, upon streams flowing into the St. John, 218 saw mills and 147 grist mills. The tributaries of the St. John afford an amount of water power which is incalculable; a very small portion only has yet been employed.

The country bordering on the St. John is well adapted for settlement and cultivation; the soil is excellent, and produces large crops. As yet, it is very thinly populated; still it was found, by the recent census, that in the counties bordering on the St. John the following quantities of cattle were owned, and crops raised, in 1850:

Cattle, 89,657 head; sheep, 96,760; swine, 23,391; hay, 129,000 tons; oats, 846,445 bushels; potatoes, 1,060,883 bushels; wheat (above Fredericton,) 42,500 bushels; butter, 763,334 cwt.; and maple sugar, 124,000 pounds.

The larch or hackmatac timber, which abounds in all the territory watered by the St. John and its tributaries, is highly prized for ship-building, and is greatly sought after by American ship builders. Ships built of this wood are rated as first-class for seven years, while those built of spruce and pine only stand in that rank four years.

So much of this wood was carried out of New Brunswick into Maine and Massachusetts in 1850 for ship building purposes, that the legislature of New Brunswick became alarmed, lest the ship-yards of that colony should fall short of a supply; and a special export duty was, therefore, imposed on knees, foot-hooks, and floor timbers, when sent out of the country. This act has been suspended in its operation during the present year; but the very fact that such a duty has once been imposed, and that it may be demanded in another season, is another and powerful reason for an amicable and equitable arrangement which will open the navigation of the St. John to citizens of the United States, and relieve them from the payment of all, or any export duties upon their products, whether of the forest, of mines, or of agriculture, in their transit to the sea.

As valuable interests arise, and border relations become more complicated, this question will yearly become more difficult of arrangement. The magnitude of lumbering operations upon the waters of the St. John, and the expense at which those operations are conducted by the enterprising and industrious citizens of Maine, as also the interests

of a large body of American citizens, who, in constantly increasing numbers, are forming new settlements on the affluents of the St. John, and conducting agricultural operations upon a large scale, demand the fostering care and watchful protection of government.

A sketch of the early history and of the present state of our knowledge of the geology, mineralogy, and topography of the British provinces of Nova Scotia and New Brunswick, containing information concerning the value of the minerals of those provinces. By CHARLES T. JACKSON, M. D.

Nova Scotia is one of the oldest of the European settlements in America. Little is known of the voyages of the Northmen, but there is reason to believe that those hardy navigators were the first Europeans that visited these shores. They formed, however, no permanent settlements, and hence did nothing towards the civilization of the country. The French navigators, the Jesuit priests, and those adventurous merchants and farmers who accompanied them, did much towards the civilization of this continent, and the marks they made in the wilderness of the great northern and western regions of this country still are extant in every portion of the country between the mouth of the St. Lawrence river and the great lakes of America, and all along the borders of the mighty Mississippi, from the Falls of St. Anthony to the Gulf of Mexico. Without the use of arms the French people conquered the savages of this continent; the cross of the *Saviour* prevailed where muskets and bayonets would have been of little avail. The ardent and devoted priest, fired with an irrepressible zeal, pressed boldly into the camps of the red men of the forest and of the prairie, and overpowered the superstitious savages by a more magnificent display of the regalia of the Catholic church than had ever been seen by the children of the forest.

Overcome by the pomp and show of the ministers of the cross, the savages bowed before the God of the white men as superior to their own, in no less degree than the gilded trappings of the French priests surpassed the coarse, gingling costumes of their own mystery of medicine men. It was thus that the French people first were enabled to gain foothold among the Indians of America, and to spread their language and religion among the aboriginal tribes of the North and West. Their settlements certainly left monuments which date back as far as to 1606 in Nova Scotia, for the writer of this notice found an ancient tomb-stone on Goat island, in the Anapolis basin, with the inscription "1606." It was undoubtedly a memento of the grave of one of the soldiers or sailors of De Ments' fleet, which established the colony of French people at Port Royal, now Anapolis, in Acadie—now Nova Scotia.

We refer to the settlements of the French, at this early day, because to them we owe our first knowledge of a few of the minerals of this province. The fleet of De Ments carried back to France many of the minerals of the newly-discovered and newly-settled Acadie. A large amethyst from Cape Split, or Cape Blomidon, in the Basin of Mines,

was presented to the Queen of France by this intrepid and intelligent navigator on his return from the province to his native shores. This stone is said still to exist among the crown jewels of France, though the country which it represents passed long since into the hands of the British, having been conquered principally through the aid of the then New England colonies of Great Britain—Massachusetts, New Hampshire, and Maine. Native copper was also discovered along the shores of Cape D'Or; and in other places in the trap breccia of the North mountain range; and the name Cape D'Or leads us to believe that the brilliant metallic copper seen beneath the waters which bathe the foot of that promontory was mistaken, at first, for native gold.

The early French settlers were very attentive in their exploration of the mineral wealth of the country, and they manifested more skill and discrimination generally in their estimate of their value, than is to be found among our own pioneers in the wild and uninhabited regions of this continent.

We shall have occasion to show, in a subsequent communication, how much the French Jesuits did towards the discovery of the hidden treasures of the shores of the great lakes of this country, and shall prove that they knew more of them in 1636 than our own people knew in 1843. It must be remembered that the Jesuit fathers were men of great learning, and possessed a knowledge of all the sciences of their day; hence it is not incredible that they should have done much towards a correct knowledge of the natural history of the various countries which they explored. It is natural, also, that they should have recorded the discoveries which they made, and transmitted an account of them to France, in order to induce more of their countrymen to flock to the shores of the New World. Did time allow us to ransack the archives of the Jesuit colleges, there is no doubt that we should be able to discover records concerning the mineral wealth of Nova Scotia and of New Brunswick, such as we found concerning the minerals of Lake Superior while preparing a report on the mines of that wonderful region for our government a few years since. It seems to be the duty of the historian of mineralogical science to search the records made by the first explorers of the country, as much as it is the duty of the historian of civil and political movements to look back to the origin of facts and data, and to the actions of his predecessors. Unfortunately, we have not the means at hand to enable us to perform this duty.

Leaving the ancient history of our mineralogy to be explored at some future time, we hasten to our task of developing what is now known concerning the geology and mineralogy of these important provinces, remarking, at the outset, that it is only proposed to give a synopsis or brief outline of the facts, without going into minute details of a technical nature.

Nova Scotia is a most remarkable peninsula, bearing geological evidence of its having been formerly an island of the ocean; the low strip of marshy land between the head of Cumberland bay and Bay Vert appearing to be the silt deposited at the meeting of two counter-currents—one from the present Bay of Fundy, and the other from the St. Lawrence river, and its opposing tidal wave.

Exploring this neck of land farther, we find the underlying rocks

consist of the gray, red, and buff-colored sandstones of the coal measures, filled with the stems of the ancient forests that formed the coal beds; and containing innumerable seams of good bituminous coal, many of which are of sufficient magnitude to prove valuable to the coal miners. Lofty cliffs abutting upon the seacoast, at the South Joggins, present to the observer the most beautiful sectional profiles of the coal-bearing strata, with their curious and instructive fossils, both of vegetable and animal origin. Large trunks of trees, such as are at present unknown in a living state, are seen at various points standing at right-angles to the sandstone strata, indicating that they were originally perpendicular to the horizon, and have been since tilted with the stratified rocks from their original position, to an angle of about fifteen degrees from the vertical line.

Beneath the great masses of coal formed from the stems of *Sigillaria*, we find a thin bed of black shale filled with shells, resembling the genus *Dreissena*, a fresh-water shell; but they have not been fully determined and described, having been mistaken probably for the genus *Mytilus*. Above this, the rocks are filled with beautiful stems of the *Stigmaria*, and of numerous species of *Calamites*. Alternate beds of excellent bituminous coal are seen cropping out along the shore; and the British North American Mining Company has already opened, and is now working, extensive mines in one of these coal beds. This coal is peculiarly fitted for forges, and is sought with eagerness by the smiths, both of New Brunswick and of Maine.

A visit to these mines will well repay the traveller who wishes to see the relics of the primeval forests which formed the coal. We have spent hours beneath the ponderous piles of rocks which form these massive cliffs, and have beheld with amazement the huge trunks of trees, mostly of the *Sigillaria* group, spanning the vault of rocks over our heads—one, forty feet long and from two to three feet in diameter, lying directly across the ceiling of shales which forms the roof of one of the chambers of the mine. In other places we walked beneath the spreading roots of these ancient trees, and measured their expansions in the shale of the roof of the mine. Here and there the scaly stems of the *Lepidodendron* were seen stretching their tall forms through the rocks, or procumbently reposing, like huge serpents, partly encased in the rocks. Now and then a bunch of coal black fern-fronds is seen, representing the foliage of the ancient tree-fern; and broad, flag-like leaves remind us of the spreading palms of the tropical islands of the South Pacific ocean. To the geologist the South Joggins coal mines, in spite of its uncouth name, is like enchanted ground, and is to the phytologist a classic land. The enterprising miner sees there the never-failing signs of a coal deposit; and the quarryman finds excellent materials for buildings and for grindstones. It is from rocks of this very coal formation that the grindstones which are in use over nearly all our Atlantic coast are derived; and the places known as Grindstone island, Cape Merriaguin, and the whole coast of Chigenecto bay, afford abundant strata which yield the very best material from which these useful tools of trade are formed. So on the Peticodiac river, both quarry-stones of superior quality, and excellent grindstones, are ob-

tained in abundance. Cape Rorier is now explored also by enterprising quarrymen, and yields valuable returns.

It is not perhaps generally known that our Atlantic cities, as far south at least as Philadelphia, and perhaps also Baltimore, receive large quantities of beautiful and compact gray, buff-colored, and blue sandstones from the Bay of Fundy. The myriads of grindstones which are brought to our market employ an immense amount of tonnage, and give employment to a great number of merchants in all our towns. Who does not know how much our success in agriculture is due to gypsum? Yet, how few stop to inquire whence it is procured. It is nearly all brought from the quarries of Nova Scotia and New Brunswick, and belongs to the coal formation of those provinces. It is used to a truly wonderful extent in the United States, and finds its way, by railroads, canals, rivers, and lakes, into every part of our country where the hand of the farmer is employed in raising grasses, wheat, and corn. A vast amount of tonnage is sustained upon the waters by this traffic in gypsum, taken from nature's inexhaustible storehouses in the rocks of the provinces which now occupy our attention.

The coals of Nova Scotia are of various kinds, and are wholly different from those of the United States; at least they differ from all the coals which are found on the eastern side of the Appalachian chain of mountains, so that they do not enter into competition with the coals obtained from mines in the United States, which supply our coast. They are some of them suitable for the smith's use, others for steamboats, others for gas-making, &c., and will be always required, whatever may be the supply from our own mines of Pennsylvania, Maryland, and Virginia; the mine near Richmond, Virginia, furnishing the only bituminous coal that will serve in the place of the coals of Nova Scotia. Hence, we shall not fear that any evil can come to our own coal trade from the competition of the British provinces. Coals are found most abundantly in Pictou, at New Caledonia, Glasgow, on East river, and in various parts of the great coal-basin which lies on the northern coast of Nova Scotia. The island of Cape Breton also furnishes an abundance of excellent bituminous coal.

In the province of New Brunswick recent explorations have brought to light a most beautiful, and before unknown, variety of highly bituminous coal, containing sixty per cent. of gas-making bitumen and forty per cent. of coke, which yields but half a pound of ashes per hundred weight. This coal is in the true coal formation, and is found in a highly inclined bed running nearly northeast and southwest, with the trend of the enclosing strata. This coal mine is one of the most remarkable in America; not only on account of its beautiful, clean, glossy, and highly bituminous characters, so admirably adapted for gas making, but also on account of the abundance, beauty, and perfection of its fossils, and especially of its embalmed fishes of the *Palaeoniscus* genus—fishes of the true coal formation of America, and analogous to those of the same formation in Europe. Six or more new species of this genus *Palaeoniscus* we have described in a printed memoir on this coal mine. Time and labor doubtless will add many more to the list, and the Albert county coal mine will become the Mecca of pilgrims in

search of fishes of olden time. This coal, as already suggested, is a new variety, particularly adapted to the uses of the gas-house. It furnishes a very rich gas, highly charged with carbon, consisting mostly of olefiant gas; and hence, is the very material that is wanted by gas manufacturers to enrich the products of our semi-bituminous coals of Maryland and Virginia. It is not used alone in any gas-works, but is mixed with other coals in the proportions of from one-fifth to one-third, and thus gives the best product that can be obtained; and at the same time, it gives greater value to the coke of our more ash-bearing coals. The importation of the Albert coal into the United States does not, therefore, in any way interfere with the sale of our own coals; but, on the contrary, enables us to use coals that would not otherwise find any market for gas-making. It also saves much outlay in apparatus required for making oil-gas from whale and fish oils, used to enrich the pale or bluish flame produced by gas from many of the coals employed at our gas-works. With the progress of geological research more deposits of this valuable coal will undoubtedly be discovered, and the trade with the United States will tend to draw it within our borders, by the exchange of commodities with our provincial brethren.

Thus far we have called attention mostly to the rocks of the coal formation and to their contents. But Nova Scotia is a country rich in geological resources; all the rocks, from the crystalline granites up to the new red sandstone series, being, as it were, drawn together in this province, as are still more extended groups in the island of Great Britain. It is obvious that America has been cast on a most expanded scale, and that our rock formations are so wide and deep as to separate to great distances the various deposits; and, although Vanuxem has in a most patriotic manner declared, that "in proportion to the magnitude of the geological scale is the greatness of nations," we cannot conceal the fact that it would be much more convenient to have our coal a little nearer to our metalliferous deposits, somewhat as they exist in England, Scotland, and Wales. In Nova Scotia the coal is very near to her vast beds and veins of iron ores, and to her copper-bearing rocks. The slate hills furnish good roofing slates, and are full of ores of the metals. Her trap-rocks are of the same age, and contain the same minerals as those on the south shore of Lake Superior, at Keweenaw Point, on the Ontonagon river, and on Isle Royale, which are known to be so rich in mines of native copper and silver. Native copper and silver are found in the trap breccia, and amygdaloid of the north mountains of Nova Scotia, in numerous places from Digby Neck to Cape D'Or; and there is reason to believe, that when there shall be the same amount of scientific labor, and of mining skill and enterprise, expended in searching these rocks in Nova Scotia, that there has been on Lake Superior, there will be exposed many deposits of value to the country, affording to our provincial brethren new means of extending their traffic with our people.

There are beds of sandstone in Nova Scotia which also contain rich ores of copper; but they have been but little explored, on account of the peculiar condition of mining rights in that province, which are not open to general competition and to private enterprise.

Ores of lead are also found near the Shæbinacudie river, and in other

limestone rocks of that province, which belong to the upper Silurian or to the Devonian groups.

Hones of superior quality are furnished from some of the slates of the coal series, where the argillaceous strata have been acted upon by the igneous trap-rocks.

Sandstones suitable for the hearths of iron furnaces are abundantly obtained upon the borders of Cumberland bay, and ores of manganese are abundant as shore pebbles at Quaco and other parts of the Bay of Fundy, and veins of this ore are found in the limestone rocks of the province. Iron ores of the very best quality are abundant near the Basin of Mines, and near Anapolis, at Nictau, and Clements, on Digby Neck, and also near the cold mines of Pictou. These rich iron ores cannot find an American market so long as England furnishes iron to her provinces free of duty, and no market is offered here for Nova Scotia iron except under the same duties as are imposed on that brought from England.

We have not described the beautiful agates, amethysts, chalcedonics, jaspers, cairngorms, and the entire group of zeolite minerals which abound in the amygdaloidal trap of Nova Scotia, and tempt the mineralogist to wander beneath the frowning crags which overhang his head along the Bay of Fundy, rising in mural precipices of from 100 to 600 feet in height, and dropping, after each winter's frost, large heaps of precious specimens ready for the collector; for such things are not looked upon by every one as matters of economic value, though they are really such when they induce travel from distant shores into Nova Scotia, and cause the expenditure of wealth among the people of the province—the inevitable result of inducing travellers to pass their time among them. They are also valuable beyond what most persons suppose, when they add to human knowledge and to the means of instruction in science, for all parts of science are in some way connected with each other, so that the advancement of what appears to be at first a useless branch of learning may open the way to more profound knowledge of the laws of the universe, and brings about results not at first anticipated. No one knows how useful a stone, at first sight apparently useless, may become by the hand of science.

What beautiful laws were opened by Sir David Brewster, and others, by the study of the polarization of light by crystals of these very minerals, so that these discoveries are now reduced to real pecuniary value in every well conducted sugar plantation of the world. Again, the polarization of light is now turned to account not only in detecting the intimate structure of bodies, so as to learn their nature, however masked, but even the light of a wandering comet, or of the flitting aurora borealis, is caught between the polarizing crystals and made to confess whether it is intrinsic, or is borrowed from some other source. We

NOTE.—We refer to the memoir of Messrs. Jackson and Alger on the mineralogy and geology of Nova Scotia, published in the American Journal of Science and of the Arts, for 1828, republished in the Transactions of the American Academy of Arts and Sciences, for 1832, for full descriptions of the interesting minerals and Rocks of Nova Scotia. Also, to sundry papers published in the Quarterly Journal of the Geological Society of London, by James Dawson, esq., of Pictou. Also, to Sir Charles Lyell's Travels in America, and to sundry communications published by him in the Quarterly Journal of the Geological Society of London, for remarks on the geology of parts of this interesting province.

shall, therefore, claim some attention to the curious minerals of Nova Scotia, though their uses may not be all at once apparent.

The topographical features of Nova Scotia are not less remarkable than the geology of that province. We have along the Bay of Fundy a long ridge of mural precipices, excavated by the action of the sea, which wears away the softer amygdaloid and trap breccia lying at the line of junction of the trap rock with the new red sandstone, and forms an overhanging mass of columnar trap rocks in numerous places on that coast. This trap ridge runs ENE., and WSW., and extends one hundred and thirty miles in length from Briar's island, at the extremity of Digby Neck, to Capes Split and Blomidon. There cannot be a more picturesque coast than this. These frowning crags, with their crowded forests of fir and spruce trees, first meet the eye as we cross the Bay of Fundy. Their height serves to protect the interior from the driving fogs of the bay, which melt into thin air as they pass up the sides of these mountains and disappear.

Beyond this barrier we come to the rich and beautiful valley of the Anapolis river, which takes its rise in the Garden of Acadie, Cornwallis, where the teeming soil bears abundant produce.

Passing this valley as we wend our way across the country, we come to the South mountains, the great Silurian ridge of slate rocks, containing the rich iron ores of Nictau and Clements, so remarkable for their abundant Silurian fossils, such as the *asaphus crypturus*, *deltthisis*, and other well known fossils of the Silurian rocks. Beyond this, we come to the granite rocks which were elevated subsequently to the deposition of the strata of Silurian slates, and have lifted them at a bold angle with the horizon.

This is a cross section of Nova Scotia. If now we travel to the north-eastward, we soon change the scene and find ourselves on the Permian sandstones near Windsor, and soon come to the gypsum rocks in the coal series of the province, where we wander over extensive hills of gypsum, and see the quarries wrought by the busy miner and quarryman. Riding over a fine road to Halifax, we come to the flinty slates of that town, so remarkable for their hard sterility. Travelling northward to Pictou, we traverse extensive beds of Devonian limestone, and soon come to the rich deposits of coal and of iron ore in the district of Bictou, and on the East river, in New Glasgow. This whole region is rich and beautiful, and is settled mostly by Highlanders from Scotland while in other parts of Nova Scotia, as at Halifax and in the valley of Anapolis, we have English and Irish; and on Digby Neck, Hessians, American refugees, and French. The French population is mostly on the other side of St Mary's bay, on Sissaloo river—an old French colony, the remains of the French neutral colony.

Nova Scotia is remarkably temperate, considering its northern latitude, the almost insular position of the province, and the proximity of the gulf-stream serving to render the climate more mild than that of Canada. The tides of the Bay of Fundy have always attracted much attention, on account of the great ebb and flow, and the manner in which the tide enters the narrow bays and runs up the rivers both in New Brunswick and Nova Scotia. It is obvious to the hydrographer, that the great tidal wave enters the Bay of Fundy at its wide tunnel-

like mouth, and is kept from spreading by its rocky walls, and is forced into a narrow compass as into a tunnel's neck. Hence the impetuous waters, compressed into a narrow space, rise with fearful rapidity, rushing up in what is called a *bore*, sometimes four or six feet in height at the heads of bays and up the river channels. On the Peticodiac, at the bend of the river, this bore is seen to the greatest advantage. The tides rise, at the highest, to about sixty feet at the head of the bay, while the rise is not more than thirty feet at the mouth of the bay. The fishermen know how to make use of these rapid tides, and always manage to go with the current. Hence the Peticodiac is sometimes called "lazy-man's river," since rowing is quite unnecessary, the tide bearing the boat whither the boatman wishes, he only having to guide her course. Every one knows that the rivers of the Bay of Fundy are full of fine shad and salmon in their season, and the herrings of Digby are known all the country over for their excellence.

Observations on the geological resources of the province of New Brunswick.

We have already given a brief sketch of the valuable mines and quarries on the New Brunswick side of the Bay of Fundy, though much more might have been stated had time been allowed for a minute investigation of that important district.

We shall now extend our observations inland, and point out some of the more prominent features of this province, so far as our personal observations will permit. Leaving the township of Hillsboro', we travel towards St. John, and find rocks of the coal formation, gray sandstones, snowy-white gypsum, and other rocks of that series, which are here and there found resting upon hills of sienite, hornblende rock, and other crystalline aggregates of hypogene origin. On the borders of these extensive rocks we find novaculite of a green color, which appears to be an altered slate rock and a conglomerate of its broken fragments consolidated by an argillaceous cement. Reaching Sussex vale, we come to some of the richest and purest salt springs known in this country, and witness the manufacture of the finest flavored and purest table salt—an article justly prized above any kind of salt made in the country, on account of its freedom from deliquescent salts of lime and magnesia. Now on the borders of the beautiful Kennebekaris river, we followed its meanderings through one of the most picturesque valleys of the province, and find on the steep flanks of the hills the continuous out-cropping of red sandstones of the Devonian group, which support the coal formation of the more eastern district before described. This valley is obviously one of denudation, and the deeply scored rocks evince the passage, in olden time, of currents of water and floes of ice loaded with imbedded rocks and frozen soil.

The broad and beautiful Kennebekaris bay spreads before us, and is bordered by limestone rocks of the Devonian group. We next enter the city of St. John, the great mercantile *entrepôt* of the province, where ride large numbers of great ships, lading and unloading, and carrying on an extensive commerce with the mother country. The city of St. John is surrounded by excellent limestones; and some of the gray sandstones are found to contain large fossil trees, indi-

cating that they belong to the rocks not very far below the coal series ; while the slates of the Great Falls, a mile or two from the populous portions of the city, contain the largest bed of plumbago known in America—a kind approaching, in some degree, to a metamorphosed coal, but still sufficiently pure for the manufacture of lustre, and for the preparation of moulds for iron castings. Masses of igneous rocks of the trappean order are seen at Indiantown, a part of St. John city, and this igneous rock is supposed to underlie the metamorphosed limestones and slates of the town. It is remarkable that no remains of fossils are found in this limestone to denote its geological age. Ascending the river, we find, along its banks, the most curious display of the strata of the country. Red sandstone, slates, and limestone are the common rocks which meet the eye until we reach Fredericton, where the coal formation crosses the river to its southern bank. There is an extensive deposit of the coal-bearing rocks around Grand Lake, on the northern side of the St. John, below Fredericton, and mines have been opened in many places along its borders, from which excellent coals have been obtained. They are especially prized for use in the forge, since they are of the coking variety, useful in making a hollow fire.

No spot thus far examined has furnished such beautiful specimens of fossil plants of the coal formation. They are chiefly of the tribe of *ferns* and of *Lepidodendra* ; and the perfection of these remains of ancient vegetation cannot but excite the admiration of geologists and botanists ; for the substance of the plants is perfectly preserved, and is of a perfectly black color, while the shales in which they are found are of a light neutral tint of gray, giving great relief and distinctness to the conserved and charred foliage. Even the fructification of the ferns is perfectly distinct on their foliage, and every scale and leaf of the *Lepidodendron* is found entire. The beds of coal thus far opened have not been found of much thickness—most of them not being more than from a foot to eighteen inches thick—but some are of greater magnitude ; and we are informed that new beds of ample dimensions for profitable working have been found within this district, and are now opened by mines. There is every reason to believe that important coal mines will be found on the borders of this lake, and the time will come when their fuel will be required in St. John and along the borders of the river. It will serve admirably for fuel in the furnaces of steamboats which ply on the waters of this magnificent river.

Still ascending the St. John by steamboats, we come to Woodstock, on the western side of the river ; and here, on the borders of the Meduxnekeag river, a few miles above the town, we come to one of the most extensive deposits of red hæmatite iron ore—a perfectly inexhaustible bed.

This, though so highly charged with manganese as to make white and brittle cast-iron, resembling antimony in its fractured surface, furnishes the very toughest kind of bar-iron, having eminently the properties required for making the finest cast-steel. It has been for many years exported to England for that purpose ; but owing to the late reduction of price in English iron, caused by the glut of the European market, the furnace-fires have ceased at Woodstock for the present,

but will probably, as the price is now rising again, soon go into blast for the production of pig-iron to be used in making bar-iron in the puddling furnaces of England.

Ores of manganese are also found around Woodstock, though they have not yet been sent to market.

Still ascending the St. John, we come to the Tobique river, which enters the St. John, on the eastern side, a little below the Aroostook. A few miles from the mouth of the Tobique we find the red sandstone rocks, like those of Nova Scotia, full of excellent gypsum. Springs of salt water are also said to have been found therein. This gypsum will prove valuable to the farmers on both sides of the St. John, and will save the expense of bringing that mineral up the river. A tribe of Indians still dwell on the borders of the Tobique, and have their principal camps at the mouth of the river. They still find occupation in the chase, and even to this time take many beaver, otter, and sable, besides hunting bears, moose, and caribou, in the forests.

A few miles more of canoe voyage brings us to the upper falls of the St. John—a magnificent cataract of 70 or 80 feet perpendicular descent. This is one of the most picturesque spots on the river, and will in due time become a favorite place of resort in the summer season. Here the river is closely confined between lofty crags of slaty limestone, and makes a sudden turn in its course as it bursts through its rocky barriers. Its beauty is not destroyed by the great saw-mills that were built upon the edge of the falls by the late Sir John Caldwell; but the business created on the spot has brought a sufficient number of settlers to make the place more cheerful. Above the falls the river expands, and is as tranquil as a placid lake. We followed its windings in our canoe for many days, stopping at night among the hospitable and naturally polite French people who live in humble simplicity on the borders of the river, pursuing their quiet mode of life, undisturbed by the thirst for gain that torments dwellers in the great mercantile cities of the coast.

The people of Madawaska are descendants of the French neutrals of Acadie, and very much resemble, in their mode of life, the people of Sissaloo, on the St. Mary's river. They have few wants, and these are easily supplied by means of their own skill in the chase and in rural labor.

For forty miles above the falls of the St. John, the French settlements of Madawaska are scattered along both sides of the river, the principal settlements being on the provincial side of the river.

Some fifty miles farther up, the St. John divides into numerous branches, which extend into Canada on the north and into Maine on the south. The St. François is its most important Canadian branch, and the Allagosh, with its numerous lakes, and the Aroostook, extending almost to the northwest angle of Maine, where it nearly reaches the corners of New Hampshire and of Canada, are the longest tributaries of this great river. That portion of the river is but little known to this day except to the Indian hunter; and it is not, so far as we can learn, very inviting to the canoe *voyageur*. The whole region of country above the falls of the St. John is based upon a blue slaty limestone, probably of the Silurian group of rocks; but it is not rich in

fossils or in minerals of value. The soil is excellent all over these rocks, and bears good crops of the cereal grains and large burdens of grass when cleared and cultivated.

Having no personal knowledge of the eastern coast of the province, the Bay of Chaleur, of Miramichi, or of any part of the shores of the Gulf of St. Lawrence, we must leave that portion of the province to be described by others. The province of New Brunswick is known to contain an abundance of the very best kinds of timber for ship building, and for sawing into boards, plank, and deals. Much of her commercial intercourse with the mother country is sustained by this trade. Ships of the largest class of merchantmen are, therefore, nearly as frequent in the harbor of St. John as in the ports of the United States, for this class of vessels is adapted more particularly for the transportation of bulky timber, spars, and masts. Most of the ships which sail from St. John are built and owned in the province.

New Brunswick, as has already been observed, contains some very remarkable deposits of coal, accompanied by a series of most perfect fossils. The most remarkable of these deposits is the Albert coal-mine, in Hillsboro', near the banks of the Peticodiac river. This coal-bed is included in shales, with an underlying mass of soft slate, equivalent to the under-clay of most bituminous coal-beds, and the coal is directly overlaid by strata of highly bituminous shales, filled with scales of ganoid fishes, and with the entire embalmed remains of beautiful species of the genus *Palæoniscus* fishes of the ganoid order. These fossils were originally discovered by the writer of this article in the spring of 1851, and descriptions of them were read by him before the Boston Society of Natural History at their second meeting in May of that year; and that paper was subsequently incorporated into a report to the Albert Coal Company, from which report we now extract the following:

“Descriptions of the fossil fishes of the Albert Coal Mine.

“Pl. I., Fig. 1. This fish is the first one that was discovered by me at the Albert mine.

“Description: Fish, four diameters of its body long; head, obtuse or blunt, as if obliquely compressed on upper and front part; whole length, $3\frac{2}{10}$ inches; width in middle of body, $\frac{8\frac{5}{10}}{10}$ inch; *fins*, one dorsal, opposite anal, small triangular, $\frac{3}{10}$ of an inch at base, jointed, drooping, as if the fish was dead before it was enclosed in the mud, (now shale.) *Anal*, small, triangular, a little larger than dorsal; *pectoral*, small, compressed into mass of scales of body of the fish; *tail*, bifurcated, unequal, very long, and tapering in upper division, which extends to a fine point. The *scales* run down on upper division of tail, and become gradually smaller to tip; *caudal rays* come exclusively from under side of upper, and from lower division of tail. Scales of body brilliant, rhomboidal, wavy, serrated on posterior margins, color light brown. This fish is embalmed and not petrified. No ridge of bone is seen to indicate the vertebral column; hence the bones must have been cartilaginous and compressible. The gill plates are too confusedly compressed to be dissected. I cannot find in any published book any

figure of a fossil fish identical with this. It is evidently a Palæoniscus, and is probably a young individual, as seems to be indicated by its small size and the delicacy of its scales. We will name it, provisionally, *Palæoniscus Alberti*, in commemoration of its being the first fossil fish discovered in Albert county, in New Brunswick.

“Pl. I., Fig. 2. This beautiful fish was found by Mr. Brown, the captain of the mine, subsequent to my first visit to Hillsboro'. It is one of the largest, or full grown species. It was unfortunately broken in the operation of extracting it, but it still is a very valuable specimen. This being the first fossil fish found by the chief miner, I have named it *Palæoniscus Brownii*.

“Description: Fish nearly whole. It is one of the largest species yet found, and its length is three times the greatest width of its body; whole length, $5\frac{3}{10}$ inches; breadth, $1\frac{7}{10}$ inches; head broken off just in front of pectoral fin; extremity of tail broken; abdominal fin missing, it having been broken in getting out the specimen. Dorsal fin, a little behind middle of body, opposite, or rather a little in front of anal.

“Pl. I., Fig. 3, represents a perfect fish of the genus Palæoniscus, which was found on the 3d of June last. In its general form and appearance it resembles the *Palæoniscus Elegans* of Professor Sedgewick, (Lond. Geol. Trans., 2d series, Vol. iii, Pl. 9, Fig. 1,) and Agassiz, (Recherches sur les Poissons Fossiles, Vol. ii, Tab. 10, Fig. 5,) but it differs from that species in the striation of the scales, the striæ of the Hillsboro' species being parallel to the anterior and lower margins of the scales, and the shape of the scales differing essentially from Mr. Sedgewick's species.

“Description: Fish, long and slender, $4\frac{1}{2}$ diameters of its body long; length of head, a little less than the largest diameter of the body; the head has the shape of an equilateral spherical triangle; tip of nose, or snout, curiously tuberculated and dotted; gill-plates cannot be dissected, they are so brittle and confused with the head; *fins*, pectoral a little behind gill plates, and extend below the fish $\frac{3}{10}$ of an inch—it is a narrow pointed fin, well marked with its rays. *Dorsal fin* far back towards the tail, a little anterior to anal; it is half an inch long and $\frac{2}{10}$ of an inch high, and is well marked with its rays. *Anal fin* somewhat larger than dorsal, a little posterior to it. *Abdominal fin* very small, situated a very little in advance of the middle of the body; tail unequally bifurcated or heterocercal; *scales* run down on it becoming smaller and more and more acutely rhomboidal or lozenge-shaped as they recede; caudal rays come exclusively from under side of upper division of tail. *Scales* obtusely rhomboidal on anterior and middle of body, and are distinctly striated parallel to anterior and lower margins, while they are smooth and very brilliant towards and upon the tail; dorsal scales large, and in form of obtuse spherical triangles, pointing backwards towards the dorsal fin. This species is not described in any book I have examined, and, believing it to be new, I shall take the liberty of naming it *Palæoniscus Cairnsii*, after the highly intelligent superintendent of the Albert coal-mine, William Cairns, to whose active and unremitting labors I am indebted for so many specimens of these interesting fossils.

“Pl. I., Fig. 4. This large and elegant fish was most unfortunately

broken in splitting it out from the rock, only the posterior part of it having been saved in a fit condition for delineation. The whole length of the fish was originally fifteen inches. That portion which remains entire, is $5\frac{1}{2}$ inches long; it was broken off through the posterior edge of the dorsal fin. It was an old fish, as is evident from the appearance of the scales, which are thick, heavy, and have their striations in part obliterated, while the serrations are extremely sharp and deep. The scales are elongated rhomboids, and have many striæ upon their surface, which run parallel with their upper and lower margins. Caudal scales, acute lozenges. They run down on upper division, which is long, and covered with scales. Rays of tail come off very distinctly, exclusively from under side of the upper division, and the tail is unequal or heterocercal. Until we obtain an entire specimen, perhaps it will be prudent to abstain from giving a specific name. (See Pl. I., Fig. 5, now named *P. Allisoni*.) It is a species of the genus *Palæoniscus*.

“Pl. II., Fig. 1. This species so nearly resembles the *Palæoniscus decorus* of Sir Philip M. de Egerton as on first view to pass for it; but on examining the lines of striæ, we are forced to regard it as another species. The four great dorsal scales, anterior to the dorsal fin, exactly resemble in form those represented in Sir Philip M. de Egerton's plate. (See Quarterly Journal Geological Society of London, for 1849.) The scales of one specimen are striated, parallel with the superior and inferior margins, and are deeply and acutely serrated on their posterior edges. The lines of striation are worn away considerably, indicating, perhaps, that it was an old fish. It was, when entire, about eight inches long, and it is two inches in diameter from the anterior edges of the dorsal and anal fins. The lithographic delineation gives a sufficiently full exhibition of the characters of this specimen, which appears to be of the same species, or very near the species, last described.

“Fig. 2, 2 bis, are delineations of specimens of shale, representing a fish and its counter print in the rock, just as it was split open. It is a small species of *Palæoniscus*, compressed vertically, and is contorted as if the fish had struggled to extricate himself when imprisoned in the mud that now forms this rock. The line of dorsal scales, in the middle of this fish, proves its position to be as I have stated, and this opinion is still further confirmed by the shape of the head, and by the open gill covers. This fish must have been caught in the mud alive, since it was in an upright position.

“Fig. 3, represents a beautiful and perfect fish, found at the new pit of the Albert coal mine, by Mr. Wallace, deputy collector of Hillsboro', who kindly presented it to me. It is compressed vertically, or from the back towards the abdomen, and the head is also vertically compressed between the strata. The large dorsal scales, so characteristic, are seen along the middle of the fish. There is a coprolite seen projecting from near the middle of the fish, and it is not certain whether it is included partially in its body, or was in the mud before the fish was deposited or caught. The body of the fish curves over the coprolite as if it had been a hard substance.

“Description: Fish is $4\frac{1}{2}$ diameters of its body long; body $3\frac{1}{2}$

inches long; head in form of equilateral spherical triangle; gills open; back of head beautifully marked by tuberculations, or striæ and dots; dorsal scales oval-shaped and striated, the most pointed part of the scale being towards the tail; they run along the entire back to the tail, excepting at the place where the dorsal fin is compressed; scales of body serrated on posterior margins, and striated parallel with their upper and lower edges, and wavy in middle. I am disposed to regard this individual as belonging to the same species as the one before described.

"Fig. 2, 2 bis.—Figure 7 represents a lower jaw of a *Palæoniscus* from the Albert mines. It is interesting as showing the mode of denitification of these ancient fishes; the teeth are here seen to be in a line fixed in regular sockets in the jaw, like those of salmon; the jaw is beautifully marked with little raised dots, visible under an ordinary lens; the teeth agree with those observed by Sir Philip M. de Egerton. (See Quarterly Jour. Geol. Soc., Lond., 1849.)

"Fig. 8.—This specimen was discovered by me in the shale of the new shaft of the Albert mines. It is peculiarly interesting on account of the entire preservation of its abdominal fin, and also on account of its association with a coprolite which seems to have belonged to this individual.

"Description: Fish, entire; length, $3\frac{7}{10}$ inches; width of the body, $\frac{7}{10}$ of an inch; length of the head, equal to the greatest width of the body; fish, four diameters of its body in length; fins, one dorsal, opposite anal, situated in the posterior, third of body; anal fin little larger than dorsal; abdominal fin small, situated a little in advance of the middle of the body of the fish; pectoral fin a little larger than abdominal; scales, large and brilliant, having a light-brown color striated parallel to anterior margins transversely, and longitudinally in middle, but finer than on anterior margins; tail, more regular than the before-described species, but still unequal; has scales in upper division. This specimen also presents another curious feature; its tail having been amputated by a shift of the strata, and the fracture being polished and recemented a little out of place. Head more acute than any of the before-described species, and very perfectly preserved, having the fine markings of the gill covers and the striæ and markings distinct, and also what appears to be the impression of the tongue of the fish. The orbitar ring is also preserved, and is a horn-like circle, or ring, filled with bituminous shale or clay. A coprolite under the abdomen of the fish is a cylindrical mass, rounded at each end, $\frac{7}{10}$ of an inch long, and $\frac{3}{10}$ of an inch in diameter. It is of an ash-gray color, and includes what appear to be small black scales of fishes."

Descriptions of the scales of fossil fishes from the Albert coal mine, with analysis of the scales.

Owing to the perfect preservation of the body of the fish, and of ganoid fish-scales in the rocks, it is as easy to identify them as if the fish were still living; for the substance of a ganoid fish-scale is of the nature of bone, as will be shown by the following analysis of the scales of *Palæoniscus*, from the Albert coal mines: 0.62 gramme of the scales

from the middle of the body of the fish (Pl. I., fig. 4,) submitted to analysis, gave the following results :

Animal matter	0.0800	} Phosphate of lime and of magnesia, 0.4309.
Carbonate of lime	0.0980	
Phosphoric acid	0.2452	
Lime	0.1234	
Magnesia	0.0623	
Silica	0.0040	
	0.6129	

By analysis of another portion of the same fish, it is proved that the fibrinous and albuminous matter composing the fish is still unchanged in composition, so far as its elements are considered.

The important element proving the presence of animal matter is nitrogen, which is separated by analysis into the state of ammonia. This by two determinations, was found to be in one 15.56 per cent., and in the other 16.54 nitrogen; the mean being 16.05 per cent., which is the amount of nitrogen in fibrine and albumen.

Description of the scales of Palaeonisci from the shales of the Albert coal mine.

Plate I. A. Portion of shale, with impressions of *Palaeoniscus*' scales of three varieties, seen enlarged in *a, b, c*; *a* is one of the scales from the middle of the body of the fish, and shows the articulating process by which it is attached to the lower edge of the scale next above it on the fish. The striations of the scale, and the serrations of its right extremity are distinctly shown. *b* represents one of the fulcre or scales near the fins of the fish; a group of three of them are seen in specimen A. *c* is a broad scale from the lower part of the body near the tail.

B represents two *fulcre* or fin scales from the back, at the dorsal fin. The enlarged views of them give a full explanation of their structure. They have been mistaken not unfrequently for teeth, since the larger scales bear some resemblance to the teeth of placoid fishes, and to sauroid fishes' teeth. C represents a specimen of another species of *Palaeoniscus* scale. It is, in the original specimen, the most perfect that has been seen at the mine; above it is a correctly enlarged figure of this scale.

The reader is perhaps aware that geologists have adopted the division of fishes, as proposed by Agassiz, as classified by their scales, which are of four orders: 1. Placoid, (broad plate,) of which the sharks' scales are illustrative. 2. Ganoid, (resplendent,) hard, bony scales; example, the American gar-pike. 3. Ctenoid, (comb-like;) example, scales of the perch. 4. Cycloid, (circular;) examples, herring, salmon, cod, pollock scales.

These divisions suffice for most purposes in identifying fishes; and it fortunately happens that most of the fossil fishes—all of those of an ancient type—belong to the bony-scale group; and the character of the scale of one of these fishes remains unaltered in the rock where it was originally imbedded at the time of its deposition.

Plate I., Fig. 5, represents the head and part of the body of a very large fish of the genus *Paleoniscus*. It appears to belong to the same species with fig. 4 of same plate, and fig. 1 of plate II.

Description: Width of body of fish, 3 inches; length, probably from 15 to 18 inches; head, strong, firm, and more bony than usual with fishes of this group; length, from $2\frac{1}{2}$ to 3 inches; width, 2 inches; gill-plates distinct, but crushed together, so that they cannot be dissected, since they adhere firmly together; pectoral fin, short, strong, and has a rounded and heavy shoulder of great strength, covered with a long armor, striated obliquely backwards and downwards. Other fins were broken from the specimen before I received it and lost; but those wanting are seen on fig. 4 of this plate, and fig. 1 of Pl. II. Prints of five of the great dorsal scales distinct in the rock—scales broken off. Scales of body perfect, serrated, and distinctly striated with wavy lines horizontally, and slightly curving towards the posterior upper angle of scale. A marked swelling in the place of the stomach shows that the organ is filled with the food of the fish. Color of the fish light clove brown, or a little more inclined to cinnamon brown.

This fish I propose to name in honor of the enterprising projector of the mine, who presented me with the specimen: *Paleoniscus Allisoni*, in honor of Edward Allison, esq., of St. John.

List of the Fossil Plants found in the shales of the Albert Coal Mine.

The fossil fishes already described belong to the genera known to characterize the coal formations of Europe; but, as might be expected from other analogous facts, the American species are not identical with any known in the Old World, though they closely resemble them. They are of the same genus, but of new and before undescribed species.

The plants found associated with these fishes concur in proving the formation at the Albert mine to be in the true coal series, and thus set at rest those doubts which were hastily expressed by other geologists, who made a cursory examination of this mine, who knew not the facts contained in this paper.

Plate III, Figs. 1 and 2, represent a specimen of *Lepidodendron*, analogous to the *L. Gracile* of Ad. Brogniart, though not identical with that species. Figs. 3 and 3 bis represent the fruit of the *Lepidodendron*, or *Lepidostrobus*, found in the shale of this mine. Figs. 4, 5, and 8 represent a plant about which some doubt still exists, but which was supposed to be some species of *Sphaerædra*; but it differs from that plant in several respects, as will be discovered on comparing it with the plate in the work of Lindley and Hutton. Figs. 6 and 7 are broad flag-like leaves, supposed to belong to the palm tribe. Fig. 9 is the common calamite of the coal formation, and was found in the gray sand-stone below the coal bed at the Albert mine. These plants are similar to those found in the coal mines of Nova Scotia and of other parts of New Brunswick, and are like those found in the anthracite mines at Mansfield, Massachusetts, and in the semi-bituminous coal mines of Maryland and of Virginia. Figs. 4, 5, and 8, represent the only plant that I have not before discovered in our coal formation.

This plant is evidently a succulent annual, as evinced by its contorted and drooping stem, and was probably an aquatic plant, such as are found growing in marshy places or bogs. Its association with fishes indicates its being an aquatic plant, or one growing on the borders of a lake or river. It is not a *fucoïd*, as has been alleged, for it has alternate branches.

The following is an elementary analysis of the Albert coal, made by C. T. Jackson :

Carbon.....	75.2
Hydrogen.....	7.6
Oxygen and a little nitrogen.....	17.2
	<hr/>
Total.....	100.0
	<hr/> <hr/>

The coal yields.....	60 per cent. of volatile matter.
do.....	40 do. of coke.
	<hr/>
Total.....	1.00
	<hr/> <hr/>

And the coke leaves 0.47 per cent. of red ashes. The coal cokes readily, and cements closely, if compressed ; but it does not melt, though it softens if slowly heated to redness in close vessels. It yields 20 per cent. of soluble bituminous matters to benzole, and from 12 to 15 per cent. to oil of turpentine. The solubility of a portion of its bitumen led most persons, at first, to suppose that it was a kind of bitumen ; but the discovery of organic structure in the coal itself removed this error, and chemical researches proved the coal to be a little more bituminous than the cannel coals of commerce. There can be no doubt of the fact that this coal is in the true coal field of the provinces.

The discovery of other beds of this valuable substance is highly desirable, and the field has been as yet but little explored.

Agricultural Resources of New Brunswick and of Nova Scotia.

Viewing the rocks which have, by their decomposition, produced the mineral matters of the soil of the provinces of New Brunswick and of Nova Scotia, we see that every mineral ingredient requisite for the formation of good soils must be contained in them ; and the drift agencies, whether of ice or water, in olden time, have duly commingled the detritus, so as to diffuse the different mineral substances. Vegetable matters—the foliage which drops from deciduous trees ; the peat mosses, which grow in humid places, and decayed trunks of trees—have added the matters which produce humus, or vegetable mould ; and thus we have formed, by the hand of Nature, the soils which we cultivate.

From geological considerations we should *a priori* regard the soils of New Brunswick and of Nova Scotia as capable of bearing any of our usual crops of cultivated plants, as well as the usual forest trees of northern climes. Such we know by observation to be the fact ; and

the only influences which prevent the soil of these provinces from bearing any and all kinds of plants are those of climate. The cold of long winters limits the growth of crops to a few months; and only those which are hardy, and are adapted to the climate, can be raised advantageously. We have, then, to inquire what are the crops which experience has proved to be the best for the countries in question. It is known that the northern portions of America "possess an excessive climate,"* viz: one of extreme heat in summer, and of great cold in winter. Such climates produce a most rapid growth of vegetation; for the heat of a summer's sun hurries forward the processes of vegetable growth, and an early autumn brings the ripening to a close. Plants, which ripen more slowly in temperate climes, have to be gradually acclimated before they can accommodate themselves to the short seasons of the north. Hence the variety of *zea* maize (Indian corn) which grows in Canada differs in its habits of growth from the southern corn, and ripens, where corn of a more southern-raised seed would perish, in the milk, by frost. There are many of our usual plants that will bear this acclimating process above referred to; others we had not been able to subdue to our short seasons. The potato is much improved by being hastened in its growth in the way above alluded to, and the provinces of New Brunswick and Nova Scotia produce the best potatoes known in this country. The smaller cereals—such as oats, rye, barley, and summer wheat—ripen perfectly in these provinces, and the grain is of excellent quality and of remarkable sweetness.

Turnips of every variety grow well, and pease, beans, and other leguminous plants are known to thrive admirably. In short, we may say, from observation of the fact, that all the usual culinary vegetables which grow in the States of Maine and New Hampshire, thrive equally in the soil and climate of the two provinces we are describing. Fruit trees, also, with the exception of the peach, (which does not bear well the intense cold of winter,) produce good fruit in these provinces.

The most highly valued crop among the farmers of New Brunswick is grass, which, with the least labor, is the most profitable crop; for good hay is not only required for keeping of the stock on the farm, but is also extensively in demand among the timber-cutters of the forest, for the supply of food to their teams of cattle. Large quantities of pressed hay, in bundles, are also exported from the provinces to the cities of the United States. Four-fifths of the land on every large farm may be advantageously laid down in grass and be kept for mowing land, until it is so old as to require to be taken up by the plough; and this is done gradually, so as to keep but a limited portion of the land in tillage, for there are few farmers in the province who can cultivate more than thirty acres of tilled land to advantage, and therefore they have to keep the rest of the farm in grass, which it is also advantageous for them to do, on other accounts, as above specified.

It is well known that little progress has been made in agriculture in the provinces, for the forests, full of heavy timber trees, tempt the agricultural portion of the community to engage in the heavier and more immediately profitable enterprises of lumber cutting and sawing. This

*Humboldt Isothermal Lines.

business, although not so beneficial to the character of the people as the more civilized life of farming, has its advantages, not to be overlooked. It produces a hardy set of men, and encourages, to some extent, the establishment of manufacturing operations, by familiarizing the people with the machinery of mills, and with the various mechanical operations connected with the business.

Thus far the demand for food in the provinces is vastly beyond the supply raised on the soil, and no exports of grain, or indeed of any agricultural produce, save of potatoes and of hay, takes place from either of them. Oats of superior quality are raised on Prince Edward's island, and brought to Boston, where they command a higher price than the kinds raised in the States. This is probably the only grain that we can expect to receive from the Lower provinces. Immense quantities of flour from the United States find its way to these provinces; but there is now growing up in Canada West a powerful competition with us in this trade; for the soil of that portion of Canada is of the same quality as that of the neighboring State of New York, and will produce wheat equally well and of as good quality.

In the course of time the province of New Brunswick will become more successful in the cultivation of her soil. The improvements of science will gradually extend themselves among the farmers there, as they have done, and are still doing, with us; but still it may be more advantageous for the people of New Brunswick to obtain their chief supply of flour and corn from the United States, provided they can furnish, in the course of trade, other products of their own soil, as they do of their waters and of their forests. Mines of coal and of iron they have in abundance; building-stones, grindstones, roofing slates, gypsum, and salt, and manganese, they already export, and can supply in as large quantities as may be required; and the time will come when ores of lead and of copper will be added to the exports of the provinces of New Brunswick and of Nova Scotia.

C. T. JACKSON, M. D.,

Assayer to the State of Massachusetts, &c., &c.

PART VII.

NOVA SCOTIA.

The province of Nova Scotia now includes Cape Breton, which at one period was under a separate government.

Nova Scotia proper is a long peninsula, nearly wedge-shaped, connected at its eastern and broadest extremity with the continent of North America by an isthmus only fifteen miles wide. This narrow slip of land separates the waters of the Bay of Fundy from those of the Gulf of St. Lawrence. The peninsula stretches from southwest to northeast, fronting the Atlantic ocean; its extreme length being about two hundred and eighty miles.

The singular and valuable island of Cape Breton lies to the eastward of Nova Scotia, from which it is only separated by the strait of Canso. This strait is in length about twenty miles, and in breadth about one mile. Cape Breton is more particularly described under a separate head.

The most remarkable feature in the peninsula of Nova Scotia is the numerous indentations along its coasts. A vast and uninterrupted body of water, impelled by the trade-wind from the coast of Africa to the American continent, strikes the Nova Scotia shore between 44° and 45° north latitude with great force. A barrier of fifteen miles only (the strip of land already mentioned) between the Atlantic ocean and Gulf of St. Lawrence seems to have escaped such a catastrophe, while a space of one hundred miles in length, and upwards of forty in breadth, has been swallowed up in the vortex, which rolls its tremendous tides of sixty and seventy feet in height up the Bay of Fundy. This bay bounds Nova Scotia on its northwest side, and separates it from the continent.

The combined influence of the same powerful agent and of the Atlantic ocean has produced, though in a less striking manner, the same effect upon the southeastern shore. Owing to the operation of these causes, the harbors of Nova Scotia, on its Atlantic coast, for number, capacity, and safety, are perhaps unparalleled in any part of the world.

It is stated that between Halifax and Cape Canso there are twelve ports capable of receiving ships-of-the-line, and fourteen others of sufficient depth for merchantmen.

A broad belt of high and broken land runs along the Atlantic shores of Nova Scotia, from Cape Canso to Cape Sable. The breadth of this belt or range varies from twenty miles, in its narrowest part, to fifty and sixty miles in other places. Its average height is about five hundred feet; it is rugged and uneven, and composed chiefly of granite and primary rocks.

The peninsula of Nova Scotia is supposed to contain 9,534,196 acres; and it is estimated that nearly two-thirds of its entire surface is

covered by the formation above described. The country is undulating throughout, and abounds with lakes of all shapes and sizes. The scenery is everywhere beautifully picturesque, owing to the great variety of hill and dale, and the numerous rivers and lakes scattered everywhere.

The soil of Nova Scotia varies greatly in quality; some of the uplands are sandy and poor, while the tops of the hills are frequently highly productive. On the Atlantic coast the country is so rocky as to be difficult of cultivation; but, when the stones are removed, the soil yields excellent crops.

The portion of Nova Scotia best adapted to agricultural pursuits is its northeastern section, which rests upon the sandstones and other rocks of the coal formation. Its most valuable portion is upon the Bay of Fundy, where there are deep and extensive deposits of rich alluvial matter, thrown down by the action of the extraordinary tides of this extensive bay. These deposits have been reclaimed from the sea by means of dikes; and the "diked marshes," as they are termed, are the richest and most wonderfully prolific portions of British North America. Nothing can exceed their enduring fertility and fruitfulness, to which there seems no reasonable limit.

The highest land in Nova Scotia is Ardoise hill, which is only 810 feet above the level of the sea.

The navigation returns of Nova Scotia present the following statement of the ships inward and outward in 1849 and 1850, as the aggregate of all the ports in the collony.

Countries.	Inward in 1849.		Outward in 1849.	
	Ships.	Tons.	Ships.	Tons.
Great Britain.....	176	75,843	183	77,174
British colonies.....	1,770	123,084	1,930	148,777
United States.....	2,806	259,974	2,606	247,154
Foreign States.....	287	26,685	102	9,749
Total.....	5,039	485,586	4,821	482,854

Seamen : inward, 34,210 ; outward, 32,375.

The following is a return of shipping for 1850 :

Countries.	Inward.		Outward.	
	Ships.	Tons.	Ships.	Tons.
Great Britain.....	139	65,864	164	71,589
British colonies.....	1,963	136,992	2,184	167,915
United States.....	2,896	281,340	2,595	245,726
Foreign States.....	254	25,509	157	15,907
Total.....	5,255	509,705	5,102	501,237

Seamen : inward, 34,475 ; outward, 32,135.

The aggregate value of the imports and exports of Nova Scotia in the years 1849 and 1850 is thus stated :

	In 1849.		In 1850.	
	Imports.	Exports.	Imports.	Exports.
Great Britain	\$1,489,615	\$260,785	\$1,892,020	\$262,945
British colonies—				
West Indies.....	68,350	951,375	73,115	1,179,590
North America.....	852,165	420,140	1,192,605	634,190
Elsewhere	22,035	24,090	214,955	53,595
United States	1,764,785	894,425	1,612,575	988,065
Foreign States	727,240	253,920	295,815	238,045
Total	4,924,190	2,804,735	5,281,065	3,356,430

The following return shows the quantity and value of all articles, the growth, produce, or manufacture of the United States, imported into the colony of Nova Scotia during the year 1850, as also the rate and amount of duty paid thereon :

Articles.	Quantity.	Value.	Rate of duty—sterling.	Total duty.
Apples.....barrels..	211	\$632	4s. per barrel.....	\$211
Butter.....cwt....	26	336	8s. per cwt.....	53
Beef.....do.....	6	31	6s. per cwt.....	8
Crackers.....do.....	159	1,590	3s. 4d. per cwt....	132
Clocks.....number..	141	352	5s. each.....	176
Clocks.....do.....	9	180	10s. each.....	22
Candles.....pounds..	26,138	3,267	1d. per pound.....	544
Candles.....do.....	465	232	3d. per pound.....	28
Cheese.....cwt....	107	1,253	5s. per cwt.....	133
Chocolate.....pounds.	241	25	1d. per pound.....	5
Flour.....barrels..	62,891	314,455	1s. per barrel.....	15,722
Hams.....cwt....	183	1,837	9s. per cwt.....	413
Leather (sole).....pounds..	54,914	8,008	1d. per pound.....	1,143
Leather (upper).....do.....	3,448	1,292	2d. per pound.....	143
Lard.....cwt....	380	3,805	3s. per cwt.....	761
Onions.....do.....	1,208	3,021	2s. 6d. per cwt....	755
Pork.....do.....	3,330	24,730	6s. per pound.....	4,996
Rum.....gallons..	1,291	968	1s. 6d. per gallon..	483
Sugar (crushed).....cwt....	44	450	10s. per cwt.....	111
Sugar (refined).....do....	37	470	14s. per cwt.....	131
Tobacco.....pounds..	248,540	46,601	1½d. per pound....	7,766
Articles paying 2½ per cent.....		33,653	2½ per cent.....	841
Articles paying 6¼ per cent.....		210,847	6¼ per cent.....	13,177
Articles paying 10 per cent.....		13,720	10 per cent.....	1,372
Articles paying 20 per cent.....		1,621	20 per cent.....	323
Total		673,376		49,464

The following returns give an abstract of the trade of the province of Nova Scotia during the year 1851:

No. 1.—*Return showing the ships and tonnage inward, and the value of imports into the province of Nova Scotia, during the year 1851.*

From what countries.	Vessels.		Value of imports.
	Number.	Tons.	
Great Britain.....	109	48,988	\$2,133,035
British North American colonies.....	1,249	82,613	1,022,415
British West Indies.....	128	13,565	40,590
United States.....	1,480	209,304	1,390,965
Foreign West Indies.....	179	17,542	757,565
Spain.....	12	3,497	16,015
Colonies of France and Spain.....	3	231	2,520
Foreign Europe.....	3	736	1,520
Portugal.....	2	191	13,890
China.....	3	487	125,000
Guernsey and Jersey.....	4	474	21,605
St. Pierre, Newfoundland.....	44	3,183	1,110
Foreign States.....	12	1,291	1,410
Total.....	3,228	382,102	5,527,640

No. 2.—*Return showing the ships and tonnage outward, and the value of exports from Nova Scotia, during the year 1851.*

To what countries.	Vessels.		Value of exports.
	Number.	Tons.	
Great Britain.....	75	40,164	\$142,245
British North American colonies.....	1,258	97,153	1,346,595
British West Indies.....	355	39,414	911,355
Guernsey and Jersey.....	1	206	13,200
United States of America.....	1,433	121,212	736,425
Foreign West Indies.....	104	10,008	304,080
Mauritius.....	2	469	12,155
Spain.....	1	189	8,265
Batavia.....	1	400	.....
Pernambuco.....	1	203	8,930
Foreign Europe.....	3	407	16,460
Brazils and colonies of Spain.....	5	604	35,845
South America.....	1	283	1,905
French North America.....	18	928	3,925
St. Pierre.....	7	419	925
Total.....	3,265	311,059	3,542,310

The imports and exports of Nova Scotia for 1849, 1850, and 1851 are shown comparatively as follows :

	1849.	1850,	1851.
Imports	\$4,924,190	\$5,281,065	\$5,527,640
Exports	2,804,735	3,356,430	3,542,310

The various articles of the growth, produce, and manufacture of the United States imported into Nova Scotia in 1851 were of the estimated value of \$886,940, and they paid provincial duties amounting in the aggregate to \$64,727.

The principal articles of colonial produce, growth, and manufacture exported to the United States of America in 1851 were of the following description and value :

Articles.	Quantity.	Value.
Coals	47,375 chaldrons	\$145,180
Fish—Dried cod	5,571 quintals	13,800
Mackerel	59,750 barrels	290,225
Salmon	4,444 barrels and 238 boxes, fresh...	46,245
Herrings	17,499 barrels	62,140
Alewives	1,490 barrels	3,875
Pickled fish	2,692 barrels	16,405
Oil	603 casks and 4,716 gallons	11,715
Freestone	955 tons	12,840
Gypsum	40,592 tons	28,145
Hides	2,422	6,860
Lumber and plank	257,700 feet and 466 pieces	2,815
Oats	13,877 bushels	2,650
Potatoes	1,385 bushels	1,580
Skins	48 packages	1,745
Wool	51 bales	2,040
Wood and bark	21,584 cords	38,875
Miscellaneous .....	.....	17,930
Total .....	.....	*705,045

* See note, end of Part IX.

During the year 1851, one hundred and six American vessels, of the aggregate burden of 15,901 tons, entered inward in the various ports of Nova Scotia, of which number 91 vessels, 13,032 tons, cleared again with cargoes for the United States, and the remaining 15 took cargoes for foreign ports.

The number of vessels owned and registered in the province of Nova Scotia, on the 31st December, 1850, is thus stated: 2,791 vessels, 168,392 tons.

The fisheries on the colonial coasts have been prosecuted to a greater extent by the people of Nova Scotia, except Newfoundland, than by those of any other colony. The following table, compiled from official

returns, is of some importance at this time to the fishing interests of the United States.

The number of vessels employed in the fisheries of Nova Scotia in 1851 was 812, of the burden of 43,333 tons, manned by 3,681 men. The number of boats engaged was 5,161, manned by 6,713 men. The number of nets and seines employed was 30,154. The catch of the season was as follows :

Dry fish.....	196,434	quintals.
Salmon.....	1,669	barrels.
Shad.....	3,536	"
Mackerel.....	100,047	"
Herrings.....	53,200	"
Alewives.....	5,343	"
Smoked herring.....	15,409	boxes.

The total value of the above products of the fisheries is stated at \$869,080; to which must be added 189,250 gallons of fish oil, valued at \$71,016. The total value of the fisheries undoubtedly greatly exceeds a million of dollars.

The census taken in this province during the past year (1851) gives the total population at 276,117 souls. In this total are included 1,056 Indians, and 4,908 colored persons.

The number of births in 1850 was 8,120; the number of deaths 2,802; of marriages 1,710.

It appears that there are in the province 1,096 schools, with an aggregate of 31,354 scholars.

The religious denominations are thus classed :

Church of England.....	36,482
Roman Catholics.....	69,634
Presbyterians—Kirk of Scotland.....	18,867
Presbytery of Nova Scotia.....	28,767
Free Church of Scotland.....	25,280
Baptists.....	42,243
Methodists.....	23,596
Congregationalists.....	2,639
Universalists.....	580
Lutherans.....	4,087
Sandinians.....	101
Quakers.....	188
Other denominations.....	3,791

The whole number of churches in the province is 567. The number of inhabited houses is stated at 41,453; of uninhabited houses 2,028; of houses building 2,347; of stores, barns, and outhouses, 52,758.

The probable value of real estate is stated by the census return at \$32,203,692.

It appears that there are in Nova Scotia no less than 40,012 acres of diked land. This is chiefly on the upper part of the Bay of Fundy, and is celebrated for its enduring fertility. It is estimated to be worth,

on the average, about \$60 per acre. The quantity of improved upland is stated at 799,310 acres.

The quantity of live stock is thus stated :

Horses	28,789
Neat cattle	156,857
Milch cows	86,856
Sheep	282,180
Swine	51,533'

The grain and other crops, in 1850, were as follows :

Wheat	bushels..	297,157
Barley	do.....	196,097
Rye	do.....	61,438
Oats	do.....	1,384,437
Buckwheat	do.....	170,301
Indian corn	do.....	37,475
Hay	tons....	287,837
Peas and beans	bushels..	21,638
Grass seed	do.....	3,686
Potatoes	do.....	1,986,789
Turnips	do.....	467,127
Other roots	do.....	32,325

The products of the dairy, in 1850, are stated at 3,613,890 pounds of butter and 652,069 pounds of cheese.

There are 1,153 saw-mills in the province, which employ 1,786 men. There are also 398 grist-mills, which employ 437 men. There are, besides, 10 steam-mills, or factories, 237 tanneries, 9 foundries, 81 carding and weaving establishments, 17 breweries and distilleries, and 131 other manufacturing establishments of various kinds.

The whole quantity of coals raised in the province, in 1850, is stated at 114,992 chaldrons. There were 28,603 casks of lime burned and very nearly three millions of bricks manufactured. The quantity of gypsum quarried was 79,795 tons ; the quantity of maple sugar made, 110,441 pounds.

THE PORT OF HALIFAX.

Latitude, 44° 39' north ; longitude, 63° 36' west ; magnetic variation, 15° 3' west ; rise and fall of tide, 7 to 9 feet.

It is alleged that the harbor of Halifax has not, perhaps, a superior in any part of the world. It is situate nearly midway between the eastern and western extremities of the peninsula of Nova Scotia, and, being directly open to the Atlantic, its navigation is but rarely impeded by ice. From the Atlantic the harbor extends inland for fifteen miles, terminating in a beautiful land-locked basin, where whole fleets may ride in good anchorage.

The entrance to Halifax harbor is well lighted, and buoys are placed upon all the shoals. A fine, deep channel stretches up behind Halifax called the Northwest Arm, which renders the site of the city a penin-

sula. The town is built on the declivity of a hill, which rises gradually from the water's edge; its length is more than two miles, and breadth nearly a mile, with wide streets crossing each other at right angles.

As the port at which the Cunard mail-steamers touch, on their voyages to and from Europe, and as the proposed terminus of the great railway from Québec to the Atlantic, in connexion with those and other steamers, Halifax bids fair to become a place of very considerable commercial importance.

The nature and extent of its trade and commerce, at the present time, will be best understood by the tables which follow.

The value of imports and exports at the port of Halifax, in 1850, is thus stated:

Countries.	Value of imports.	Value of exports.
Great Britain	\$1,675,150	\$75,780
British colonies {	West Indies	790,150
	British North America	124,780
	Other colonies	18,945
United States of America	1,109,000	469,000
Foreign States	267,990	187,960
Total	4,080,400	1,663,615.

The ships inward and outward, in 1850, are thus stated:

Countries.	Inward.				Outward.			
	Sailing vessels.		Steam vessels.		Sailing vessels.		Steam vessels.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Great Britain	61	28,986	36	24,834	17	2,878	28	32,354
British colonies	587	36,619	42	7,798	674	51,659	43	8,258
United States	259	27,518	35	32,768	169	19,273	39	36,249
Foreign States	174	18,081	.....	.....	92	10,408	.....	.....
Total	1,081	111,204	113	65,400	952	84,218	110	76,861

The following is an exhibit of the various descriptions of merchandise imported into Halifax from the United States in the year 1850, with the value of each description :

Articles.	Value.
Ale and porter	\$565
Agricultural implements	135
Bacon and hams	485
Beef and pork	36,170
Books and stationery	23,870
Beans and peas	715
Brandy	395
Brooms	4,460
Bread and biscuit	25,505
Bran	3,270
Butter	1,040
Burning fluid	5,280
Corn	21,400
Corn-meal	93,660
Cordage	17,085
Cotton manufactures	54,630
Cocoa	2,755
Candles	7,640
Coffee	6,620
Drugs and medicines	10,070
Wheat flour	224,050
Rye flour	77,440
Dried fruit	7,379
Fresh fruit	1,410
Glassware	3,255
Hardware	30,420
Hides	4,315
Hemp	4,915
Leather	7,180
Leather manufactures	9,990
Lard	2,385
Onions	2,490
Rice	11,070
Rum	1,020
Sugar	5,290
Soap	1,455
Tallow	4,780
Tar and pitch	6,425
Tobacco	76,785
Tea	8,280
Vinegar	1,405
Wheat	23,935
Miscellaneous	106,270
Total	938,985

The staple exports of the port of Halifax are the various products of the sea fisheries, in which a large number of the inhabitants of Nova Scotia are regularly employed. The extent of this business at Halifax is thus stated :

The following return exhibits the number of ships, and their tonnage, which entered inward at the port of Halifax during the year 1851, as also the value of imports by such vessels, distinguishing British from foreign. This return furnishes a good general idea of the import trade of Halifax as at present existing :

From what countries.	Vessels.		Value of imports.		Total value.
	Number.	Tons.	British.	Foreign.	
Great Britain	97	53,920	\$1,482,095	\$193,255	\$1,675,350
British N. American colonies..	528	33,051	921,710	19,165	940,875
British West Indies	101	11,366	45,075	1,450	46,525
United States.....	264	60,284	.....	938,985	938,985
St. Pierre.....	4	216	.....	.....	.....
Foreign West Indies.....	152	14,224	.....	587,080	587,080
Spain	9	2,157	.....	29,555	29,555
Portugal	3	337	.....	20,600	20,600
Azores	3	548	.....	2,470	2,470
Hong Kong.....	1	186	.....	48,425	48,425
Mexico.....	1	113	.....	.....	.....
Holland.....	1	400	.....	5,550	5,550
Total.....	1,164	176,802	2,448,880	1,846,535	4,295,415

The Coal Trade.

Besides its staple export arising from the fisheries, the province of Nova Scotia also sends abroad a very considerable quantity of bituminous coal.

A notice of the abundant mineral wealth of this colony is given in my former report to the Treasury Department, published by order of the Senate ; but some portions of this it may be necessary to repeat at present, in order to point out clearly the existing state of the coal trade of Nova Scotia.

The coal mines at present opened and worked in this colony are four in number. They are as follows :

1st. The Albion mines, near Pictou, on the Gulf of St. Lawrence.

2d and 3d. The Sydney and Bridgeport mines, in Cape Breton.

4th. The Cumberland mines at the head of the Bay of Fundy.

The mines near Pictou are about eighty miles by water from the western extremity of the strait of Canso, which separates Cape Breton from Nova Scotia. Here there are ten strata of coal ; the main coal band is thirty-three feet in thickness, with twenty-four feet of good coal. Out of this only thirteen feet is fit for exportation ; the remaining part is valuable for furnaces and forges.

In consequence of a general subsidence of the ground, to the extent of six feet, over all the old workings, new pits have recently been opened at the Pictou mines, which are only 150 feet deep ; the main coal band being struck at a higher level than in the old pits.

The average cost of mining coals here is thirty cents per chaldron ; the various expenses of the mines, engines, &c., increase the cost of coals at the pit mouth to sixty-two and a half cents per ton. The cost

of screening, transporting to the loading-ground by railway—a distance of nine miles—with other incidental charges, adds seventy-five cents per ton to the cost of the coals.

The shipping season commences at Pictou about the first of May, and continues until the middle of November, after which the northern harbors of Nova Scotia are frozen up.

At Pictou, coals are delivered by the single cargo at three dollars and thirty cents per chaldron. Purchasers of one thousand chaldrons, or more, obtain a deduction of thirty cents per chaldron. The slack, or fine coal, is delivered on board at one dollar and a half per chaldron, with a discount of three per cent. for cash payment.

The average weight of a chaldron of Pictou coal is 3,456 pounds. The average required in the United States is 2,940 pounds the chaldron.

One hundred chaldrons of coals, Pictou measure, are equal to 120 chaldrons, Boston measure. The usual freight from Pictou to Boston is \$2 75 per chaldron, Boston measure.

Pictou is in latitude $45^{\circ} 41'$ north; longitude $62^{\circ} 40'$ west; rise and fall of tide 4 to 6 feet.

The Sydney coal field occupies the southeast portion of the island of Cape Breton, and is estimated to contain two hundred and fifty miles of workable coal. The thickness of the coal-bed worked at Sydney is six feet. It is delivered on board vessels, after being transported three miles by railway, to the loading-ground, at \$3 60 per chaldron, with the same deduction to large purchasers as at Pictou. This coal, as a domestic fuel, is accounted equal to the best Newcastle; it is soft, close-burning, and highly bituminous.

The Bridgeport mines are fifteen miles from Sydney. The coal-seam at these mines is nine feet thick, and contains two thin partings of shale. The coal is of excellent quality, of the same description as at Sydney, and not at all inferior.

The coals from Cape Breton overrun the Boston measure from 18 to 20 per cent.

Sydney is in latitude $46^{\circ} 18'$ north; longitude $60^{\circ} 9'$ west; rise and fall of the tide 6 feet.

The Cumberland coal mines are on the coast of Chignecto, which forms the northeastern termination of the Bay of Fundy. These mines have been but recently opened. The seam worked is about four and a half feet in thickness. The coal is bituminous, but is alleged to contain more sulphur than any other description in Nova Scotia.

The principal exportation of coals from Nova Scotia and Cape Breton is to ports in Massachusetts and Rhode Island, with a small quantity to New York. Many American vessels in this trade, especially since the change in the navigation laws, obtain freights for Nova Scotia, Newfoundland, the French islands of St. Peter, Prince Edward island, and the New Brunswick ports on the Gulf of St. Lawrence, and load with coals as their return cargo.

The mean price of Sydney and Pictou coal for the chaldron, of 48 bushels, weighing 3,750 (nominally one ton and a quarter) is \$3 10, which is equal to \$2 32 per chaldron of 36 bushels. The freight to Boston is \$2 75 per chaldron; the duty under the tariff of 1846 (thirty

per cent. *ad valorem*) is seventy cents per chaldron, amounting in all to \$5 77 per chaldron. To this must be added: insurance, two per cent., and commission, two and a half per cent. The price paid in Boston by actual consumers for this same coal is about eight dollars per chaldron.

Anthracite coal does not exist in any of the colonies, and they bid fair to become consumers of Pennsylvania anthracite, the importation of which has already commenced, to some extent, in New Brunswick for steamboats and foundries. Under liberal arrangements on both sides, the consumption of anthracite coals would greatly increase in the colonies, and even in Nova Scotia, it being for many purposes better fitted and more economical than the bituminous coal of that colony.

The following return shows the quantities of coal, in chaldrons, shipped to the United States from the different mines in Nova Scotia, in the years 1849 and 1850:

Years.	Pictou.		Sydney.		Joggins, (Cumberland.)		Total.	
	Coarse.	Slack.	Coarse.	Slack.	Coarse.	Slack.	Coarse.	Slack.
1849.....	48,812	7,110	12,090	1,210	403	.....	61,305	8,320
1850.....	51,436	6,932	10,796	1,586	722	.....	62,954	8,518

The foregoing return was furnished by the Hon. S. Cunard, the general agent for all the mines of Nova Scotia. No return has been received for the year 1851; but Mr. Cunard states that the quantity fell off about twelve thousand chaldrons in that season.

CAPE BRETON.

This valuable island is in shape nearly triangular, its shores indented with many fine, deep harbors, and broken with innumerable coves and inlets.

Cape Breton is almost separated into two islands by the great inlet called the Bras D'Or, which enters on its east side, facing Newfoundland, by two passages hereafter described, and afterwards spreading out into a magnificent sheet of water, ramifies in the most singular manner throughout the island, rendering every part of its interior easily accessible.

The Bras D'Or (or "Arm of Gold") creates two natural divisions in Cape Breton, which are in striking contrast; the northern portion being high, bold, and steep; while that to the south is low, intersected by water, diversified with moderate elevations, and rises gradually from its interior shore until it presents abrupt cliffs toward the Atlantic ocean.

The whole area of Cape Breton is estimated at 2,000,000 of acres; its population somewhat exceeds 50,000 souls.

In the southern division of Cape Breton, the highest land does not exceed 800 feet; but in the northern division the highlands are higher,

bolder, and more continuous, terminating at North Cape, which is 1,800 feet in height, and faces Cape Ray on the opposite coast of Newfoundland. Between these two capes, which are 48 miles apart, is the main entrance to the Gulf of and river St. Lawrence—a pass of great importance.

The Bras D'Or appears to have been an eruption of the ocean, caused by some earthquake or convulsion, which admitted the water within the usual boundary of the coast. This noble sea-water lake is 50 miles in length, and its greatest breadth about 20 miles. The depth of water varies from 12 to 60 fathoms, and it is everywhere secure and navigable. Sea-fisheries of every kind are carried on within the Bras D'Or to a very considerable extent, as also a salmon fishery. Quantities of codfish and herrings are taken on this lake during winter through holes cut in the ice. The entrance to this great sea-lake is divided into two passages by Boulardrie island; the south passage is 23 miles long, and from a quarter of a mile to three miles wide; but it is not navigable for large vessels, owing to a bar at its mouth. The north passage is 25 miles long, from two to three miles wide, with a free navigation, and above 60 fathoms of water. The shores of these entrances are settled by Scotch Highlanders and emigrants from the Hebrides, who prosecute the fisheries in boats with much success. These fisheries are most extensive and valuable, not exceeded in any part of America; but, from their inland position, are at present wholly inaccessible to our citizens, who have never yet participated in them in the least degree.

In several of the large bays connected with the Bras D'Or, the large timber ships from England receive their cargoes at 40 and 60 miles distance from the sea. The timber is of good size, and of excellent quality.

The rich coal deposits of Cape Breton occupy not less than 120 square miles, all containing available seams for working of bituminous coal of the best quality.

The extensive and varied fisheries; the rich deposits of the finest coal, with the best iron ore; the superior quality of the timber, and extraordinary facilities and conveniences for ship-building; the rare advantage of inland navigation, bordered by good land for agricultural purposes; the existence also of abundant salt springs, lofty cliffs of the best gypsum, and the finest building stone of all kinds; with the geographical situation of the island as the key of the St. Lawrence, and the position which commands the entire commerce and fisheries of the northeastern portion of North America—all combine to render Cape Breton one of the most important and most desirable possessions of British North America.

The possession of Cape Breton is of the utmost consequence to Great Britain. The naval power of France, it is well known and admitted, began to decline from the time that nation was driven out of the North American fisheries by the conquest of Louisburg.

It has been said by Mr. John MacGregor, M. P., late secretary to the Board of Trade, that the possession of Cape Breton would be more valuable to our people, as a nation, than any of the British West India islands; and that if it were once obtained by them as a fishing station,

and a position to command the surrounding seas and neighboring coasts, the American navy might safely cope with that of all Europe.

By the treaty of Utrecht, in 1713, France ceded to England the country called "L'Acadie," now known as Nova Scotia and New Brunswick, but reserved to itself the "Isle Royale," since called Cape Breton. In order to maintain their position in America, the French took formal possession of the harbor of Louisburg soon after this treaty, and in 1720 commenced there the construction of the fortress of that name, so well known and celebrated in history. Upon this fortress the French nation expended thirty millions of livres—a very large sum in those days. It was captured in the most gallant and extraordinary manner by the forces of New England, in 1745, but was restored to France by the treaty of Aix-la-Chapelle, in 1747, in return for Madras. It was recaptured by the British and colonial forces in 1758; and after the treaty of 1763, by which the French gave up all their North American possessions to England, the British government demolished the fortifications of Louisburg, at an expense of \$50,000, fearing they might fall into the hands of some hostile power. Since then the famous harbor of Louisburg has been deserted; although previously—during its occupation by the French—it exported no less than 500,000 quintals of cod annually, and six hundred vessels, of all sizes, were employed in its trade and fisheries.

Cape Breton was formally annexed to Nova Scotia, by royal declaration, in 1763; but in 1784, a separate constitution was granted to it, and it remained under the management of a lieutenant governor, council, and assembly, until 1820, when it was re-annexed to Nova Scotia.

Owing to the returns of trade for Cape Breton being mixed up with those for Nova Scotia, it is now difficult to obtain an accurate account of the value of its products annually.

The products of the fisheries of Cape Breton, in 1847 and 1848, were as follows:

1847.—Dried cod.....	41,364	quintals.
Scalefish, dried.....	14,948	"
Pickled fish—		
Mackerel.....	17,200	barrels.
Herrings.....	2,985	"
Salmon.....	335	"
Other pickled fish.....	12,399	"
Seal-skins.....	12,100	in number.
Oil of all kinds.....	415	tuns.

The estimated value of the foregoing articles was \$302,616.

1848.—Dried cod.....	32,553	quintals.
Scalefish, dried.....	6,783	"
Pickled fish—		
Mackerel.....	14,050	barrels.
Herrings.....	3,700	"
Salmon.....	295	"
Other pickled fish.....	18,862	"
Seal-skins.....	2,200	in number.
Oil of all kinds.....	543	tuns.

The value of the above estimated at \$282,772.

There is reason to believe, however, that the above gives but an imperfect idea of the extent of the fisheries at Cape Breton. It has been ascertained that, from the portion of this island within the strait of Canso, the following quantities of fish were exported in the year 1850:

Codfish.....	28,570	quintals.
Herrings.....	8,750	barrels.
Spring mackerel.....	51,600	“
Fall mackerel.....	7,670	“

No returns can be procured from the northern and western portions of this island, the fish caught near which being generally carried direct to market from the fishing-grounds by the fishermen themselves, without reference to any custom-house. It has been ascertained, however, on good authority, that the quantity of herrings and mackerel caught and cured at Cheticamp, (the western extremity of Cape Breton,) during the season of 1851, was not less than 100,000 barrels.

It is alleged that the banks in the vicinity of Cape Breton are thickly covered with shell-fish, and consequently are the best feeding-grounds for cod found anywhere in those seas; hence, also, the superior quality of the cod caught and cured there.

The total quantity of coals raised in Cape Breton, and sold during the year 1849, amounted to 24,960 chaldrons (Newcastle measure) of large coal and 11,787 chaldrons of fine coal; of this quantity, 12,090 chaldrons of the large coal and 1,210 chaldrons of fine coal were shipped to the United States in 1849; in 1850 the quantity shipped to the United States was 10,796 chaldrons of large coal and 1,586 chaldrons of fine coal.

The entries and clearances of trading and fishing vessels at Cape Breton in 1850 were as follows:

Inward in 1850.

From what country.	Vessels.	Tons.	Vessels.	Tons.
At Arichat—				
From England	2	349		
From British colonies	52	3,196		
From the United States	98	8,105		
From foreign States.....	5	1,663		
Total.....			157	13,313
At Sydney—				
From England	6	1,859		
From British colonies	216	21,017		
From the United States.....	104	10,956		
From foreign ports.....	25	1,516		
Total.....			351	35,348
Whole number of vessels inward.....			508	48,661

Vessels outward in 1850.

To what country.	Vessels.	Tons.	Vessels.	Tons.
From Arichat—				
To Great Britain				
To British colonies.....	48	2,961		
To the United States.....	14	1,283		
To foreign States.....	4	633		
Total.....			66	4,877
From Sydney—				
To Great Britain	5	837		
To British colonies.....	217	20,615		
To the United States.....	69	6,883		
To foreign States.....	48	3,712		
Total.....			339	31,591
Whole number of vessels outward.....			405	36,468

The value of imports and exports at Cape Breton, in 1850, is thus stated in the official returns made to Halifax :

	Arichat.	Sydney.	Total value.
IMPORTS.			
From Great Britain.....	\$1,575	\$18,335	
From West Indies.....	1,355		
From British North America.....	23,585	16,860	
From other British colonies.....	15,695		
From United States.....	43,380	13,645	
From foreign States.....	1,355	1,690	
	86,945	50,530	
EXPORTS.			
To Great Britain.....		10,850	
To British West Indies.....	38,400	2,745	
To British North America.....	38,620	119,265	
To other British colonies.....	9,650		
To United States.....	35,335	44,470	
To foreign States	32,475	7,200	
	154,480	184,530	
			339,010

It is believed that the foregoing statements do not give a correct account of the whole import and export trade of Cape Breton, as much is imported and sent away through Halifax, to and from which there is at all times an extensive coasting trade. But sufficient has been stated to show that Cape Breton possesses a very considerable trade, which might be very largely increased with our country under a system of free interchanges, inasmuch as Cape Breton greatly needs, and will always continue to purchase, many products of the United States, the quantity being limited solely by the power of paying for them in the

produce of her forests, mines, and fisheries, the exports from which could be increased very considerable.

SABLE ISLAND.

This low, sandy island, the scene of numerous and melancholy shipwrecks, lies directly in the track of vessels bound to or from Europe. It is about eighty-five miles distant from Cape Canso. Its length is about twenty-five miles, by one mile and a quarter in width, shaped like a bow, and diminishing at either end to an accumulation of loose white sand, being little more than a congeries of hard banks of the same. The sum of \$4,000 annually is devoted to keeping a superintendent from Nova Scotia, with a party of men, provided with provisions and other necessaries, for the purpose of relieving shipwrecked mariners, of whatever nation, who may be cast upon its shores.

Of late years it has been found that mackerel of the finest quality can be taken in great abundance, quite close to the shores of Sable island, during the whole of every fishing season; and this fishing is every year becoming of greater importance. Several of our enterprising fishermen have found their way there of late, in schooners of about ninety tons, and have succeeded very well.

By observations of Captain Bayfield, R. N., the well known marine surveyor, made in the autumn of 1851, the eastern extreme of this island has been found to be in latitude $43^{\circ} 59'$ north, and longitude $59^{\circ} 45' 59''$ west. Two miles of the west end of the island have been washed away since 1828. This reduction, and consequent addition to the western bar, is reported to have been in operation since 1811, and seems likely to continue. There has been no material change in the east end of the island within the memory of any one acquainted with it.

The western bar may be safely approached by the lead, from any direction, with common precaution. The length of the northeast bar, it is said by Captain Bayfield, has been greatly exaggerated; but still, it is a most formidable danger. Its real length is fourteen miles only, instead of twenty-eight, as heretofore reported. For thirteen miles from the land it has six fathoms of water, with a line of heavy breakers in bad weather; in the fourteenth mile there is ten fathoms of water, and not far from the extremity of the bar 170 fathoms, so that a vessel going moderately fast might be on the bar in a few minutes after in vain trying for soundings.

Captain Bayfield has recommended to the government of Nova Scotia to establish a light-house on the east end of this island, and measures are now in progress for its erection.

Sable island lies eighty miles to the southward of Nova Scotia, and in the immediate vicinity of the gulf-stream. Throughout nearly its whole length of twenty-five miles, sable island is covered with natural grass and wild pease, sustaining by its spontaneous production, five hundred head of wild horses, and many cattle.

The Hon. Mr. Howe, principle secretary of Nova Scotia, visited this island in 1850, and reported favorably as to the extent and value of the fishery upon its coast. The superintendent informed Mr. Howe that, a few days before his arrival, the mackerel crowded the coast in such

numbers that they almost pressed each other upon the sands. Mr. Howe himself saw an unbroken shoal, extending from the landing place for a mile, within good seining distance, besides other shoals at various points, indicating the presence, in the surrounding seas, of incalculable wealth.

It is believed that a good boat fishery for cod might be carried on here. Seals are numerous all around the island, being very little disturbed.

Hitherto the government of Nova Scotia, to which this island belongs, has not permitted any fishing establishments to be set up upon it. It has been feared that discipline would not be maintained at the government establishment for the relief of shipwrecked mariners, if persons not under the control of the superintendent were allowed to land upon the island, and that the obligations of humanity might be disregarded by mere voluntary settlers, or that the temptation to plunder the unfortunate might prove too strong to be resisted by such a population when the hand of authority was withdrawn.

The natives of Nantucket,* if permitted, would soon build havens and breakwaters at Sable island, and make what is now but a dreaded sand bank amid the solitudes of the ocean, a cultivated centre of mechanical and maritime industry; and, as population increased, employment would be found for the hardy race which this stern nursery would foster and train, to draw wealth from the deep.

* A writer in that valuable work, *Hunt's Merchant's Magazine*, thus describes Nantucket, which, in many respects, is very similar to Sable island :

“NANTUCKET—A small crescent of pebbly soil, just lifting itself above the level of the ocean, surrounded by a belt of roaring breakers, and destitute of all shelter from the stormy blasts which sweep over it, there is nothing about it ‘but doth suffer a sea change.’ Its inhabitants know hardly anything but of the sea and sky. Rocks, mountains, trees, and rivers, and the bright verdure of the earth, are names only to them, which have no particular significance. They read of these as other people read of angels and demi-gods. There may be such things, or there may not. But, dreary and desolate as their island may seem to others, it realizes their ideal of what the world should be; and probably they dream that Paradise is just such another place—a duplicate island, where every wind that blows wafts the spray of the sea in their faces!”

PART VIII.

THE ISLAND COLONY OF NEWFOUNDLAND, INCLUDING
LABRADOR.

In order that a correct opinion may be formed as to the natural resources and capabilities of the island of Newfoundland, and the value of its fisheries, it will be necessary to give a brief notice of the geographical position and physical conformation of that island. A brief description will also be given of the Labrador coast, which now forms part of the government of this colony.

Newfoundland lies on the northeast side of the entrance into the Gulf of St. Lawrence. From Canada it is separated by the Gulf; its southwest point approaches Cape Breton within about 46 miles; to the north and northwest are the shores of Labrador, from which it is divided by the Strait of Belleisle; its eastern side is washed by the Atlantic ocean. Its form is somewhat triangular, but without any approach to regularity, each of its sides being broken into numerous bays, harbors, creeks, and estuaries. Its circuit is not much less than one thousand miles. Its width at the widest part between Cape Ray and Cape Bonavista is about 300 miles; its extreme length from Cape Race to Griguet bay is about four hundred and nineteen miles, measured on a curve through the centre of the island.

From the sea, Newfoundland has a wild and sterile appearance, which is anything but inviting. Its general character is that of a rugged, and, for the most part, a barren country. Hills and valleys continually succeed each other, the former never rising into mountains, and the latter rarely expanding into plains.

The hills are of various characters, forming sometimes long flat-topped ridges, and being occasionally round and isolated, with sharp peaks and craggy precipices. The valleys also vary from gently sloping depressions to rugged and abrupt ravines. The sea-cliffs are for the most part bold and lofty, with deep water close at their foot. Great boulders, or loose rocks, scattered over the country, increase the general roughness of its appearance and character. This uneven surface is covered by three different kinds of vegetation, forming districts, to which the names of "woods," "marshes," and "barrens," are respectively assigned.

The whole occupy indifferently the sides, and even the summits, of the hills, the valleys, and the lower lands. They are generally found, however, clothing the sides of hills, or the slopes of valleys, or wherever there is any drainage for the surplus water. For the same reason, probably, they occur in greatest abundance in the vicinity of the sea-coast, around the lakes, and near the rivers, if the soil and other circumstances be also favorable.

The trees of Newfoundland consist principally of pine, spruce, fir, larch, (or hackmatac,) and birch; in some districts the mountain ash, the alder, the aspen, and a few others, are also found. The character of the timber varies greatly, according to the nature of the sub-soil and the situation. In some parts, where the woods have been undisturbed by the axe, trees of fair girth and height may be found. These, however, are scattered, or occur only in small groups. Most of the wood is of small and stunted growth, consisting chiefly of fir trees, from twenty to thirty feet in height, and about three or four inches in diameter. These commonly grow so close together that their twigs and branches interlace from top to bottom, and lying indiscriminately among them are innumerable old and rotten stumps and branches, or newly-fallen trees. These, with the young shoots and brush-wood, form a tangled and often impenetrable thicket.

Embosomed in the woods, and covering the valleys and lower lands, are found open tracts, which are called "marshes." These marshes are not necessarily low or even level land, but are frequently at a considerable height above the sea, and have often an undulated surface. They are open tracts, covered with moss, sometimes to the depth of several feet. This moss is green, soft, and spungy; it is bound together by straggling grass, and various marsh plants. The surface is very uneven, abounding in little hillocks and holes, the tops of the hillocks having often dry, crisp moss upon them. A boulder or small crag of rock occasionally protrudes, covered with red or white lichens, and here and there is a bank, on which the moss has become dry and yellow. The contrast of these colors with the dark velvety green of the wet moss, often gives a peculiarly rich appearance to the marshes. This thick coating of moss is precisely like a great sponge spread over the country. At the melting of the snow in the spring it becomes thoroughly saturated with water, which it long retains, and which every shower of rain continually renews. Numerous small holes and pools of water, and in the lower parts, small sluggish brooks or gulleys, are met with in these tracts; but the extreme wetness of the marshes is due almost entirely to the spungy nature of the moss, the slope of the ground being always nearly sufficient for surface drainage; and when the moss is stripped off, dry ground or bare rock is generally found beneath.

The "barrens" of Newfoundland are those districts which occupy the summits of the hills and ridges, and other elevated and exposed tracts. They are covered with a thin and scrubby vegetation, consisting of berry-bearing plants and dwarf bushes of various sorts. Bare patches of gravel and boulders, and crumbling fragments of rock, are frequently met with upon the "barrens," which generally are altogether destitute of vegetable soil.

These different tracts are none of them of any great extent; woods, marshes, and barrens frequently alternating with each other in the course of a day's journey.

In describing the general features of the country one of the most remarkable must not be omitted, namely, the immense abundance of lakes of all sizes, which are indiscriminately called "ponds." These are found everywhere, over the whole face of the country, not only in

the valleys but on the higher lands, and even in the hollows of the summits of the ridges, and the very tops of the hills.

They vary in size from pools of fifty yards in diameter to lakes upwards of thirty miles long, and four or five miles across. The number of those which exceed two miles in extent must, on the whole, amount to several hundreds, while those of smaller size are absolutely countless.

Taken in connexion with this remarkable abundance of lakes, the total absence of anything that can be called a navigable river is at first sight quite anomalous. The broken and generally undulated character of the country is no doubt one cause of the absence of large rivers. Each pond, or small set of ponds, communicates with a valley of its own, down which it sends an insignificant brook, that pursues the nearest course to the sea. The chief cause, however, both of the vast abundance of ponds and the general scantiness of the brooks, and smallness of the extent of each system of drainage, is to be found in the great coating of moss that is spread over the country. On any great accession of moisture, either from rain or melted snow, the chief portion is absorbed by this large sponge; the remainder fills the numerous ponds to the brink, while only some portion of the latter runs off by the brooks. Great periodical floods, which would sweep out and deepen the river channels, are almost impossible; while the rivers have not power at any time to breach the barriers between them, and unite their waters. In dry weather, when from evaporation and drainage the ponds begin to shrink, they are supplied by the slow and gradual drainage of the marshes, where the water has been kept as in a reservoir, to be given off when required.

The quantity of ground covered by fresh water in Newfoundland has been estimated, by those acquainted with the country, at one-third of the whole island, and this large proportion will not probably be found an exaggeration. The area of Newfoundland is estimated at 23,040,000 acres.

LABRADOR.

Of the coast of Labrador less is known than of the island of Newfoundland, to the government of which it was re-annexed in 1808, having for some time previously been under the jurisdiction of Canada. It may be said to extend from the fiftieth to the sixty-first degree of north latitude, and from longitude 56° west, on the Atlantic, to 78° , on Hudson's bay. It has a seacoast of about 100 miles, and is frequented, during the summer season, by more than 20,000 persons.

This vast country, equal in extent to France, Spain and Germany, has a resident population of between 8,000 and 10,000 souls, including the Esquimaux and Moravians.

The climate is very severe, and the summer of exceedingly short duration. It is believed that the mean temperature of the year does not exceed the freezing-point. The ice does not usually leave the coast before June; and young ice begins to form again on the pools and sheltered small bays in September, when frosts are very frequent at night. Situate in a severe and gloomy climate, and producing nothing

that can support human life, this is one of the most barren and desolate countries in the world. But, as if in compensation for the sterility of the land, the sea in its vicinity teems with fish. There would be little inducement to visit the desolate coast of Labrador but for its most valuable and prolific fisheries, which excite the enterprise and reward the industry of thousands of hardy adventurers who annually visit its rugged shores.

In general, the main land does not exceed the height of five hundred feet above the level of the sea, and is often much lower, as are all the islands, excepting Great and Little Mecatina. The main land and islands are of granitic rock, bare of trees, excepting at the heads of bays, where small spruce and birch trees are met with occasionally. When not entirely bare, the main land and islands are covered with moss or scrubby spruce bushes; and there are many ponds of dark bog-water, frequented by water-fowl and flocks of the Labrador curlew.

The main land is broken into inlets and bays, and fringed with islands, rocks, and ledges, which frequently rise abruptly to within a few feet of the surface, from depths so great as to afford no warning by the lead. In some parts, the islands and rocks are so numerous as to form a complete labyrinth, in which nothing but small egging schooners or shallops can find their way.

But although the navigation is everywhere more or less intricate, yet there are several harbors fit for large vessels, which may be safely entered, with proper charts and sailing directions.

The Strait of Belleisle, which separates Newfoundland from Labrador, is about fifty miles long, and twelve broad. It is deep, but is not considered a safe passage usually, owing to the strong current which sets through it, and the want of harbors. There are no harbors on that part of the Newfoundland coast which faces this strait; and those on the Labrador coast are not considered safe, except the havens near the northern and southern extremities of the strait.

During the winter months the resident population of Labrador does not exceed eight hundred souls of European descent. Many of the white men have intermarried with the Indians. The few widely-scattered families reside at the establishments for seal and salmon-fishing, and for fur-trading. Seals and salmon are very plentiful; the latter are of a larger and better description than those taken on the coast of Newfoundland.

The furs of Labrador are very valuable. There are four kinds of foxes; with otters, sables, beavers, lynxes, black and white bears, wolves, deer, (caribou,) ermine, hares, and several other small animals, all bearing fur of the best description. The Canadian partridge, and the ptarmigan, or willow grouse, are also plentiful.

A number of small schooners or shallops, of about twenty-five tons, are employed in what is termed the "egging business." The eggs that are most abundant and most prized are those of the murr; but the eggs of puffins, gannets, gulls, eider ducks, and cormorants, are also collected. Halifax is the principal market for these eggs, but they have been also carried to Boston, and other ports. One vessel of 25 tons is said to have cleared \$800 by this egging business in a favorable season.

THE COD-FISHERY.

In Newfoundland the term "fish" is generally understood to mean codfish, that being the great staple of the island. Every other description of fish is designated by its particular name.

The cod-fishery is either prosecuted in large vessels in the open sea, upon the Grand Bank of Newfoundland, or else in boats or shallops near the coast of the island; and these modes of fishing are respectively designated the "bank fishery," and the "shore fishery."

The Grand Bank is the most extensive sub-marine elevation yet discovered. It is about six hundred miles in length, and in some places five degrees, or two hundred miles, in breadth. The soundings on it are from twenty-five to ninety-five fathoms. The bottom is generally covered with shell-fish. It is frequented by immense shoals of small fish, most of which serve as food for the cod. Where the bottom is principally of sand, and the depth of water about thirty fathoms, cod are found in greatest plenty; on a muddy bottom cod are not numerous. The best fishing grounds on the Grand Bank are between latitude 42° and 46°.

Those perpetual fogs which hang over the Banks, and hover near the southern and eastern portions of the coast of Newfoundland, are supposed to be caused by the tropical waters, swept onward by the Gulf steam, meeting with the icy waters carried down by the influence of the northerly and westerly winds from the Polar seas. This meeting takes place on the Grand Bank. The difference in the temperature of the opposing currents, and in their accompanying atmospheres, produces both evaporation and condensation, and hence the continual fog.

The cod-fishery on the Grand Bank began a few years after the discovery of Newfoundland. In 1502, mention is made of several Portuguese vessels having commenced this great fishery. In 1517, when the first English fishing vessels appeared on the Banks, there were then on the fishing ground no less than fifty Spanish, French, and Portuguese ships, engaged in the fisheries.

The great value of this fishery was not fully appreciated by the English until about 1618. In twelve years after, there were no less than one hundred and fifty vessels from Devonshire alone engaged in it. At that period England began to supply the Spanish and Italian markets, and then a rivalry in the fishery sprang up between the English and French. Its importance to England was manifested by the various acts of Parliament which were passed, and the measures adopted for its regulation and protection. Ships of war were sent to convey the British fishing vessels, and protect them while prosecuting the fishery. In 1676, some of the large vessels engaged in the Bank fishery carried twenty guns, eighteen small boats, and from ninety to one hundred men. This arose from the hostile position assumed by France with reference to this fishery. The English fishermen had much annoyance and trouble from those of France; notwithstanding which, the British Bank fishery continued to prosper.

Owing to the confusion created by the French revolution of 1792, their bounties on the Newfoundland fisheries were discontinued, and they immediately fell off greatly. In 1777, no less than 20,000 French

seamen were employed in the Newfoundland fisheries; but that number dwindled down to 3,397 in 1793.

From 1793 to 1814, the British fishery at Newfoundland prospered greatly. The price in foreign markets was very high, and the value of fish exported from Newfoundland in 1814 was estimated at nearly fifteen millions of dollars.

At that time the western and southern "shore" fishery sprung into importance, and offered stronger inducements for its pursuit by the inhabitants of Newfoundland than the Bank fishery. The latter was then chiefly carried on from St. John, and to a limited extent from Bay Bulls, Cape Broyle, Termense, Renewes, and Trepassy. It was prosecuted by parties from the west of England, who were the last to abandon it. Their "bankers," as vessels which fish on the Grand Bank are termed, generally carried twelve men, whose catch for the season was about one thousand quintals of cod; yielding, also, about four tons of oil from their livers.

After the peace of 1814, the British Newfoundland fisheries suddenly declined, owing to the competition which sprung up with the French fishermen, and our own citizens engaged in the business. Many of the chief merchants of Newfoundland engaged in the trade, as also numbers of the principal fishermen, were wholly ruined; and it is stated, on good authority, that bills of exchange on England, to the extent of one million of pounds sterling, were returned protested in the years 1815, 1816, and 1817. So great was the extent of the depression in the British fisheries of Newfoundland, that it was at one time proposed to remove the settled population from the island. This, however, was not carried out, temporary measures being adopted to relieve the pressure which bore with such excessive severity upon the staple trade of the country.

The bounties granted by France were higher even then than at present, and were so arranged as to exclude all fish of British catch from the French, Spanish, and Italian markets. The effect of this has been to break up the fishery on the Grand Bank by British vessels, altogether; and that fishery is now prosecuted solely by the vessels of France and of the United States, under the stimulus of bounties, which have never been given to this fishery by the British.

THE SHORE FISHERY.

The inhabitants of Newfoundland prosecute the shore fishery for cod in boats, shallops, and schooners, according to the ability of those who fit them out. In the small boats the fishery is pursued on the coast by the poorer portion of the inhabitants, who generally abandon it for the large-boat fishery so soon as they acquire sufficient means. In the small boats the people are confined to their immediate localities, whether the fishing is good or bad; with the larger boats they can avail themselves of such of the fishing grounds as offer the greatest inducements.

A fair average catch for small boats is from forty to fifty quintals per man for each season; for the large boats, from eighty to one hundred quintals per man. The expense of the large boats is about fifty per

cent. beyond that of the others. In the small boats there are two men only, and sometimes but one; in the large boats, four to six men.

At most of the fishing stations on the coast of Newfoundland the cod-fishery commences early in June, and by the 10th of August may be said to be over, for, although the people continue it for two months longer, the proceeds sometimes fail to pay even the expenses. The want of other employment is the principal reason why it is not abandoned in August. On some parts of the coast, however, the cod-fishery is pursued with much success during the whole year.

The small boats land their catch every night, when the fish are split and salted on shore. The large boats, when fishing near home, generally land their catch and salt it in the same way; but when at a distance from home they split and salt on board from day to day, until they have completed their fare. Four times the quantity of split fish, as compared with the article when caught, may be stowed in the same space.

The "shore fishery" is the most productive, both of merchantable fish and oil.

The cod-fishery being generally the most certain in its results, has hitherto been followed as the staple and prevailing fishery at Newfoundland; while the seal, the herring, the salmon, the mackerel, and the whale fisheries, have been prosecuted but a comparatively short time, and to a limited extent, in those localities where they were first commenced. They are considered of such minor importance (with the exception of the seal-fishery) that no permanent arrangements have yet been made for their development throughout the whole fishing season.

THE HERRING FISHERY.

Great shoals of herrings visit the coasts of Newfoundland in the early part of every season to deposite their spawn, when a sufficient quantity for bait only is taken by the resident fishermen. On the southern and western coasts of Newfoundland, however, herrings are caught to some extent for exportation, but not by any means in such quantities as might be expected, considering their wonderful abundance. The inhabitants do not pursue the herring fishery as a distinct branch of business: so many as are required by themselves for bait in the cod-fishery, and to supply the French "bankers," appear to be about the extent of the quantity taken in general. It is no uncommon thing on the south and west coasts of Newfoundland for hundreds of barrels of live herrings of good quality to be turned out of the seines in which they are taken, the people not deeming them worthy of the salt and the labor of curing.

This fishery might be made almost as productive as that for cod, and perhaps more valuable, by the adoption of an improved system of curing and packing, which would render the fish fit for those markets from which it is now excluded by reason of being imperfectly cured.

THE SALMON FISHERY.

This is a valuable fishery in Newfoundland, but it is not prosecuted so extensively as it might be, nor are the fish so valuable, when cured, as they ought to be, from the manner in which they are split and salted. This branch of business, under better management, could be rendered much more extensive and profitable.

THE MACKEREL FISHERY.

Although mackerel are said to abound on the southern shores of Newfoundland, as also north of Cape Ray, and thence up to the Strait of Belleisle, during the summer season, yet this branch of the fisheries is neglected by the residents of the island. They have no outfit for the mackerel fishery whatever, and this excellent fish seems to possess perfect impunity on those coasts of Newfoundland which it frequents, going and returning as it pleases, without the least molestation.

THE WHALE FISHERY.

It is believed that the whale fishery might be much more extensively pursued from Newfoundland than at present, particularly on the western coast, and in the Gulf of St. Lawrence, where it is prosecuted to a limited extent by the hardy fishermen of Gaspé, without competition.

THE SEAL FISHERY.

About fifty years since, the capture of seals on the ice in early spring, which is popularly called "the seal fishery," first began at Newfoundland. It languished, however, until 1825, since which it has gone on increasing, year by year; and when successful, it is the most profitable business pursued there.

The mode of prosecuting this fishery is as follows: The vessels equipped for the seal fishery are from sixty to one hundred and eighty tons each, with crews of twenty-five to forty-five men; they are always prepared for sea, with the necessary equipment, in March every year. At that season the various sealing crews combine, and by their united efforts cut the vessels out of the ice, in which they have firmly frozen during the winter. The vessels then proceed to the field ice, pushing their way through the openings or working to windward of it, until they meet it, covered with vast herds of seals. The animals are surprised by the seal-hunters while sleeping on the ice, and killed either with firelocks or bludgeons, the latter being the preferable mode, as firing disturbs and frightens the herd. The skins, with the mass of fat which surrounds the bodies, are stripped off together; these are carried to the vessels and packed closely in the hold.

The sealing vessels during storms of snow and sleet, which at that season they must inevitably experience, are exposed to fearful dangers. Many vessels have been crushed to pieces by the tremendous power of vast masses of ice closing in upon them, and in some instances whole

crews have perished. Storms which occur during the night, and when the vessel is entangled among heavy ice, are described as truly terrible; yet the hardy Newfoundland seal-hunter is ever anxious to court the exciting yet perilous adventure.

The vessels having completed their fare, or having failed to do so before the ice becomes scattered, and all but the icebergs has been dissolved by the heat of the advancing summer, return to their several ports; and it sometimes happens that vessels which are successful immediately after falling in with the ice, make two trips in that season.

The fat, or seal-blubber, is separated from the skins, cut into pieces, and put into frame-work vats, where it becomes oil simply by exposure to the heat of the sun. In three or four weeks it flows freely; the first which runs off is the virgin or pale oil, and the last the brown oil: under these respective designations they are known as the ordinary seal-oil of commerce.

The seal-skins are spread out and salted in bulk; after which they are packed up in bundles of five each, for shipment to foreign markets.

Besides the mode of seal-hunting on the ice above described, seals are also caught at Newfoundland and Labrador, on the plan first adopted—that is, by setting strong nets across such narrow channels as they are in the habit of passing through, in which they become entangled.

THE SYSTEM OF CARRYING ON THE FISH AND OIL TRADE OF NEWFOUNDLAND.

The persons connected with this business are—

First. The British merchant, or owner, residing in some cases in Great Britain, but in general on the island, who is the prime mover in all the business of the colony.

Second. The middle man, or planter, as he is absurdly termed, probably from all the original English settlements in America having received the official designation of plantations.

Third. The working bee, or fisherman, the bone and sinew of the country, the main-stay of its fisheries, and chief reliance of its trade and commerce.

The merchant finds the ship or vessel, provides nets, line, provisions, and every other requisite for prosecuting the fisheries; these he furnishes to the planter. In some instances the planter owns the vessel, and provides his own outfit. It is his duty in all cases to engage the crew and to superintend the labor of catching and curing.

In the seal fishery prosecuted in vessels, one-half the profit of the voyage goes to the merchant or owner who provides and equips the vessel, the other half being divided among the crew. Besides the profits on the extra stores or clothing furnished to the crew, the merchant or owner deducts from each of them from six to eight dollars as berth-money. To this there are occasional exceptions in favor of experienced men, who are either charged less, or get their berths free, in consequence of being able marksmen; and then, by way of distinction, they are called “bow-gunners.”

A^r fishing-servant usually gets from seventy-five to one hundred dol-

lars for the season, commencing with the first of May, and ending with the last of October. These wages are usually paid one-half in money and one-half in goods.

The Labrador fishermen are in general shipped or hired on shares, or, as they call it, on "half their hand," being fully found by the planter in everything necessary to prosecute the fishery during the season. This is also the case, in some instances, with the fishermen engaged for carrying on the shore fishery of Newfoundland.

The following return of the vessels equipped for the seal fishery, from the port of St. John only, and the number of seals taken by them during the last ten years, will give some idea of the extent and value of this branch of business in Newfoundland:

Year.	No. of ves- sels.	Aggregate ton- nage.	Men.	No. of seals taken.
1842.....	74	6,035	2,054	232,423
1843.....	106	9,625	3,177	482,694
1844.....	121	11,088	3,775	347,904
1845.....	126	11,863	3,895	302,363
1846.....	141	13,165	4,470	195,626
1847.....	95	9,353	3,215	334,430
1848.....	103	10,046	3,541	389,440
1849.....	58	5,847	2,170	206,338
1850.....	71	6,728	2,574	340,075
1851.....	92	9,200	3,489	382,083

The whole outfit for the seal fishery from the island of Newfoundland in the spring of the year 1851, amounted to 323 vessels, with an aggregate of 29,545 tons, manned by 11,377 men.

The average take of seals in the whole of Newfoundland during the last seven years, is estimated at 500,000 per annum.

The following is a comparative statement of the quantity and value of the staple articles of produce exported from the island of Newfoundland in the years 1849 and 1850:

Articles.	1849.		1851.	
	Quantity.	Value.	Quantity.	Value.
Dried fish.....quintals..	1,175,167	\$2,825,894	1,089,182	\$2,558,251
Oils.....gallons..	2,282,496	1,025,961	2,636,800	1,487,654
Seal skins.....number..	306,072	162,144	440,828	318,480
Salmon.....tierces..	5,911	51,912	4,600	44,160
Herrings.....barrels..	11,471	27,220	19,556	46,939

The total value of the imports and exports of Newfoundland, in the years 1849, 1850, and 1851, was as follows:

	1849.	1850.	1851.
Imports.....	\$3,700,912	\$4,163,116	\$4,609,291
Exports.....	4,207,521	4,683,696	4,276,876

The extent of the foreign commerce of this colony is manifested by the statements which follow, showing the numbers, tonnage, and men, of the vessels which entered and cleared at Newfoundland in the years 1850 and 1851:

No. 1.—*Vessels inward and outward in 1850.*

Countries.	Inward.			Outward.		
	Number.	Tons.	Men.	Number.	Tons.	Men.
Europe—						
Great Britain.....	196	28,446	1,662	114	15,597	890
Guernsey and Jersey.....	13	1,516	102	4	664	28
Gibraltar.....				8	1,152	50
Ionian islands.....				2	259	14
Spain.....	104	14,701	870	81	9,371	800
Portugal.....	81	10,035	602	76	9,427	647
Denmark.....	12	2,002	104			
Germany.....	30	4,797	252			
Italy.....	14	1,795	116	67	9,641	550
France.....				1	89	7
Madeira.....				2	221	14
America—						
British North American col- onies.....	508	44,853	2,800	542	35,536	3,280
British West Indies.....	30	4,189	260	75	10,180	629
United States.....	130	15,622	787	41	3,770	241
Spanish West Indies.....	66	9,022	631	15	1,915	111
Danish West Indies.....				1	118	7
St. Pierre.....	32	412	95			
Brazils.....	4	838	50	58	11,055	609
Total.....	1,220	138,228	8,333	1,087	108,795	7,868

No. 2.—*Vessels inward and outward in 1851.*

Countries.	Inward.			Outward.		
	Number.	Tons.	Men.	Number.	Tons.	Men.
Europe—						
Great Britain.....	212	29,994	1,660	148	15,731	892
Guernsey and Jersey.....	11	1,352	95	4	664	42
Gibraltar				11	1,132	67
Ionian islands						
Spain.....	105	14,932	875	50	5,789	422
Portugal	70	8,825	548	88	11,312	723
Denmark	6	1,541	73	1	107	7
Germany	41	6,822	348			
Italy	4	604	37	50	6,998	477
France.....						
Madeira.....				1	62	4
America—						
British North American colonies	524	47,450	2,911	503	55,162	3,172
British West Indies	29	3,598	230	70	10,135	603
United States.....	131	16,481	869	33	3,569	211
Spanish West Indies.....	39	4,603	201	18	20,202	130
Danish West Indies.....				2	388	19
St. Pierre.....	43	675	90	51	10,256	568
Brazils.....	7	1,488	75	4	71	19
Total.....	1,222	137,465	8,012	1,034	141,578	7,356

The following comparative statement shows the total shipping of Newfoundland inward and outward in 1849, 1850, and 1851:

	1849.			1850.			1851.		
	No.	Tons.	Men.	No.	Tons.	Men.	No.	Tons.	Men.
Entered.....	1,156	132,388	8,060	1,220	138,228	8,331	1,222	137,465	8,012
Cleared.....	1,074	126,643	7,901	1,087	108,795	7,868	1,034	141,578	7,356

The ships built in Newfoundland during the period of four years, from 1846 to 1850 inclusive, are as follows:

Years.	Vessels.	Tons.
In 1847.....	17	854
In 1848.....	19	794
In 1849.....	30	1,055
In 1850.....	30	1,497

The population of Newfoundland, by the last census, in 1845, was 96,295 souls. On the 1st of January, 1852, the population was estimated at 125,000, of whom 30,000 were engaged directly in the fisheries. In 1845 the number of fishing boats, &c., was as follows:

Boats from 4 to 15 quintals.....	8,092
Boats from 15 to 30 quintals.....	1,025
Boats from 30 quintals upwards.....	972
Number of cod seines.....	879
Number of sealing nets.....	4,568

The value of the annual produce of the colony of Newfoundland has thus been stated, on an average of four years, ending in 1849, by the British colonial authorities:

949,169 quintals of fish exported.....	\$2,610,000
4,010 tierce of salmon.....	60,500
14,475 barrels of herrings.....	42,500
508,446 seal-skins.....	254,000
6,200 tons of seal-oil.....	850,000
3,990 tons of cod-oil.....	525,000
Fuel and skins.....	6,000
Bait annually sold to the French.....	59,750
Value of agricultural produce.....	1,011,770
Fuel.....	300,000
Game—venison, partridges, and wild fowl.....	40,000
Timber, boards, house-stuff, staves, hoops, &c.....	250,000
Fish, fresh, of all kinds, used by inhabitants.....	125,000
Fish, salted. . .do. . .do.....	175,000
Oil consumed by inhabitants.....	42,500
Total.....	<u>6,352,020</u>

The average value of property engaged in the fisheries, during the same period, is thus stated:

341 vessels, engaged in the seal fishery.....	\$1,023,000
80 vessels, engaged in coasting and cod-fishery.....	80,000
10,089 boats, engaged in cod-fishery.....	756,675
Stages, fish-houses, and flakes.....	125,000
4,568 nets, of all descriptions.....	68,500
879 cod seines.....	110,000
Vats for making seal-oil.....	250,000
Fishing implements and casks for liver.....	150,000
Total.....	<u>2,563,175</u>

TRADE BETWEEN NEWFOUNDLAND AND THE UNITED STATES.

The following statement furnishes a full account of the quantity and value of the staple products of Newfoundland, exported from that colony to the United States in the years 1849, 1850, and 1851:

Articles.	1849.		1850.		1851.	
	Quantity	Value.	Quantity	Value.	Quantity	Value.
Fish, herrings barrels..	686	\$1,690	1,860	\$4,040	2,329	\$5,510
tongues and sounds...do....	16	75	37	45	46	230
caplin.....do.....	29	60	19	25	18	25
salmon.....do.....	3,374	34,180	1,192	19,055	4,163	41,630
dried cod quintals..	21,428	56,935	14,119	31,770	15,431	38,495
Hides.....number..	245	600	1,431	3,445	619	1,245
Oil, seal.....tons.....			4	535	1	15
cod.....do.....	22	2,220	29	4,355	19	4,375
Skins, seal.....number..					750	560
Total.....		95,700		63,270		92,220

The whole of the foregoing articles were exported from Newfoundland to the United States in British vessels only, no other vessels whatsoever being employed in their transport.

The character and extent of the imports into Newfoundland from the United States is shown thus:

Return of the quantity, value, rate, and amount of duty paid on principal articles, the growth, produce, or manufacture of the United States, imported into the colony of Newfoundland, during the year ending 5th January, 1852.

Articles.	Quantity.	Value.	Rate of duty.	Total duty.
Arrowroot.....		\$2,370	5 per cent....	\$118
Apothecaries' ware.....		2,007	5 ..do.....	100
Bacon and hams.....cwt..	180	1,980	5 ..do.....	232
Beef, salted.....barrels..	2,098	24,690	2s. per bbl....	1,048
Beer and ale.....do....	346	1,906	10 per cent...	190
Blacking.....				
Bran.....qrs.....	29	70	5 per cent....	3
Bread.....cwt.....	5,357 2	25,923	3d. per cwt....	334
Bricks.....No.....	524,703	3,895	5 per cent....	190
Butter.....cwt.....	3,633 3	43,987	2s. per cwt....	1,816
Cabinet ware.....		715	10 per cent....	71
Candles, tallow.....pounds..	47,920	5,600	7½ per cent....	420
Chocolate and cocoa.....cwt..	23	350	5s. per cwt....	28
Clocks and watches.....		1,620	10 per cent....	162
Cheese.....cwt.....	555 2	4,775	5s. per cwt....	693
Coffee.....cwt.....	682	8,325		
Coloring.....gallons..	148	45	5 per cent....	2
Confectionary.....		152	5.....do.....	7
Corn, grain, meal, flour, viz:				
Indian corn.....qrs.....	284	1,650	5.....do.....	82
Indian meal.....barrels..	6,293	24,318	6d. per bbl....	786
Flour.....do.....	87,410	475,330	1s. 6d. per bbl.	32,778
Oatmeal.....do.....	97	500	6d. per bbl....	12
Peas.....qrs.....	36	405	5 per cent....	20
Oats.....do.....	25	100	5.....do.....	5

STATEMENT—Continued.

Articles.	Quantity.	Value.	Rate of duty.	Total duty.
Cotton manufactures		\$465	5 per cent...	\$23
Earthen and Chinaware		36	5...do.....	1
Feathers.....cwt..	24	190	5...do.....	9
Fish, viz: oysters.....bushels..	96	100	.....	.....
Fluid.....		308	5...do.....	15
Fruit, viz:				
Apples.....barrels..	1,493	3,785	1s. 6d. per bbl.	559
Raisins, currants.....cwt..	399 2	4,195	5 per cent...	209
Oranges, lemons.....barrels..	251	760	5...do.....	38
Preserves.....cwt..	1 2	50	5...do.....	2
Ginger, preserved.....pounds..	14	10	5...do.....	.....
Glassware.....		510	5...do.....	25
Grape vines.....		15	5...do.....	1
Hardware and cutlery.....		3,610	5...do.....	180
Hats.....dozen..	157	397	5...do.....	19
Hay and straw.....tons..	10	150	5...do.....	7
Hops.....bales..	20	610	5...do.....	30
Iron manufactures.....		960	5...do.....	48
Juice, lime and lemon.....		5	5...do.....	.....
Lard.....cwt..	25	297	5...do.....	14
Lead.....cwt..	0 3 11	16	5...do.....	1
Leather manufactures.....		6,291	5...do.....	314
Lime.....bushels..	515	98	5...do.....	4
Musical instruments.....		740	5...do.....	37
Molasses.....gallons..	28,184	7,045	1½d. per gall..	881
Oakum.....cwt..	196 2	1,077	5 per cent...	53
Onions.....bushels..	30	21	free.....	.....
Perfumery.....		25	5 per cent...	1
Pickles and sauces.....		40	5...do.....	2
Pitch and tar.....barrels..	8 1	3,333	5...do.....	166
Pork, salted.....barrels..	14,480	183,085	3s. per bbl....	10,860
Potatoes and vegetables.....bushels..	745	785	free.....	.....
Rice.....cwt..	419 2	1,877	5 per cent...	93
Robes, buffalo.....	60	300	5...do.....	15
Rosin.....barrels..	1	31	5...do.....	1
Salt.....tons..	4	55	6d. per ton...	.....
Saleratus.....		25	5 per cent...	1
Slops.....		845	5...do.....	42
Seeds.....		581	free.....	.....
Sausages.....cwt..	20 1	85	5 per cent...	4
Soap.....do..	430	2,000	5...do.....	100
Spirits, viz: rum.....gallons..	6,122	3,655	9d. per gall..	1,147
Stationery.....		525	5 per cent...	26
Straw manufactures.....		35	5...do.....	1
Stone, grave.....No..	1	7	5...do.....	.....
Tea.....pounds..	51,390	14,518	3d. per lb....	3,211
Tobacco, viz:				
Leaf.....pounds..	3,358	780	2d. do.....	139
Manufactures.....do...	329,156	54,535	2d. do.....	13,714
Cigars.....No..	54,050	925	5s. per M....	3,378
Stems.....cwt..	30	75	2s. per cwt...	15
Tobacco pipes.....		2	5 per cent...	.....
Tongues.....barrel..	1	12	5...do.....	.....
Turpentine, spirits of.....gallons..	118	41	5...do.....	2
Vinegar.....do..	563	122	5...do.....	6
Wine, in bottles.....do..	2	15	3s. per gall..	1
Wood, viz:				
Staves and casks.....packages..	4,472	3,950	5 per cent...	197
Timber.....tons..		15	1s. 6d. per ton.	.....
Board and plank.....feet..	10,000	100	2s. 6d. per M..	6
Wooden ware.....		7,696	5 per cent...	384
Woollen manufactures.....		11,736	5...do.....	586
Total.....		954,266	.....	75,665

An examination of the preceding table shows that the principal articles imported into Newfoundland from the United States are precisely those which give greatest employment to our people.

The value of salted beef imported in 1851 was \$24,690; of bread, \$25,923; of bricks, \$3,895; of butter, \$43,987; of cheese, \$4,775; of Indian corn, \$1,650; of corn meal, \$24,318; of wheat flour, \$4,75,330; of apples, \$3,785; of pitch and tar, \$3,333; of salted pork, \$183,085; of rice, \$1,877; of tobacco, \$54,535; of staves, \$3,950; of wooden wares, \$7,696; and of wollen manufactures, \$11,736.

The total value of articles imported into Newfoundland in 1850, being the growth, produce, or manufacture of the United States, was \$767,550; the value of such articles imported in 1851 was \$954,266, showing an increase in the latter year of \$186,716.

The following abstracts of the trade of Newfoundland show, comparatively, the relation which the trade with the United States bore to the whole trade of the island with all countries in the year 1851.

The first abstract which follows, shows the number and tonnage of the vessels entered inward in the colony in 1851, with the value of the goods imported in such vessels, distinguishing British from foreign :

Countries from whence entered.	Vessels.		Value of imports.		Total.
	No.	Tons.	British.	Foreign.	
Europe—					
Great Britain.....	212	29,994	\$1,410,265	\$132,770	\$1,543,035
Guernsey and Jersey.....	11	1,352	57,155	560	57,715
Spain.....	105	14,932	.....	62,620	62,620
Portugal.....	70	8,825	.....	90,165	90,165
Denmark.....	8	1,541	.....	80,810	80,810
Germany.....	41	6,822	.....	399,875	399,875
Italy.....	4	604	.....	1,970	1,970
America—					
British North American colonies.	524	47,450	847,060	94,640	939,700
British West Indies.....	29	3,598	86,100	.....	86,100
United States.....	131	16,481	.....	998,735	998,735
Spanish West Indies—					
Cuba.....	27	3,368	.....	139,610	139,610
Porto Rico.....	12	1,235	.....	53,300	53,300
Brazils.....	7	1,488	.....	95	95
St. Peter's, (French.....	43	675	.....	1,450	1,450
Total.....	1,224	138,365	2,400,580	2,054,600	4,455,180

This table shows, that next to great Britain and the northern colonies, the largest amount of imports into Newfoundland is from the United States. It exceeded the importations from the neighboring colonies last year by \$59,000, and amounted to nearly one-half of all importations from every foreign country.

The succeeding abstract exhibits the number and tonnage of the vessels cleared outward from Newfoundland in 1851, with the value of the articles exported in such vessels, distinguishing British from foreign:

Countries for which cleared.	Vessels.		Value of exports.		Total.
	No.	Tons.	British.	Foreign.	
Europe—					
Great Britain.....	118	15,731	\$2,040,960	\$98,655	\$2,139,615
Guernsey and Jersey.....	4	664	22,260	880	23,140
Gibraltar.....	11	1,132	60,035	.....	60,035
Spain.....	50	5,789	273,810	.....	273,810
Portugal.....	88	11,312	575,360	.....	575,360
Denmark.....	1	107	11,625	.....	11,625
Sicily.....	5	582	31,380	.....	31,380
Italy.....	50	6,998	357,370	.....	357,370
Madeira.....	1	62	2,490	.....	2,490
America—					
British North American colonies...	503	55,162	345,930	16,920	362,850
British West Indies.....	70	10,135	340,095	570	340,665
United States.....	33	3,559	99,720	250	99,970
Spanish West Indies—					
Cuba.....	} 18	20,202	50,325	.....	50,325
Porto Rico.....			21,920	.....	21,920
West Indies, (Danish).....	2	388	.....	.....	.....
Brazils.....	51	10,256	450,560	.....	450,560
St. Peter's, (French).....	4	71	230	.....	230
Total.....	1,013	142,176	4,684,070	117,275	4,801,345

From the preceding statement it will be seen that the exports from Newfoundland to the United States have but a small value, as compared with the articles imported from this country. For the staple products of Newfoundland exported to Spain, Portugal, Italy, and the Brazils, amounting, in the whole, to \$1,657,190, that colony receives a considerable proportion of its payment in ready money, a large share of which finds its way to our country for beef and pork, pitch and tar, breadstuffs and tobacco. The balance of trade being so largely against Newfoundland, in its dealings with us, creates much difficulty in that colony, and forces it to deal more extensively with European countries which purchase its products, than it would do if the trade with us were more nearly upon an equality.

In 1850 the number of vessels which cleared from the colony of Newfoundland was 1,102, of the burden of 129,832 tons. The total value of the various articles exported in these vessels is thus stated: British \$4,761,260; foreign, \$117,590; total, \$4,878,850.

The total value of exports in 1851 being \$4,445,180 only, shows a decrease from the preceding year of \$433,670.

The value of imports at Newfoundland in 1850 was \$4,336,585, and in 1851 was \$4,455,180, being an increase in the value of goods imported in the latter year of \$108,595. There was, therefore, an increased importation, with diminished exports, during the past season in Newfoundland.

VALUE OF THE LABRADOR TRADE AND FISHERIES.

The exports from Labrador are cod, herring, pickled salmon, fresh salmon, (preserved in tin cases,) seal-skins, cod and seal-oil, furs, and feathers.

No accurate account of the value of the exports of Labrador can be furnished, because there are no custom-houses or public officers of any description on that wild and barren coast; but the following estimate is given as an approximation to the annual value of the exports. It has been carefully made up from the best and most perfect information that can be obtained:

In American vessels	\$480,000
In Nova Scotia vessels	480,000
In Canadian. ....do.....	144,000
In vessels owned or chartered by English and Jersey houses having establishments on the coast.....	480,000
In vessels owned or chartered by the people of Newfoundland	1,200,000
Total.....	<u>*2,784,000</u>

The number of fishermen employed on the Labrador coast every season is from ten to fifteen thousand.

The salmon fisheries average, annually, about thirty thousand tierces, not more than two hundred tierces of which find their way to Newfoundland. The salmon exported from Newfoundland are almost exclusively the catch of that island.

The herring fishery at Labrador is carried on by fishermen from Nova Scotia, Canada, Newfoundland, and the United States, and are shipped directly from the coast to a market.

Of the seal-oil, seal-skins, furs, and feathers, a very small share finds its way to Newfoundland. Merchants and traders on the coast buy them in exchange for their goods, being less bulky and more valuable than fish. The trading vessels do not buy many cod on the coast, preferring the other commodities named.

Since the treaty of Paris, in 1814, the Labrador fishery has increased more than six-fold, in consequence of the fishermen of Newfoundland being forced by French competition from the fishery on the Grand Bank, and also driven from the fishing grounds, now occupied almost exclusively by the French, between Cape Ray and Cape St. John.

The imports of Labrador have been estimated by the authorities of Newfoundland as of the value of \$600,000 per annum.

THE PORT OF ST. JOHN, NEWFOUNDLAND.

The chief town in Newfoundland is its capital and principal seaport, St. John, in latitude 47° 34' north, longitude 52° 43' west.

* The total exports are by some persons estimated at \$4,000,000.

It is the most eastern harbor in North America, only 1,665 miles distant from Galway, on the west coast of Ireland, being the shortest possible distance between the continents of Europe and America. As it lies directly in the track of the Atlantic steamers between the United States and Europe, public attention has naturally been directed towards its harbor as a position of prominent and striking importance on this side the Atlantic. It therefore deserves something more than a passing notice.

It has recently been proposed that St. John should be established as a port of call for at least one line of Atlantic steamers, and that the intelligence brought by this line from the Old World should be thence transmitted by telegraph to the whole of North America.

The route for the line of the proposed telegraph from St. John to Cape Ray, the southwestern extremity of Newfoundland, was explored during the latter part of the season of 1851, in a very energetic and successful manner, by Mr. Gisborne; and it was found, that beyond the question of expense, there were no unusual obstacles to prevent the construction of the line. From Cape Ray to Cape North, at the northeastern extremity of Cape Breton, the distance is forty-eight miles, across the great entrance to the Gulf of St. Lawrence. It is proposed that telegraphic communication shall be maintained across this passage by a submarine cable, similar to that now successfully in operation between England and France. From Cape North to the town of Sydney, in Cape Breton, the distance is but short; and Sydney already communicates by telegraph with every place in America to which the wires are extended.

Another proposition is to carry the submarine cable at once from Cape Ray to the east cape of Prince Edward island; then traversing a portion of that island, to pass across the straits of Northumberland into New Brunswick, there to connect at the first convenient station with all the telegraph lines in North America.

It is alleged that a fast steamer, having on board only the small quantity of coals which so short a trip would require, might cross the Atlantic from Galway to St. John in five days; and, if so, information from all parts of Europe could be disseminated over the whole of our Union, even to the Pacific—from Moscow to San Francisco—within six days.

The harbor of St. John is one of the best in all Newfoundland, where good harbors abound. It is formed between two mountains, the eastern points of which have an entrance called "the Narrows."

From the circumstance of this harbor being only accessible by one large ship at a time, and from the numerous batteries and fortifications erected for its protection, St. John is a place of very considerable strength. There are about twelve fathoms water in mid-channel of the entrance, which, although but one hundred fathoms wide, is only one hundred fathoms long; and, when the Narrows are passed, the harbor trends off to the southwest, affording ample space for shipping, with good anchorage, in perfect shelter.

Some very interesting testimony was taken before the Legislative Assembly of Newfoundland in 1845, with reference to the advantages of St. John as a port of call for Atlantic steamers. Among other

witnesses who were examined was Captain John Cousins, an old and respectable shipmaster, who stated as follows :

"I am a master-mariner, and I have been engaged in the trade forty-four years. I have arrived at Newfoundland from England and foreign countries during each month in the year. The coast of Newfoundland, from Conception bay to Cape Race, is a fine, bold shore ; there is not a rock or shoal to take up a vessel in making the land. The harbor of St. John is safe and commodious ; it is as fine a harbor as any in the colony ; the water is deep enough for a line-of-battle ship. *There are no perceptible tides.* The light-house on Cape Spear affords a fine light, which can be seen upwards of twenty miles at sea. There is a good harbor light, also.

"The northern ice along the eastern side of Newfoundland is generally to be found in greatest quantities during the months of March and April. The ice in April is softer, more honey-combed, than in March ; by April, the great body of field-ice has generally passed to the southward, and is found as far as the bank off Cape Race. I have, as a master, made several voyages to Nova Scotia, the coast of which is a very dangerous one, from the shoals that lie off it at a considerable distance.

"Fogs prevail along the coast of Newfoundland and Nova Scotia chiefly during the months of May, June, and July ; they are thickest on the Banks. Those that are acquainted with the navigation of Newfoundland boldly run through the fog for the land, and find the atmosphere clear within a mile, or a mile and a half, of this shore ; and the safety and boldness of our coast permit the running close inshore with impunity.

"Between St. John and Cape Race,* a distance of about fifty miles, there are seven harbors, into which vessels of any size could enter easily and lie safely. A straight line from Liverpool to Halifax would cut St. John harbor. From St. John to Cape Clear is 1,700 miles, or thereabouts."

In a representation made very recently by the people of St. John to the imperial government, it is set forth that the geographical position of St. John is the most eastern land on the American side of the Atlantic, situated on a promontory directly in the route between the other North American provinces and the United Kingdom, and distant from Ireland 1,665 miles only, obviously points it out as a port of call for Atlantic steamers. That in addition to its favorable position, the harbor of St. John possesses the advantages of being capacious yet landlocked ; of having a depth of water and absence of tides which enable the largest ships that float to enter and leave it at all hours ; of being easy of access and free from shoals or hidden dangers, as none exist

* A beacon has recently been erected on Cape Race, on the southern coast of Newfoundland, by the imperial government. The total height of the beacon is 65 feet. It stands on the rising ground, 140 feet high, immediately behind Cape Race rock ; so that the top of the beacon is at an elevation of 205 feet above the level of the sea. It is of hexagonal shape, 22 feet in diameter at the base, and 11 feet on each face. It tapers upwards to a height of 56 feet, where its diameter is but 2 feet 9 inches, and is then surmounted by a skeleton ball 9 feet in diameter—making the total height 65 feet. The faces of the beacon are painted alternately white and red, and the ball at the top red. The Cape Pine light-house is also painted white and red, but in horizontal alternate stripes ; whereas, Cape Race beacon is painted in vertical alternate stripes.

along the line of bold coast between Cape St. Francis and Cape Race, which may everywhere be approached with safety. It is, therefore, said to be manifest that the port of St. John presents facilities and conveniences for steamers which cannot be surpassed in any port in the world. There is said to be less fog on the coast of this part of Newfoundland than on the Atlantic coast of Nova Scotia; and oftentimes when the fog is thick on the Banks of Newfoundland, this coast is free from it.

A good land fall is of great value to the navigator, and it is asserted that none better can be found for trans-Atlantic steamers than St. John, as the royal mail steamers for Halifax usually endeavor to make the land about thirty miles to the southward of St. John. Hence it is argued that their call at St. John would detract nothing from their safety, and but little from their dispatch.

All history and experience prove that the necessities of commerce seek out the nearest and shortest routes for travel and business. Calais and Dover have been the points of embarkation between England and the continent of Europe ever since the invasion of Britain by Cæsar, and for the sole reason that they are the nearest points between the island of Great Britain and the continent. Where Cæsar crossed the straits of Dover, the submarine telegraph now transmits intelligence from every portion of Europe, on its way to North America. A glance at the map of the world shows that in all time past, the points of islands or continents which approach the nearest have become the highways of their intercourse and commerce. Cape Surium was the point of concentration for the trade of Greece, because it was the nearest point to Egypt. The Appian Way was extended from Capua to Brundisium, on the Adriatic gulf, because that was the nearest good harbor, near the narrowest part of the Adriatic sea, in the most direct line from Rome to Constantinople. In modern times, that most wonderful and costly work, the Britannia tubular bridge across the Menai strait, has been erected at vast expense, simply because it is in the most direct line from London to Dublin and Ireland.

Under the impulse given to communication between Europe and America by the fast ocean steamers now traversing the Atlantic with speed and certainty, and the quickening influence of the electric telegraph, spreading its network of wires over the length and breadth of the continent for the instant communication of intelligence, it is but reasonable to believe that the nearest points between the continents of Europe and America—between the west coast of Ireland and the easternmost point of Newfoundland—will be established as the highway for communication between this country and Europe, to insure the transmission of intelligence in the shortest possible space. Nature appears to have decreed this; and it only remains for man to carry out, in the most advantageous manner, what has been thus decreed.

The legislature of Newfoundland appears to be fully alive to the importance of the geographical position of the harbor of St. John, and firmly impressed with the belief that, by means of steam communication with Ireland, it must be the point from which, without dispute, the earliest and latest intelligence will be transmitted between Europe and America. Influenced by this impression, it has made liberal offers to

parties who will undertake to make St. John a port of call for trans-Atlantic steamers, and will establish a line of electric telegraph from thence to Cape Breton, within a given period. Besides other advantages, it has voted to pay a bonus of \$7,500 for each one hundred miles of telegraph line, and \$12,500 per annum for five years to a line of steamers, calling twice each month at the port of St. John.

LIGHT-HOUSES ON THE EASTERN COAST OF NEWFOUNDLAND.

These light-houses are said to be as good as any in the world, and are thus described :

At Cape Bonavista there is a powerful light, revolving every two minutes, red and white alternately ; elevation, one hundred and fifty feet above the sea ; seen at a distance of thirty miles. This light is in longitude $52^{\circ} 8'$ west, latitude $48^{\circ} 42'$ north.

At Cape Spear, distant from Cape Bonavista seventy-three miles, there is a powerful revolving light, showing a brilliant flash at intervals of one minute ; elevation, two hundred and seventy-five feet above the sea ; seen in all directions seaward at the distance of thirty miles. In longitude $52^{\circ} 37' 5''$ west ; latitude $47^{\circ} 30' 20''$ north.

At Cape Race is fixed a beacon-tower, in longitude $52^{\circ} 59'$ west, latitude $46^{\circ} 40'$ north ; distant from Cape Spear fifty-six miles. This beacon-tower is hexagonal, painted in vertical stripes, red and white alternately. It has a skeleton ball at the top, painted red ; its height is sixty-five feet, and it stands on ground one hundred and forty feet above the level of the sea.

At Cape Pine, distant from Cape Race thirty-two miles, is a powerful revolving light, three times a minute ; its elevation above the sea is three hundred and two feet, and it can be seen from all points to seaward at the distance of thirty miles. Longitude $53^{\circ} 32' 12''$ west ; latitude $46^{\circ} 37' 12''$ north.

In addition to these lights, there is a good fixed light at the entrance of the harbor of St. John, on the southern head, in longitude $52^{\circ} 40' 50''$ west, and latitude $47^{\circ} 33' 50''$ north. In foggy weather a heavy eighteen-pound gun is fired by day every half hour, thus enabling vessels to run at all times for the Narrows, the water being deep and the shore bold. The greatest distance between any two lights on this coast is eighty-eight miles ; and as each light can be seen thirty miles in clear weather, there would be but twenty-eight miles to run without seeing a light.

The cost of the best coals for steam purposes, at the port of St. John, is as follows :

Coals from Sydney, Cape Breton.....	\$4 90 per ton.
Coals from Pictou, Nova Scotia.....	4 60 do.
Coals from Troon and Ardrossan, Scotland.....	4 96 do.

The duty on coals at Newfoundland is 30 cents per chaldron, equal to 25 cents per ton, which is included in the above rates.

The trade and commerce of the port of St. John is very considerable, as will be seen by the various statements which follow.

In the years 1850 and 1851 the number of vessels which entered inward at the port of St. John, Newfoundland, was as follows :

Countries from which vessels entered.	1850.			1851.		
	No. of vessels.	Tonnage.	Men.	No. of vessels.	Tonnage.	Men.
Europe :						
Great Britain	131	20,281	1,121	138	21,114	1,143
Guernsey and Jersey	3	221	14	4	385	23
Spain	65	8,817	521	66	9,635	522
Portugal	46	5,533	530	46	5,515	325
Denmark	5	808	41	4	853	38
Germany	25	4,108	211	37	6,281	318
Italy	12	1,539	95	3	420	27
America :						
British N. American colonies.	380	36,552	2,192	377	37,773	2,183
British West Indies	26	3,527	218	26	3,144	199
United States	105	12,978	729	99	12,552	645
Spanish West Indies	64	8,796	612	38	4,512	300
Brazils	3	657	36	4	872	51
Total	865	103,817	6,120	842	103,016	5,774

The number of vessels which cleared from St. John in the same years was as follows :

Countries from which vessels cleared.	1850.			1851.		
	No. of vessels.	Tonnage.	Men.	No. of vessels.	Tonnage.	Men.
Europe :						
Great Britain	78	11,173	623	82	11,148	617
Gibraltar	6	809	47	8	733	41
Ionian islands	1	104	6			
Spain	58	7,005	541	34	4,097	303
Portugal	31	3,750	235	57	7,390	451
Denmark				1	107	7
Italy	46	6,366	398	31	3,642	252
Sicily	2	352	13	1	147	7
Madeira	2	221	14	1	62	4
Franco	1	89	7			
America :						
British N. American colonies.	389	42,517	2,478	343	41,898	2,335
British West Indies	62	8,429	514	61	8,718	514
United States	31	2,971	194	27	2,865	169
Spanish West Indies	15	1,915	111	17	2,099	120
Danish West Indies	1	118	7	2	388	19
St. Pierre	1	95	5			
Brazils	42	8,149	445	38	7,897	429
Total	766	94,063	5,638	703	91,191	5,268

As furnishing an insight into the general character of the trade and business not only of the port of St. John, but of Newfoundland generally, the following statements of imports and exports at that port are here submitted.

The first is a statement of the quantities of each description of imports at the port of St. John in 1850 and 1851, with its increase or decrease.

Articles.	Weight or measure.	1850.	1851.	Increase.	Decrease.
Bread.....	cwt.....	58,556	80,143	21,587	.....
Flour.....	barrels...	82,488	106,084	23,596	.....
Corn-meal.....	.do.....	9,716	3,869	.....	5,847
Pork.....	.do.....	19,253	13,309	.....	5,944
Beef.....	.do.....	2,410	2,522	112	.....
Butter.....	cwt.....	12,056	13,370	1,314	.....
Rum.....	punchons	901	722	.....	269
Molasses.....	.do.....	9,856	7,313	.....	2,543
Brown sugar.....	cwt.....	17,571	23,035	5,465	.....
Coffee.....	.do.....	888	1,926	1,038	.....
Manufactured tobacco.....	.do.....	1,890	3,087	1,197	.....
Tea.....	pounds...	254,404	359,334	104,930	.....
Soap.....	boxes...	12,163	11,707	.....	454
Candles.....	.do.....	4,598	3,159	.....	1,439
Salt.....	tons.....	19,948	22,570	2,622	.....
Coals.....	.do.....	18,025	16,613	.....	1,412
Pitch and tar.....	barrels...	3,240	3,029	.....	211
Potatoes.....	.do.....	6,726	10,856	4,130	.....
Oats.....	bushels...	24,225	34,449	10,224	.....
Lumber.....	M.....	3,778	4,263	485	.....
Oxen and cows.....	.....	2,718	2,562	.....	156
Sheep.....	.....	3,541	2,836	.....	708

The following statement exhibits the quantities of the various descriptions of goods exported from the port of St. John in the same years, 1850 and 1851:

Articles.	Weight or measure.	1850.	1851.	Increase.	Decrease.
Dried fish :					
To Portugal.....	quintals..	85,243	160,905	76,562	.....
Spain.....	.do.....	123,040	70,113	.....	52,937
Italy.....	.do.....	114,665	68,533	.....	46,130
British West Indies.....	.do.....	117,750	116,731	.....	1,019
Brazil.....	.do.....	108,684	114,757	6,073	.....
British America.....	.do.....	25,391	11,389	.....	14,002
England.....	.do.....	6,990	7,425	435	.....
Scotland.....	.do.....	5,025	2,623	.....	2,402
Ireland.....	.do.....	7,635	7,272	.....	363
Other ports.....	.do.....	69,258	69,523	265	.....
Seal and whale oil.....	tons.....	4,868	5,411	643	.....
Cod oil.....	.do.....	2,447	2,273	.....	174
Blubber.....	.do.....	578	265	.....	313
Seal skins :					
To United Kingdom.....	number..	339,075	381,333	42,258	.....
United States and British America.....	.do.....	1,000	750	.....	250
Salmon.....	tierces...	1,950	3,129	1,179	.....
Herrings.....	barrels...	8,457	14,079	5,622	.....

In addition to the quantity of cod mentioned above as having been exported during the year 1851, there were in store at St. John on the 20th of January, 1852, no less than 181,000 quintals ready for exportation the coming spring.

The value of the imports into the port of St. John from the United States during the year 1851 was as follows: In British vessels, \$660,685; in American vessels, \$75,650; total value of imports from the United States in 1851, \$736,335.

The following statement comprises an account of the various descriptions of articles imported into the port of St. John from Canada in the years 1850 and 1851, with the quantity and value of each article:

Description of articles.	1850.		1851.	
	Quantity.	Value.	Quantity.	Value.
Ale and porter .....barrels....	402	\$3,025	236	\$1,842
Apples .....barrels....	52	110	107	255
Bacon and hams .....cwt.....	122	1,735	46	530
Barley.....bushels....	2,606	1,360	15	22
Beef.....barrels....	294	2,305	239	1,455
Bread.....cwt.....	862	2,275	2,845	7,050
Bricks.....number....	8,000	45		
Butter.....cwt.....	2,479	37,160	3,117	46,600
Candles.....pounds....	6,485	665	3,874	606
Carriages.....number....	2	210		
Clocks.....		100		
Indian corn .....bushels....	2,084	2,750	10,226	4,876
Flour.....barrels....	29,180	156,400	37,487	185,800
Furniture.....		40		
Horses.....		50		
Indian meal.....barrels....	69,133	1,750	461	1,550
Lard .....pounds....	4,187	345		
Laths.....number....	40,800	50	20	15
Lumber.....feet.....	224,561	2,250	273,028	2,720
Malt.....		495		
Oatmeal.....barrels....	660	3,110	359	1,710
Oats.....bushels....	1,188	400	4,149	1,295
Pease.....barrels....	730	1,445	486	1,185
Pork .....barrels....	120	1,450	2,035	28,250
Potatoes and turnips.....barrels....	147	165	520	600
Shingles.....thousands..	1,245	3,115	815	2,050
Soap.....pounds....	67,678	1,910	10,000	387
Timber.....tons.....	162	825	265	1,385
Tobacco.....pounds....	565	95	3,146	750
Undefined spirits.....gallons....	586	730		
Vinegar.....gallons....	441	125		
Wine.....gallons....	60	150	20	90
Onions.....barrels....			185	325
Staves.....number....	173,823	5,670	369,599	8,787
Miscellaneous.....		940		187
Total.....		233,250		300,322

The imports into the port of St. John in 1851 from the British West Indies are thus stated: Molasses, 20,063 cwt.; value, \$49,950. Rum, 49,411 gallons; value, \$21,595. Brown sugar, 2,188 cwt.; value, \$10,780. Total value from British West Indies, \$82,325.

From Spain, the imports at St. John in 1851 were as follows: Corks, 11 cwt.; value, \$115. Feathers, 5,936 lbs.; value, \$430. Dried fruit, 36 cwt.; value, \$255. Olive oil, 424 gallons; value, 210. Salt, 482,504 bushels; value, \$38,655. Wine, 3,325 gallons; value, \$4,700. Total value of imports from Spain in 1851, \$44,365.

From Portugal the imports in 1851 are thus stated:

Articles.	Quantity.	Value.
Candles	pounds..... 1,640	\$150
Corks	cwt..... 48	155
Corkwood.....	do..... 78	130
Dried fruit.....	do..... 6	45
Green fruit.....	boxes..... 282	535
Feathers.....	pounds..... 2,988	205
Olive oil.....	gallons..... 1,005	1,010
Onions.....	bushels..... 828	1,035
Salt.....	do..... 185,854	17,065
Wine.....	gallons..... 33,379	47,880
Total value of imports at S. John, in 1851, from Portugal.....		68,218

From Germany, in 1851, the imports at the port of St. John were as follows:

Articles.	Quantity.	Value.
Bacon and hams.....	cwt..... 372	\$4,985
Salt beef.....	do..... 296	1,650
Bread and biscuit.....	do..... 48,633	198,645
Bricks.....	796,100	2,495
Butter.....	cwt..... 3,043	35,615
Cabinet wares.....	.....	2,260
Cordage.....	cwt..... 803	6,060
Oatmeal.....	barrels..... 499	2,315
Pease (round).....	do..... 337	2,875
Pease (split).....	cwt..... 250	595
Glass and glassware.....	.....	4,635
Leather manufactures.....	.....	10,535
Oakum.....	cwt..... 50	285
Pitch and tar.....	barrels..... 266	1,215
Pork.....	cwt..... 3,173	25,670
Wine.....	gallons..... 32	70
Woollen manufactures.....	.....	10,295
Total value from Germany in 1851.....		310,200

The imports from Denmark in 1851 were as follow :

Articles.	Quantity.	Value.
Bread and biscuit	9,627	\$35,435
Bricks	36	190
Butter	297	4,455
Pork	348	2,625
Glassware		115
Cotton manufactures		1,160
Leather		2,025
Wooden wares		690
Woollen manufactures		4,065
Total from Denmark in 1851.....		50,760

From the Spanish West Indies the imports in the year 1851 were as follows :

From Cuba.

Articles.	Quantity.	Value.
Coffee	122	\$625
Molasses.....	26,586	66,465
Rum.....	586	290
Brown sugar.....	2,775	11,475
Cigars	47,750	615
Total value		79,470

From Porto Rico.

Articles.	Quantity.	Value.
Coffee.....	20	\$200
Molasses.....	5,403	13,755
Rum.....	180	95
Brown sugar.....	1,269	6,400
Cigars	30,250	375
Total value.....		20,825

Total value of imports in 1851 from Spanish West Indies..... \$100,295

The change in the navigation laws of Great Britain came into operation on the 5th January, 1850; and our vessels immediately availed themselves of the new description of freights which the new arrangements offered to them at Newfoundland. It will no doubt be interesting to observe the course of traffic which our vessels have adopted with respect to this colony during the past year, when the business became better understood. The following statement, showing the number of our vessels which arrived at the port of St. John during the year 1851, with the places whence they came, and the nature of the cargoes they brought—as, also, the ports for which they sailed, and the nature of

the freight they took away—may therefore prove both interesting and useful, not only to the department, but to commercial men generally :

Vessel's name.	Tonnage.	Where from.	Inward cargo.	Sailed for—	Outward cargo.
El Dorado.....	182	Baltimore	Pork, flour, and meal.	Pernambuco	Dried fish.
Poultney.....	231	....do....	Pork, flour, meal, and bread.	....do.....	....do.
Exporter.....	179	....do....	Flour, bread, butter, pork, beef, candles, tobacco, corn, tar, cheese, and rice.	St. Jago de Cuba.	....do.
Charles William .	140	New York	Flour, tea, soap, hats, clocks, dried apples, oatmeal, and cheese.	Sydney, B..	In ballast, to receive coals at Sydney mines.
Charles Henry...	144	Matanzas.	Molasses.....	Pictou.....	In ballast, to load coals at Pictou mines.
Avon.....	147	Boston ...	Bread, flour, butter, and pork.	Sicily.....	Dried cod.
Panama.....	158	....do....	Ballast.....	Pernambuco	....do.
Phenix.....	149	....do....	....do.....	Gibraltar...	....do.
Water Witch ...	167	Baltimore.	Flour and corn meal..	Pernambuco	....do.
El Dorado.....	182	....do....	Flour and pork.....	....do.....	....do.
T. M. Mayhew..	176	Montreal.	Flour, tobacco, and butter.	Sydney, B..	Ballast, (for coals.)
T. M. Mayhew..	176	Sydney...	Coals.....	Pictou .....	....do.
Andrew King...	198	Boston....	Molasses.....	....do.....	....do.

Except occasionally in the months of February and March, when in severe seasons the ice is on the coast of Newfoundland, the harbor of St. John is always easy of access. In order to show the number of vessels which have entered and cleared at St. John in every month of the year during the years 1848, 1849, and 1850, the following statements have been published in the colony :

Months.	Inward.			Outward.		
	1848.	1849.	1850.	1848.	1849.	1850.
January	35	31	21	28	31	28
February.....	16	14	26	12	14	20
March.....	9	19	18	11	11	11
April.....	35	64	27	25	32	23
May.....	102	78	118	94	71	61
June.....	70	65	86	97	89	122
July.....	98	84	81	66	61	73
August.....	102	115	138	70	75	71
September.....	116	105	115	122	138	159
October.....	85	102	82	78	101	95
November.....	81	88	72	69	72	64
December.....	28	40	44	45	44	42
Total.....	777	805	828	717	739	769

It is believed that the returns of the trade and commerce of this important colony are more full and correct than ever before presented to Congress. They were compiled from trade returns of the customs, which are annually made up, in a very correct and comprehensive manner—as much so as those of any commercial port on this continent. My thanks are presented to honorable Mr. Little, member of the Provincial Assembly, for much valuable information relating to the trade, resources, and great importance of the fishing interest of this colony; to the honorable Mr. Kent, the collector of the port; and to several other gentlemen.

PART IX

THE COLONY OF PRINCE EDWARD ISLAND.

Charlotte Town, the capital, is in lat. $46^{\circ} 14'$ north, lon. $63^{\circ} 8'$ west.

The island of Prince Edward, formerly called St. John's island, is situated in a deep recess on the western side of the Gulf of St. Lawrence. It is separated from New Brunswick and Nova Scotia by the straits of Northumberland, which, at their narrowest part, are only nine miles wide.

This island is somewhat crescent-shaped; its length, measured on a line through its centre, is about one hundred and thirty miles; its greatest breadth, thirty-four miles; in its narrowest part, near the centre, it is only four miles wide.

The east point of Prince Edward Island is distant twenty-seven miles from Cape Breton, and one hundred and twenty-five miles from Cape Ray, the nearest point of Newfoundland. Owing to the manner in which this island is intersected by the sea, there is no part of it distant more than eight miles from tide-water.

The whole surface of the island consists of gentle undulations, never rising to hills, nor sinking to absolutely flat country. The soil is a bright reddish loam, quite free from stone. The entire island is a bed of rich alluvium, elevated from the sea by some convulsion of nature, or else left dry by the gradual recession of the waters of the gulf. There are many beautiful bays and safe harbors; and wherever a brook is not found, good water can always be had within eighteen feet of the surface, by sinking a well.

The soil is admirably adapted for agricultural purposes; it is easily worked, and there is abundance of sea-manure everywhere at hand. There are no stones to impede the plough; in fact, stone is so scarce that such as is required for building purposes is imported from Nova Scotia. Wheat, oats, barley, and potatoes are staple products, and are produced abundantly.

The area of Prince Edward Island is estimated at 2,134 square miles, equal to 1,365,000 acres. According to a census taken in 1848, the population amounted to 62,678 souls, being in the proportion of one soul to every twenty-two acres of land, or nearly thirty souls to the square mile.

The climate is neither so cold in winter nor so hot in summer as that of Lower Canada, while it is free from the fogs which at certain seasons envelope portions of the shores of Nova Scotia and Cape Breton. Its climate is very nearly the same as that of Cape Breton, but more equable; the seasons are very nearly the same. It is exceedingly healthy in every part.

This island was discovered by Sebastian Cabot, on St. John's day, (24th June,) 1497, and thence received the name of St. John. The English took very little notice of this discovery, although made under their own flag; but the Gulf of St. Lawrence was very soon visited by the Basques, Bretons, and Normans, on account of its fisheries.

So early as 1506, Jean Denys, a pilot of Honfleur, published a chart of the gulf, and of this island.

It continued to be the resort of French fishermen until 1663, when it was leased by authority of the King of France to the Sieur Doublette, and his associates, as a fishing-station. As the French did not encourage settlements near their fishing-stations, any more than the English, very little progress was made in its colonization, until after the treaty of Utrecht, in 1713. Its settlement and agricultural improvement were then encouraged, in order that the island might form a granary for the supply of the fortress of Louisbourg, upon which so much money was expended.

At the taking of Louisbourg, in 1758, was stipulated in the articles of capitulation, that the French of St. John's island should lay down their arms. The island was shortly after taken possession of by a body of British troops. It then contained ten thousand French inhabitants.

After the treaty of Paris, in 1763, by which France ceded this island, with her other North American colonies, to England, the French inhabitants were driven off, as on all occasions they evinced great hostility to the English.

A survey of this island was completed in 1766, when it was divided into sixty-seven townships, of about twenty thousand acres each. The whole of these townships (with the exception of two, then occupied by a fishing company) were disposed of in London, in one day, by way of lottery, the tickets being distributed among officers of the army and navy who had served in the preceeding war, and other persons who had claims upon the government.

In 1770 Prince Edward Island was separated from Nova Scotia, and erected into a separate colony, with a lieutenant governor, an executive and legislative council of nine members, and a house of assembly of fifteen members. It has since continued to enjoy representative institutions; the executive and legislative council has been divided into two distinct councils, and very recently the principles of responsible government have been established in this colony.

The crown has very little land for sale in this colony—merely the residue of the two townships that were not disposed of by the lottery. The price at which small lots are sold is about three dollars per acre. The proprietors rarely sell any of their lands; but when they do, the price is about five dollars per acre. Farm lots are usually leased at twenty cents per acre per annum, for terms of sixty-one and ninety-nine years—the tenant paying all charges and taxes. Some proprietors concede to their tenants the privilege of converting the leasehold into freehold, at twenty years' purchase; but a majority of the landholders do not grant this privilege.

By the census return of 1848, it appears that the number of acres held in fee-simple by occupants, was 280,649; under lease, 330,293 acres; by written demise, 31,312 acres; by verbal agreement, 38,786

acres; and by squatters, 65,434 acres. The quantity of arable land then under cultivation was 215,389 acres.

The crop of 1847 was as follows: wheat, 219,787 bushels; barley, 75,521 bushels; oats, 746,383 bushels; potatoes, 731,575 bushels; turnips, 153,933 bushels; clover-seed, 14,900 pounds; and hay, 45,128 tons. The quantity of potatoes in 1847 was much smaller than in previous years, owing to the prevalence of the potato rot that season.

The stock of the island in 1848 was as follows: horses, 12,845; neat cattle, 49,310; sheep, 92,875; and hogs, 19,683. In that year there were in the island 109 churches, 182 school houses, 13 breweries and distilleries, 116 grist mills, 27 carding mills, 139 saw mills, and 246 threshing machines.

In 1849 there were 88 new vessels built in this colony, of the burden of 15,902 tons; in 1850 there were 93 new vessels built, of the burden of 14,367 tons; in 1851 there were 89 vessels built, of the burden of 15,677 tons. A large proportion of the vessels built on this island are intended expressly for sale in Newfoundland, where they find a ready market, being well suited for sealing and the fisheries.

On the 31st December, 1850, the number of vessels owned and registered in Prince Edward Island was 310, of the burden of 27,932 tons. On the 31st December, 1851, the vessels owned and registered in the island amounted to 323, of the burden of 31,410 tons.

The extent of the import and export trade of this island will be best understood by the following comparative statement of the value of imports and exports in 1849 and 1850:

Countries.	1849.		1850.	
	Imports.	Exports.	Imports.	Exports.
United Kingdom.....	\$192,030	\$83,890	\$279,898	\$84,996
British North American colonies....	300,280	174,940	308,409	181,343
British West Indies	1,140	2,535	565	4,165
United States.....	82,580	32,410	41,603	55,385
Total.....	576,040	292,775	630,475	325,989

The wide difference between the value of imports and that of exports is made up by the sale of new vessels in Great Britain and Newfoundland—an account of which cannot be ascertained.

By a return published at Newfoundland, it appears that in the year 1851, the number of new vessels built at Prince Edward Island, and sold in Newfoundland, was 16, of the aggregate burden of 1,921 tons; and that the sales of such vessels amounted to \$55,316.

The vessels inward and outward at Prince Edward Island in 1850 and 1851 are thus stated:

No. 1.—*Vessels entered and cleared in 1850.*

Countries.	Inward.		Outward.	
	No.	Tons.	No.	Tons.
Great Britain.....	18	4,523	64	12,454
British colonies.....	498	17,691	518	23,605
United States.....	34	2,578	49	4,038
Foreign States.....	7	225	7	225
Total.....	557	25,017	638	40,322

Number of seamen inward, 2,082; number outward, 2,301.

No. 2.—*Vessels entered and cleared in 1851.*

Countries.	Inward.		Outward.	
	No.	Tons.	No.	Tons.
Great Britain.....	18	4,140	45	10,951
British colonies.....	470	18,042	488	25,374
United States.....	43	2,724	86	5,427
Foreign States.....	2	87	2	71
Total.....	553	24,993	621	41,823

Number of seamen inward, 2,370; number outward, 3,631.

The value of the exports of this Island colony in 1851 was as follows:

To Great Britain.....	\$68,925
British North American colonies.....	172,304
United States.....	119,236
Total.....	<u>360,465</u>

The following is a statement of the quantity, rate, and amount of duty paid on all articles the growth, produce, or manufacture of the United States, imported into the colony of Prince Edward Island in 1851.

Articles.	Quantity.	Rate of duty.	Total duty.
Apples and onions.....	728 barrels.....	5 per cent.....	\$122
Stationery.....	104 packages.....	.....do.....	81
Boots and shoes.....	154.....do.....	10 per cent.....	206
Breadstuffs.....	334.....do.....	5 per cent.....	65
Burning fluid.....	26.....do.....	.....do.....	20
Candles and soap.....	421.....do.....	.....do.....	82
Corn and corn-meal.....	844 bbls. & 1,006 bags.....	.....do.....	231
Dry goods.....	128 packages.....	.....do.....	261
Drugs and medicines.....	59.....do.....	.....do.....	52
Flour.....	655 barrels.....	\$1 25 per barrel.....	818
Hardware.....	80 packages.....	5 per cent.....	142
Leather.....	15,112 pounds.....	2 cents per lb...	312
Molasses.....	42,423 gallons.....	3 cents per gall.	1,325
Nails and spikes.....	182 packages.....	5 per cent.....	35
Oranges and lemons.....	89.....do.....	.....do.....	19
Pitch and tar.....	257 barrels.....	2 per cent.....	16
Rice.....	11 packages.....	5 per cent.....	8
Spirits.....	7,800 gallons.....	62½ cents per gall.	4,875
Seeds.....	202 bags.....	free.....	
Stoves.....	282.....	5 per cent.....	165
Sugar.....	349 cwt.....	\$1 50 per cwt.....	523
Tea.....	42,103 pounds.....	8 cents per lb...	3,505
Tobacco.....	11,487.....do.....	6.....do.....	717
Varnish and turpentine.....	25 packages.....	5 per cent.....	11
Wooden ware.....	62.....do.....	10.....do.....	212
Sundries.....	.....do.....	5.....do.....	207
Total.....	.....	.....	14,020

The total value of the articles on which the above duty of \$14,020 was paid was \$77,858, the whole of which was imported into Prince Edward Island in British vessels, with the exception of merchandise of the value of \$3,200, in an American bottom.

In 1850, the value of articles, the growth, produce, and manufacture of the United States, imported into Prince Edward Island, was only \$42,113, upon which duties were paid amounting to \$6,420.

The wide difference between the value of imports from the United States in 1850 and 1851, arises from the fact that in 1851 the duties on imports were greatly reduced from the rates of the preceding year, and hence the increased value of imports in 1851. With the high rate of duties in 1850, only \$6,420 was received on articles of American production; while in 1851, with diminished rates, the duties on American production were increased to \$14,020 in the aggregate.

It is a fair inference, from this state of facts, that Prince Edward Island would take a much larger amount of American goods if the duties were still further reduced, or if no duties whatsoever were levied on their importation.

The articles exported in 1851 to the United States, of the growth or produce of the Island, were as follows:

Barley, 17,929 bushels; boards and plank, 12,000 feet; iron, 60 cwt.; cattle, 9 head; firewood, 20 cords; dry fish, 650 quintals; pickled

fish, 1,786 barrels; hard wood, 74 tons; horses, 3; hacmatac knees, 2,215; oats, 222,109 bushels; potatoes, 45,942 bushels; turnips, 3,090 bushels; wool, 1,700 pounds.

The value of the foregoing, with the value of sundry other articles not enumerated, amounted together to \$119,236. The value of similar articles exported to the United States in 1850 was only \$55,886.

It is obvious, therefore, that the increased import from the United States in 1851 was coupled with an increased export to the United States in that year.

The following is a statement of the American vessels and their cargoes which entered and cleared at Prince Edward Island in 1851:

Name of vessel.	Tons.	Where from.	Cargo.	Whence cleared.	Cargo
Denmark.....	63	Gloucester.....	Flour and meal.	Gloucester.....	Oats....
Native American..	115	Newburyport...	.....do.....	Newburyport...	Oats and potatoes.
Iowa.....	74	United States...	Gin, molasses, and flour.....	United States...	.....do....
Daniel P. King...	73	.....do.....	Flour, tea, &c..	.....do.....	.....do....
Bold Runner.....	72	.....do.....	.....do.....	.....do.....	.....do....
Solon.....	64	.....do.....	.....do.....	.....do.....	.....do....
Cadmus.....	115	.....do.....	.....do.....	.....do.....	.....do....
Bold Runner.....	72	.....do.....	.....do.....	.....do.....	.....do....
Diana.....	70	.....do.....	.....do.....	.....do.....	.....do....
Linda.....	86	.....do.....	Dry goods.....	.....do.....	.....do....
Commerce.....	78	.....do.....	.....do.....	.....do.....	.....do....

The following abstract gives a very satisfactory view of the trade and commerce of this colony for 1851 :

Exports.	Amount.
89 vessels, 15,721 tons, at £4 (island currency) per ton.....	\$251,536
Barley, 30,581 bushels.....	18,348
Boards and deals, 1,497,629 feet, and 6,316 pieces.....	41,346
Beef, 39 barrels.....	616
Butter, 150 tubs.....	1,182
Cattle, 363 head.....	7,823
Carriages, 5.....	188
Dry fish, 7,687½ quintals.....	19,235
Pickled fish, 3,624 barrels.....	19,544
Furs, 3 cases.....	280
Hides, 2 casks.....	40
Horses, 97.....	8,124
Lathwood, 649 cords.....	871
Oil, 484 gallons.....	252
Oats, 365,695 bushels.....	109,708
Oatmeal, 5½ tons—34 sacks, 125½ barrels.....	1,143
Oysters, 4,377½ bushels.....	1,243
Pork, 46 barrels.....	552
Potatoes, 158,569 bushels.....	47,568
Spars, 796.....	1,230
Shingles, 220,772,000.....	732
Sheep, 245 head.....	717
Sundries.....	25,736
Turnips, 27,343 bushels.....	4,901
Timber, 1,282 pieces ; 66 tons scantling ; 7,580 tons of timber ; 1,865 knees..	42,060
Wheat, 1,970 bushels.....	2,400
Wool, 2 bundles.....	14
	607,389
Imports, including ship chandlery, which is exported again in the building and rigging of ships, and not estimated in the value of the shipping.....	\$538,755
Less—say, for ship chandlery.....	62,884
	£475,871

PART X.

INTERCOURSE BETWEEN GREAT BRITAIN AND HER NORTH AMERICAN COLONIES.

The industry of the inhabitants of the British North American colonies is principally engaged in agriculture, the fisheries, mines, and forests; in exporting the products of which to the United Kingdom and other British possessions, and to some foreign countries, and importing from thence, in exchange, the various requisites whose growth or manufacture is ill suited to the climate or condition of these possessions, consists their trade, and the great extent of employment it gives to British shipping.

The most important object of industry in British North America, as well as the most striking physical feature of the country, is the forest—lofty, wide-spreading, and apparently illimitable—all unplanted by the hand, and, for a large part, yet untrodden by the foot of man; where, without having planted or sown, he may enter, and reap and gather in what nature for many centuries has been bountifully preparing for his use.

The importance and value of the North American timber trade to England is so fully established, as to be beyond a doubt. The maritime supremacy of England has been maintained by it, new markets have been created for her manufactures, and a home, with remunerative employment, has been found for her surplus population.

To show the rise and progress of the trade between Great Britain and the North American colonies, the following statements are offered. These have been carefully compiled from Parliamentary returns, and may be relied upon.

Total official value of goods exported from Great Britain to the British North American colonies in the years mentioned.

Colonies.	1800.	1805.	1810.	1815.
Canada	\$2,208,528	\$2,030,313	\$4,701,220	\$8,821,003
Nova Scotia.....	849,998	591,000	1,682,937	2,195,592
New Brunswick.....	389,904	121,409	464,220	984,676
Prince Edward Island.....	.....	.....	99,043	62,155
Cape Breton.....	.....	.....	.....	15,864
Newfoundland	1,053,115	1,213,565	1,813,128	2,721,993
Total.....	4,501,545	3,956,287	8,760,548	14,801,283

As marking the progress and extent of the trade between the United Kingdom and the North American colonies, the following return is presented, showing the ships and tonnage inward and outward in Great Britain and Ireland, to and from those colonies, distinguishing British from foreign, from 1840 to 1850, both years inclusive:

Years.	INWARD.				OUTWARD.			
	British.		Foreign.		British.		Foreign.	
	Ships.	Tons.	Ships.	Tons.	Ships.	Tons.	Ships.	Tons.
1840	2,416	808,222	.....	.....	2,099	694,094	7	2,213
1841	2,461	841,348	.....	.....	1,937	652,725	1	384
1842	1,555	541,451	.....	.....	1,333	446,842	.....	.....
1843	2,215	771,905	.....	.....	1,996	710,608	1	180
1844	2,284	789,410	.....	.....	2,060	722,299	2	882
1845	3,018	1,090,224	.....	.....	2,510	917,423	1	414
1846	2,887	1,076,162	.....	.....	2,666	978,590	7	2,418
1847	2,459	953,466	9	3,274	2,174	829,809	29	6,331
1848	2,279	886,696	.....	.....	1,766	668,087	.....	.....
1849	This return wanting		.....	.....	.....	.....	.....	.....
1850	2,036	798,080	170	67,580	1,337	480,279	43	15,930

The official value of the import and export trade between Great Britain and the North American colonies, for the years 1818, 1819, 1820, 1832, 1838, 1843, and 1848, is thus stated:

	1818.	1819.	1820.	1832.	1838.	1843.	1848.
Imports....	\$6,610,215	\$7,740,905	\$6,064,225	\$11,779,260	\$12,114,765	\$10,691,415	\$11,279,135
Exports....	8,976,320	10,005,165	8,381,580	9,544,785	11,696,035	11,287,250	11,240,150

The amount of tonnage inward and outward between Great Britain and the colonies, in 1800, 1805, and 1815, was as follows:

Colonies.	1800.		1805.		1815.	
	Inward.	Outward.	Inward.	Outward.	Inward.	Outward.
Canada	14,293	10,366	15,076	14,139	31,405	27,839
Nova Scotia.....	232	4,149	9,742	7,934	21,087	29,284
New Brunswick	6,072	3,424	3,687	3,679	72,790	50,901
Prince Edward Island .....	.....	.....	1,121	1,100	5,985	3,107
Newfoundland.....	5,271	19,780	12,386	29,669	14,181	60,795

The following statement, compiled from official returns, exhibits the total tonnage inward in Great Britain from the British North American colonies, as also the total tonnage outward to the same colonies, in 1845 and 1850, distinguishing British from foreign tonnage :

	1845.				1850.			
	Inward.		Outward.		Inward.		Outward.	
	British.	Foreign.	British.	Foreign.	British.	Foreign.	British.	Foreign.
	<i>Tons.</i>	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
England	1,480,807	7,045	1,373,724	12,370	1,258,478	72,178	1,135,734	73,323
Scotland.....	268,329	.....	226,482	230	178,574	3,778	171,626	3,029
Ireland	210,136	.....	149,095	.....	90,012	6,129	68,626	16,082
Channel Islands..	3,082	.....	7,138	.....	3,498	.....	9,482	.....
Total.....	1,962,354	7,045	1,756,439	12,600	1,530,562	82,085	1,385,468	92,434

It will be borne in mind that on the 5th of January, 1850, the change in the navigation laws of England came into operation; and the foregoing table, therefore, shows the extent to which foreign tonnage was engaged during that year in the trade between Great Britain and the North American colonies.

The extraordinary increase of the timber trade between Great Britain and her North American colonies is presented in the following statements, which commence with the year 1800. In that year there were imported into Great Britain, from the North American colonies, the following quantities of timber :

- 34,017 loads of fir timber.
- 843 do oak timber.
- 850 masts.
- 424 (standard hundreds) of deals.
- 7,214 hundreds staves.

In 1819 the timber trade with North America had greatly increased, as will be perceived by the following statement of timber imported into Great Britain from the colonies in that year :

- 266,297 loads fir timber.
- 9,482 loads oak timber.
- 14,170 masts.
- 9,868 (standard hundreds) deals.
- 359 do do battens.
- 42,998 hundreds staves.

The statements which follow give the quantities and value of the North American timber trade in 1840, 1845, and 1850, distinguishing the quantity entered for home consumption from the whole quantity imported :

Timber imported into the United Kingdom for home consumption.

Description.	1840.		1845.		1850.	
	From British possessions.	From foreign countries.	From British possessions.	From foreign countries.	From British possessions.	From foreign countries.
Sawed lumber, sup. ft.	311,935,800	.....	331,650	.....	74,250	.....
Square timber, cubic ft.	31,950,700	8,440,200	.....	.....	.....	.....
Timber, sawed or split, cubic feet	.....	.....	24,944,550	17,148,250	23,386,500	18,365,750
Lumber, not sawed or split, cubic feet	.....	.....	39,874,500	14,101,400	31,150,000	13,696,100

Total timber imported.

Description.	1840.		1845.		1850.	
	From British possessions.	From foreign countries.	From British possessions.	From foreign countries.	From British possessions.	From foreign countries.
Sawed lumber, sup. feet	*313,442,250	.....	*212,850	.....	*56,100	.....
Square timber, cubic feet	*32,336,100	8,557,500	.....	.....	.....	.....
Timber, sawed or split, cubic feet	.....	.....	*24,691,300	19,526,350	*21,833,950	17,971,450
Timber, not sawed or split, cubic feet	.....	.....	*39,315,750	14,765,650	*31,015,400	12,513,150
Staves, cubic feet	.....	.....	*4,417,350	.....	*4,129,400	.....
Official value..	\$6,281,075		\$7,936,020		\$6,326,340	

NOTE.—Quantities marked thus * may be considered as wholly from the British North American colonies.

REMARK.—The above tables are compiled from the Annual Trade and Navigation Accounts and the Yearly Treasury Finance Returns.

To those acquainted with the timber trade, these returns will very likely explain themselves; but, in order to present in more precise form the state of the North American timber during the last three years, the following statement, compiled from the returns of the Board of Trade, is submitted:

Colonial timber and deals imported into the United Kingdom, in loads of 50 cubic feet: In 1849, 1,054,246; in 1850, 1,056,987; in 1851, 1,119,000.

In 1847 there was a large reduction in the duties on Baltic and other foreign timber; and in the North American colonies, great apprehensions were entertained that the remission of those duties would be highly injurious, if not almost fatal, to the colonial timber trade.

Such, however, has not proved to be the case. It is true, as will be seen by the following statement, that the quantity of foreign timber imported into Great Britain since the remission of duty, has considerably increased; but the quantity from the North American colonies has likewise increased, as shown in the preceding statement.

Foreign timber and deals imported into the United Kingdom, in loads of 50 cubic feet: In 1849, 578,468; in 1850, 690,692; in 1851, 868,000.

The effect of opening the market to foreign timber by a reduction of duties, and consequently an increased importation, has not, as was greatly feared at the outset, proved injurious to the colonies by diminishing the price of their timber. The increased consumption of timber in England has caused a demand for greater varieties of wood. The use of Baltic timber more extensively than heretofore, has caused a greater demand for colonial wood to be used in connexion with it; while the change in the navigation laws has so reduced freights, that the producer of timber and deals in the North American colonies now receives more for his articles than he ever did before the reduction of the duties.

Besides timber, there are other products of the forest, such as ashes and furs, which form no inconsiderable item in the sum total of colonial produce imported into the United Kingdom.

The total value of all colonial products to the United Kingdom, including those derived from mines, agriculture, and the fisheries, is fully set forth in the various tables to be found in this report under head of each colony respectively; and to these, reference is made for more particular information.

England possesses no nursery for seamen at all equal to her North American colonial trade. Besides training her own hardy and burly sons to the dangers and hardships of the sea, that trade fosters and raises up, from among her active, well-built, enduring, and intelligent subjects in the northern colonies, as fine seamen as ever trod a deck, afraid of no danger, and perfectly fitted to sustain any reasonable amount of cold, hardship, and fatigue. The vigor of their frames, their sound constitutions, and the habit of facing severe cold, violent gales, and stormy seas, in a high northern latitude, aided by quick perceptions and ready intelligence, eminently qualify them to navigate her ships to any quarter of the world, either to uphold the honor of their country in fighting her battles upon the seas, or, better still, to extend and enlarge her commerce to every part of the habitable globe.

To her colonial seamen, England may well look with honest pride. Save our own citizens, they have few equals, and none others are their superiors. Whether in war or in peace, these British North American sailors, cradled on a stormy deep, and roughly nursed amid storm and tempest, are in every way fitted to fulfil their duty, and do honor to the country which claims their allegiance.

PART XI.

TRADE OF THE PRINCIPAL ATLANTIC PORTS OF THE UNITED STATES WITH THE BRITISH NORTH AMERICAN COLONIES BY SEA.

The direct trade by sea between the principal Atlantic seaports of the Union and the British North American colonies has, within a few years, become of such extent, value, and importance, as to demand more than ordinary attention.

Probably the most remarkable and interesting feature of the age, is the rapid increase and constant activity of the world's commerce. Its great agent and promoter, navigation, to which such enormous annual contributions have latterly been made by England and the United States, is more firmly establishing it on a more extended basis, for still greater and more universal achievements.

The great addition to the navigation interest of the world furnished by the British colonies is not generally considered; nor is its important and influential character fully understood, save by a small portion of the leading statesmen of Europe and America.

The great maritime resources of the North American colonies, and the advantages of their geographical position for an extended commerce with all mankind, will contribute more effectually to accelerate their onward progress to wealth and power, and unquestionably give them a commanding position in all future commercial developments.

The extent of seacoast and abundance of excellent harbors in these colonies, is most remarkable.

Commencing at the river St. Croix, the boundary of the United States, there is much coast, and many fine ship harbors, within the Bay of Fundy and the islands it encloses. Next comes the Atlantic coast of Nova Scotia, with its numerous indentations; then the sea-shores of Cape Breton, and its beautiful and extensive interior coast surrounding that large arm of the sea known as the Bras D'Or, or "Arm of Gold;" next, the eastern or Gulf coast of Nova Scotia and New Brunswick, the Bay of Chaleur, the shores of the whole colony of Prince Edward Island—of the Magdalen islands and Anticosti, and all the Labrador coast from Mt. Joly to Davis's straits; in the aggregate, about 3,500 miles of coast-line, everywhere teeming with fish, in greater abundance and excellence than in any other part of the world.

To this great extent of seacoast, admirably provided with large and excellent harbors, must be added the coast of Newfoundland, more than 1,000 miles in extent, whose harbors and fisheries have been known and constantly frequented for more than three centuries.

The handsome and elaborate map of the Lower Colonies, hereunto appended, was prepared expressly for this report by Mr. Henry F.

Perley, of St. John, New Brunswick, a young engineer of much promise. The original surveys, maps, and charts, from which it was prepared are of the most recent date, and of the highest authority; they were obtained with some trouble and at much expense, from England and from the provinces. These have been carefully collated and compiled, and the result is the present map, which is recommended as one of the best yet presented. It exhibits the peculiar configuration of the Gulf of St. Lawrence, and of the colonies which are washed by its waters, with their infinity of rivers and harbors, and endless variety of creeks, coves, inlets, estuaries, straits, bays, and arms of the sea.

There cannot, perhaps, be found elsewhere the same extent of country possessing in a greater, or even an equal degree, all the requisites for constructing a mercantile marine, nor the like extent of seacoast so profusely furnished with the finest and most capacious harbors, as the colonies of New Brunswick and Nova Scotia.

A glance at the map at once shows that those colonies are but a mere extension of New England, and that an interchange of their respective products must not only exist, but will of necessity be mutually beneficial, if not absolutely essential to the prosperity of either country. The wise and truthful spirit of commerce will be opposed to any policy, whether British, American, or colonial, that restricts in the slightest degree the entire freedom of commercial intercourse between countries in such immediate proximity, and whose best interests are so closely interwoven.

The island colonies of Newfoundland and Prince Edward Island, lying contiguous to New Brunswick and Nova Scotia, with similar characteristics in almost every particular, are rapidly becoming convinced of the value of their material interests in connexion with the necessity for a more liberal commercial intercourse with the United States.

Although the tables which follow show that the trade of the four lower colonies is chiefly confined to Boston and New York, yet they also prove that commercial intercourse with them is becoming more general with all the towns and seaports of the Atlantic States, and that Baltimore and Philadelphia also participate in its benefits.

To encourage the intercourse thus springing into existence and attaining great value from the natural course of trade, and the relative position of the parties with reference to certain natural products of each, would seem to be the bounden duty of the governments of these respective countries.

The first object of every commercial system should be to create and uphold a great commercial marine. Mr. Huskisson laid it down as a principle, that "the only true and durable foundation of a large commercial marine is to be laid in the means of affording it beneficial employment. Without such employment—without, in short, extensive commerce, and great capital to sustain and invigorate that commerce, no laws merely protective will avail. Strict navigation laws have not always created a marine. Does not naval and commercial superiority depend on the habits, pursuits, inclinations, associations, and force of character, rather than on any code of laws whatever?"

In spite of the prohibitions and restrictions which yet exist, and serve to prevent the rapid increase of commercial intercourse between the

United States and the lower colonies, yet that intercourse has already attained great value and importance from a very small beginning.

The tonnage inward from the United States, in all the British North American colonies, during the years 1787, 1788, and 1789, amounted on the average of those years to 15,524 tons annually. These were all British vessels.

In 1816, the tonnage inward from the United States was as follows: British 18,378 tons; American, 75,807 tons: total, 94,185 tons.

The average of the years 1820, 1821, and 1822, was: British, 10,464 tons; American, 66,029 tons: total, 76,593 tons.

In the year 1830, the tonnage inward from the United States was: British, 20,755 tons; American, 54,633 tons: total, 75,388 tons.

The tonnage inward from the United States in 1831 was: British, 41,367 tons; American, 16,567 tons: total, 57,934 tons.

The decrease of tonnage in this year was owing entirely to commercial restrictions, embarrassing to trade and injurious to both parties. The falling off in tonnage between 1816 and 1831 was no less than 36,251 tons, or more than one-third of the whole inward tonnage.

The absurd and injurious restrictions having been removed, trade and navigation between the colonies and the United States at once revived; and in 1840 the inward tonnage from the United States was as follows: British, 401,676 tons; American, 357,073 tons: total, 758,749 tons.

In the short period of nine years, owing to enlarged freedom of trade, the tonnage between the United States and the colonies increased more than thirteen-fold!

Following up this increase, the tonnage inward from the United States in 1850 was: British, 972,327 tons; American, 994,808 tons: total, 1,967,066 tons.

The astonishing increase in the nine years which preceded 1840, was followed in the ten years which succeeded that period by another surprising increase, amounting to more than 250 per cent.! And now commences the year 1851.

The first table hereafter presented exhibits the description, quantity, and value of the various articles of domestic production exported from twenty-three Atlantic ports of the United States to the colonies of New Brunswick, Nova Scotia, Newfoundland, and Prince Edward Island, during the year 1851.

Table exhibiting the description, quantity, and value of the various articles of domestic production exported from twenty-three Atlantic ports of the United States to the colonies of New Brunswick, Nova Scotia, Newfoundland, and Prince Edward Island, during the year 1851.

Districts.	Flour.	Pork, hams, and lard.	Butter & cheese.	Beef, hides, and tallow.	Corn meal and rye meal.	Bread.	Rice.	Tobacco.	Cotton manufactures.	Leather, boots & shoes.	Manufactures of glass.	Manufactures of wood.	Books and maps.	Unenumerated.	Total.
Passamaquoddy.....	\$19,230	\$7,998	\$546	\$9,644	\$4,722	\$96	\$320	\$2,243	\$95,431	\$47,437	\$1,760	\$6,762	\$6,169	\$227,121	\$429,669
Portland and Falmouth.....	14,216	478	.....	1,548	42	42	24	496	7,238	393	.....	574	.....	8,024	82,973
Penobscot.....	225	78	.....	120	.....	.....	.....	49	.....	.....	.....	.....	.....	20	492
Machias.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Portsmouth.....	1,857	127	.....	94	.....	13	.....	.....	.....	38	.....	.....	.....	204	2,881
Newport.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Providence.....	804	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fall River.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fairfield.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Middletown.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New London.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marblehead.....	10,815	127	.....	.....	1,636	.....	3	77	69	19	.....	.....	.....	.....	.....
Salem and Beverly.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gloucester.....	210,037	62,772	19,716	41,321	41,337	.....	10,994	37,867	93,835	45,561	.....	.....	.....	1,822	14,068
Boston and Charlestown.....	320,336	168,052	25,495	84,471	79,016	.....	12,331	166,059	4,379	24,053	7,127	.....	.....	297,685	376,133
New York.....	83,692	639	22	48,802	649	.....	806	4,054	.....	79	.....	.....	.....	115,218	354,087
Philadelphia.....	115,245	19,371	1,681	4,213	9,424	.....	.....	.....	.....	.....	.....	.....	.....	40,216	125,350
Baltimore.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17,567	172,530
Wilmington.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,118	1,118
Elizabeth City.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13,100	13,100
Camden.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Edenton.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Savannah.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total value.....	725,957	255,202	47,460	89,649	136,749	800	24,359	210,387	201,399	117,568	9,232	16,513	14,050	733,896	2,634,506

Here is an export trade of domestic products from some only of our Atlantic seaports to the lower colonies during the past year, amounting to more than two and a half millions of dollars. Yet this is not the whole of the exports from the ports indicated to those colonies, as will be seen by the table which follows, exhibiting the description, quantities, and value of the various articles of foreign production exported from the same twenty-three ports to the four lower colonies in 1851.

Table exhibiting the description, quantities, and value of the various articles of foreign production exported from the ports mentioned to the four lower colonies in 1851.

Districts.	Flour and wheat.	Tea.	Coffee.	Sugar.	Molasses.	Spirits.	Raisins and dried fruits.	Hides.	Corrage & hemp.	Cotton manufactures.	Unenumerated.	Total.
Passamaquoddy.....		\$6,106	\$1,961		\$546		\$489		\$67		\$19,724	\$28,893
Portland and Falmouth.....		152	24	\$64	1,347		30					1,617
Penobscot.....												
Machias.....				11	120	\$1,689						1,820
Portsmouth.....												
Newport.....												
Providence.....												
Fall River.....												
Fairfield.....												
Middletown.....												
New London.....												
Marblehead.....		180	5	59	302	3						549
Salem and Beverly.....												
Gloucester.....	\$16,097	69,760	11,321	20,869	25,082	2,968	16,816	\$27,623	20,415	\$14,534	71,910	297,395
Boston and Charlestown.....	462,468	159,013	10,608	21,913	1,920	38,317	2,661	6,711	3,545	5,783	19,263	732,202
New York.....				299	1,317		10			804	334	3,118
Philadelphia.....			354									
Baltimore.....												
Wilmington.....												
Elizabeth City.....												
Camden.....												
Edenton.....												
Savannah.....												
Total.....	478,565	235,211	24,273	43,215	30,634	42,974	20,009	34,334	24,027	21,121	111,231	1,065,594

There is exhibited in the preceding table an export trade amounting to \$3,700,100, already existing with the lower colonies; and there will be seen by the statement which follows, the nature and value of the various articles imported from the lower colonies into the Atlantic ports of the Union already named during the year 1851:

Districts.	Fish.	Coal.	Plaster.	Grind-stones.	Lumber.	Potatoes.	Oats and barley.	Firewood.	Hides and skins.	Sugar.	Unenumerated.	Total.
Passaquoddy.....	\$4,573	\$2,945	\$23,250	\$106	\$1,718	\$727	\$5	\$423	\$62	.....	\$73,593	\$107,402
Portland and Falmouth.....	3,369	2,121	4,756	.....	2,020	2,062	90	1,087	.....	.....	7,163	22,668
Penobscot.....	.....	.....	.....	.....	429	28	3	.....	.....	.....	34	494
Machias.....	.....	.....	.....	.....	3,284	2,199	.....	.....	.....	.....	837	12,251
Portsmouth.....	800	3,548	191	.....	1,432	.....	.....	1,392	.....	.....	.....	1,432
Newport.....	.....	.....	.....	.....	6,446	1,825	.....	.....	.....	.....	.....	15,886
Providence.....	72	6,468	.....	1,075	.....	.....	.....	.....	.....	.....	.....	10,221
Fall River.....	10,203	.....	.....	.....	.....	.....	.....	.....	.....	.....	18	4,020
Fairfield.....	492	533	1,617	1,378	.....	.....	.....	.....	.....	.....	.....	.....
Midletown.....	.....	63	.....	65	.....	.....	.....	.....	.....	.....	.....	.....
New London.....	.....	.....	53	.....	2,069	.....	.....	.....	.....	.....	.....	.....
Marblehead.....	45	.....	.....	.....	159	214	.....	6,012	36	.....	308	2,122
Salem and Beverly.....	.....	7,838	3,104	.....	2,650	2,326	484	4,275	4	.....	11,994	32,703
Gloucester.....	666	.....	.....	.....	975	536	1,110	5,003	.....	.....	2,969	11,239
Boston and Charlestown.....	376,916	96,124	15,215	.....	.....	52,894	41,793	42,475	11,731	\$1,817	310,276	949,241
New York.....	160,635	17,391	21,967	9,646	10,799	9,387	18,685	.....	.....	11,829	11,342	271,681
New York.....	42,556	3,995	.....	.....	.....	1,807	.....	.....	.....	.....	1,725	50,083
Philadelphia.....	24,246	179	1,017	.....	.....	520	.....	.....	.....	.....	.....	25,962
Baltimore.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wilmington.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elizabeth City.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Camden.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Edenton.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,053	2,053
Savannah.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	610	610
Total.....	614,398	151,408	71,170	12,270	31,981	74,525	62,170	60,667	11,833	13,646	422,932	1,526,990

To exhibit in a more condensed form, and place the value of this colonial trade in a position to be better understood and appreciated, the following statement is submitted, showing the total value of domestic and foreign exports, and the value of colonial imports, in 1851, deduced from the preceding statements.

Districts.	Exports.		Total ex-ports.	Imports.	Total exports and imports.
	Domestic.	Foreign.			
Passamaquoddy	\$429,669	\$28,893	\$458,562	\$107,402	\$565,964
Portland and Falmouth.	32,973	1,617	34,590	22,668	57,258
Penobscot.....	492	.....	492	.....	492
Machias.....	.....	.....	.....	494	494
Portsmouth	2,331	1,820	4,151	12,251	16,402
Newport .....	.....	.....	.....	1,432	1,432
Providence.....	334	.....	334	15,886	16,220
Fall River.....	.....	.....	.....	10,221	10,221
Fairfield.....	.....	.....	.....	4,020	4,020
Middletown.....	.....	.....	.....	128	128
New London.....	.....	.....	.....	2,122	2,122
Marblehead.....	.....	.....	.....	6,774	6,774
Salem and Beverly...	14,068	549	14,617	32,703	47,320
Gloucester.....	.....	.....	.....	11,259	11,259
Boston and Charlestown	876,183	297,395	1,173,578	949,241	2,122,819
New York.....	954,087	732,202	1,686,289	271,681	1,957,970
Philadelphia.....	125,350	3,118	128,468	50,083	178,551
Baltimore.....	172,530	.....	172,530	25,962	198,492
Wilmington.....	1,118	.....	1,118	.....	1,118
Elizabeth City.....	13,100	.....	13,100	.....	13,100
Camden.....	.....	.....	.....	2,053	2,053
Edenton.....	.....	.....	.....	610	610
Savannah.....	12,271	.....	12,271	.....	12,271
Total.....	2,634,506	1,065,594	3,700,100	1,526,990	5,227,090

The preceding table shows a trade which has, almost without attracting any portion of public attention, already sprung up, and been extended to the amount of nearly five millions and a quarter of dollars during the past year.

To show further the importance of this same colonial trade in encouraging our mercantile marine, the following table of shipping, inward and outward, during 1851, to and from nine ports of the United States only, and the colonies of New Brunswick, Nova Scotia, Newfoundland, and Prince Edward Island, distinguishing American from British shipping, is also submitted:

This table shows that, during the year 1851, 341,372 tons of shipping entered inward from the lower colonies in nine Atlantic ports only, and that 588,658 tons of shipping cleared outward from those ports for the same colonies; making, in the whole, an aggregate of 930,030 tons of shipping engaged in the colonial trade with nine ports of the Union alone in that year.

In order to show the relative total amount of tonnage inward and outward to and from the principal seaports of the United States and the North American colonies, the following comparative statement has been compiled, showing the whole tonnage inward and outward at the ports named, in 1851 :

Ports	Inward.	Outward.
New York.....	1,448,768	1,230,082
Quebec.....	533,821	586,093
Boston.....	504,501	503,101
New Orleans.....	328,932	421,566
St. John, N. B.....	282,450	324,821
Halifax, N. S.....	176,802	178,079
Philadelphia.....	159,636	140,174
Baltimore.....	113,027	105,789
St. John, Newfoundland.....	103,016	91,191

The foregoing comparative statement will, no doubt, excite some surprise as to the relative amount of shipping and navigation to the principal seaports of North America. It proves, beyond a doubt, and without reference to any other statement comprised in this report, that the British North American colonies have industriously improved the extensive facilities and abundant resources they possess, and have already achieved the high position of being the fourth, if not the third, commercial power, in point of tonnage and navigation, in the world.

The character of colonial vessels has improved within a few years very rapidly, and they are selling very readily in England at remunerating prices, and are found to be as good vessels as are built in the world. The St. John and Quebec ships take the lead in colonial shipping.

PART XII.

REVIEW OF THE PRESENT STATE OF THE DEEP-SEA FISHERIES OF NEW ENGLAND.

PREPARED BY WILLIAM A. WELLMAN, ESQ., ASSISTANT COLLECTOR OF THE PORT OF BOSTON, UNDER THE DIRECTION OF P. GREELY, JR., ESQ., COLLECTOR OF THAT PORT.

The fisheries of Massachusetts, and of the other New England States, were prosecuted successfully, and to a great extent, long prior to the revolutionary war; and it will be seen by the treaty of 1783, that they occupied a prominent point in the negotiations for peace. By the third article of that treaty it was stipulated, "that the people of the United States shall continue to enjoy unmolested the *right* to take fish of every kind on the Grand Bank, and on all other banks of Newfoundland; also in the Gulf of St. Lawrence, and at all other places *in the sea*, where the inhabitants of both countries used any time to fish; that the inhabitants of the United States shall have *liberty* to take fish of any kind on such part of the coast of Newfoundland as the British shall use, (but not to cure or dry them on the island;) and also on the coasts, bays, and creeks of all other of his Britannic Majesty's dominions in America; and that the American fishermen shall have liberty to dry and cure fish in any of the unsettled bays, harbors and creeks in Nova Scotia, Magdalen islands, and Labrador, so long as the same shall remain unsettled; but so soon as the same, or either of them, shall be settled, it shall not be lawful for the said fishermen to dry or cure fish at such settlement, without a previous agreement for that purpose with the inhabitants, proprietors, or possessors of the ground."

This article secured to us the *right of the coast fishery*, which, as colonies, we had used and possessed in common with the mother country; and under its provisions the cod fishery recommenced at the close of the war, and continued to increase with the encouragement granted by the government.

At first a bounty was allowed on the exportation of salted fish, as a drawback of the duty on imported salt; and subsequently, the present system of allowances in money was established to vessels employed for a certain specified time in the Bank and other cod fisheries. The State of Massachusetts alone employed in the cod fishery, from 1786 to 1790, five hundred and forty vessels annually, measuring about twenty thousand tons, manned by three thousand three hundred seamen, and the value of their products in fish exported to Europe and the West Indies exceeded two hundred and forty thousand dollars.

From this period the fisheries increased, and added largely to the trade and commerce of the North, until the beginning of the commer-

cial restrictions which led to the embargo of 1808, and the war with England in 1812. The magnitude of our fisheries from 1790 to 1807, the greatest periods of prosperity, can be realized by those only who have studied this branch of American industry. Beyond what relates to the value of the wealth annually added to the country, and the extensive employment it gives to our native seamen, it has claims on the protection of the government as a nursery for the hardy and daring mariners who have heretofore manned our fleets and fought the battles of our navy. Some idea may be formed of the extent of the fisheries just prior to the mercantile disturbances of 1808, from the fact that, during the year 1806, the value of dried and pickled fish exported exceeded \$2,400,000. From this time to the years 1813 and 1814 it dwindled down to less than \$100,000. Then it was that the war between the United States and England almost annihilated the fisheries; but the navy was recruited, from the vessels laid up, with that strength and daring which enabled it to cope so successfully with its adversaries. When peace was concluded, the rights secured, under the treaty of 1783, to carry on the cod fishery on the colonial shores, was refused by the British government. The treaty of Ghent, and the commercial convention subsequently, are both silent on this important subject; and it was not until by the convention of 20th of October, 1818, that we obtained the *privilege* to take fish "where the inhabitants of both countries," under all former treaties, claimed the *right*. And by this same convention it will be seen that "the United States renounced any liberty before enjoyed or claimed by them, or their inhabitants, to take, dry, or cure fish, *on or within three marine miles* of any of the coasts, bays, creeks, or harbors of any of the British dominions of America not included within that part of the southern coast of Newfoundland extending from Cape Ray to the Rameau islands; on the western and northern coast of Newfoundland, from Cape Ray to the Quiepen islands; on the shores of the Magdalen islands; and also on the coasts, bays, harbors, and creeks, from Mount Jolly, on the south of Labrador, to and through the straits of Bellisle, and thence northerly along the coast."

We have, by this agreement, the liberty to dry and cure fish in any of the unsettled bays, &c.; and when settled, with the grant of the proprietors of the ground. Some of our vessels have attempted to carry on the fishery as they had been in the habit of doing; but the prescribed limits of *three miles* from the shore the imperial government decided should be measured from the headlands, and not from the interior of the bays, and excluded our vessels from the passage or strait of Canso, and denied our right to land on the Magdalen islands; thus driving off the American fishermen from the usual fishing grounds, and in many instances seizing and confiscating their vessels.

These proceedings have naturally excited much ill feeling, especially with those who have for so long a time resorted to those shores; and these onerous restrictions are still in full force.

The advantages thus secured to the colonial fishermen must be apparent; for while our fishermen are compelled to go out to the banks in large vessels, fitted at great expense, and with crews averaging nine men to every schooner of ninety tons burden, and extending their

voyages for many weeks, the colonists carry on their fishing entirely in small boats, with perhaps not more than two men in each, who return to their shores at the close of each day's work, and land and cure their fish, which at the close of the summer are laden on board their ships for a foreign market. Our vessels return to our ports, when laden with fish, to wash out, dry and cure their "fares," and they are necessarily much behind their more favored competitors in seeking a market for the produce of their toilsome labors of the fishing season.

In consequence of these unequal privileges, and the change of policy of our government with regard to a reduction of duties, from specific rates to a uniform ad valorem rate of twenty per centum on the foreign cost of imported fish, our colonial competitors now supply our own markets, as they did formerly the principal markets of Catholic Europe and the West Indies. And not only our own markets are flooded with foreign-caught fish for consumption and for transportation to other American markets, but the Atlantic ports, since the year 1846, have become depots of vast quantities of dry and pickled fish for *exportation* to foreign countries.

Prior to the enactments of the tariff law of December, 1846, and the warehousing act of August of that year, no drawback was allowed on foreign dried and pickled fish, and other salted provisions, or fish-oil; and so far as relates to the drawback of the duties *paid* on said articles, the prohibition of the 4th section of the act of April 27, 1816, is presumed to be in force. But its provisions are entirely nullified by the operations of the warehousing act, which allows foreign fish to be imported, and entered in bond, and exported thence *without the payment of any duties*.

By the statement marked No. 1, appended hereto, of the imports of fish into this port, from 1821 to 1851, it will appear that during the first-named year only *six* quintals of dry fish and *eighty-seven* barrels of pickled fish were imported; and that, during the first fiscal year after the passage of the tariff of 1846, nearly *fourteen thousand* quintals of dry fish and *forty-two thousand* barrels of pickled fish were imported; the foreign cost of which was a fraction short of \$200,000. Statement No. 2 exhibits the exports from 1843 to 1851, by which it appears that in 1843, 1844, 1845, and 1846, not any foreign-caught fish was exported; and that the value of the exports of American fisheries averaged half a million of dollars annually. The same statement shows, that from 1847 to 1851, there were exported from this port 63,816 quintals of dry fish, and 92,524 barrels of pickled fish, all of which were entered under the provisions of the warehouse act, and consequently exported without paying any duties.

These facts most strikingly illustrate the hard lot of our fishermen, who are denied equal competition on the fishing grounds, and are likewise deprived of the discrimination in their favor, extended to them for more than half a century, by the general government; consequently, the results of their adventures are diminished from year to year, as the home markets, as well as the foreign markets, are being supplied by foreigners with foreign-caught fish.

Statement No. 3 exhibits the quantity and value of dry fish imported

and warehoused for the fiscal years 1847 to 1851, inclusive, and the disposition made of the same.

Statement No. 4 shows the same for pickled fish.

By the first it will be seen that twenty-seven thirty-fourth parts of the whole importation were exported; and by the second, that fifty per cent. of the imports were shipped out of the country, to the exclusion of American fish. These facts are so very striking, that comment is deemed unnecessary.

Statements Nos. 5, 6, and 7, exhibit the quantity and value of each kind of fish imported into the United States from 1843 to 1850, inclusive, and also the exports for the same years, of both foreign-caught and American fisheries. In the table No. 5, the increase of imports will sufficiently appear; and I have to call your particular attention to table No. 6, in which will be seen that in 1843 no *foreign* dry fish was exported from any port in the United States, and only one hundred and three barrels of pickled fish; and even down to 1846, the small amount of *ten* quintals only were exported. The following year, 1847, *thirty-five thousand* quintals of dry and *fourteen thousand* barrels of pickled fish were exported, and the annual exports have gone on increasing from that time to the present; the quantity of pickled fish for 1850 being over *fifty-nine thousand* barrels. Table No. 7 shows the quantity and value of American-caught fish exported to all countries for the same years.

I also append table No. 8, which shows the whole quantity of pickled fish inspected at the various fishing towns in Massachusetts from 1838 to 1850, inclusive. This document is compiled to exhibit the magnitude of this branch of the fisheries in this Commonwealth, and the interest Massachusetts citizens have in the proper regulation of the fisheries.

I also append hereto statement No. 9, of the tonnage of vessels employed in the fisheries of the United States for the years 1843 to 1850, inclusive, designating the tonnage employed in the cod fishery, mackerel fishery, and of vessels under twenty tons burden in the cod fishery, and also register tonnage in the whale fishery, together with the aggregate tonnage of the whole country for each period, by which a comparison can be made, at a glance, of the relative tonnage in each employment, with the entire tonnage of the United States.

In the year 1815, the year after the termination of the late war with Great Britain, the fishing tonnage of the United States did not exceed fifteen thousand tons; in 1835, twenty years afterwards it reached one hundred and fourteen thousand tons; in 1845 it was two hundred and eighty-seven thousand tons; and from 1846 to 1850, it increased about nine thousand tons only, including the whale fishery.

Although the cod and mackerel fisheries were each regarded a trade or employment within the true intent and meaning of the 32d section of the act of 1793, the authority to issue licenses for the mackerel fishery was first granted by the act of Congress of 24th of May, 1828, by which it was proposed to keep the two employments distinct. But every year's returns show that vessels so licensed have been engaged in catching cod fish; and the owners of such vessels have in many districts obtained the bounty allowed to vessels in the cod fishery, by de-

ducting the time employed in mackerel fishing, if the time required for bounty was otherwise made out between the last day of February and the last day of November, in the year employed. The consequence has been, that within the customary range of a fishing voyage both cod and mackerel have been taken, without regard to the tenor of the license, and the collectors generally have paid the full bounty allowed by law to those employed exclusively in the cod fishery. It would therefore appear from the legal history of the fishing bounties and allowances, and from the constructions and understanding of them by the various officers whose duty it is to execute them, that the whole system requires revision. The regulations for dividing the proceeds of the fishing voyages, instead of paying monthly wages to the crew, are too frequently evaded by a large number of vessels; and notwithstanding all the vigilance of the officers of the revenue, it is quite doubtful if the actual fishermen now derive much if any benefit from the large sums annually paid out of the treasury for fishing bounties. I regard it of great importance to cherish this branch of industry, and would not recommend that anything should be adopted which would impair its prosperity; but I am so strongly impressed with the conviction that those most interested in the business would be benefited by a more thorough supervision of bounty claims, that I do not hesitate to urge its consideration upon the department.

The second act passed by Congress after the establishment of government—July 4th, 1789—allowed a bounty on dried and on pickled fish, and on salted provisions, exported to any foreign country; and this act continued in force, with the modifications contained in the acts of August 4th and the 10th of August, 1790; of the 18th of February and 8th of July, 1792; 2d of March, 1799; 12th of April, 1800; and finally repealed by the abolition of the salt duty, March 3d, 1807. From 1807 to July 29th, 1813, *there were no bounties or allowances to fishing vessels.* This last act restored the fishing bounties without granting any allowance or drawback on the exportation of salted beef and pork; and the rates allowed were increased by the act of March 3d, 1819, according to which all payments are now made.

I have thus summarily traced the history of legislation in regard to this subject, in order to show the share of public attention given to it, and as preparatory to giving a comparative view of the sums paid by government as bounties under the various acts of Congress.

It appears that for the year ending December 31, 1791, the sum of \$29,682 11 was paid as bounties on salted provisions and pickled fish, but nothing was paid to *vessels employed in the fisheries* prior to 1793, when the sum paid was nearly \$73,000. For the year 1806, the sum of \$37,000 was paid on salted provisions, &c., and \$163,000 to vessels employed in the fisheries, making a total of about \$200,000. During the years 1812, '13, and '14, no payments were made. In 1815, only \$1,800 were paid; but in 1820, the first year after the operation of the act of 1819, the sum paid amounted to \$209,000. The amount now paid annually is not far from \$320,000. By the abstract herewith, number 10, it will be seen that at this port alone there have been paid more than *two millions of dollars* for bounties since the year 1841. The sums paid to vessels licensed at Boston I have separated

from the amounts paid for drafts drawn by collectors of other districts, designating the particulars and the aggregates for each year and for the whole period. It will be seen, likewise, that while the allowances have continued to decrease at Boston, at almost every other place they have increased. At this port, for several years past, an inspector has been detailed at the commencement of the fishing season, whose whole duty it is to look after vessels engaged in the fisheries, and to note, from day to day, every vessel in port, and all the particulars relating to her business, and at the close of the season the facts collated are communicated in detail to the collectors of the respective ports whence licenses were granted. Under the instructions of the department of February 22d, 1842, a certificate has been required previously to the vessel's departure, setting forth her seaworthiness and a description of fishing gear, &c., and such a certificate has been regarded here as a necessary prerequisite to the obtaining the bounty. The journal of the vessel, to be sworn to by the master, has also been required, as directed by instructions of 22d of December, 1848; and the last circular on this subject, of September 17, 1851, as modified by circular of December 11, 1851, will be strictly enforced, and applied in the liquidation of all claims for the bounty during the past season.

If time permitted, other matters might be examined and stated, bearing on this subject, but they would little aid or strengthen the inferences to be drawn from the facts submitted. The extent, character, and value of the fisheries, in connexion with the trade and commerce of the British North American provinces, will appear in an examination of the statistical tables which form a part of this report; and from an examination of the existing treaties bearing on the fisheries, the restrictions and inequalities under which American fishermen pursue their business will be apparent. It follows, therefore, that to secure anything like reciprocal trade between the United States and those provinces, a more liberal policy on the part of the British government in regard to the fisheries must first take place. So long as our citizens are compelled to conduct the fishing business from their vessels in the open sea, and the colonists are permitted to land on any of the shores, inhabited or uninhabited, and set up their fishing stations, and carry on their employment from the land, and American vessels are denied the free navigation of the St. Lawrence, the Gut of Canso, the shore fisheries, and other advantages claimed by the colonists, under the sanction of these treaties, it is believed that our government cannot adopt any measures tending to additional benefits to the commerce of the colonies.

I also transmit abstract (No. 11) of fishing vessels lost during the past season, their tonnage, loss of life, &c., as returned by the collectors of the several ports therein named.

CUSTOM-HOUSE, *Boston*, January 7, 1852.

The following statement shows the allowances to vessels employed in the fisheries and bounties on pickled fish exported from January 1, 1820, to June 30, 1851:

Years.	Allowances to ves- sels employed in the fisheries.	Bounties on pickled fish exported.
To 31st December, 1820	\$197,834 63	\$11,168 71
1821	170,052 92	11,107 80
1822	149,897 83	11,158 30
1823	176,706 08	10,988 50
1824	208,924 08	10,162 80
1825	198,724 97	10,560 60
1826	215,859 01	13,640 40
1827	206,185 55	8,879 20
1828	229,145 20	9,026 23
1829	261,069 94	9,007 60
1830	197,642 28	9,073 10
1831	200,428 39	13,406 20
1832	219,745 27	14,392 00
1833	245,182 40	13,284 43
1834	218,218 76	10,802 21
1835	223,784 93	9,536 80
1836	213,091 03	6,731 80
1837	250,181 04	7,360 42
1838	314,149 49	5,474 30
1839	319,852 03	4,743 50
1840	301,629 34	4,953 90
1841	355,140 01	4,760 40
1842	235,613 07	5,629 30
Six mos. to June 30, 1843	169,932 33	3,315 05
1844	249,074 25	6,663 60
Year ending June 30, 1845	289,840 07	4,174 20
1846	274,942 98	5,540 60
1847	276,439 38	6,488 20
1848	243,432 23	747 80
1849	286,703 77	68 40
1850	287,988 75	.....
1851	328,265 01	30 00
	7,725,373 13	241,936 35

M. NOURSE, *Acting Register.*

TREASURY DEPARTMENT, *Register's Office, August 11, 1852.*

No. 1.—*Imports of dried and pickled fish into the port of Boston during the fiscal years ending June 30, from 1821 to 1851.*

Year.	Dried fish.		Pickled fish.	
	Quintals.	Value.	Barrels.	Value.
1821.....	6	\$13	87	\$245
1830.....	37	389	351	2,591
1840.....	575	3,937	7,845	76,194
1843.....	169	1,989	9,667	39,796
1844.....	125	1,340	26,047	170,585
1845.....	684	3,933	21,322	194,948
1846.....	430	2,798	17,598	155,264
1847.....	13,822	22,424	41,456	199,171
1848.....	20,774	48,262	72,419	322,730
1849.....	723	2,851	34,597	189,695
1850.....	7,013	15,244	55,886	301,904
1851.....	3,424	8,463	92,312	473,005
	47,782	111,643	379,587	2,126,128

COLLECTOR'S OFFICE, BOSTON, *December 17, 1851.*

P. GREELY, JR., *Collector.*

No. 2.

Quantity and value of dry and pickled fish exported from the port of Boston to foreign countries from July 1, 1843, to June 30, 1851, inclusive.

Period.	American caught.			Foreign caught.			Total value.
	Dry.		Pickled.	Dry.		Pickled.	
	Quintals.	Value.		Quintals.	Value.		
1843 to 1844	157,313	\$401,118	17,065	\$62,535	.....	.....	\$463,653
1845.....	149,352	511,078	12,964	65,607	.....	.....	576,685
1846.....	159,799	386,948	26,251	110,980	.....	.....	499,528
1847.....	152,716	389,883	11,061	42,869	.....	.....	525,554
1848.....	165,170	321,704	5,638	26,177	10,923	\$44,471	482,573
1849.....	100,412	214,947	7,066	24,585	16,493	106,119	302,862
1850.....	109,931	233,931	3,609	16,016	6,050	12,127	318,108
1851.....	61,805	155,636	4,667	22,138	7,671	13,769	284,100
	999,489	2,616,845	90,321	370,997	63,816	110,478	3,453,063

P. GREELY, JR., Collector.

CUSTOM-HOUSE, BOSTON, COLLECTOR'S OFFICE,
December 18, 1851.

No. 3.—Statement of dry fish warehoused in the district of Boston and Charlestown from June 30, 1847, to June 30, 1851; also, dry fish withdrawn from warehouse during the same period.

During years ending—	WAREHOUSED.		WITHDRAWN FROM WAREHOUSE.					
	Quantity.		Transportation.		Exportation.		Consumption.	
	Cwt. qrs. lbs.	Dollars.	Cwt. qrs. lbs.	Dollars.	Cwt. qrs. lbs.	Dollars.	Cwt. qrs. lbs.	Dollars.
June 30, 1848.....	21,371 0 2	52,885	817 2 8	2,231	15,926 1 14	38,864	4,796 0 20	12,478
June 30, 1849.....	1,894 1 14	7,554	.....	.....	1,929 1 16	7,698	91 3 6	75
June 30, 1850.....	7,420 1 21	14,795	637 3 0	1,574	6,190 2 21	11,736	471 3 18	964
June 30, 1851.....	4,189 1 10	10,584	1,467 1 8	3,967	3,242 0 17	7,679	52 0 0	106
Total.....	34,975 0 19	85,818	2,922 2 16	7,772	27,190 2 12	65,977	5,411 3 16	13,623

No. 4.—Statement of pickled fish warehoused in the district of Boston and Charlestown from June 30, 1847, to June 30, 1851; also, pickled fish withdrawn from warehouse during the same period.

During years ending—	WAREHOUSED.		WITHDRAWN FROM WAREHOUSE.					
	Value.		Transportation.		Exportation.		Consumption.	
	Barrels.	Hf-bbbls.	Barrels.	Hf-bbbls.	Barrels.	Hf-bbbls.	Barrels.	Hf-bbbls.
June 30, 1848.....	48,218	466	6,080	41	27,318	36	14,513	522
June 30, 1849.....	31,762	387	5,032	6	17,896	21	9,067	223
June 30, 1850.....	30,346	383	7,032	36	14,716	25	4,124	111
June 30, 1851.....	47,499	912	2,970	231	22,538	168	19,740	495
Total.....	157,825	2,148	21,765	314	79,015	250	47,444	1,351
					82,730		264,165	259,420
					825,865		\$99,264	\$74,447
					106,542		38,249	43,549
					105,550		39,337	22,708
					229,716		87,315	118,416

No. 5.—Imports of dried and pickled fish into the United States during the fiscal years ending June 30, from 1843 to 1850, inclusive.

Whence imported.	1843.			1844.			1845.			1846.						
	Dried.		Pickled.	Dried.		Pickled.	Dried.		Pickled.	Dried.		Pickled.				
	Cwt.	Value.	Barrels.	Cwt.	Value.	Barrels.	Value.	Cwt.	Value.	Barrels.	Value.	Cwt.	Value.	Barrels.		
Hanse Towns.....	7	\$18	41	\$360	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holland.....	94	897	84	1,086	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
England.....	2	\$24	19	189	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Scotland.....	8	59	5	31	6	36	8	\$46	.....	.....	.....	.....	.....	.....
Ireland.....	4	60	2	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
British West Indies.....	3	30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
British American colonies.	174	1,299	16,303	117,626	336	2,933	43,329	258,416	1,831	9,425	29,785	273,753	840	9,154		
Cuba.....	4	29	29	293	2	11	13	282	1	8	7	174	.....	.....
Italy.....	1	3	11	62	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Belgium.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
France on the Atlantic.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
France on the Mediterranean	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
French West Indies.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Spain on the Mediterranean.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gibraltar.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mexico.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sweden and Norway.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trieste.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Malta.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Spain on the Atlantic.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sicily.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Africa.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Canada.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	188	1,411	16,762	120,196	360	3,067	43,542	261,013	1,297	9,646	30,596	290,519	875	9,319	31,402	279,515

No. 5—Continued.

Whence imported.	1847.			1848.			1849.			1850.		
	Dried.		Pickled.		Dried.		Pickled.		Dried.		Pickled.	
	Cwt.	Value.	Barrels.	Value.	Cwt.	Value.	Barrels.	Value.	Cwt.	Value.	Barrels.	Value.
Hanse Towns			270	\$387			1,003	\$2,049			639	\$1,180
Holland			1,361	3,688			1,540	4,151			2,474	5,148
England	6	\$30	68	224	52	648	174	1,033	144	\$856	171	325
Scotland			19	124			16	55	7	44	80	343
Ireland			301	567							161	129
British West Indies	160	220	1,193	5,145	1,095	1,475	760	2,647			475	1,015
British American colonies	6,901	15,827	80,259	378,425	50,649	135,568	149,866	676,763	21,670	41,216	154,995	563,992
Cuba	5	22	4	21	4	21	27	203	2	15	17	57
Italy							53	251				
Belgium												
France on the Atlantic												
France on the Mediterra- near					18	55				5	21	
French West Indies			19	33							1	3
Spain on the Mediterra- near			47	190							73	152
Gibraltar											8	129
Mexico												
Sweden and Norway												
Trieste												
Malta							16	56				
Spain on the Atlantic					1	5						
Sicily							4	95				
Africa							100	410				
Canada									687	1,512	6,987	16,861
	7,007	16,022	83,541	388,805	51,826	127,799	153,571	687,846	22,520	43,709	166,081	559,334
											108,380	496,671

DISTRICT OF BOSTON AND CHARLESTOWN, Boston, December 20, 1851. P. GREELEY, JR., Collector.

No. 6.

Exports of dried and pickled fish from the United States during the fiscal years ending June 30, from 1843 to 1850, inclusive.

	FOREIGN CAUGHT.															
	1847.				1848.				1849.				1850.			
	Dried.		Pickled.		Dried.		Pickled.		Dried.		Pickled.		Dried.		Pickled.	
	Cwt.	Value.	Bbbs.	Value.	Cwt.	Value.	Bbbs.	Value.	Cwt.	Value.	Bbbs.	Value.	Cwt.	Value.	Bbbs.	Value.
Danish West Indies	200	\$612			2,000	\$5,249	1,982	\$7,137	729	\$1,801	2,737	\$8,302	148	\$343	1,354	\$4,088
Dutch West Indies	146	365	830	\$3,196			1,371	5,167			1,394	4,979	23	304	1,275	4,218
British American Colonies	204	568							155	296	424	1,051			216	1,002
Cuba	30,096	32,059	1,911	8,141	17,094	49,356	4,675	18,734	7,473	19,323	3,409	10,064	8,718	21,483	1,351	4,344
Other Spanish West Indies	980	2,868	1,069	4,566	4,915	14,369	3,053	13,407	4,087	9,744	5,713	17,814	3,226	8,751	2,244	9,457
Haiti	767	2,432	9,357	38,537	4,768	14,591	21,622	87,844	160	470	11,598	45,349	295	564	13,480	51,684
Mexico	28	100	30	130												
Brazil	1,142	2,992			3,376	11,567			6,496	14,205			7,091	17,411		
Swedish West Indies			60	285												
Mauritius			100	400												
British Honduras			50	188												
French West Indies			79	215												
French Guiana			287	1,199												
Venezuela			30	120	256	808	158	561	250	769			252	583		
Wes. Indies generally			225	1,035												
Dutch Guiana																
British Honduras																
British Guiana																
British West Indies																
Teneriffe and other Canaries																
Cisplatine Republic					12	48	649	2,755	278	653	1,472	4,566	1,594	3,748	300	780
Argentine Republic					250	720			51	150						
					572	1,975			110	350			250	1,424		

Whither exported.

Africa generally.....	838	100	325	100	283	50	163
Malta.....		1,581	3,237				
Canada.....		110	22			22	65
Bourbon.....					1,872	2,000	
Italy.....							150
Chili.....							450
South America generally.....						10	176
		114			114		
		312			312		
		114			114		
		350			350		
	33,563	42,016	13,959	58,012	33,243	98,683	35,005
	141,711	19,899	47,816	29,163	97,970	24,491	59,035
							22,551
							53,759

NOTE.—The quantity to each country not given in the annual reports of 1843, 1844, 1845, and 1846: In 1843, 103 barrels of pickled fish, \$416; in 1844, 755 barrels pickled fish, \$3,164; in 1845, 6 cwt. dried fish, \$21; 100 barrels pickled fish, \$300; in 1846, 10 cwt. dried fish, \$132; 75 barrels pickled fish, \$81.

Custom-house, Boston, Collector's Office, December 22, 1851.

P. GREELY, JR., Collector.

No. 7—Exports of dried and pickled fish from the United States during the fiscal years ending June 30, from 1843 to 1850, inclusive.

Whither exported.	AMERICAN CAUGHT.							
	1843.				1844.			
	Dried.		Pickled.		Dried.		Pickled.	
Quintals.	Value.	Barrels.	Value.	Quintals.	Value.	Barrels.	Value.	
Swedish West Indies.....	360	\$914	240	\$965	152	\$423	46	\$313
Danish West Indies.....	16,642	37,899	3,127	9,836	13,600	37,605	4,019	17,329
Dutch East Indies.....	6	40	.....	.....	50	111	25	63
Dutch West Indies.....	13,973	19,782	1,201	4,658	19,357	39,465	2,282	9,359
Dutch Guiana.....	7,998	11,143	475	1,887	10,381	19,975	373	1,355
Gibraltar.....	235	471	.....	.....	90	220	.....	.....
British East Indies.....	.....	.....	180	319	49	210	63	166
Australia.....	.....	.....	21	92	.....	.....	100	240
Honduras.....	920	2,618	167	962	.....	.....	752	3,923
British West Indies.....	3,773	8,696	672	2,671	2,999	7,599	1,956	5,601
British American colonies.....	23	50	99	351	472	1,442	4,051	15,532
French West Indies.....	2,671	6,086	1,030	3,737	5,126	14,409	998	5,273
French Guiana.....	6,162	11,431	478	2,999	7,052	15,278	372	1,645
Bourbon, &c.....	.....	.....	4	40	70	185	.....	.....
Teneriffe and other Canaries.....	30	88	.....	.....	76	258	.....	.....
Manilla and Philippine islands.....	50	200	50	120	20	75	315	779
Cuba.....	46,007	101,653	3,769	14,927	107,493	265,807	4,931	21,490
Other Spanish West Indies.....	26,242	58,730	6,854	28,696	35,638	98,749	8,918	42,067
Fayal and other Azores.....	237	504	.....	.....	702	1,498	.....	.....
Cape de Verde islands.....	57	100	.....	.....	36	159	.....	.....
Trieste and other Austrian ports.....	.....	.....	6	20	.....	.....	15	140
Turkey, Levant, &c.....	64	129	.....	.....	324	874	20	176
Havti.....	43,080	107,485	11,560	42,660	58,408	168,983	16,671	67,974
Texas.....	3	8	7	41	32	48	50	347

Mexico.....	2,178	4,152	222	541	2,943	7,542	238	842
Central Republic of America.....	42	85			37	132		
New Grenada.....	85	247			933	2,768	72	357
Venezuela.....	1,113	2,850	160	325				
Brazil.....	1,844	2,267	30	65	1,618	5,199	13	41
Cisplatine Republic.....	161	400			600	1,915		
Argentine Republic.....	314	615			510	1,130	26	53
Chili.....	145	461			262	736		
China.....			75	162			100	230
West Indies generally.....	37	116	26	73	40	149	170	518
South America generally.....	335	1,077			575	1,463		
Africa generally.....	434	898	199	595	514	1,242	200	1,268
England.....							1	7
British Guiana.....							55	182
Madeira.....							1	9
Italy.....								
South seas and Pacific ocean.....								
Russia.....								
Cape of Good Hope.....								
Mauritius.....								
France on the Mediterranean.....								
Spain on the Atlantic.....								
Peru.....								
Asia generally.....								
Malta.....								
Ireland.....								
Scotland.....								
France on the Atlantic.....								
Miquelon and other French fisheries.....								
Portugal.....								
Holland.....								
Canada.....								
Tuscany.....								
Hanse Towns.....								
	174,220	381,175	30,554	116,042	271,610	699,836	46,170	197,179

No. 7—Continued.

Whither exported.	AMERICAN CAUGHT.						
	1845.			1846.			
	Dried.		Pickled.	Dried.		Pickled.	
Quintals.	Value.	Barrels.	Value.	Quintals.	Value.	Barrels.	Value.
Swedish West Indies.....	194	\$527	71	\$300	353	175	\$855
Danish West Indies.....	11,526	29,739	2,953	14,324	11,791	4,649	29,553
Dutch East Indies.....	80	220	50	256			
Dutch West Indies.....	18,304	37,107	1,973	8,418	11,773	2,159	8,885
Dutch Guiana.....	9,691	17,567	588	2,316	10,600	1,638	5,339
Gibraltar.....	320	354			2,493		
British East Indies.....	40	106	87	745	46	12	100
Australia.....	36	110	40	400	12	35	290
Honduras.....	1,551	4,600	306	2,121	2,179	6,284	3,844
British West Indies.....	1,755	4,689	1,275	5,551	1,940	275	7,366
British American colonies.....	293	1,480	1,852	4,205	2,371	1,415	5,242
French West Indies.....	2,079	6,273	1,265	6,927	4,061	2,563	10,571
French Guiana.....	7,558	17,103	619	2,946	5,289	855	2,466
Bourbon, &c.....							
Teneriffe and other Canaries.....	55	166			38		122
Manilla and Philippine islands.....	30	90	12	116	25	41	405
Cuba.....	123,000	301,408	6,589	27,264	118,592	7,729	31,668
Other Spanish West Indies.....	37,905	92,223	9,004	46,819	36,687	12,455	53,737
Fayal and other Azores.....							
Cape de Verd islands.....					5	5	11
Trieste and other Austrian ports.....	29	95					
Turkey, Levant, &c.....	59,427	247,772	17,327	79,185	208	29	807
Hayti.....	40	148	48	319	57,483	18,719	67,220
Texas.....			45	478	587	316	1,509
Mexico.....	1,102	2,105			1,627		3,628

COLONIAL AND LAKE TRADE.

Central Republic of America.....	7	22	16	96	125	358	43	287
New Grenada.....	50	149	.....	.....	24	65	18	108
Venezuela.....	1,257	3,662	101	487	1,309	3,679	85	427
Brazil.....	3,859	12,221	17	49	1,574	5,625	162	830
Cispatine Republic.....	351	698	.....	.....	.....	.....	80	310
Argentine Republic.....	1,639	4,919	.....	.....	687	1,835	5	25
Chili.....	552	1,680	.....	.....	.....	.....	28	208
China.....	25	264	127	256	.....	.....	50	390
West Indies generally.....	811	2,583	214	640	4,284	9,294	381	1,648
South America generally.....	2,784	6,217	100	375	152	739	15	26
Africa generally.....	505	1,141	153	608	464	1,239	266	1,357
England.....	.....	.....	.....	.....	.....	.....	100	425
British Guiana.....	232	605	50	390	83	164	24	111
Madeira.....	63	162	.....	.....	157	451	25	124
Italy.....	1,012	3,040	.....	.....	305	719	.....	.....
South seas and Pacific ocean.....	74	173	.....	.....	73	192	.....	.....
Russia.....	6	20	.....	.....	.....	.....	27	175
Cape of Good Hope.....	16	48	11	95	4	16	.....	.....
Mauritius.....	.....	.....	450	2,930	.....	.....	.....	.....
France on the Mediterranean.....	602	1,807	.....	.....	.....	.....	350	1,573
Spain on the Atlantic.....	.....	.....	3	8	.....	.....	52	186
Peru.....	.....	.....	10	30	.....	.....	.....	.....
Asia generally.....	20	60	.....	.....	.....	.....	.....	.....
Malta.....	.....	.....	.....	.....	.....	.....	159	640
Ireland.....	.....	.....	.....	.....	.....	.....	.....	.....
Scotland.....	.....	.....	.....	.....	.....	.....	.....	.....
France on the Atlantic.....	.....	.....	.....	.....	.....	.....	.....	.....
Miquelon and other French fisheries.....	.....	.....	.....	.....	.....	.....	.....	.....
Portugal.....	.....	.....	.....	.....	.....	.....	.....	.....
Holland.....	.....	.....	.....	.....	.....	.....	.....	.....
Canada.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuscany.....	.....	.....	.....	.....	.....	.....	.....	.....
Hanse Towns.....	.....	.....	.....	.....	.....	.....	.....	.....
	288,880	802,353	44,203	208,654	277,401	699,559	57,060	230,495

Central Republic of America.....	62	20	87	31	87	138	20	87	31	87	138
New Grenada.....	50	10	35	10	35	211	7	43	117	428	186
Venezuela.....	1,639	49	315	427	1,603	5,066	411	1,221	5,439	17,903	275
Brazil.....	1,203	65	347	858	3,115	4,719	465	2,524	463	1,410	3,272
Cisplatine Republic.....	75	55	103	250	765	213	21	218	20	75	100
Argentine Republic.....	200	450	.....	.....	.....	450	94	460	30	77	90
Chili.....	50	120	.....	.....	.....	120	.....	.....	.....	.....	.....
China.....	31	180	.....	.....	.....	180	7	43	117	428	186
West Indies generally.....	7,078	18,953	.....	.....	.....	18,953	411	1,221	5,439	17,903	275
South America generally.....	304	854	.....	.....	.....	854	465	2,524	463	1,410	3,272
Africa generally.....	458	1,436	.....	.....	.....	1,436	21	218	20	75	100
England.....	1,242	3,065	.....	.....	.....	3,065	94	460	30	77	90
British Guiana.....	28	80	.....	.....	.....	80	.....	.....	.....	.....	.....
Madeira.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Italy.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
South seas and Pacific ocean.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Russia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cape of Good Hope.....	12	30	.....	.....	.....	30	15	31	643	1,831	225
Mauritius.....	58	160	.....	.....	.....	160	7	75	202	663	1,388
France on the Mediterranean.....	.....	.....	.....	.....	.....	.....	295	1,898	.....	.....	.....
Spain on the Atlantic.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Peru.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Asia generally.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Malta.....	20	45	.....	.....	.....	45	.....	.....	.....	.....	.....
Ireland.....	6	18	.....	.....	.....	18	41	267	.....	.....	.....
Scotland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
France on the Atlantic.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miquelon and other French fisheries.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Portugal.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Canada.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuscany.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hanse Towns.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
TOTALS	258,870	659,629	136,221	206,549	609,482	22,736	31,361	109,315	22,736	109,315	109,315

No. 7—Continued.

	AMERICAN CAUGHT.							
	1849.			1850.				
	Dried.		Pickled.		Dried.		Pickled.	
	Quintals.	Value.	Barrels.	Value.	Quintals.	Value.	Barrels.	Value.
Whither exported.								
Swedish West Indies.....	183	\$493	110	\$431	108	\$268	24	\$95
Danish West Indies.....	6,920	16,189	1,930	6,595	5,327	13,179	537	2,495
Dutch East Indies.....							12	98
Dutch West Indies.....	9,086	16,569	980	4,060	14,860	25,462	870	4,537
Dutch Guiana.....	12,719	23,430	623	1,846	15,003	25,898	669	3,017
Gibraltar.....	400	800			1,269	2,592		
British East Indies.....			130	723	704	1,920	1,182	5,863
Australia.....								
Honduras.....	715	1,972	306	1,292	1,051	3,106	371	2,303
British West Indies.....	2,146	5,615	1,378	5,948	2,012	4,634	1,088	4,764
British American colonies.....	165	346	84	400	4	16	24	128
French West Indies.....	880	2,671	737	2,828	1,484	3,620	616	2,908
French Guiana.....	5,270	7,956	870	2,355	5,794	10,903	264	1,218
Bourbon, &c.....							60	500
Teneriffe and other Canaries.....	197	518	3	41	92	264	25	90
Manilla and Philippine islands.....			5	21				
Cuba.....	94,579	193,967	4,467	16,653	49,835	100,364	1,737	7,120
Other Spanish West Indies.....	20,880	44,136	4,164	15,007	16,215	34,719	2,827	14,202
Fayal and other Azores.....	429	838	9	25				
Cape de Verd islands.....	22	47	10	64			104	204
Trieste and other Austrian ports.....								
Turkey, Levant, &c.....							44	357
Hayti.....	30,526	76,867	7,810	25,931	48,127	121,048	7,294	29,554
Texas.....								
Mexico.....	2,424	3,647	111	201	1,423	3,836	108	540

Central Republic of America.....	37	59	5	51	.....	.....	3	5
New Grenada.....	185	575	74	434	.....	.....	616	2,864
Venezuela.....	732	2,101	86	364	.....	593	80	455
Brazil.....	1,269	3,193	155	733	.....	1,695	144	525
Cisplatine Republic.....	.....	.....	.....	.....	.....	298	.....	.....
Argentine Republic.....	161	402	.....	.....	.....	305	43	186
Chili.....	742	1,018	89	297	.....	848	130	431
China.....	92	199	45	220	.....	715	140	607
West Indies generally.....	3,061	8,046	276	634	.....	310	102	673
South America generally.....	3,60	196	.....	.....	.....	1,703	.....	.....
Africa generally.....	274	593	550	2,508	.....	1,000	422	2,681
England.....	.....	122	20	122	.....	374	.....	.....
British Guiana.....	352	1,016	398	1,460	.....	73	100	300
Madeira.....	40	96	.....	.....	.....	107	20	144
Italy.....	.....	.....	.....	.....	.....	.....	.....	.....
South seas and Pacific ocean.....	192	505	3	24	.....	119	10	100
Russia.....	.....	.....	1	7	.....	.....	.....	.....
Cape of Good Hope.....	13	35	.....	.....	.....	.....	.....	.....
Mauritius.....	100	300	28	173	.....	.....	40	340
France on the Mediterranean.....	.....	.....	.....	.....	.....	.....	.....	.....
Spain on the Atlantic.....	.....	.....	.....	.....	.....	.....	.....	.....
Peru.....	.....	.....	.....	.....	.....	.....	.....	.....
Asia generally.....	.....	.....	.....	.....	.....	.....	.....	.....
Malta.....	1,130	2,300	.....	.....	.....	.....	21	125
Ireland.....	.....	.....	.....	.....	.....	.....	.....	.....
Scotland.....	.....	.....	.....	.....	.....	.....	.....	.....
France on the Atlantic.....	.....	.....	.....	.....	.....	.....	.....	.....
Miquelon and other French fisheries.....	418	743	50	188	.....	.....	.....	.....
Portugal.....	.....	.....	.....	.....	.....	.....	.....	.....
Holland.....	.....	.....	12	170	.....	.....	.....	.....
Canada.....	1,049	1,844	274	1,014	.....	.....	16	224
Tuscany.....	.....	.....	40	265	.....	224	243	1,778
Hanse Towns.....	.....	.....	.....	.....	.....	.....	1	10
	197,457	419,092	25,835	93,085	168,600	365,349	19,944	91,445

P. GREELY, JR., Collector.

DISTRICT OF BOSTON AND CHARLESTOWN, Collector's Office, Boston, December 22, 1851.

New Bedford.....	46,537	74,893	98,014	212,296	195,194	238,980	300,336	203,499	246,463
Nantucket.....								453	251
Westport.....								145	88
Ipswich.....									362

NOTE.—The returns from each of the above-mentioned towns, from 1838 to 1841, inclusive, are not given, but the total for each year is as follows : 1838, 141,311 barrels ; 1839, 111,715 barrels ; 1840, 73,018 barrels ; 1841, 50,992 barrels.

Custom-house, Boston, Collector's Office, December 22, 1851.

P. GREELY, JR., Collector.

No. 9.—Statement of the tonnage of vessels employed in the fisheries of the United States on the 30th of June, 1843, 1844, 1845, 1846, 1847, 1848, 1849, and 1850.

	1843.	1844.	1845.	1846.	1847.	1848.	1849.	1850.
Enrolled vessels employed in the cod fishery.....	Tons. 95lbs. 54,901 36	Tons. 95lbs. 78,178 86	Tons. 95lbs. 69,825 66	Tons. 95lbs. 72,516 17	Tons. 95lbs. 70,177 52	Tons. 95lbs. 82,651 82	Tons. 95lbs. 73,882 00	Tons. 95lbs. 85,646 30
Enrolled vessels employed in the mackerel fishery.....	11,775 70	16,170 66	21,413 16	36,463 16	31,451 13	43,558 78	42,942 02	58,111 94
Licensed vessels under 20 tons employed in the cod fishery..	6,322 84	7,045 86	7,165 01	6,802 14	7,502 60	7,194 62	7,873 62	8,160 34
Registered and enrolled vessels employed in the whale fishery.	152,374 86	168,293 63	190,695 65	186,980 16	193,888 72	192,609 65	180,186 29	146,016 71
Aggregate amount of tonnage of the United States.....	2,158,602 93	2,280,095 07	2,417,002 06	2,562,084 81	2,839,045 77	3,154,041 85	3,334,015 29	3,535,454 23
	2,383,977 84	2,549,784 23	2,706,101 59	2,864,846 49	3,142,035 84	3,480,056 87	3,638,899 27	3,833,389 62

DISTRICT OF BOSTON AND CHARLESTOWN, Collector's Office, December 19, 1851.

P. GREELY, JR., Collector.

No. 10.—Abstract of bounty allowances to fishing vessels, paid by the collector and disbursing agent of the treasury at the port of Boston, for the fishing seasons of the years 1841 to 1850, inclusive.

District.	1841.	1842.	1843.	1844.	1845.	1846.	1847.	1848.	1849.	1850.	Total.
Boston.....	\$7,242 31	\$3,744 64	\$3,843 45	\$5,323 98	\$3,972 64	\$893 33	\$1,181 68	\$2,266 24	\$2,662 07	\$2,239 70	\$33,370 04
Gloucester.....	30,152 57	28,603 50	32,704 58	36,423 50	38,406 98	46,213 16	36,387 32	45,663 80	51,815 94	50,350 04	396,721 39
Barnstable.....	52,491 28	37,868 86	36,233 05	45,247 15	39,821 40	39,256 20	31,830 65	41,614 75	40,268 85	48,113 59	412,735 78
Penobscot.....	23,497 18	18,712 50	22,066 12	27,905 53	31,458 89	32,902 44	32,637 78	41,666 98	37,534 37	42,070 55	309,452 34
Frenchman's Bay.....	9,568 31	9,192 71	10,240 10	11,357 46	9,451 58	10,667 42	9,511 62	11,779 67	13,914 12	13,979 51	115,662 50
Plymouth.....	15,625 70	13,582 19	18,415 15	23,975 40	21,774 85	18,123 03	14,858 91	19,123 31	17,723 83	18,011 05	181,216 42
Newburyport.....	3,055 49	5,101 01	8,007 33	15,600 90	7,292 02	7,491 28	8,494 04	8,817 21	7,662 45	14,881 75	86,403 48
Salem and Beverly.....	17,762 90	.....	15,511 35	14,571 22	13,462 45	12,236 68	11,057 61	9,935 06	9,393 95	11,408 56	115,339 78
Marblehead.....	21,319 10	20,054 06	22,127 90	22,615 61	20,628 67	16,311 93	8,418 34	10,829 53	10,923 62	10,771 13	163,999 89
New London.....	14,502 64	12,944 86	12,906 40	14,913 53	14,733 58	14,079 34	13,613 81	13,108 97	9,611 25	8,459 58	128,863 96
Portsmouth.....	.....	451 20	685 89	759 20	.....	.....	.....	1,736 26	3,065 05	3,923 57	10,621 17
Stonington.....	178 19	314 98	178 19	.....	.....	41 74	.....	1,965 09	1,925 68	823 93	5,429 80
Nantucket.....	.....	.....	.....	.....	.....	277 30	154 14	1,384 21	1,142 25	546 22	3,504 12
Edgartown.....	.....	.....	.....	.....	.....	120 04	.....	231 74	441 75	534 33	1,447 90
Midletown.....	.....	.....	.....	.....	.....	720 00	233 68	328 88	.....	360 00	3,287 03
Newport.....	.....	.....	360 00	564 47	720 00	720 00	.....	.....	.....	360 00	6,833 39
New Bedford.....	.....	229 30	299 79	1,696 09	724 84	955 07	624 51	1,129 56	825 00	349 23	.....
Belfast.....	1,857 12	.....	360 00	.....	.....	.....	.....	.....	.....	.....	1,857 12
Fairfield.....	720 00	360 00	.....	.....	.....	.....	.....	.....	.....	.....	1,440 00
Ipswich.....	5,752 77	4,875 39	6,427 78	.....	.....	.....	.....	.....	.....	.....	17,056 14
Providence.....	.....	.....	432 05	138 94	.....	.....	.....	.....	.....	.....	565 99
Ellsworth.....	.....	.....	.....	71 84	.....	.....	.....	.....	.....	.....	71 84
New Haven.....	.....	.....	.....	312 08	.....	.....	.....	.....	.....	.....	312 08
Total.....	202,725 56	156,035 40	190,799 13	221,471 90	202,557 94	200,288 98	168,994 09	216,761 75	217,510 60	241,809 34	2,018,954 67

P. GREELY, JR., Collector.

DISTRICT OF BOSTON AND CHARLESTOWN, Collector's Office, December 30, 1851.

Abstract of fishing vessels lost during the year 1851.

DISTRICT OF GLOUCESTER.

Denomination and names of vessels.	Masters of vessels.	Tonnage.	Number of men.	Value.	Proceeds of wrecks.	Amount of loss.	Remarks.
Schooner Daniel P. King.....	Not given.....	73 42	Not known..	\$3,000	\$36	\$2,964	Crew saved.
Schooner Powhatan.....	.....do.....	65 93	.....do.....	1,200	172	1,028	Do.
Schooner Eleanor.....	.....do.....	81 31	.....do.....	3,500	600	2,900	Do.
Schooner Flirt.....	.....do.....	85 39	14	3,500	Total loss.....	3,500	Crew lost.
Schooner Princeton.....	.....do.....	65 58	10	2,600	.....do.....	2,600	Do.
Schooner Jubilee.....	.....do.....	51 41	Not known..	800	.....do.....	800	Crew saved.
Schooner Red Wing.....	.....do.....	41 78	.....do.....	1,200	.....do.....	1,200	Do.
Schooner Garland.....	.....do.....	113 00	.....do.....	5,000	1,200	3,800	Do.
Schooner Industry.....	.....do.....	51 47	.....do.....	850	276	574	Do.
		629 49	24	21,650	2,284	19,366	

No. II—Continued.

DISTRICT OF PENOBSCOT.

Denomination and names of vessels.	Masters of vessels.	Tonnage.	Number of men.	Value.	Value of fittings.	Amount of loss.	Remarks.
Schooner New England.....	Brophy.....	65 13	10	\$1,400	\$650	Total.....	
Schooner Martha Ann.....	Clark.....	35 52	5	800	300	do.....	
Schooner Norma.....	Thurlo.....	66 13	9	1,400	600	do.....	
Schooner Mary Moulton.....	Emerson.....	50 44	8	1,000	500	do.....	Eight men lost.
Schooner George.....	Thurston.....	55 26	7	1,200	600	do.....	
Schooner Rapid.....	Hatch.....	63 2	7	1,000	600	do.....	
Schooner Independence.....	Robbins.....	53 80	6	1,200	450	do.....	
Schooner Lyon.....	Pressey.....	62 90	11	1,000	650	do.....	Six men lost.
Schooner Mary Farley.....	Steel.....	74 24	11	2,800	775	do.....	
Schooner Elizabeth.....	Knight.....	57 48	8	1,000	600	do.....	Eight men lost.
Schooner Reward.....	Howard.....	46 82	5	900	500	do.....	
Schooner Amelia.....	Lunt.....	28 50	4	300	100	do.....	
Schooner Delight.....	Abbott.....	21 25	3	250	.....	do.....	
Boat Leader.....	Hendrick.....	15 22	2	150	.....	do.....	
		696 1	96	14,400	6,325		

No. 11—Continued.

DISTRICT OF PORTLAND.

Denomination and names of vessels.	Masters of vessels.	Ton-nage.	No. of men.	Value.	Proceeds of wrecks.	Amount of loss.
Schooner Regulator.....	None given...	49 85	8	\$600	None..	Total.
Schooner Washington.....	do.....	52 08	10	800	do.....	do...
Schooner Delight in Peace.....	do.....	51 21	8	1,000	do.....	do...
Schooner Elizabeth.....	do.....	35 66	6	600	do.....	do...
Schooner Triumph.....	do.....	52 29	12	1,600	do.....	do...
Schooner Hickory.....	do.....	40 74	8	400	do.....	do...
Schooner Caledonia.....	do.....	87 56	14	600	do.....	do...
		369 54	66	5,000		

DISTRICT OF BARNSTABLE.

Denomination and names of vessels.	Masters of vessels.	Ton-nage.	Number of crew lost.	Value.	Proceeds of wrecks.	Amount of loss.
Schooner William Gray...	None given...	57 08	.....	\$1,000	.....	\$1,000
Schooner Belle Isle.....	do.....	163 82	4	3,000	.....	3,000
Schooner Rival.....	do.....	47 76	.....	1,400	.....	1,400
Schooner Nettle.....	do.....	66 92	.....	3,000	.....	3,000
Schooner E. M. Shaw.....	do.....	82 20	16	3,000	.....	3,000
Schooner Franklin Dexter.....	do.....	63 13	10	2,200	.....	2,200
Schooner Hamilton.....	do.....	64 22	11	2,500	.....	2,500
Schooner Grafton.....	do.....	78 22	.....	3,000	.....	3,000
Schooner Telegraph.....	do.....	.....	2	.....	.....	.....
Schooner Melrose, and other vessels in this district, partial loss.....	do.....	.....	.....	.....	.....	5,000
		563 50	43	19,100	.....	24,100

DISTRICT OF PORTSMOUTH.

Denomination and names of vessels.	Masters of vessels.	Ton-nage.	Number of crew lost.	Value of vessels.	Value of cargo.	Amount of loss.
Schooner Ballerma.....	None given...	59 00	8	\$1,600	\$900	Total.
Schooner Banner.....	do.....	33 00	6	500	500	do...
Schooner Burlington.....	do.....	96 00	13	1,500	2,800	do...
Schooner Harvest Home.....	do.....	66 00	10	2,500	900	do...
Schooner Wellington.....	do.....	74 00	10	1,500	3,500	do...
Schooner Oscar Coles.....	do.....	.....	.....	.....	.....	do...
		328 00	47	7,600	8,600	16,000

No. 11—Continued.

DISTRICT OF PASSAMAQUODDY.

Denomination and names of vessels.	Masters of vessels.	Tonnage.	Number of crew lost.	Value of vessel.	Value of outfits.	Total.
Schooner America.....	None given...	43 21	9	\$700	\$400	\$1,100
Schooner Maria.....	.....do.....	46 61	8	600	400	1,000
Schooner Eliza.....	.....do.....	54 09	None....	1,200	300	1,500
		143 91	17	.....	.....	3,600

RECAPITULATION.

Districts.	Number of vessels.	Tonnage.	Loss in dollars.	Loss of life.
District of Gloucester.....	9	629 49	19,366	24
District of Penobscot.....	14	696 01	14,400	22
District of Portland.....	7	369 54	5,600	66
District of Barnstable.....	10	563 50	24,100	43
District of Portsmouth.....	6	328 00	16,200	47
District of Passamaquoddy.....	3	143 91	3,600	17
Total.....	49	2,730 53	83,266	219

P. GREELY, Jr., *Collector.*

COLLECTOR'S OFFICE,
District of Boston and Charlestown, January 1, 1852.

PART XIII.

THE FRENCH FISHERIES AT NEWFOUNDLAND.

The recent movements in France in regard to bounties on fish caught at Newfoundland, and exported to foreign countries, are singularly interesting at the present time, because it will be found, from what follows, that the changes which take place during the present year in the allowance of those bounties are calculated to exercise a powerful effect on the deep-sea fisheries of the United States. Hereafter we are to have fish, caught and cured by citizens of France, entering our markets, under the stimulus of a large bounty, to compete with the fish caught and cured by our own citizens. This altogether new and unexpected movement on the part of France has already attracted attention and excited much interest among the fishermen of the New England States. As affecting an important branch of the industry of our people, this change in the policy of France will be reviewed somewhat at length, in order that the whole matter may be fully understood. The law of France which granted bounties to the sea fisheries being about to expire, the project of a new law was submitted to the National Assembly on the 20th of December, 1850, by Monsieur Dumas, Minister of Agriculture and Commerce, and Monsieur Romain-Desfosses, Minister of Marine and Colonies. At the same time, these ministers submitted to the National Assembly an able report on the deep-sea fisheries of France, and a variety of interesting statistical returns, translations of which are embodied herewith.

It is set forth, among other things, by the Minister of State, that the bounties paid by France during the nine years from 1841 to 1850, inclusive, for the cod fishery only, had amounted to the mean annual average of 3,900,000 francs. The number of men employed in this fishery annually amounted to 11,500 on the average. The annual expense to the nation was, therefore, 338 francs per annum for each man. France trains up, in this manner, able and hardy seamen for her navy, it is said, who would cost the nation much more if they were trained to the sea on board vessels-of-war.

The proposed law and report of the ministers of State who introduced it having been submitted to a committee of the National Assembly, a report thereon was presented by Monsieur Ancet, the chairman, on the 3d day of May, 1851, a translation of which is as follows:

Report rendered in the name of the commission for the inquiry into the projected law relating to the great sea fisheries, by M. Ancet, representative of the people. Session of May 3, 1851.

GENTLEMEN: The commission to which you intrusted the examination of the projected law in relation to the great sea fisheries, presented

by the Ministers of Marine and Commerce, has devoted itself to the said examination with all the attention which its importance demanded. It has heard delegates from all the ports out of which the vessels are equipped. It has consulted the attested reports of the remarkable discussions held by the Counsel of State, as well as the deliberations of the commission formerly appointed, under the honorable Mr. Ducos, its president; deliberations which served—if one may so speak—as the basis for this project; and to conclude, it is only after coming to a perfect understanding with Messieurs the Ministers of the Marine and Commerce, and the Director General of Customs, that we lay before you the result of our labors.

Your commission, messieurs, has not thought for a moment that the encouragement granted to the great fisheries can be regarded as any exclusive favor or protection to any one form of industry. Unquestionably, the industry exerted in the fisheries, and the commercial activity arising from it, becomes a very considerable element of employment and comfort to a numerous class of people, but this consideration appears to us entirely secondary and insufficient to justify the favors of especial legislation.

We conceive that such industrial employments as can prosper only at the expense of the public treasury should not exist; and that the intervention of the State, in the form of aid and bounties, can be justified only by considerations of general and public interest. It is not, therefore, a commercial law that we have the honor to propose to the Assembly, but rather a maritime law—a law conceived for the advancement of the naval power of this country; for it is in this point of view only, that, in our opinion, the encouragement granted to the great fisheries ought to be maintained. France, seated on the three most important seas of Europe, must continue a maritime power. The memory of her history, the genius of her inhabitants, the variety of her productions, the easiness of her communications with the rest of the continent, and, yet more, the interests of her greatness and of her preponderance in the world, command this.

Nevertheless, the loss of her most magnificent colonies has occasioned irreparable injury to the commercial marine, which is an essential element of naval power. Treaties, which became inevitable in the course of time, have successively robbed her of the most valuable objects of freight. Cotton belongs to the Americans, coal to the English; and at the present moment, the shipments of sugars, our last resource for distant navigation, seems to be daily growing less and less.

The great fisheries still remain to us; and in order to preserve them, we must continue the encouragements they have received, even at periods when a commercial and colonial prosperity, infinitely superior to that now existing, multiplied our shipping, and created abundance of seamen. It is on our fisheries that at this day repose all the most serious hopes of our maritime enlistments.

In fact, the fisheries give employment to a great number of men, whom a laborious navigation, under climates of extreme rigor, speedily forms to the profession of the sea.

No other school can compare with this in preparing them so well, and in numbers so important, for the service of the navy.

Thus it appears from the crew lists of our marine, that the average numbers of men employed by the one hundred kilogrammes of tonnage, in commercial vessels, are as follows:

For long coasting.....	6 men.
For foreign voyages.....	8 “
For short coasting.....	11 “
For fishery on the Grand Banks.....	13 “
For fishery at Iceland.....	17 “
For fishery at St. Pierre and Miquelon.....	18 “
For fishery on the coasts of Newfoundland.....	30 “

These figures clearly prove the considerable share which cod-fishing bears in the development of our maritime enlistments. If it were necessary to confirm the fact yet more strongly, we should say that table No. 2, appended to this report, establishes that the increase of the maritime population in the districts in which these vessels are fitted out has been, on the average, during the ten years under the prevalence of the law which we call upon you to maintain, not less than twenty-six per cent.; whereas, in the other districts the progress has not exceeded fourteen per cent.

England, notwithstanding the immense resources of her insular position; the United States, where fisheries are both economical and easy, inasmuch as they are carried on upon their own coasts, and Holland, had always favored this description of shipping, and have proportioned their encouragement to the chances of profit or loss, as they appeared to predominate.

Less than any other maritime nation ought we to refuse support to this admirable school for our seamen, for the French shipmasters are at present in a condition very inferior to that occupied by their rivals.

There was a time when France possessed all the principal fishing grounds in Acadia, Canada, Isle Royal, the isle of St. John, and lastly Newfoundland. The treaties of 1713, of 1763, of 1783, and finally of 1814, have reduced our possessions in those seas to the two islets of St. Pierre and Miquelon; that is to say, of two sterile rocks, destitute of all resources, and on which we are forbidden to raise any fortifications.

The same treaties reserve to us the right of fishing along the coast, but only at determined points and distances. We are only permitted to establish ourselves on the northern part of Newfoundland during a few months of the year, and that without constructing any permanent habitations.

Thus, while the English are in exclusive possession of the best fisheries—while they are enabled to found numerous permanent habitations on the southern coast of Newfoundland, favored by the mildness of the climate and the fertility of the soil—our fishers are obliged to carry out with them yearly, to the north shore, salt, fishing utensils, materials for the construction of places for shelter, and, in a word, all that is necessary for subsistence and for the operations of the season. That portion of Newfoundland is, moreover, as the honorable Mr. Ducos observes, in reporting the laws of 1841, uncultivated and savage; its climate is stormy and severe; its waters far less fruitful in

fishes. As regards the Americans, we have already said that their fisheries are easy and economical along the vast range of coasts they possess, near the most favorable fishing grounds.

The consequences of such inequality in position can be readily appreciated. On all sides, the cod taken in the English and American fisheries can be sold at prices greatly inferior to the rates for French cod; and the great marts to which we carry our productions will be very soon closed against us, if we do not counterbalance the disadvantages of our situation by means of prudently considered encouragements.

Your commission, gentlemen, has shown, then—

1. That commercial navigation having lost its best elements of transportation, the preservation of the great fisheries assumes a degree of importance more serious when they are viewed as being in fact the nursery of our military marine.

2. That the increase of the enrolment for the navy arising from the vessels used in the fisheries, has justified the hopes which induced the legislation to impose certain sacrifices on the treasury.

3. That in the disadvantageous position to which the treaties have reduced our shipmasters, the fisheries can be maintained only by means of encouragement which will in some degree diminish the advantages possessed by our rivals. It remains to examine what has been the importance of the sacrifices to which the State has submitted, and to consider whether we may look for results proportionate to the assistance asked for from the new clauses of the proposed law.

BOUNTIES ON VESSELS FITTED OUT.

We fish for cod—

On the Grand Bank of Newfoundland;

On the shores of the same island;

On those of the isles of St. Pierre and Miquelon;

In the Icelandic seas;

And on the Dogger Bank.

We fish with or without drying.

Fishery without drying is carried on in the Icelandic seas, on the Dogger Bank, and on the Grand Banks of Newfoundland. The fish so taken is salted on board the fishing vessels, and each vessel brings it to France as soon as the cargo is completed. This is the *green codfish*, which is consumed entirely in France. This description of fishery employs far fewer men than the fishery with drying, and yet its returns are far more abundant. Fishery with drying is practised on the Grand Bank of Newfoundland, on the shores of that island, and on those of the isles of St. Pierre and Miquelon.

The cod there taken is dried on shore, either at St. Pierre and Miquelon, or on those coasts of Newfoundland where that privilege is reserved to us. This day, cod is not sparingly consumed in France. It is principally exported, with the aid of bounties, to French colonies and foreign countries, either directly from the fisheries by the fishers themselves, or by transshipment from France.

It appears from the official tables which have been furnished to us, that during the period from 1841 to 1849 the returns of the French

fisheries have been annually, on an average, about 44,000,000 kilogrammes: of this gross amount, 27,000,000 have been consumed in France, 17,000,000 have been exported to the colonies or to foreign countries; and that the exportation has been made in nearly equal proportions from the seats of fishery and from the ports of France. Thus about two-fifths of the returns of our fisheries are yearly exported to markets from which the competition of our rivals would very soon exclude us, were it not for the aid afforded by means of bounties; for the prices of the English and American cod must always be lower than the rates of our fish, owing to the different positions in which we are placed. We shall proceed to show that, should this be the case, and this exportation be stopped, our equipment of vessels for the fisheries would be reduced to a most insignificant number, and our enrolment of seamen would be deprived of one of its most precious resources. The encouragements given to the cod fishery are divided into bounties on the number of men in every crew, and into bounties on the exportation of the produce, counted by the quintal of cod, but the amount of bounty varying according to the destination of the cargoes.

It follows that the bounties on the crew are beneficial to the vessels employed in both kinds of fishing—that with, and that without drying. The average annual amount of bounties to the crew for the last ten years has been 530,000 to 540,000 francs.

The bounties on exportation apply only to the 17,000,000 kilogrammes exported, whether to our own colonies or to foreign countries, and have amounted, on an average of years since 1841, to 3,800,000 francs; that is to say, during the nine years elapsed since 1841, the expenses of the State on the cod fisheries have annually reached the average of 3,900,000 francs.

The cod fisheries employ 332 vessels, 47,000 tons burden, and manned, according to the government returns, by 11,500 men. Each of these men, therefore, is an annual charge on the nation of 338 francs. But it has been said that if the bounties paid on the exportation of fish were discontinued, the fisheries necessary for the provisioning of France itself would still remain; and it is, in reality, for only about one-third of the produce of our fisheries that the budget is charged yearly with so heavy a sum. It is not, therefore, 12,000 sailors, but the third part of that number, which costs us three millions.

Messieurs, this reasoning has been seriously discussed by your commission, and it appears to us that it is actually the 12,000 fisher sailors, and not the third of that number, who profit by the sacrifices of the treasury. In fact, the operations of the fisheries are indivisible, and form a single whole. It is the elasticity given by exportation to the price in our markets which alone induces the fitting out so many vessels. Is it not true, if the bounties did not aid in the shipments to the colonies, and to foreign ports, of a considerable proportion of the produce of the fisheries, those external markets would be closed against us, and that consequently thereupon the French markets would be embarrassed, and prices lowered?

The consequences which must follow from such a state of things can be easily foreseen. The produce of the fisheries selling in France only, because all exportation would be impossible, two-thirds of the outfits

would cease. It may be said that there would be even a greater reduction than this, and that France, after the loss, too great to be appreciated, of a large part of her naval enrolment, would have either to pay very dearly for French fish, or else admit foreign cod.

As we have observed, messieurs, the fisheries without drying, the operations of which are more simple and the returns larger, employ a much smaller number of sailors. But, again, the vessels in use for this purpose employ only the actual number of hands necessary for the navigation of them; and it may be said of this fishery, that if it prepares fewer men for the sea, it forms better sailors, the *élite* of the navy. It is pursued principally on the Grand Bank of Newfoundland, and in forty fathoms of water. The vessel lies at anchor, and sends out her boats every day, in the heaviest seas, to set, and again take up the lines. Of all kinds of fishery it is the rudest and most exposed.

It would seem at first that the encouragements given to it should be equal to those given to the fisheries with drying and the island fisheries, since, on the one hand, its products are abundant, and more capable, owing to their quality, of sustaining competition against foreign produce; and on the other, it furnishes excellent sailors for the naval levies. But to the powerful considerations of economy which have continually governed us, and led to reduce rather than exceed the amounts of the encouragement given in past times, is added this reflection—that the law cannot adopt as its end the encouragement of the trade in codfish. This branch of industry, as we have already stated, could have no title above any other to require sacrifices on the part of the state, if it did not, in a very advantageous proportion, augment the number of our sailors. In this point of view—the only one which can be admitted by the legislator—that fishery which furnishes the most sailors is that which best justifies the highest encouragement. Now, the fishery on the Grand Bank, without drying, is the best school for sailors; but it is incontestable that the fishery on the coast of Newfoundland, as well at St. Pierre and Miquelon, offer a readier and more efficacious means of recruiting the navy. As to that which is carried on upon the coast of Newfoundland, with drying, the bounties on the outfit which it enjoys have not been altered since 1816. It has always been fixed at fifty francs per man for each of the crew. The law, moreover, imposes on all vessels fitted out with this destination, the obligation of embarking at least twenty men in every vessel of less than one hundred tons burden; thirty men for a vessel from one hundred to one hundred and fifty-eight tons; and fifty men for a vessel from one hundred and fifty-eight tons upward. It is this fishery which employs the largest number of vessels, and which is most favorable to enlistments. In it, young men from fifteen to eighteen years, who otherwise would never have thought of navigation, go on board as cabin-boys or green-hands, and make several voyages. They are employed in the work ashore, and in drying the fish. The second year they go out in the fishing boats every morning, and return every evening; by this means they are formed gradually to continued navigation. After three years, these young men, if they have passed the age of sixteen years, are classed, and belong for the remainder of their lives to the maritime lists. Beyond question, these recruits who so largely swell our lists are, at

first, but very imperfect sailors; there are even some who, after the three voyages required previous to being entered on the lists, give up the sea as an employment; but the number of these is much smaller than has been stated. And is it not evident that our population on the sea-board would enter less readily upon the career of seamen, if, in place of the excitement and interest which their engagement in the fisheries offers, they had no prospect but that of embarking in the vessels of state?

The government proposes to you to continue the bounty of fifty francs a man for the crews of vessels employed in the fisheries, with drying, whether carried on upon the coasts of Newfoundland, at St. Pierre, and Miquelon, where the conditions and method of fishing are analogous, or upon the Grand Bank. We have alluded to the difficulties of this mode of fishing, even when it is prosecuted without drying the fish caught.

We give entire approbation to these propositions.

The bounty on the fishing without drying in the Icelandic seas, is fixed at fifty francs per man for each of the crew, since the law of June 25, 1841. We have retained this also, on the recommendation of messieurs the Minister of Commerce and the Marine. No fishery, in truth, is more suitable for the formation of intrepid sailors. On the coast of Newfoundland the ship is laid up and dismantled; on the Grand Banks it is at anchor; in Iceland it must needs be under sail among floating ice, and on a sea continually stormy and agitated. The fishing is practised with hand-lines, from a hundred to a hundred and fifty fathoms in length; the fish, instead of being salted in bulk, is prepared and salted in tuns brought from France. The cod coming from Iceland are not dried; this fishery only furnishes the green cod consumed in France, and thus it receives no benefit on the bounties for exportation. The number of vessels fitted out not having increased of late years, it is reasonable to conclude that the profits of this fishery are not considerable.

Six vessels only have been sent to the Dogger Bank since 1841. We retain the bounty of 15 francs per man for each of the crew, which is given to this fishery, carried on in the North sea.

Bounty on the produce of the fisheries.—According to the law of 1841, the bounty on dry codfish sent to the French colonies, whether from the place where the fish is caught or from the warehouse in France, is fixed at 22 francs per quintal. The law proposes to reduce this amount to 20 francs per quintal; and we approve the reduction. The same law of 1841 assigns a bounty of 14 francs the quintal to all codfish sent into transatlantic countries. A decree of August 24, 1848, raised this bounty to 18 francs. The present project proposes to render it equal to that accorded to fish sent to the French colonies. We believe this new proposal to be wisely conceived, and likely to produce very beneficial effects on our fisheries. In fact, the diminution of two francs per quintal in the bounty on exportations to our colonial possessions, together with an augmentation of two francs in favor of exportation to foreign transatlantic countries, will tend to open new foreign markets to us, at the very moment when the political and commercial situation of our colonies leads us to apprehend a decrease of their ordinary consumption.

The sacrifices on the part of the treasury will not be augmented; for a considerable quantity of codfish was re-exported from our colonies, after having enjoyed the bounty of 22 francs. The shippers would no longer have an interest in overstocking our colonial markets with their produce, since the bounty will be no higher when sent there than when sent to Cuba or Brazil; and, at the same time, the exemption from all duties in our colonies guaranties that they will always be sufficiently supplied.

The prohibition to send codfish to ports at which there is no French consul forms part of the law of 1841. In order to prevent abuses, the shippers are obliged to furnish a certificate proving the good quality of their fish, and its exact weight. It is important to the interest of the treasury that these certificates should be made by a government officer, who would be under the influence of responsibility not felt by men completely unconnected with the administration. There is, moreover, no port of any consideration at which there is not a French consular agent.

This commission has considered it its duty to admit our colonies on the western coast of Africa to the benefit of the same bounties accorded to the West India colonies, and has especially had Senegal in view—a colony too often overlooked and forgotten. The government has accepted this addition to the proposed law.

The present project establishes the bounty of 16 francs on exportations to European countries and to foreign States on the Mediterranean, which the law of 1841 had established at 14 francs, and a decree of 1848 had raised to 18 francs. This reduction in favor of the treasury we do not consider likely to militate against our exportation to those countries. In concurrence with the government, we include Tuscany in this category; but we except from it Sardinia, where ancient and well-assured relations permit us to reduce the protection to 12 francs.

Upon the whole, messieurs, the scale of bounties which we above propose to you promises the treasury a saving of 300,000 francs, provided that, in spite of our fears of its decrease, our exportations of codfish remain equal to what they have been during the last ten years.

The second article of the proposed law retains the obligation that each vessel shall have a minimum of crew proportioned to the size of the ship. This measure, which was established in 1832, on the request of the shipmasters themselves, is at once preservative of their interests and those of maritime enlistment, the essential object of all the protection to the fisheries.

The Minister of Marine has declared to us that the minimums appeared to him to be judiciously regulated, and that there was no necessity for modifying them, the administration having had, thus far, no reason to complain of any abuses. The commission has therefore approved the minimums as they are now established, adding, that if, in the course of the term which you propose to fix for the duration of the law, the necessity of augmenting them shall become evident, the government shall have the power to provide for their increase.

The vessels sent to the fisheries without drying, having salt on board—that is to say, in Iceland and on the Grand Bank—are never subjected to the ordinance respecting minimums; they embark at their own pleasure

such number of men as their crew as they deem advisable for navigating and fishing. Their crews are less numerous, because they have no need, like the vessels fishing on the coast, to employ hands in the operation of drying fish ashore; but all the men being mariners, all contribute alike to the naval enrolment. These vessels are compelled to bring back to France the entire produce of their fisheries. Several ports on the channel, which fit out especially for the fisheries without drying, have many times complained of the absolute prohibition to sell any part of their cargoes at the seat of the fisheries, or to store them at St. Pierre, in order to be forwarded thence to colonial or foreign markets. It is understood that the object of this prohibition is to disallow the great bounty (formerly 22 francs, henceforth 20 francs) to vessels, which, not being subject to the regulations respecting a minimum number of crew, do not contribute so largely to the naval enrolment. It may be observed, on the other hand, that these vessels form the best sailors; and there are circumstances under which the absolute compulsion to bring back the produce of their fishery to France may prove ruinous to their operations.

Messieurs the Ministers of Commerce and the Marine have entertained this view of the case, and have stated that it is the intention of the government to grant the liberty desired, under certain conditions, which will prevent the abuses that might otherwise creep in. Your commission proposes to you to provide by law that a regulation, made and published by the government, shall declare under what circumstances the warehousing of fish at St. Pierre shall be permitted, and the conditions which shall regulate warehousing. The fishery at the Grand Bank, without drying, decreases under the bounty of 30 francs. Not being able, however, to ask further sacrifices of the treasury, we wish to reanimate the outfit of these vessels, which it is so important to preserve, by other means. The third article stipulates that the bounty on the crew shall be paid but once during the season, even if the vessel should make several voyages. This wise disposition prevents the possibility of having the same men counted twice in the same year. This same article prohibits the payment of the bounty to any men but those who have arrived at the maritime enrolment through the gradations required by law, or to those who, having been inscribed therein, conditionally, shall not have attained the age of twenty-five previously to the date of sailing.

The men who have passed the age of twenty-five without being classed—that is to say, without having made three voyages—are less easily trained to the habits of the sea. The profession of a mariner is one which must be adopted while young; and if the bounties were accorded to men of above twenty-five years, and not classed, the law would fail in one of its most important ends—that, namely, of creating a class of men especially suitable for enrolment in the navy. It is right and fit, therefore, that the projected law should exclude such men from the receipt of the bounty.

The fourth article requires that, in order to obtain the bounty, the cod shall be in fit condition for consumption as food. This provision of the law cannot but obtain general approbation. The fifth article admits simple coasters to the right of carrying codfish, and receiving the boun-

ties allowed on the exportation of the same to ports and markets. This right is accorded by the laws now existing. At present the law permits every mariner who shall have made five fishing voyages on the coasts of Iceland, the two last as an officer, to be deemed capable of commanding a fishing vessel in the same seas.

The sixth article of the government project abrogates this privilege, and reserves the command of such vessels exclusively to captains in foreign voyages, and the masters of coasters; this provision to date from January 1, 1852. The chamber of commerce at the port of Dunkirk, where vessels are specially fitted out for the Iceland fishery, has protested strongly against this provision. Its adoption—so they say—would act ruinously on the Iceland fishery. Of one hundred and twenty vessels annually sent to sea, fifteen, at most, are commanded by the masters of coasters, who quit that hard and laborious navigation when they find an occasion to take command of merchant vessels. In truth, it is our opinion messieurs, that the difficulties of the Icelandic fisheries require practical experience, and the endurance of privations of all kinds to which mariners, who have become masters of fishing craft, are accustomed from their childhood, and we are of opinion that it is not advisable to deprive these devoted and gallant men of the hope of reaching a station which more experienced mariners are for the most part indifferent to acquire; and in order to reconcile the security of navigation with the facilities required by commercial interests, and asked for by a whole class of sailors, we propose to you to suppress all conditions with reference to date, and to add to the first article these words: “if he shall prove himself to have such knowledge of his profession as will be sufficient for the security of navigation.” A ministerial decree of 1840 has already made an examination of masters of fishing vessels obligatory; the new law will only confirm, by rendering legal, a usage already established. The fourth article reproduces the provisions of the twelfth article of the law of April 22, 1832, adding to it a provision by which the government will have the power of fixing the period during which each vessel shall remain on the fishing grounds.

Your commission is of opinion that it is advisable such periods should be lawfully determined; but while admitting the article, it desires that such period should be so limited as to throw no obstacle in the way of the fisherman's operations, in regard to the bounties.

SECOND HEAD.

The second head of the project presented by the government relates to the salt to be used in the fisheries.

Your commission, messieurs, has carefully examined the provisions under this head. It has examined many individuals representing the manufactures of the different kinds of salt, and several delegates from the outfitters of vessels interested in the matter; and, after mature deliberation, the commission has come to the opinion that, pending the existence of a special inquiry into the manufacture of salt, with which a committee by you appointed is at this moment engaged, it is our duty to strike out of a special law on fisheries, any propositions which might thereafter be modified by general legislation. We limit our-

selves, therefore, to affirming the legislation which actually directs the use of the various kinds of salt to be employed in the curing of codfish, without anticipating, by any particular definition, the final conclusion at which the Assembly may arrive in regard to salt.

We are the more convinced of the propriety of holding ourselves to this reservation, since the government has declared to us, since the presentation of the project, that it was its intention to strike out the exemption which the — article seemed to insure to the codfish imported into France from the fishing-places, and that it shall be necessary to prove, as well for such fish as for that exported to the colonies or foreign markets, that it was cured with salt of French manufacture, or with salt which had paid duty as at present.

The second head is, therefore, merely a re-enactment of the law of 1848, which is useless. But you will agree with us, messieurs, that if the existing legislation on the character of the salt should be modified unfavorably to the cod-fishing interests, the scale of bounties which we have calculated on deductions from facts now existing, must be established proportionably to the reduction which the augmentation of the duties of salt may occasion.

Upon the foregoing report the National Assembly of France passed the law therein mentioned on the 22d July, 1851, which was officially published on the 22d August last.

This law provides that from the first day of January, 1852, until the 30th June, 1861, the bounties for the encouragement of the cod-fishery shall be as follows :

BOUNTIES TO THE CREW.

1. For each man employed in the cod-fishery, (with drying,) whether on the coast of Newfoundland, at St. Pierre and Miquelon, or on the Grand Bank, 50 francs.
2. For each man employed in the fisheries in the seas surrounding Iceland, without drying, 50 francs.
3. For each man employed in the cod-fishery on the Grand Bank, without drying, 30 francs.
4. For each man employed in the fishery on the Dogger Bank, 15 francs.

BOUNTIES ON THE PRODUCTS OF THE FISHERIES.

1. Dried cod, of French catch, exported directly from the place where the same is caught, or from the warehouse in France to French colonies in America or India, or to the French establishments on the west coast of Africa, or to trans-atlantic countries, provided the same are landed at a port where there is a French consul, per quintal metrique, *equal to two hundred and twenty and a half pounds avoirdupois*, twenty francs.

2. Dried cod, of French catch, exported either direct from the place where caught, or from ports in France, to European countries or foreign States within the Mediterranean, except Sardinia and Algeria, per quintal metrique, sixteen francs.

3. Dried cod, of French catch, exported either to French colonies in America or India, or to trans-atlantic countries, from ports in France, without being warehoused, per quintal metrique, sixteen francs.

4. Dried cod, of French catch, exported direct from the place where caught, or from the ports of France, to Sardinia or Algeria, per quintal metrique, twelve francs.

BOUNTY ON COD LIVERS.

5. Cod livers which French fishing vessels may bring into France as the product of their fishery, per quintal metrique, (twenty francs.)

From the foregoing state of bounties, it will be seen that there are some grounds for the fears entertained by the fishermen of New England, that the cod caught by the French at Newfoundland will be introduced into the principal markets of the United States, with the advantage of a bounty of twenty francs on the French quintal metrique, which is two hundred and twenty and a half pounds avoirdupois, very nearly equal to two dollars per American quintal of one hundred and twelve pounds—a sum almost equal to what our fishermen obtain for their dried fish when brought to market.

In order to show the extent to which the French prosecute their deep-sea fisheries, the following returns are presented. They are translations from the official returns annexed to the report of the commission of the National Assembly, and have, therefore, the highest official authority.

No. 1.

THE COD FISHERY.

Return of vessels fitted up for the cod fishery from the year 1842 to the year 1850, both inclusive.

Years.	Coast of Newfoundland.			St. Peter's and Miquelon.			Grand Bank of Newfoundland, with drying.			Grand Bank, without drying.			Iceland.			Dogger Bank.			Totals.		
	Ships.	Tonnage.	Men.	Ships.	Tonnage.	Men.	Ships.	Tonnage.	Men.	Ships.	Tonnage.	Men.	Ships.	Tonnage.	Men.	Ships.	Tonnage.	Men.	Ships.	Tonnage.	Men.
1842.....	143	21,608	6,473	9	1,262	209	53	6,827	1,785	108	14,886	1,726	83	6,508	1,024	.....	.....	.....	401	51,041	11,217
1843.....	133	19,500	6,157	5	676	132	57	4,597	1,325	119	16,785	1,947	97	7,684	1,259	3	83	24	394	49,322	10,904
1844.....	138	19,882	6,230	9	1,161	350	33	4,271	1,269	109	14,316	1,644	109	8,692	1,512	.....	.....	.....	389	48,322	11,005
1845.....	149	20,928	6,670	4	537	161	41	5,253	1,648	88	12,777	1,447	95	7,663	1,323	.....	.....	.....	977	46,158	11,249
1846.....	147	21,464	6,666	1	163	51	59	6,330	2,140	84	12,539	1,412	194	8,159	1,458	.....	.....	.....	396	48,669	11,727
1847.....	157	24,485	7,398	1	140	66	52	7,799	2,052	76	10,968	1,184	105	8,053	1,454	2	59	9	387	51,599	12,163
Annual mean.....	145	21,195	6,599	5	657	172	43	5,816	1,703	95	13,702	1,560	99	7,794	1,338	.....	.....	.....	389	49,219	11,378
Mean of the period from 1835 to 1839.....	142	21,797	6,369	18	2,321	372	50	6,517	1,340	102	14,891	1,537	104	7,476	1,254	.....	.....	.....	416	53,456	10,882
1848.....	127	20,781	6,058	1	110	33	65	8,781	2,529	71	11,966	1,257	90	7,439	1,248	.....	.....	.....	354	49,097	11,125
1849.....	131	14,106	6,359	2	216	101	48	6,587	1,867	69	11,737	1,239	73	6,014	1,033	1	34	7	324	38,797	10,606
1850.....	139	22,477	6,715	3	338	141	51	7,056	2,150	67	11,482	1,196	101	7,516	1,371	.....	.....	.....	361	48,893	11,573

No. 2.

The account of the sums paid as bounties to the crews of vessels employed in the cod fishery of France in the years 1842, 1843, 1844, 1845, 1846, and 1847.

Place of fishery.	1842.	1843.	1844.	1845.	1846.	1847.
	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
Coast of Newfoundland..	323,650	307,850	311,500	333,500	333,300	369,900
St. Peter's and Miquelon	10,450	9,600	17,500	3,050	2,550	3,300
Grand Bank, (dried fish)	89,250	66,250	63,450	82,400	107,000	102,600
Grand Bank, (green fish)	51,780	58,410	49,320	43,410	42,360	35,520
Iceland.....	51,200	62,950	75,600	66,150	72,900	72,700
Dogger Bank.....		360				135
Total.....	526,330	505,420	517,370	528,510	558,110	584,155

	<i>Francs.</i>
Annual mean of above six years.....	536,649
Do.....preceding period.....	<u>485,190</u>
Total paid in the year 1848.....	531,110
Do.....do.....1849.....	505,275
Do.....do.....1850.....	<u>554,730</u>
Annual mean of eight years—1842 to 1849.....	<u>532,035</u>

Return of the number of persons enrolled annually for the navy in the several maritime districts of France from the year 1840 to the year 1850, inclusive.

Districts.	1841.				1842.				General total.				
	Captains and master pilots.	Petty officers and seamen.		Green hands.	Boys.	General total.	Captains and master pilots.	Petty officers and seamen.					
		Petty officers.	Seamen.					Total.		Petty officers.	Seamen.	Total.	
Dunkirk.....	434	55	3,844	3,899	1,055	953	430	69	3,950	4,019	919	865	6,233
Havre.....	1,254	104	3,968	4,072	1,678	835	1,258	114	4,190	4,304	1,894	983	8,439
Cherbourg.....	559	133	2,406	2,539	1,967	599	561	161	2,580	2,741	1,001	541	4,844
Brest.....	741	1,034	9,132	10,166	4,168	1,843	744	1,068	9,521	10,589	4,365	1,937	17,625
St. Servan.....	1,013	1,279	7,317	7,596	2,148	4,325	1,022	306	7,546	7,852	2,481	1,335	12,690
L'Orient.....	1,058	389	5,901	6,290	1,542	1,510	1,071	416	6,081	6,447	1,567	1,626	10,711
Nantes.....	1,056	97	3,613	3,710	1,365	1,080	1,102	112	3,655	3,767	1,522	1,004	7,395
Rochefort.....	837	285	2,729	3,014	984	928	832	281	2,783	3,064	1,014	1,032	5,942
Bordeaux.....	1,026	224	4,270	4,494	1,159	1,002	1,035	235	4,363	4,598	1,353	1,094	8,080
Bayonne.....	167	93	1,287	1,480	1,488	1,171	1,170	101	1,394	1,405	537	1,176	2,378
Toulon.....	3,121	1,862	8,345	10,407	3,433	3,936	3,060	1,944	8,597	10,541	3,654	4,019	21,274
Total.....	11,296	4,575	53,112	57,687	18,937	14,182	11,285	4,807	54,610	59,417	20,307	14,602	105,611

No. 3—Continued.

Districts.	1843.				1844.				General total.				
	Captains and master pilots.	Petty officers and seamen.			Captains and master pilots.	Petty officers and seamen.							
		Green hands.	Boys.	General total.		Petty officers.	Seamen.	Total.		Green hands.	Boys.		
Dunkirk.....	415	85	4,065	4,094	1,033	849	6,391	101	4,113	4,214	1,053	842	6,538
Hayre.....	1,265	198	4,436	4,574	1,889	1,029	8,757	136	4,549	4,685	1,953	7,767	9,033
Cherbourg.....	570	191	2,624	2,815	896	563	4,844	583	2,669	2,864	852	624	4,920
Brest.....	726	1,097	10,023	11,120	4,550	2,071	18,467	712	10,265	11,366	4,648	2,043	12,769
St. Servan.....	968	335	7,584	7,884	2,449	1,577	12,878	343	7,581	7,924	2,713	1,400	12,905
L'Orient.....	1,078	446	6,144	6,590	1,561	1,706	10,935	461	6,302	6,763	1,563	1,662	11,079
Nantes.....	1,123	132	3,693	3,825	1,488	1,016	7,452	144	3,838	3,982	1,445	1,047	7,625
Rocheport.....	789	306	2,919	3,210	1,201	1,101	6,301	789	3,667	3,972	1,352	1,196	6,703
Bordeaux.....	1,034	258	4,462	4,720	1,279	1,034	8,667	252	4,578	4,830	1,208	917	8,029
Bayonne.....	171	108	1,118	1,526	519	156	2,372	118	1,433	1,551	525	161	2,409
Toulon.....	2,911	2,043	8,757	10,800	3,262	3,632	20,605	2,936	8,932	11,047	3,103	3,721	20,807
Total.....	11,050	5,153	56,025	61,158	20,127	14,734	107,069	11,061	57,327	62,598	20,415	14,773	108,807

Districts.	1845.					1845.								
	Captains & mas- ter pilots.		Petty officers and seamen.			Green hands.	Boys.	General total.	Petty officers and seamen.			Green hands.	Boys.	General total.
	Petty officers.	Seamen.	Total.	Petty officers.	Seamen.				Total.					
Dunkirk.....	497	112	4,271	4,383	1,068	902	6,760	421	116	4,191	4,307	980	895	6,603
Hayre.....	1,265	151	4,777	4,928	1,997	1,289	9,479	1,274	150	4,765	4,915	1,964	1,340	9,493
Cherbourg.....	594	204	2,755	2,959	841	703	5,097	619	204	2,680	2,884	830	742	5,045
Brest.....	737	1,155	10,801	11,956	4,677	2,378	19,748	752	1,179	11,208	12,387	5,378	6,742	21,259
St. Servan.....	881	312	7,539	7,851	2,768	1,404	12,964	879	378	7,526	7,904	2,627	1,202	12,612
L'Orient.....	1,113	471	6,560	7,031	1,639	1,308	11,591	1,066	440	6,336	6,776	1,434	1,991	11,210
Nantes.....	1,173	153	3,952	4,105	1,501	1,035	7,814	1,168	191	3,737	3,928	1,381	991	7,468
Rocheport.....	791	315	3,171	3,486	1,273	1,183	6,733	697	319	3,947	3,666	1,185	1,217	6,765
Bordeaux.....	1,096	259	4,689	4,948	1,779	799	7,948	1,091	256	4,718	4,974	1,132	754	7,951
Bayonne.....	177	120	1,446	1,566	591	174	2,568	175	120	1,359	1,519	631	180	2,565
Toulon.....	2,899	2,104	9,330	11,424	3,155	3,769	21,247	2,981	2,139	9,137	11,276	2,812	3,657	20,726
Total.....	11,133	5,416	59,284	64,697	20,635	15,424	111,889	11,123	5,492	59,044	64,536	20,354	15,624	111,637

No. 3—Continued.

Districts.	1847.					1848.							
	Captains & mas- ter pilots.	Petty officers and seamen.			Boys.	Green hands.	General total.	Captains & mas- ter pilots.	Petty officers and seamen.		Boys.	Green hands.	General total.
		Petty officers.	Seamen.	Total.					Petty officers.	Seamen.				Total.
Dunkirk.....	431	116	4,382	4,498	943	6,823	440	121	4,448	4,569	1,044	7,019	
Havre.....	1,277	146	4,964	5,110	2,108	9,863	1,281	134	4,943	5,077	2,147	9,890	
Cherbourg.....	587	209	2,729	2,938	858	5,136	1,602	213	2,752	2,965	910	5,191	
Brest.....	793	1,114	11,576	12,690	6,021	23,280	814	1,242	12,441	13,684	7,305	25,104	
St. Servan.....	903	374	7,744	8,118	3,124	13,491	927	1,375	7,806	8,181	3,225	13,726	
L'Orient.....	1,082	433	6,663	7,096	1,468	11,590	1,097	415	6,791	7,206	1,940	12,109	
Nantes.....	1,199	200	3,940	4,140	1,354	7,605	1,232	188	4,005	4,193	1,439	7,916	
Rochefort.....	709	316	3,458	3,774	1,428	7,140	1,726	341	3,578	3,919	1,486	7,452	
Bordeaux.....	1,076	260	4,709	4,969	1,269	7,962	1,081	263	4,779	5,042	1,276	8,128	
Bayonne.....	1,173	123	1,546	1,669	778	2,697	174	113	1,468	1,581	902	2,872	
Toulon.....	3,032	2,130	9,697	11,827	3,159	22,245	3,074	2,185	10,174	12,359	3,243	22,974	
Total.....	11,262	5,421	61,285	66,706	23,110	117,858	11,438	5,591	63,185	58,776	24,917	122,411	

No. 3—Continued.

Districts.	1849.					1850.								
	Captains and master pilots.	Petty officers and seamen.			Green hands.	Boys.	General total.	Captains and master pilots.	Petty officers and seamen.			Green hands.	Boys.	General total.
		Petty officers.	Seamen.	Total.					Petty officers.	Seamen.	Total.			
Dunkirk.....	446	130	4,413	4,532	1,075	930	6,974	444	124	4,408	4,532	902	959	6,837
Havre.....	1,295	133	4,976	5,109	2,168	1,252	9,804	1,251	140	5,076	5,216	2,145	1,445	10,037
Cherbourg.....	579	210	2,695	2,905	934	687	5,119	587	208	2,719	2,927	873	685	5,072
Brest.....	832	1,255	12,410	13,665	7,347	3,351	25,182	806	1,277	13,395	14,672	7,216	2,968	25,662
St. Servan.....	928	373	7,769	8,142	3,505	1,411	13,968	941	369	8,049	8,418	3,441	1,205	14,005
L'Orient.....	1,107	389	6,759	7,148	1,960	1,800	12,087	1,082	354	6,984	7,368	1,711	2,327	12,488
Nantes.....	1,254	186	4,022	4,208	1,469	1,091	7,984	1,266	186	4,092	4,278	1,538	1,088	8,170
Rocheport.....	760	344	3,580	3,924	1,502	1,260	7,410	762	280	3,841	4,121	1,512	1,351	7,746
Bordeaux.....	1,107	249	4,712	661	1,215	757	7,997	1,114	237	4,645	4,882	1,015	632	7,643
Bayonne.....	181	117	1,469	1,586	872	234	2,865	188	117	1,594	1,711	796	215	2,910
Toulon.....	3,132	2,110	10,240	12,350	3,252	4,310	22,972	2,961	2,042	10,979	13,021	3,291	4,600	23,873
Total.....	11,621	5,518	64,467	69,985	25,311	17,135	124,052	11,402	5,364	65,782	71,146	24,440	17,475	124,463

No. 4.—Return of the quantity of dried cod exported direct from the place where caught to the colonies of France, with the rate and amount of bounty paid thereon, in the years 1842 to 1850, inclusive.

Years.	Number of ships employed.	Rate of bounty.	Quantity of cod exported.	Am't of bounty paid.	Average quantity of cargo.
		<i>Francs</i>	<i>Kilogrammes.</i>	<i>Francs.</i>	<i>Kilogrammes.</i>
1842	83	22	6,366,042	1,400,529.30	76,669
1843	110	22	7,943,377	1,747,542.94	72,213
1844	83	22	7,591,477	1,669,684.94	86,380
1845	120	22	9,538,033	2,098,367.26	79,483
1846	115	22	9,269,153	2,171,313.61	92,443
1847	126	22	9,366,996	2,051,760.72	74,150
Total	642	.....	50,675,078	11,139,098.82	481,368
Annual average.....	107	.....	8,445,846	1,856,516.33	80,228
Average of preceding period....	68	.....	6,466,024	1,808,099.94	104,234
1848	84	22	5,838,692	1,284,512.35	69,508
1849	91	22	5,275,637	1,160,640.14	57,974
1850	107	22	5,544,399	1,219,767.86	51,816
Average of 8 years—1842 to 1849	102	.....	7,723,550	1,698,030.35	76,100

No. 5.—Return of the quantity of dried cod of French catch exported from the warehouse in France to French colonies, in the years 1842 to 1850, inclusive, and the amount of bounty paid thereon.

Years.	Number of ships employed.	Rate of bounty.	Quantity of cod exported.	Am't of bounty paid.	Average quantity of cargo.
		<i>Francs</i>	<i>Kilogrammes.</i>	<i>Francs.</i>	<i>Kilogrammes.</i>
1842.....	121	22	3,759,988	827,156.76	31,072
1843.....	146	22	4,330,036	963,607.92	30,000
1844.....	173	22	4,332,355	964,118.10	25,331
1845.....	202	22	5,372,286	1,181,902.92	26,590
1846.....	109	22	3,696,354	813,197.88	33,911
1847.....	82	22	2,977,965	655,152.30	36,616
Total	833	.....	24,568,804	5,405,135.88	183,220
Annual average	139	.....	4,094,800	900,855.98	30,533
Average of preceding period....	68	.....	3,580,050	914,434.00	52,646
1848.....	87	22	2,456,812	536,098.53	28,239
1849.....	119	22	3,162,766	695,808.52	26,611
1850.....	94	22	1,936,387	426,005.14	.....
Mean of 8 years—1842 to 1849..	129	.....	3,773,547	829,630.00	29,758

No. 6.—Return of the quantity of dried cod of French catch exported from the ports and curing places of France to French colonies, in the years 1842 to 1850, inclusive, and amount of bounty thereon.

Years.	Number of ships employed.	Rate of bounty.	Quantity of cod exported.	Amount of bounty paid.	Average quantity of cargo.
		<i>Francs</i>	<i>Kilogrammes.</i>	<i>Francs.</i>	<i>Kilogrammes.</i>
1842	44	16	766,913	122,240.96	17,429
1843	31	16	385,027	61,604.32	12,420
1844	47	16	634,872	101,579.52	13,507
1845	19	16	231,287	37,005.92	12,173
1846	23	16	761,863	121,898.08	33,124
1847	2	16	47,909	7,655.44	23,954
Total	166	.....	2,827,871	451,984.24	112,607
Annual average	27 $\frac{2}{3}$	.....	471,312	75,330.70	18,768
Average of preceding period, 1837, 1838, 1839	17	.....	276,423	50,688.00	14,515
1848	31	16	556,504	89,040.72	17,951
1849	41	16	863,679	138,188.72	21,065
1850	27	16	661,838	105,894.16	.....
Average of eight years—1842 to 1849	29	.....	531,007	84,902.96	18,953

No. 7.

Return of the quantity of dried cod exported direct from the places where caught, by fishermen of France, to foreign countries, in the years 1842 to 1850, inclusive, with the amount of bounty paid thereon in each year.

Years.	Spain and Portugal.		Algeria.		Levant.		Italy.		Total quantity exported.	Total amount of bounty paid in francs.
	Quantity in kilograms.	Bounty in francs.								
1842.....							745,794	89,495.28	745,794	89,495.28
1843.....							1,203,401	144,408.12	1,203,401	144,408.12
1844.....	211,684	29,635.76					2,364,792	283,775.04	2,576,476	313,410.80
1845.....	329,933	45,210.62					3,047,996	365,759.52	3,370,929	410,970.14
1846.....			250,580	35,081.34			2,447,124	293,654.88	2,697,705	328,736.22
1847.....			71,367	9,991.38			871,017	104,522.04	942,374	114,513.42
Total.....	534,617		321,946				10,680,124		11,536,679	
Annual average.....							1,780,020		1,922,780	
Average of preceding period.....							3,063,358		3,137,331	
1848.....			140,838	25,350.84	389,708	70,147.44	1,699,081	203,889.72	2,229,627	299,338.00
1849.....	217,405	30,436.70	176,805	31,824.90	205,647	37,016.46	2,467,416	296,089.92	3,067,273	395,367.98
1850.....					92,444		594,615		637,059	
Total bounty.....		105,283.08		102,248.46		107,163.90		1,781,594.52		2,096,259.96
Average of eight years— 1842 to 1849.....	94,003	13,160.38		12,781.05			1,855,898	222,698.75	2,101,197	262,036.22

Return of the quantity of dried cod, of French catch, exported from the ports of France to foreign countries, in the years 1842 to 1850, inclusive, with the amount of bounty paid thereon in each year.

Years.	Spain and Portugal.		Algeria.		Levant.		Italy.		Total quantity exported.	Total amount of bounty paid in francs.
	Quantity in kilogrammes.	Bounty in francs.								
1842.....	39,345	5,508.30	163,122	22,837.08	160,772	22,508.08	2,276,758	273,210.96	2,659,995	324,064.42
1843.....	2,486	340.04	346,763	48,546.82	639,084	89,471.76	2,789,131	334,695.72	3,771,464	473,054.34
1844.....	26,044	3,646.16	306,684	42,935.76	1,219,599	170,743.86	2,390,578	286,869.36	3,942,905	504,195.14
1845.....	616,392	86,294.88	227,289	31,830.46	1,408,333	197,166.62	1,476,329	177,159.48	3,728,343	492,441.44
1846.....	3,297	461.58	330,543	46,276.02	1,813,228	253,851.92	2,053,473	246,446.76	4,200,544	547,006.28
1847.....	4,082	571.48	150,606	21,084.84	303,679	70,515.06	2,108,614	253,083.68	2,766,981	345,205.06
Total.....	691,616	.....	1,525,007	.....	5,744,695	.....	13,094,883	.....	21,076,229	.....
Annual average.....	115,274	.....	254,167	.....	957,449	.....	2,182,480	.....	3,512,705	.....
Average of preceding period.....	.....	.....	73,973	.....	.....	.....	.....	.....	3,137,331	.....
1848.....	.....	.....	668,863	120,395.21	1,207,293	237,312.74	2,895,163	347,419.56	4,771,319	695,127.51
1849.....	10,000	1,800.00	208,420	37,515.60	2,178,353	392,103.54	2,440,022	292,802.64	4,836,795	724,921.78
1850.....	.....	.....	148,813	.....	302,059	.....	1,065,674	.....	1,576,546	.....
Total bounty.....	.....	98,632.44	.....	371,411.79	.....	1,423,703.58	.....	2,211,608.16	.....	4,105,315.97
Average of eight years— 1842 to 1849.....	87,705	12,327.85	300,286	46,436.47	1,141,293	177,962.94	2,303,558	276,451.00	3,835,813	513,164.49

No. 9.

An account of the amount of bounties paid out of the treasury of France for the encouragement of the cod and whale fisheries, from 1842 to 1849, inclusive.

Years.	Cod fishery.	Whale fishery.	Total.
	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
1842	3,295,285.18	356,845.54	3,652,130.72
1843	3,922,518.16	461,455.25	4,383,973.41
1844	4,079,260.84	527,938.69	4,607,199.53
1845	4,765,646.96	224,602.76	4,990,249.72
1846	4,481,531.36	296,611.06	4,778,142.42
1847	3,760,668.58	277,845.40	4,038,513.98
1848	3,433,446.01	89,948.40	3,523,394.41
1849	3,644,957.33	190,821.52	3,835,778.85
Total.....	31,381,314.42	2,426,068.62	33,809,383.04

Annual average during the above eight years, 4,226,172.88 francs.

NOTE.—The amount of bounties paid in France up to the 1st day of December, 1851, was as follows :

	<i>Francs.</i>
Cod.....	2,631,643.90
Whale.....	178,010.62
Total.....	<u>2,809,654.52</u>

APPENDIX.

Having described in previous portions of this report the various works which compose our system of artificial improvements, a brief notice of the internal and domestic commerce of the country, which may be said to be the result of these works in connexion with our unrivalled natural channels of trade—our navigable lakes and rivers; the general character and direction of this commerce; its progressive development, and present and prospective magnitude; the influence it has exerted in the advancement of the wealth and prosperity of the country; and the relation that some of our leading staples bear to our foreign and domestic trade—forms an appropriate sequel to be considered in this appendix.

The great facilities which are offered by the topographical features of the country for a vast and extended domestic commerce were foreseen at an early period of its history. The wonderful sagacity of WASHINGTON discovered and predicted the result which the people have within a comparatively few years achieved. When, in 1783, he proceeded up the Mohawk valley to Fort Stanwix, the present site of Rome, N. Y., and from thence over the route now occupied by the Erie canal to the waters of Wood creek, which flow into Lake Ontario, and from thence to the sources of the Susquehanna, he gave the following expression to this glowing thought: "Taking a contemplative and extensive view of the vast inland navigation of the United States, I could not but be struck with the immense diffusion and importance of it, and with the power of that Providence who had dealt his favor to us with so profuse a hand. Would to God we may have wisdom to improve them."

Our national progress has undoubtedly far transcended all that the "Father of his Country" dared ever to hope or desire. Our natural avenues have been improved, and artificial ones have been constructed, allowing the free, rapid, and cheap movement of the products of national industry in every direction, and the producer and consumer in every portion of the country are brought into convenient connexion with each other. By opening easy access to markets, the development of our resources has been stimulated to an extraordinary degree. The results obtained can hardly be better expressed than by copying the following paragraph from the celebrated treasury report of the Hon. Robert J. Walker, of 1847-'48, in which he says:

"The value of our products exceeds three thousand millions of dollars. Our population doubles once in every twenty-three years, and our products quadruple in the same period. Of this three thousand millions of dollars, only about \$150,000,000 are exported abroad, leaving \$2,850,000 at home, of which at least \$500,000,000 are annually interchanged between the several States of the Union. Under this system, the larger the area and the greater the variety of climate, soil, and

products, the more extensive is the commerce which must exist between the States, and the greater the value of the Union. We see, then, here, under the system of free trade among the States of the Union, an interchange of products of the annual value of at least \$500,000,000 among our twenty-one millions of people, whilst our total exchanges, including imports and exports, with all the world beside, containing a population of a thousand millions, were last year \$305,194,260."

The following tables will exhibit something of the productions and value of the country in 1850, and of its commerce with foreign nations in 1851. These tables have been compiled from various authentic and official sources, and may be relied upon as the nearest approximation to correctness that can be had under the present system of procuring statistics.

The following statements show the trade and commerce, population, treasury receipts, &c., of the country for several years :

Average yearly imports, 1821 to 1826, inclusive, specie omitted	- - - - -	\$74,554,315
Average yearly imports, 1821 to 1826, inclusive, specie included	- - - - -	80,878,348
Average yearly imports, 1848 to 1852, inclusive, specie omitted	- - - - -	176,247,101
Average yearly imports, 1848 to 1852, inclusive, specie included	- - - - -	181,966,579
Average yearly exports, 1821 to 1826, inclusive, specie omitted	- - - - -	69,439,785
Average yearly exports, 1821 to 1826, inclusive, specie included	- - - - -	77,491,843
Average yearly exports, 1848 to 1852, inclusive, specie omitted	- - - - -	155,760,131
Average yearly exports, 1848 to 1852, inclusive, specie included	- - - - -	175,943,360
Tonnage in 1821	- - - - -	1,298,958 tons.
Tonnage in 1852	- - - - -	4,138,441 tons.

Receipts into the treasury from customs and other sources.

Year.	Customs.	Total from all sources.
1800.....	\$9,080,932	\$12,451,184
1810.....	8,583,309	12,144,206
1820.....	15,005,612	20,881,493
1821.....	13,004,447	19,573,703
1822.....	17,589,761	20,232,427
1823.....	19,088,433	20,540,666
1824.....	17,878,325	20,381,212
1825.....	20,098,713	26,840,858
	87,659,679	107,468,866
Average.....	17,531,936	21,453,773
1830.....	21,922,391	24,844,116
1831.....	24,224,441	28,526,820
1832.....	28,465,237	31,865,561
1833.....	29,032,508	33,948,426
1834.....	16,214,957	21,791,935
	119,859,534	143,976,864
Average.....	25,971,907	28,795,373
1847.....	23,747,864	52,025,989
1848.....	31,757,070	56,693,450
1849.....	28,346,738	59,663,097
1850.....	39,668,686	47,421,748
1851.....	49,017,567	52,312,979
1852.....	47,339,326	49,728,386

Per cent. increase in custom receipts.

Year.	Customs.	Per cent. increase for ten years.
1810.....	\$8,583,309	}78½+
to 1820.....		
to 1830.....	21,922,931	}46 1-11+
to 1840.....		
to 1850.....	39,668,686	}Decrease.
to 1852.....		
1850.....		}193 5-6+

Statement showing the valuation, area, and population to the square mile in 1850, with the indebtedness of the several States in 1851.

States.	Valuation.		Area in square miles.	Pop'n to the square mile.	Indebtedness in 1851.
	Assessed value.	True or estimated value.			
Alabama	\$219,476,150	\$228,304,332	50,722	15.21	\$8,539,110
Arkansas	36,428,675	39,841,625	52,198	4.01	1,506,562
California*.....	22,123,173	22,161,872	188,982	.....	475,460
Connecticut.....	119,388,672	155,707,980	4,674	79.33	91,212
Delaware.....	17,442,640	18,652,053	2,120	43.17	.....
Florida.....	22,784,837	22,862,270	59,268	1.47	†2,800
Georgia.....	335,110,225	335,425,714	58,000	15.62	1,828,472
Illinois.....	114,782,645	156,265,006	55,405	15.36	16,627,509
Indiana.....	152,870,399	202,650,264	33,809	29.23	6,775,522
Iowa.....	21,690,642	23,714,638	50,914	3.77	79,442
Kentucky.....	291,387,554	301,628,456	37,680	26.07	4,397,637
Louisiana.....	220,165,172	233,998,764	46,431	11.15	11,492,566
Maine.....	96,765,868	122,777,571	30,000	19.44	600,600
Maryland.....	208,563,566	219,217,364	9,356	62.31	15,424,380
Massachusetts.....	546,003,057	573,342,286	7,800	127.49	6,259,930
Michigan.....	30,877,223	59,787,255	56,243	7.07	2,528,872
Mississippi.....	208,422,167	223,951,130	47,156	12.86	7,271,707
Missouri.....	98,595,463	137,247,707	67,380	10.12	922,261
New Hampshire.....	92,177,959	104,652,835	9,280	34.26	76,000
New Jersey†.....	190,000,000	200,000,000	8,320	58.84	71,810
New York.....	715,369,028	1,080,309,216	46,000	67.33	23,463,838
North Carolina.....	212,071,413	226,800,472	45,000	19.30	977,000
Ohio.....	433,872,632	504,726,120	39,964	49.55	18,744,594
Pennsylvania.....	497,039,649	722,486,120	46,000	50.25	40,316,362
Rhode Island.....	77,758,974	80,508,794	1,306	112.97	.....
South Carolina.....	283,867,709	288,257,694	24,500	27.28	2,061,292
Tennessee.....	189,437,623	201,246,686	45,600	21.98	3,352,856
Texas.....	51,027,456	52,740,473	237,321	.89	12,435,982
Vermont.....	71,671,651	92,205,049	10,212	30.76	.....
Virginia.....	379,561,660	389,731,438	61,352	23.17	15,196,856
Wisconsin.....	26,715,525	42,056,595	53,924	5.65	12,892
	5,983,149,407	7,068,157,779	1,486,917	.....	201,541,624
Total debt in 1851.....					\$201,541,624
Total January 1, 1850.....					209,305,552
Total January 1, 1849.....					211,252,432
Total January 1, 1848.....					205,708,038
Total January 1, 1847.....					216,911,554
Total January 1, 1846.....					224,023,827

* Only thirteen counties—the other statistics destroyed by fire in San Francisco.

† This is the Territorial debt.

‡ In New Jersey only the real estate was given, (partly estimated.)

On the 1st of June, 1850, the population of the United States was 23,263,000, and the rate of increase during the preceding ten years, with an average immigration of 150,000 per annum, was shown to be about three and one-fifth per cent. annually. At this rate of progress, the inhabitants had increased to 25,237,000 on the first of January, 1853. But during the intervening time there had arrived from Europe 990,000 immigrants, which was 604,000 above the average for the same length of time during the previous decennial term. This excess being added

to the natural increase, and to the number of immigrants who had arrived upon the average before mentioned, the result shows that the population of the United States on the 1st of January, 1853, was 25,841,000, representing an increase of 2,578,000, somewhat over eleven per cent. during the thirty-one months preceding. This increase of population is probably greater than the ratio which ought to be assumed in estimating the advance of the country in respect to its property, productions, and material resources in general. Ten per cent. may be adopted as a truer ratio, and upon this basis of computation and comparison the following tables have been prepared.

Valuation of real and personal estate of the inhabitants of the United States for the years ending June 1, 1850, and December 31, 1852, together with the average amount to each inhabitant.

States and Territories.	True or estimated value in 1850.	True or estimated value in 1852.	Populat'n of each State, January 1, 1853.	Average real and personal property to each individual.
Maine	\$122,777,571	\$135,055,328	649,338	\$208
New Hampshire	103,652,835	114,018,118	352,960	323
Vermont	92,205,049	101,425,553	348,673	290
Massachusetts	573,342,286	630,676,514	1,103,883	571
Rhode Island	80,508,794	88,559,673	163,769	540
Connecticut	155,707,980	171,278,778	411,578	416
New York	1,080,309,216	1,188,340,137	3,438,107	345
New Jersey	200,000,000	220,000,000	543,406	404
Pennsylvania	722,486,120	794,734,732	2,566,082	309
Delaware	18,652,053	20,517,258	101,603	201
Maryland	219,217,364	241,139,100	647,168	372
Virginia	430,701,082	473,771,190	1,578,043	300
North Carolina	226,800,472	249,480,519	964,482	258
South Carolina	283,257,694	317,083,463	742,042	427
Georgia	335,425,714	368,968,285	1,005,658	366
Florida	22,862,270	25,148,497	97,015	259
Alabama	228,204,332	251,024,765	856,554	293
Mississippi	228,951,130	251,846,243	673,276	374
Louisiana	233,998,764	257,398,640	574,690	447
Texas	52,740,473	58,014,520	235,977	245
Arkansas	39,841,025	43,825,127	232,699	188
Tennessee	201,246,686	221,371,354	1,112,913	198
Kentucky	301,628,456	331,791,301	1,090,569	304
Ohio	504,726,120	555,198,732	2,198,252	252
Michigan	59,787,255	65,765,980	441,395	148
Indiana	202,650,264	222,915,290	1,097,141	203
Illinois	156,265,006	171,891,506	945,131	181
Missouri	137,247,707	150,972,477	757,067	199
Iowa	23,714,638	26,086,101	213,357	122
Wisconsin	42,056,595	46,262,254	338,762	136
California	22,161,872	24,378,059	183,150	133
District of Columbia	14,018,874	15,420,761	57,372	268
Minnesota Territory			6,755	
Utah Territory	986,083	1,084,691	12,631	86
Oregon Territory	5,063,474	5,569,821	14,755	384
New Mexico	1,174,471	1,291,918	67,701	19
Aggregate	7,133,369,725	7,846,706,697		

In the preparation of the foregoing statement, the tables of the seventh census have been strictly followed, and the general rates of increase, both for population and property, found to have obtained throughout the country during the past thirty-one months, have been applied to each State, though, of course, some States have advanced much more rapidly than others. There is reason to believe that the real and personal property is considerably undervalued in the census report. This will be illustrated by the following comparison of property and wealth among the urban and rural population. It appears from the census that—

140 cities and towns, of more than 10,000 inhabitants each, contain a population of	2,860,000
Towns and villages of over 200 inhabitants (estimated)...	1,140,000
<hr/>	
Total population of cities, towns, and villages in the United States	4,000,000
Total rural population	19,263,000
<hr/>	
	23,263,000
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The four cities of New York, Philadelphia, Baltimore, and Boston, contain a population of.....	1,214,000
Amount of real and personal property.....	\$702,000,000
Average amount of real and personal property to each individual in the above cities	\$578
Aggregate amount of real and personal property owned by residents in cities, towns, and villages.....	\$2,312,000,000

The average amount of personal property owned by each inhabitant of cities and towns appears to be \$166. If the average among the rural free population be about the same, it follows that the aggregate distributed among that class is \$2,660,000,000. The total amount of real and personal property in the United States on the 1st June, 1850, therefore, may be thus stated:

Value of farms, plantations, live stock, farming imple- ments, materials, &c.....	\$4,599,364,000
Personal estate, other than above, owned by the rural population	2,660,000,000
Real and personal property owned in cities, towns, and villages	2,312,000,000
United States and State stocks owned in the United States, representing public property and not taxed.	100,000,000
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Total value of real and personal property of the United States in 1850.....	9,071,364,000
Add 10 per cent. for increase of prices since June, 1850.....	907,136,400
Add 10 per cent. for increase in the amount of prop- erty	907,136,400
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Total value of real and personal property, January 1, 1853.....	10,885,636,800
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The subjoined table is designed to exhibit a general view of the agriculture of the United States. The aggregate quantity and value of crops are first presented, and next the several items which are supposed to constitute the fixed capital of the agricultural interest. It has been thought proper to assign one-fourth of the value of live stock to the column of annual production, as that is probably the rate of yearly increase. The remainder, together with the value of farms and farming implements and machinery, should obviously be reckoned as capital. In ascertaining the average price of crops, those of the New York Price Current for January, 1853, have been taken, and a deduction therefrom of fifteen per cent. has been made, to cover expenses of transportation and commercial charges. Where special circumstances require a departure from this rule, they are noticed in the remarks appended to the table.

Table showing the amount and value of the productions of agriculture in the United States for the year 1852.

Productions.	Quantity.	Price.	Total value.
Wheatbushels.	143,000,000	\$1 00 per bushel	\$143,000,000
Ryedo . . .	15,607,000	89 . . .do . . .	13,880,230
Indian corndo . . .	652,000,000	60 . . .do . . .	391,200,000
Oatsdo . . .	161,000,000	44 . . .do . . .	70,840,000
Ricepounds.	236,843,000	3 40 per pound	8,052,662
Tobaccodo . . .	283,000,000	6 . . .do . . .	16,980,000
Cottondo . . .	1,290,000,000	10 . . .do . . .	*129,000,000
Wooldo . . .	58,067,000	50 . . .do . . .	29,033,500
Peas and beansbushels.	10,141,000	80 per bushel	8,112,800
Irish potatoesdo . . .	97,500,000	75 . . .do . . .	73,125,000
Sweet potatoesdo . . .	42,085,000	80 . . .do . . .	33,668,000
Barleydo . . .	5,683,000	60 . . .do . . .	3,409,800
Buckwheatdo . . .	9,900,000	50 . . .do . . .	4,950,000
Orchard producedo . . .			10,000,000
Winegallons.	1,000,000	50 per gallon	500,000
Value of produce of market gardensdo . . .			50,000,000
Butterpounds.	344,592,000	20 per pound	68,918,400
Cheesedo . . .	116,088,000	6 . . .do . . .	6,964,280
Haytons.	15,222,000	12 50 per ton . . .	190,275,000
Clover and other grass seedsbushels.	974,380	5 00 per bushel	4,871,900
Flaxseeddo . . .	8,487,500	1 30 . . .do . . .	11,033,750
Hopspounds.	4,231,000	17 per pound	719,270
Hemptons.	39,000	136 00 per ton . . .	5,304,000
Flaxpounds.	15,420,000	6 per pound	925,200
Maple sugardo . . .	39,675,000	5 . . .do . . .	1,983,750
Cane sugardo . . .	272,339,000	4 . . .do . . .	10,893,000
Molassesgallons.	13,970,000	25 per gallon	3,442,500
Beeswax and honeypounds.	16,500,000	20 per pound	3,750,000
Animals slaughtereddo . . .			133,000,000
Poultrydo . . .			20,000,000
Feathersdo . . .			2,000,000
Milk and eggsdo . . .			25,000,000
Residuum of crops not consumed by stockdo . . .			110,000,000
Annual increase of live stockdo . . .			167,750,000
Total annual products of agriculturedo . . .			1,752,583,042

*The price stated may be too high, and the quantity underrated.

Value of farms	\$3,914,864,000
Three-fourths of the value of live stock	503,250,000
Value of farm implements, &c.	181,250,000
Total capital employed in agriculture	4,599,364,000

REMARKS UPON THE AGRICULTURAL TABLE.

1. The crop year of 1849, to which the returns of the seventh census apply, was reported nearly all over the country as a season of "short crop." Investigations undertaken by State legislatures and agricultural societies prove that the aggregate production of wheat reported in the census tables was below the average by at least 30,000,000 of bushels. That amount has been added to form a basis of comparison for ascertaining the crop of the past year, as given in the foregoing table.

2. The quantity of tobacco assumed as the production of 1852, exhibits an increase of more than forty per cent. on that of 1849. This result is ascertained from commercial statements and circulars, the accuracy of which there is no reason to question.

3. The cotton crop in 1852 is estimated at 3,225,000 bales of the average weight of 400 pounds, and the average price for the year is assumed at ten cents per pound. The quantity will probably exceed that given in the table. Able statistical writers have made calculations showing the probability of such an increase in the production of this great staple as will bring up the crop of 1860 to 1,720,000,000 pounds.

4. The census returns of 1850 showed a small decrease of the potato crop as compared with 1840. This was owing to the disease called the potato rot. That disease is said to be disappearing, and it is considered safe to assume the production of the past year as about equal to what it would have been, had no such cause of retrogression occurred during the course of the late decennial term.

5. The census tables undoubtedly present an estimate of the wine crop very far below the truth. In the State of Ohio the vintage of 1849 yielded more than the whole quantity assigned to the United States. Since that year, numerous vineyards along the Ohio, in Missouri, and elsewhere—some of them of large extent—have been brought into a condition to add largely to the production of the country in this article. California and New Mexico, also, reported as producing more than a quarter of all the wine of the United States, must become fertile wine districts.

6. The value of the produce of market gardens is much understated in the census returns. The class of produce coming under this designation includes the whole of some highly important crops, as beets, turnips, carrots, onions, parsnips, melons, tomatoes, besides numerous minor productions which are separately of small account, but collectively amount to a very large sum. The estimate in the table is a moderate one.

7. The price of hay in New York at the end of the year 1852, was between twenty-five and thirty dollars per ton. But the quantity of this bulky article entering into the trade of the country is relatively so small, and the expense of its transportation to a market is so considerable in comparison with its original value, that the arbitrary sum of \$12 50, or less than half the selling price in New York, has been assumed as the average in the country at large.

8. The item of the value of hides and peltries is a very important one, amounting doubtless to many millions of dollars; but it is presumed to be included in the value of animals slaughtered.

9. The estimates for poultry, feathers, milk, and eggs, of which articles no returns are found in the census tables of 1850, may seem to many extravagant; but the gross amount is equal to an average of only some twelve or fifteen dollars to each farming establishment in the United States, and is undoubtedly very considerably within the truth.

10. Too high an importance has been sometimes attached to the residuum of crops as an integral part of the agricultural wealth of the United States. In official tables heretofore published, the value of such portions of the produce of the field and forest as are not susceptible, in the usual course of trade, of a transfer to market, and must be consumed on the farm, has been given at one hundred millions of dollars. But it should be remembered that by far the greater part of this value has been already expressed in that of live stock, by which nearly the whole of it is consumed. It would obviously answer no good purpose to give prominence to what has been thus disposed of as an independent item in our annual productions. But straw, corn-husks, and some other substances which come under this classification, are extensively used in the minor manufactures of the country, and will bear the valuation assigned to them in the table.

The following statements show the number of manufacturing establishments in the United States, the amount of raw materials used, the capital invested, and the total value of products, according to the census of 1850.

Names of States.	No. of establishments.	Value of raw materials.	Capital invested.	Value of annual products.
Maine.....	3,977	\$13,555,806	\$14,700,452	\$24,664,135
New Hampshire.....	3,211	12,745,466	18,242,114	23,164,503
Vermont.....	1,849	4,172,552	5,001,377	8,570,920
Massachusetts.....	8,259	85,856,771	83,357,642	151,137,145
Do.....fisheries...	593	.....	5,582,650	6,606,849
Connecticut.....	3,482	23,589,397	23,589,397	45,110,102
Do.....fisheries...	252	.....	1,986,300	2,004,483
New York.....	23,553	134,655,674	99,904,405	237,597,249
New Jersey.....	4,108	21,992,186	22,184,730	39,713,586
Do.....fisheries...	101	.....	109,678	140,050
Pennsylvania.....	21,595	87,206,377	94,473,810	155,044,010
Delaware.....	531	2,864,607	2,978,945	4,649,296
Maryland.....	3,708	17,326,734	14,753,143	32,477,702
Virginia.....	4,741	18,103,433	18,108,793	29,592,019
North Carolina.....	2,604	4,805,463	7,252,245	9,111,245
South Carolina.....	1,431	2,809,534	6,060,565	7,076,077
*Georgia.....	.....	.....	.....	6,704,132
*Alabama.....	.....	.....	.....	4,464,006
*Mississippi.....	.....	.....	.....	2,749,838
*Florida.....	103	220,611	547,060	668,335
*Louisiana.....	1,016	2,485,073	5,304,924	7,043,814
*Texas.....	.....	399,734	613,238	1,202,885
*Arkansas.....	.....	286,899	338,154	668,815
*Missouri.....	.....	12,408,457	9,194,999	24,250,578
*Kentucky.....	.....	12,458,786	14,236,964	23,273,201
*Tennessee.....	.....	4,757,257	7,044,144	9,443,701
*Ohio.....	.....	.....	.....	62,110,138
*Indiana.....	.....	9,347,920	7,917,818	18,747,068
*Illinois.....	.....	8,986,142	6,128,282	16,671,273
*Michigan.....	.....	6,221,348	6,443,316	10,729,892
*Iowa.....	.....	2,093,844	1,256,410	3,393,542
*California.....	.....	.....	.....	60,000,000
*Minnesota and other Territories.....	.....	.....	.....	2,342,000
*City of New York.....	3,163	47,664,594	29,407,754	90,382,015

NOTE.—The chief production of California is gold.

The amounts set opposite those States marked with a star are not official, and the revision of the table now going on in the Census Office may slightly vary them; but the increase or diminution will not be so considerable as to affect, in a material manner, the deductions which it is our purpose to draw from the statement. The aggregate of the above table added to the total productions of agriculture for the past year, and the value of home manufactures, given in another part of the census statistics, will give us a condensed view of the total money value of the productions of industry, including all interests, for the year 1852. The statement is as follows:

Productions of agriculture.....	\$1,769,512,642
Productions of general industry, 1850.....	1,030,000,000
Increase of productions of general industry in 1852..	103,000,000

Home manufactures, 1850*	27,500,000
Increase of home manufactures, 1852	2,750,000
	<hr/>
Total value of productions of industry, including all enumerated interests.....	<u>2,932,762,642</u>

Were it practicable to bring within the scope of a general system of statistical inquiry, like that of the late census, every variety of occupation leading to valuable results, it cannot be doubted that this grand aggregate of production in the United States would appear much larger than in the foregoing statement. Divided by the number of inhabitants, free and slave, it gives \$126 as the average annual production of each person. If we estimate the proportion of adult males as one to four of the whole population, the annual average production of each is shown to be \$504.

Statement exhibiting the value of domestic produce and manufacture exported annually from 1821 to 1852, and also the value per capita during the same period.

Years ending—	Value of domestic produce, &c., exported.	Population.	Value per capita.
September 30.....1821	\$43,671,894	9,960,974	\$4 38
1822	49,874,079	10,283,757	4 85
1823	47,155,408	10,606,540	4 44
1824	50,649,500	10,929,323	4 63
1825	66,809,766	11,252,106	5 94
1826	52,449,855	11,574,889	4 53
1827	57,878,117	11,897,672	4 86
1828	49,976,632	12,220,455	4 09
1829	55,087,307	12,543,238	4 39
1830	58,524,878	12,866,020	4 54
1831	59,218,583	13,286,364	4 46
1832	61,726,529	13,706,707	4 50
1833	69,950,856	14,127,050	4 95
1834	80,623,662	14,547,393	5 54
1835	100,459,481	14,967,736	6 71
1836	106,570,942	15,388,079	6 92
1837	94,280,895	15,808,422	5 96
1838	95,560,880	16,228,765	5 89
1839	101,625,533	16,649,108	6 10
1840	111,660,561	17,069,453	6 54
1841	103,636,236	17,612,507	5 88
1842	91,799,242	18,155,561	5 05
Nine mos. to June 30, 1843	77,686,354	18,698,615	4 15
Year to June 30. ....1844	99,531,774	19,241,670	5 17
1845	98,455,330	19,784,725	4 97
1846	101,718,042	20,327,780	5 00
1847	150,574,844	20,870,835	7 21
1848	130,203,709	21,413,890	6 08
1849	131,710,081	21,956,945	6 00
1850	134,900,233	23,246,301	5 80
1851	178,620,138	24,250,000	7 36
1852	154,930,947	25,000,000	6 19

* Employed in manufactures—613,000 males, 214,000 females.

Per cent. increase of domestic exports.

Years.	Amount.	Per cent. increase.
1821.....	\$43,671,894	34+
to		
1830.....	58,524,878	94 3-5+
to		
1840.....	113,895,634	20 1-5+
to		
1850.....	136,946,912	

Exports of domestic produce for several years, with amount to each individual.

Years.	Amount.	Population	Amount to each individual.
1830.....	\$58,524,878	12,866,520	\$4 54 10-12+
1840.....	113,895,634	17,069,453	6 67 2-9+
1850.....	136,946,912	23,119,504	5 92 1-3+

The preceding table has never been published; it shows that the exports have doubled; *per capita*, with an increase of the population of about two hundred and forty per cent.

Statement exhibiting the value of foreign merchandise imported, re-exported, and consumed, annually, from 1821 to 1851, inclusive, and also the estimated population and rate of consumption, per capita, during the same period.

Years ending—	Value of foreign merchandise.			Population.	Consumption, per capita.
	Imported.	Re-exported.	Consumed and on hand.		
September 30 1821	\$62,585,724	\$21,302,488	\$41,283,236	9,960,974	\$4 14
1822	83,241,541	22,286,202	60,955,339	10,283,757	5 92
1823	77,579,267	27,543,622	50,035,645	10,606,540	4 71
1824	80,549,307	25,337,157	55,211,850	10,929,323	5 05
1825	96,340,075	32,590,643	63,749,432	11,252,106	5 66
1826	84,974,477	24,539,612	60,434,865	11,574,889	5 22
1827	79,484,068	23,403,136	56,080,932	11,897,672	4 71
1828	88,509,824	21,595,017	66,914,807	12,220,455	5 47
1829	74,492,527	16,658,478	57,834,049	12,543,238	4 61
1830	70,876,920	14,387,479	56,489,441	12,866,020	4 39
1831	103,191,124	20,033,526	83,157,598	13,286,364	6 25
1832	101,029,266	24,039,473	76,989,793	13,706,707	5 61
1833	108,118,311	19,822,735	88,295,576	14,127,050	6 25
1834	126,521,332	23,312,811	103,208,521	14,547,393	7 09
1835	149,895,742	20,504,495	129,391,247	14,967,736	8 64
1836	189,980,035	21,746,360	168,233,675	15,388,079	10 93
1837	140,989,217	21,854,962	119,134,255	15,808,422	7 53
1838	113,717,404	12,452,795	101,264,609	16,228,765	6 23
1839	162,092,132	17,494,525	144,597,607	16,649,108	8 68
1840	107,141,519	18,190,312	88,951,207	17,069,453	5 21
1841	127,946,177	15,499,081	112,447,096	17,612,507	6 38
1842	100,162,087	11,721,538	88,440,549	18,155,561	4 87
9 m'ths to June 30, 1843	64,753,799	6,552,697	58,201,102	18,698,615	3 11
Year to June 30 1844	108,435,035	11,484,867	96,950,168	19,241,670	5 03
1845	117,254,564	15,346,830	101,907,734	19,784,725	5 15
1846	121,691,797	11,346,623	110,345,174	20,327,780	5 42
1847	146,545,638	8,011,158	138,534,480	20,870,835	6 60
1848	154,998,928	21,132,315	133,866,613	21,413,890	6 25
1849	147,857,439	13,088,865	134,768,574	21,956,945	6 13
1850	178,138,318	14,951,808	163,186,510	23,246,301	7 01
1851	223,419,005	21,743,293	201,675,712	24,250,000	8 31
1852	252,613,282	17,273,341	195,339,941	24,500,000	8 00

Total imports consumed in the United States for several years, with amount to each individual.

Year.	Amount.	Population.	Amount to each individual.
1830	\$49,575,099	12,866,520	\$3 85 ¹ / ₄ +
1840	107,141,519	17,069,453	6 27 ³ / ₄ +
1850	164,034,033	23,119,504	7 09 ¹ / ₄ +

The preceding returns, and those which immediately follow, are presented to illustrate the chief object of the report, which is to show the value of the productions, and the rapid increase of the inland interchanges between different parts of the thirty-one States, and the importance of this inland trade.

It is a natural characteristic of the North American people, influenced by that stern spirit of co-operation which has so signally contributed to their present high position, to examine with interest the results of their labor as exhibited in the advancement of its material or intellectual strength. With the progress of the former, whether of commerce, manufacture, or agriculture, there will be a corresponding increase of a taste for literature, art, and the sciences.

It is gratifying to observe that no one interest outstrips any other interest, and that if one section of the Union is prosperous, there is a corresponding improvement in another section; and, in contemplating the happy state of the confederacy, we are proud to believe that "there has never been imagined any mode of distributing the produce of industry, so well adapted to all the wants of man, on the whole, as that of letting the share of each individual depend in the main on that individual's own energies and exertions."

Doubtless, the successful application of so just a principle is chiefly owing to two causes—the perfect equality and protection of labor, and that prohibitory clause in the constitution preventing any State from levying taxes on the produce of another State; and although it has delegated to Congress the regulation of the "commerce with foreign nations and among the several States," the federal legislature has wisely left the latter totally unfettered and free.

Since the publication of Mr. Walker's celebrated report in 1847-'48, in which he estimated the internal trade of the country at three thousand millions, already mentioned, various causes, obvious to all, have conspired to greatly extend its area by increased facilities, and increased its value.

The railroads have increased from five thousand five hundred miles, costing about one hundred and sixty-six millions, to thirteen thousand three hundred miles, costing four hundred millions.

The imports and exports have increased from three hundred to over four hundred millions; the tonnage, inward and outward, from 6,700,703 to 10,591,045 tons; the tonnage owned, from 2,839,000 to 4,200,000 tons. The receipts into the treasury, exclusive of loans, have increased from twenty-six to over forty-nine millions; and the California trade, the whole of which does not appear in the published returns—the commercial phenomena of a commercial age—have also added a hundred millions to the national commerce, and, more than any event of the last forty years, have invigorated the navigating interest of the country, and to a great degree had a powerful influence over the commercial marine of the world; the whole contributing to swell the internal trade, and enabling the United States to own more than two-fifths of the tonnage of the world.

The inland trade moves in a circle: a larger part of the imports are made at the North, which pass to the South and the West—a greater

part to the latter ; while the southern States furnish the chief bulk and amount of exports.

The imports and exports, and tonnage inward and outward, of the principal commercial or Atlantic States, for the years 1825, 1840, and 1851, were as follows :

Imports.

States.	1825.	1840.	1851.
Maine.....	\$83,311,436	\$86,599,858	\$190,260,840
Massachusetts.....			
Rhode Island.....			
Connecticut.....			
New York.....			
Pennsylvania.....	12,259,001	27,009,185	23,250,271
Maryland.....			
Virginia.....			
North Carolina.....			
South Carolina.....			
Georgia.....	96,340,075	149,895,742	216,224,932
Louisiana.....			
Alabama.....			
Florida.....			
Total from all States.....			

Exports.

States.	1825.	1840.	1851.
Maine.....	\$31,018,734	\$36,412,349	\$85,238,833
Massachusetts.....			
Rhode Island.....			
Connecticut.....			
New York.....			
Pennsylvania.....	34,525,505	80,269,078	109,843,194
Maryland.....			
Virginia.....			
North Carolina.....			
South Carolina.....			
Georgia.....	66,944,745	113,895,634	196,689,718
Louisiana.....			
Alabama.....			
Florida.....			
Total from all States.....			

Tonnage inward and outward.

States.	1825.		1840.		1851.	
	Inward.	Outward.	Inward.	Outward.	Inward.	Outward.
Maine	696,097	684,398	1,599,859	1,396,194	3,779,526	3,491,786
New Hampshire						
Massachusetts						
Rhode Island						
Connecticut						
New York						
Pennsylvania						
Maryland						
Virginia						
North Carolina						
South Carolina	267,388	355,492	602,305	865,859	717,909	995,875
Georgia						
Florida						
Alabama						
Louisiana						

It is stated in another part of the report, that the resolution of the Senate referred to the trade of the lakes, and as the trade of the Mississippi valley would be justly entitled to a separate report, only general statements would be given.

The intimate connexion between the trade of the lakes and the Mississippi river, and the construction of various lines of railroads and canals to facilitate the transportation from the river to the lakes, and from the lakes to the river, the circuit made by the chief articles of imports and exports, the importance of the basin of the rivers Ohio, Missouri, and Mississippi, the increasing value of the exports of the southern portion of the confederacy, particularly to the navigating interest of the North, render it necessary, however, to notice the chief outlets of the national products, as well as the chief inlets for the produce of other countries. Although the materials are not at hand to give the account in detail, it is hardly necessary to state that no report on the internal commerce would be acceptable to other portions of the confederacy if it failed to notice the commercial importance of the Southern Atlantic States, and their great commercial interests.

The advantages to be derived from the facilities now enjoyed by the travelling public, and for the transportation of produce, are of a higher character than the additions they make to the wealth of the country. In case of an unfortunate war, particularly with a maritime power, by which our commerce with the ocean might be impeded, the means of intercommunication afforded by the rivers, canals, lakes, and railroads would still be enjoyed, and the domestic trade and commerce continue to be comparatively unmolested.

As great interest is now manifested as to what portion of the trade of the valley of the Mississippi shall seek a southern market, the following notes, prepared in part by Mr. Mansfield, of Cincinnati, will be found very useful and interesting by those engaged in that portion of the western trade. The line of separation referred to in these notes,

as dividing the northern from the southern trade, is by no means fixed or stationary, but varies from year to year, affected by prices in different markets, rates of freight, &c.—the general tendency, probably, being to the southward.

NOTES ON THE AMOUNT AND TENDENCY OF OHIO COMMERCE.

The competition between the southern, or river route, and the northern, or lake route, to the ocean, has become so strong in the western States as to excite much interest as to the dividing line which separates the *legitimate* trade of the lakes from that of the rivers. It is desirable to know what portion of the country is best accommodated by the northern, and what by the southern route; and also to know something of the character of the articles which make up the principal trade of the different channels respectively.

This is at first sight a difficult question, because the lakes, and the public works connected with them, are closed for a portion of the year, during which the trade tends southwardly. But there is a certain method of determining it. Taking, for example, the *arrivals* and *clearances* at the extremities on the lake and on the Ohio river, and then comparing the result with the receipts and clearances at the intermediate ports, it will at once appear at what points the stream, southward or northward, terminates. First, then, to take the *leading articles* of groceries which depart from Cincinnati and Toledo, and arrive at various points on the Miami canal, we have as follows :

1. *Miami Canal, 1851.*

Articles.	Cincinnati.		Toledo.	
	Receipts.	Clearances.	Receipts.	Clearances.
Coffee pounds..	1,145,481	1,673,243	66,157	3,076,468
Sugar do....	124,225	4,361,418	1,711,552	772,248
Molasses do....	.....	3,097,662	686,847	315,343
Total.....	1,279,706	9,132,323	2,464,556	4,164,059

This table proves that groceries are transported in the Miami country both from the lake to the river and *vice versa*; but that a much larger portion go from the river than from the lake. An investigation of the *receipts* at the various ports of the interior proves that the country north of Piqua, Miami county, ninety miles from Cincinnati, is supplied from Toledo, and the country south of it from Cincinnati. A point on the Miami canal, about ninety miles from Cincinnati, is therefore the point of division between the trade in foreign articles derived from the lake and that derived from the river.

The above amounts are, of course, only a part of the whole trade distributed from Cincinnati; but they are sufficient for the purposes of this inquiry.

2. *Ohio Canal, 1851.*

Articles.	Cleveland.		Portsmouth.	
	Receipts.	Clearances.	Receipts.	Clearances.
Coffee.....pounds..	29,812	1,912,204	10,152	647,418
Sugar.....do.....	187,518	1,874,274	6,055	2,025,715
Molasses.....do.....	132,844	559,246	7,750	1,828,836
Total.....	350,174	4,245,724	23,957	4,501,969

3. *Muskingum Improvement, 1851.*

Articles.	Harmar.	
	Receipts.	Clearances.
Coffee.....pounds....	840	633,327
Sugar.....do.....		986,097
Molasses.....do.....	3,000	1,557,000
Total.....	3,840	3,176,424

It appears from an examination of the statistics of the interior ports, where their receipts are from the Ohio canal, that the supplies from the Ohio river extend as far as Newark, Licking county, about 120 miles from Portsmouth and 150 from Cleveland.

The Muskingum improvement extends to Dresden, on the Ohio canal, and the groceries are supplied from the Ohio, at Harmar, so far as to Zanesville, Muskingum county.

The following tables show the aggregate of the above articles respectively shipped through the southern and northern ports of Ohio, viz:

On the Canals.

Articles.	From Toledo and Cleveland.	From Cincinnati, Portsmouth, and Harmar.
Coffee.....pounds....	5,588,372	2,953,992
Sugar.....do.....	2,646,522	7,373,220
Molasses.....do.....	1,246,522	6,483,498
Total.....	9,481,436	16,810,710

It appears that groceries are supplied from the Ohio river to nearly twice the value of those forwarded from the lakes to the interior of Ohio. From consideration of these facts, it appears that the line of general separation may be drawn through Piqua, Miami county, Urbana, Champaign county, Columbus, Franklin county, Newark, Lick-

ing county, Zanesville, Muskingum county, and whence diverging to the northeast it terminates in the neighborhood of Steubenville.

If the same inquiry be extended to the exports of domestic produce from the interior of Ohio, the line of separation will be found to run nearer to the Ohio river, but across nearly the same tract of country. The following are aggregates of the receipts, in leading articles of domestic produce, at the lake and river ports :

Articles.	At Cincinnati, Portsmouth, & Harmar.	At Cleveland and Toledo.
Flour, and wheat reduced to flour.....barrels.....	468,462	1,598,567
Pork and hams.....do.....	66,321	56,567
Lard.....do.....	21,897	33,945
Live hogs.....number.....	74,000	4,761
Corn.....bushels.....	711,125	3,561,020
Whiskey.....barrels.....	98,873	58,777

In reference to the public works of Ohio, therefore, the greater quantity of flour and grain is exported from the lake ports; but the larger proportion of live stock, animals, provisions, and whiskey pass through the river ports. As hogs are chiefly driven to Cincinnati, the above table expresses but a very small portion of the animal food received from the interior at the ports of Cincinnati and Portsmouth. The export trade of Cincinnati will be shown in another table. By examination of the arrivals and clearances of domestic produce on the Miami canal, it appears that flour and other products are shipped to Cincinnati from Piqua or its vicinity—about 100 miles to the northward. The line of separation, in regard to the productions of Ohio, will, therefore, be found very near to the centre of the State. Nothing of domestic produce, in the immediate Ohio valley, except, perhaps, tobacco, wool, and manufactured articles, go to the lake ports. In the articles of tobacco and wool the trade almost altogether tends lakewards.

The following table of the imports of lumber, from the exterior to the interior ports, will show the tendency of that article at the present date. It must be observed, however, that the amount is a mere fraction of the whole, because the lumber imported into southern Ohio is almost exclusively brought from the Alleghany region, down the Ohio; though recently lumber has found its way through Toledo and Cleveland.

	Lumber.	Lath.	Timber.
Cleveland.....feet.....	9,574,435	.....	97,321
Toledo.....do.....	8,610,951	1,915,200	.....
Cincinnati.....do.....	2,560,453	.....	.....
Portsmouth.....do.....	29,850	.....	3,131
Harmar.....do.....	169,195	.....	456
Total.....	21,234,884	1,915,200	100,908

It seems from this that six-sevenths of the lumber imported into the State by the public works for the use of the interior comes in by the lake ports.

It follows, then, from the above facts, that two-thirds the coffee and six-sevenths of the lumber passing over the public works for consumption in Ohio are imported through the lake ports; but that three-fourths the sugar and molasses, and nearly all the tobacco, are imported through the river ports. Sugar and molasses, the products of Louisiana, are distributed from Cincinnati through the Northwest, even to the shores of the lakes.

Of the produce of Ohio, three-fourths of the flour and grain are exported through the lake ports, but more than three-fourths of the pork, lard, and whiskey through the ports of the Ohio river, as will be seen by reference to the principal exports of Cincinnati, as connected with the above canal receipts.

Should the question now arise as to the comparative value of the exports of Ohio, it appears from the foregoing tables that the exports of flour, and wheat reduced to flour, amount to 2,067,029 barrels, or, reduced to grain, 10,335,145 bushels of wheat. But the exports from Sandusky, derived from a very fertile region of country, and from Milan, have in some years amounted to 600,000 barrels, including wheat reduced to flour; while there are also large exports of grain by the Pennsylvania and Ohio canal, and from various small ports on the Ohio river. The total export of wheat may therefore be set down as equivalent to fifteen millions of bushels, or to three millions of barrels of flour. In the years 1850 and 1851, the wheat crop of Ohio was equal, in the aggregate, to 65,000,000 bushels. The consumption of two millions of people, at seven bushels each, is fourteen millions per annum. We have, then, as the result of these two years:

Consumption.....	28,000,000	bushels.
Exported.....	30,000,000	“
Stock on hand.....	7,000,000	“
Total.....	<u>65,000,000</u>	“

It is possible that the quantity consumed may exceed, and the stock on hand fall short of, the figures assumed; but there is no time when, with an average crop of wheat and corn in Ohio, there is not a large surplus on hand to meet the demands of an export trade. If the above export of flour and wheat be compared with the results of our exports to foreign countries in 1850, it will be seen that the State of Ohio alone exports a quantity of wheat and flour equal to double the whole foreign export of 1850. On an average of seasons, Ohio now exports an amount nearly equal to the entire export of the United States!

The flour exported by the lakes is largely consumed by the manufacturing population of the Eastern States, the amount received in New England from the West being about equivalent to a million of barrels per annum.

Of corn, Ohio probably exports five millions of bushels, and of oats also a large quantity.

Of animal provisions, the following table exhibits a general summary, viz :

Pork, of all descriptions.....	300,000	barrels.
Lard.....do.....	100,000	“
Lard oil.....do.....	30,000	“
Beef.....do.....	50,000	“

Considering the agricultural or strictly domestic produce of Ohio exported as a whole, the annexed table very nearly exhibits the entire exports of the most important articles for 1851 :

Flour, and wheat reduced.....	3,000,000	barrels.
Corn.....	5,000,000	bushels.
Small grain.....	500,000	“
Wool.....	7,000,000	pounds.
Pork.....	300,000	barrels.
Lard.....	100,000	“
Lard oil.....	30,000	“
Beef.....	50,000	“
Cheese.....	10,000,000	pounds.
Butter.....	8,000,000	“
Candles.....	1,500,000	“
Soap.....	300,000	“
Whiskey.....	300,000	barrels.

The market value of the above articles amounts, in round numbers, to twenty-five millions of dollars. The smaller articles, not enumerated, would bring up the total to full thirty millions. The manufactures of Cincinnati and other towns exported to foreign countries may be set down at ten millions in addition. So that the aggregate export of things produced wholly within the State, and sold abroad, may be safely estimated at full forty millions per annum. The trade of a State, however, consists not only of its own produce, but likewise of all the articles imported, and of the local trade from port to port. The aggregate trade of the various towns and ports of Ohio, import and export, probably amounts to one hundred and twenty millions per annum. Some idea of this may be attained by consideration of the following table of exports in the most material articles for the port of Cincinnati :

Exports of Cincinnati for 1845 and 1850, with the per cent. of increase.

	1845.	1850.	Increase.
Beef.....barrels....	31,489	33,871	7 per ct.
Butter.....kegs.....	28,510	52,475	90 "
Candles.....boxes....	3,757	113,412	2,900 "
Cheese.....boxes....	47,539	122,005	140 "
Coffee.....sacks....	13,037	38,158	200 "
Flour.....barrels....	194,700	390,131	100 "
Iron.....tons.....	1,238	9,776	800 "
Iron.....pieces....	2,937	152,365	500 "
Lard.....kegs.....	248,753	*223,245	
Lard oil.....barrels....	1,650	26,110	1,400 "
Pork.....barrels....	71,633	224,254	200 "
Pork in bulk.....pounds....	404,426	4,753,953	1,000 "
Soap.....boxes....	2,708	21,533	700 "
Sugar.....hhds....		13,000	
Salt.....barrels....		35,729	
Merchandise.....packages..	23,603	349,181	1,400 "
Merchandise.....tons....	2,106	10,350	400 "
Molasses.....tons....	9,046	25,080	180 "
Manufactures.....pieces....	7,975	22,103	175 "
Tobacco.....hhds....	3,950	11,978	200 "
Whiskey and liquors.....barrels....	133,578	250,611	90 "

* Decrease.

This table demonstrates that the export trade of Cincinnati has increased more than two hundred per cent. in the last five years. Its power and tendency to increase no less rapidly for many years to come is undoubted. There are many smaller articles not included in the above. The total value of exports from Cincinnati is therefore estimated at above thirty millions of dollars, and the aggregate value of its trade to be sixty millions per annum.

Of the exports from Cincinnati, a large part are manufactured articles, in which Cincinnati exceeds, proportionably to its population, any town of the United States. The following table of manufactures in Cincinnati for 1840 and 1850, with their increase per cent., will show what a mass of products there are there which afford a surplus for other markets :

	1840.	1850.	Increase.
1. Manufactures of iron, viz : Boilers, engines, machinery, sugar-mills, grates, stoves, rails, &c.....	\$1,288,199	\$5,547,900	330 per ct.
2. Manufactures of cloth and clothing, viz : Bagging, sheeting, clothing, hats, caps, shirts, bonnets, &c.....	1,940,450	4,427,500	130 "
3. Manufactures of leather, viz : Leather, boots, shoes, hose, harness, &c....	748,000	2,589,650	250 "
4. Manufactures of wood, &c., viz : Furniture, boxes, blinds, buckets, trunks, re- frigerators, &c.....	937,715	2,356,890	150 "
5. Manufactures of grease and oil, viz : Soap, candles, stearine, lard oil, &c.....	353,940	4,545,000	1,300 "
6. Alcohol, wines, rectified spirits, &c.....	145,000	4,191,920	3,000 "
7. Manufactures of copper and tin, viz : Bells, tin-ware, copper-plates, &c.....	313,300	515,000	65 "
8. Manufactures of animal meats, viz : Beef, pork, hams, pickled meats, &c.....		5,895,000	
9. Books and book publications.....		1,246,540	
10. Cars and carriages.....	127,000	355,937	200 "
11. Flour and feed.....	816,700	1,690,000	100 "
12. Miscellaneous manufactures, viz : Chemicals, tobacco, white lead, steam- boats, &c.....	1,138,300	2,488,000	220 "
.....		35,739,337	300 per ct.

The above classification does not include the merely mechanical work, such as carpentering, bricklaying, painting, &c., where the result is wholly local. It includes only those manufactures of which part may be exported.

At Cincinnati, the destination of the principal articles of export is as follows :

	New Orleans and down-river ports.	Up-river ports.	Northward.
Beef.....	97 per cent.	1 per cent.	2 per cent.
Corn.....	96 "	1 "	3 "
Flour.....	97 "	2 "	1 "
Lard.....	83 "	8 "	9 "
Pork and bacon.....	79 "	16 "	5 "
Coffee.....	32 "	20 "	48 "
Sugar.....	10 "	30 "	60 "
Molasses.....	10 "	50 "	40 "

This table demonstrates that of the produce of Ohio—beef, pork, lard, flour, and corn—nearly the whole quantity, as exported from Cincinnati, goes down the river; a small portion only up the river; and but a small fractional part northward by canal or railway. On the other hand, coffee, sugar, and molasses—productions of the South—tend northward. Sugar and molasses are carried, through Cincinnati, to the borders of the lakes; while coffee, as we have seen, principally imported from Boston, Philadelphia, and Baltimore, finds its way by the lakes to Cincinnati.

The result of the tables hereinbefore adduced is to prove that the trade of the Ohio valley originates in and is controlled by itself. All the produce of Ohio, from a line running through Piqua, Newark, Dresden, &c., tends to the Ohio valley. All the tobacco, hogs, cattle, salt, and lumber of Kentucky and Virginia, for one hundred and fifty miles south of the Ohio, tend to the Ohio river, and by that route mostly to Cincinnati. All the produce, of whatever kind, concentrated in the Ohio valley, looks for transport to the Ohio river, instead of passing northward by canal or railway—in the ratio of ten to one. The articles of sugar and molasses will, in future, be supplied to Ohio and Indiana almost exclusively by way of the Ohio river. The construction of railroads, by facilitating distribution, is augmenting that tendency, and thence the business of distributing in Cincinnati is greatly on the increase. For the same reason, much of the coffee which has heretofore been bought in the North will hereafter be imported, at first hands, from Brazil and Cuba, entered at the port of Cincinnati, and distributed by the jobbing houses of that city.

Cincinnati, being the most prominent city in the valley of the Ohio, deserves a more specific notice.

CINCINNATI, OHIO.

This is the largest city west of the Alleghanies, and is situated on the northern bank of the Ohio, in latitude $39^{\circ} 6' 30''$ north, and longitude $70^{\circ} 24' 25''$ west from Washington. Its site is just opposite the mouth of the Licking river, which comes into the Ohio between Newport and Covington, Kentucky. It is distant from New Orleans about 1,450 miles; from Pittsburg, 455 miles; from Louisville, 132 miles; and from the mouth of the Ohio about 500 miles by the course of the rivers; from Baltimore, 500 miles; from Philadelphia, 600, and from New York, 650 miles, by post-route. The population in 1800 was 750 persons; in 1810, 2,540; in 1820, 9,602; in 1830, 24,831; in 1840, 46,338; and in 1850, 116,108. This exhibition of increase in population has rarely been equalled by any city on the globe; and there is very little doubt that the same, or a greater ratio of augmentation will be preserved during the present period of ten years, to elapse previous to 1860.

The numerous railways in process of construction, and already in operation, which will be tributary to her business, must have a very beneficial and prosperous effect upon her growth. The Ohio and Mississippi road, which will connect her with St. Louis, the next great western mart in point of size, by almost an air-line, cannot but be very

advantageous to her business interests, by opening to her trade a section of country which has heretofore had no access to markets of such importance as these two cities.

A full description of this and all other railway and canal routes leading to or from Cincinnati will be found in another part of this report, devoted especially to such improvements.

The commerce of Cincinnati, as has been seen by the preceding notes on Ohio commerce, and will be more fully illustrated by the following tables, is immense, embracing almost every variety of production and manufactures. The river, at the point where the city is located, is about six hundred yards in width, and its mean annual range from low to high water is about fifty feet. In the midsummer the water is sometimes so low as almost to prevent the navigation of the river by steamers above the city; generally, however, boats of light draught can proceed to Pittsburg without much difficulty, except they may be prevented a few weeks in midwinter by floating ice.

The succeeding tables, prepared by direction of the Chamber of Commerce of Cincinnati, exhibit the commerce of the port in detail, giving the quantity and character of the articles entering into its composition during the period of five years past.

Imports into Cincinnati, from all sources, for 1847-'48, 1848-'49, 1849-'50, 1850-'51, 1851-'52.

Articles.	1847-'48.	1848-'49.	1849-'50.	1850-'51.	1851-'52.
Apples, green.....bbls..	28,674	22,109	6,445	16,934	71,182
Beef.....do...	659	348	801	1,101	1,609
Beef.....tierces.....		27	15	18	1,145
Bagging.....pieces..	79,228	2,094	324		71
Barley.....bush..	165,528	87,460	137,925	111,257	89,994
Beans.....do...	8,757	3,067	5,565	31,037	14,137
Butter.....bbls..	6,625	7,721	3,674	8,259	10,203
Butter.....kegs..	6,405	7,999	7,487	11,043	13,720
Blooms.....tons..	2,203	9,513	2,545	2,727	4,036
Bran, &c.....sacks..	1,941	21,995	49,075	50,976	131,014
Candles.....boxes..	133	414	718	697	653
Corn.....bush..	361,315	344,810	649,227	489,195	653,788
Corn-meal.....do...	29,542	5,504	3,688	5,508	8,640
Cider.....bbls..	2,289	4,346	453	1,047	874
Cheese.....casks..	164	281	97	74	46
Cheese.....boxes..	138,800	143,265	165,940	205,444	241,753
Cotton.....bales..	13,476	9,058	8,551	7,168	12,776
Coffee.....sacks..	80,242	74,961	67,170	91,177	95,732
Codfish.....drums..	311	515	464	441	431
Cooperage.....pieces..	179,946	147,352	201,711	146,691	135,118
Eggs.....boxes and bbls..	4,035	4,504	2,041	5,956	10,544
Flour.....bbls..	151,518	447,844	231,859	482,772	511,042
Feathers.....sacks..	4,467	4,908	3,432	2,858	6,716
Fish.....bbls..	19,215	18,146	14,527	19,826	20,076
Fish.....kits..	725	1,059	1,290	2,694	1,075
Fruit, dried.....bush..	27,464	38,317	11,802	41,824	24,847
Grease.....bbls..	585	878	1,169	876	1,936
Glass.....boxes..	20,231	33,868	34,945	37,099	44,004
Glassware.....pkgs..	15,025	19,209	25,712	28,619	36,602
Hemp.....bundles and bales..	15,349	11,161	12,062	13,254	18,334
Hides.....loose..	33,745	23,766	30,280	8,132	54,647
Hides, green.....lbs..	10,829	22,774	14,181	25,424	54,905
Hay.....bales..	8,036	12,751	14,452	12,691	9,270

STATEMENT—Continued.

Articles.	1847-'48.	1848-'49.	1849-'50.	1850-'51.	1851-'52.
Herring boxes..	4,191	2,960	3,546	3,832	5,149
Hogs head..	49,847	52,176	60,902	111,485	160,684
Hops bales..	645	238	799	756	1,591
Iron and steel pieces..	197,120	187,864	186,832	225,039	194,107
Iron and steel bundles..	34,213	29,889	55,168	66,809	54,078
Iron and steel tons..	827	1,768	2,019	2,570	10,111
Lead pigs..	39,607	45,544	49,197	59,413	54,733
Lard bbls..	37,978	28,514	34,173	36,848	36,047
Lard kegs..	41,714	48,187	63,327	31,087	32,283
Leather bundles..	6,579	6,975	9,620	10,399	11,384
Lemons boxes..	3,068	4,181	4,183	3,377	4,434
Lime bbls..	63,364	61,278	56,482	57,537	64,817
Liquor hhds. and pipes..	3,115	4,476	5,802	1,465	3,162
Merchandise & sundries pkgs..	381,537	68,582	308,523	175,138	458,703
Merchandise & sundries tons..	7,308	837	4,540	3,370	1,958
Molasses bbls..	51,001	52,591	54,003	61,490	93,132
Malt bush..	7,999	29,910	41,982	21,356	33,220
Nails kegs..	59,983	55,893	83,073	83,761	64,189
Oil bbls..	6,618	7,427	5,049	6,764	8,305
Oranges boxes..	5,007	4,317	6,819	9,302	4,547
Oakum bales..	1,486	1,423	1,799	1,739	1,843
Oats bush..	194,557	185,723	191,924	164,238	197,868
Oil cake lbs..	2,822,793	1,767,421	27,870	194,000	247,400
Pork and bacon hhds..	4,420	6,178	7,564	6,277	10,333
Pork and bacon tierces..	140	465	2,358	1,183	1,987
Pork and bacon bbls..	69,828	44,267	43,227	31,595	22,501
Pork, in bulk lbs..	9,643,063	9,249,380	13,257,560	14,631,330	16,532,884
Potatoes bbls..	22,439	17,269	3,898	19,649	20,739
Pig metal tons..	21,145	15,612	17,211	16,110	22,605
Pimento & pepper bags..	3,455	1,257	2,558	2,027	1,425
Rye bush..	24,336	22,233	23,397	44,308	58,317
Rosin, &c. bbls..	11,668	3,298	12,349	12,511	14,184
Raisins boxes..	22,795	14,927	11,936	15,648	28,417
Rope, twine, &c. pkgs..	7,806	3,950	3,061	2,007	3,203
Rice tierces..	2,494	3,765	3,556	4,783	3,782
Sugar hhds..	27,153	22,685	26,760	29,808	39,224
Sugar bbls..	11,175	7,575	13,005	18,584	15,237
Sugar boxes..	2,928	1,847	2,467	3,612	2,259
Seed, flax bbls..	32,060	22,859	15,570	20,319	48,074
Seed, grass do..	4,968	5,928	4,432	4,104	10,819
Seed, hemp do..	214	510	314	68	304
Salt sacks..	65,265	76,985	110,650	50,474	91,312
Salt bbls..	94,722	76,496	114,107	79,358	58,020
Shot kegs..	809	818	1,447	1,567	1,688
Tea pkgs..	2,931	7,412	9,802	7,821	12,810
Tobacco hhds..	4,051	3,471	3,213	3,701	11,410
Tobacco bales..	1,223	1,311	887	1,697	1,996
Tobacco boxes and kegs..	14,815	12,463	17,772	19,945	23,000
Tallow bbls..	2,473	1,829	1,225	3,682	5,930
Wines bbls and qr. casks..	2,251	2,683	6,874	3,401	4,482
Wines baskets and boxes..	2,272	2,101	4,296	5,060	8,322
Wheat bush..	570,813	385,388	322,639	388,660	377,037
Wool bales..	1,943	1,686	1,277	1,866	4,562
Whiskey bbls..	170,436	163,419	186,678	244,014	272,788
Yarn, cotton pkgs..	6,403	5,562	3,494	5,577	10,836
Yarn, cotton bales..	288,095	262,893	174,885	124,594	167,002

It will be observed that the articles enumerated in the foregoing table comprise the whole importations into Cincinnati, whether from up the river, down the river, by canal or railway, by land or water.

The value of these imports, independent of the item of merchandise and sundries, was estimated for the year ending August 31, 1852, a

the sum of \$24,715,331. Estimating merchandise upon the basis of valuation used in the Miami and other districts on the lakes, would give a farther amount of \$32,146,400—making the aggregate import commerce amount to \$56,861,731.

Statement of the principal articles of export from Cincinnati by all land and water routes for the years 1847-'48, 1848-'49, 1849-'50, 1850-'51, 1851-'52.

Articles.	1847-'48.	1848-'49.	1849-'50.	1850-'51.	1851-'52.
Apples, green	8,512	5,824	3,519	8,064	7,223
Alcohol	1,771	3,022	3,302	5,038	7,607
Beef	14,811	12,523	7,558	19,937	20,015
Beef	3,615	9,332	6,625	9,356	9,023
Beans	1,097	1,680	2,469	1,832	1,611
Brooms	3,760	3,333	7,355	8,735	7,934
Butter	2,937	1,272	964	3,258	3,006
Butter	28,315	24,398	24,393	36,185	31,395
Bran, &c.	3,761	233	4,322	5,789	10,543
Bagging	12,632	15,910	9,353	8,212	12,918
Corn	53,021	7,176	57,248	20,137	51,231
Corn-meal	19,999	3,060	1,179	2,148	923
Cheese	30	121	106	25	71
Cheese	59,374	55,134	86,902	121,755	150,689
Candles	29,189	30,640	67,447	113,412	121,727
Cattle	733	97	30	440	1,840
Cotton	6,123	4,009	1,896	5,132	8,810
Coffee	18,581	18,909	22,030	38,158	43,654
Cooperage	36,924	55,617	73,637	63,804	64,279
Eggs	9,450	5,229	4,246	7,258	9,160
Flour	201,011	267,420	98,908	390,131	408,211
Feathers	3,736	3,824	5,380	4,095	7,876
Fruit, dried	5,074	8,317	1,850	17,480	6,413
Grease	4,268	6,922	7,597	4,426	4,732
Grass seed	2,431	2,387	2,528	2,830	7,587
Horses	1,268	378	468	599	944
Hay	94	1,040	564	638	554
Hemp	5,659	2,198	1,164	3,112	3,616
Hides	60,880	73,209	62,865	48,079	142,823
Hides	9,024	7,731	11,225	12,459	31,775
Iron	127,193	43,025	54,075	108,255	172,409
Iron	17,351	7,081	36,245	44,110	36,368
Iron	6,916	6,270	5,767	9,776	11,329
Lard	81,679	37,521	38,192	30,391	47,862
Lard	208,696	130,509	170,167	71,300	115,845
Lard oils	8,277	9,550	16,984	26,110	24,830
Linseed	3,878	3,020	4,879	7,881	9,377
Molasses	18,322	17,750	25,878	25,090	48,866
Oil cake	4,397	2,274	743	963	1,601
Oats	41,675	212	5,023	11,707	2,718
Potatoes	15,687	7,073	5,283	19,823	23,844
Pork and bacon	37,162	39,470	23,529	30,220	43,933
Pork and bacon	8,862	10,930	22,477	20,762	34,398
Pork and bacon	196,186	186,192	193,581	122,086	131,560
Pork, in bulk			13,448	2,974	3,912,943
Pork	759,188	924,256	2,310,699	4,753,953	2,372
Rope, &c.	5,556	4,369	3,451	6,272	9,365
Soap	11,095	11,303	17,443	31,553	28,033
Sheep	1,400	522		460	45
Sugar	11,559	8,443	9,650	13,000	20,360
Salt	39,656	39,990	29,509	28,585	27,022
Salt	5,057	5,403	8,301	7,144	16,314
Seed, flax	2,785	808	333	443	3,520
Merchandise	341,363	210,049	615,641	349,181	656,793
Merchandise	16,848	21,466	11,109	10,359	11,241

STATEMENT—Continued.

Articles.	1847-'48.	1848-'49.	1849-'50.	1850-'51.	1851-'52.
Liquors.....bbls..	9,364	10,913	11,798	19,297	49,348
Manufactures.....pieces..	42,412	94,904	56,810	22,103	66,200
Produce.....pkgs..	23,822	17,609	10,327	13,958	42,333
Starch.....boxes..	8,177	7,904	9,491	14,109	18,293
Tallow.....bbls..	5,682	4,975	4,311	5,927	3,039
Tobacco.....kegs and boxes..	9,352	7,497	6,905	18,345	24,761
Tobacco.....hhds..	3,812	3,309	4,847	2,856	10,821
Tobacco.....bales..	123	126	77	160	629
Vinegar.....bbls..	2,753	1,288	2,404	3,756	5,965
Whiskey.....bbls..	186,509	136,911	179,540	231,324	276,124
Wool.....bales..	2,298	1,109	2,156	2,725	3,404
Wool.....lbs..	7,037	10,230	16,841	4,836	2,972
White lead.....kegs.....			40,294	50,857	65,514
Pieces of castings.....No.....			54,399	36,266	33,942
Pieces of castings.....tons.....			2,385	1,121	1,629

A glance at the table of exports will satisfy the observer that the exports are of the same articles as the imports, and that the major part of the property here noted is merely *in transitu*, passing through the commercial houses of Cincinnati on its way to a northern or southern destination.

Many articles, it will also be observed, are much modified in their shape during their stay—such as pork, lard, whiskey, tallow, &c. These tables possess much interest, as showing the course of trade at this point, as well as exhibiting its nature and character more fully than can be otherwise done.

PITTSBURG, PENNSYLVANIA.

The city of Pittsburg is situated in the western part of Pennsylvania, at the head of navigation on the Ohio river, which is formed at that point by the union of the waters of the Alleghany and Monongahela. It is in 42° 30' north latitude, and 80° 2' west longitude; 230 miles from Baltimore, and 297 from Philadelphia; 200 miles from Harrisburg, and 226 from Washington. It had a population, with its suburbs, in 1800, of 1,565 persons, and in 1850, of about 83,000. The enumeration of the inhabitants of the city proper was, in 1810, 4,768; in 1820, 7,248; in 1830, 12,542; in 1840, 21,115; and in 1850, with its suburbs, 83,000. This number for 1850 includes Alleghany city, of upwards of 20,000 inhabitants, and some smaller places in the vicinity. Alleghany county, of which Pittsburg is the principal town, had a population, in 1850, of 138,098, having gained, since 1840, nearly 57,000. In this county a larger capital is invested in iron manufactures than in any other county in the State, which is pretty good evidence that, at present at least, it offers greater inducements to that branch of industry than any other point. Except at short periods of very dry seasons, the Ohio is navigable to Pittsburg by boats of light draught. It is not, however, navigable for boats of the largest class during any considerable portion of the season. When the spring freshets occur there

is deep water; but the boats built at Pittsburg are adapted to the lowest possible draught, so that they may transact business nearly the whole year. At times, in severe winters, there is sufficient floating ice in the upper Ohio to impede navigation for a few days. The principal harbor is furnished by the Monongahela river, which has a better depth of water than the Alleghany. The city lies chiefly between the two. It has rather a pleasant site, and is surrounded with hills of bituminous coal, which can be quarried and delivered in the city at a trifling expense. It is to this fact, and the close proximity of good iron ores, that Pittsburg owes her great growth in manufactures. Pittsburg is the great *entrepôt* of western Pennsylvania, from the Ohio and Mississippi basin and from the lakes. The Ohio river gives her an eligible connexion with the first, and its trade; while the Beaver and Erie and Ohio canals give her access to the latter; and the Pennsylvania canal from Johnstown, gives her the command of the principal portion of the trade of the State west of the Alleghanies. Besides these connexions, however, Pittsburg is about to reap great benefits from numerous railway projects, which will soon be in operation in various portions of western Pennsylvania. These are spoken of pretty fully in another department of this report, and it is therefore unnecessary to describe them under this head. One of the most important of all these projects is the Pittsburg and Olean railway, which will pass through some of the best agricultural counties in the State, but which heretofore have not had access to a market, sufficiently expeditious to develop their rich and varied resources. To connect with the route just mentioned, a road is about to be built from Buffalo, at the foot of Lake Erie, to Olean. This road will connect the western termini of the Pennsylvania canals with the western termini of the New York canals, and the head of Ohio navigation with the great lake port at the eastern terminus of navigation on Lake Erie. Buffalo will have access also to the coal and iron of Pittsburg and other portions of Pennsylvania by a direct route, and by a mode, too, which enjoys superior advantages over all others in carrying coal. Railway tracks may be laid direct from the city to the mine, and follow up the quarry indefinitely, perhaps, so that by such a mode no transshipment or cartage is required; but, with water communication, it cannot be done so easily. There, coal must be carted from mine to boat, and when arrived at the place of destination, instead of being dumped right from the cars into the coal-yard, as upon railways, it must be raised out of boats and carted away to the yard. Perhaps coal and other minerals or ores are the only kind of heavy articles of which it can be said, with truth, that they may be transported more cheaply by railway than by water. The manufactures and commerce of Pittsburg are immense; but no returns, later than those of the census of 1850, are at hand, by which to exhibit the exact value of the former, and the commercial returns are but indifferently kept at any time. Below, such authentic data are presented as could be procured indicative of the character and extent of each.

In 1840 there were in operation in Pittsburg and Alleghany city thirty-two furnaces and forges, with a capital of \$1,437,000; the total capital employed in manufactures was stated at \$2,784,594. The tonnage of the port, in 1840, was estimated at 12,000 tons.

In 1850, according to the returns of the United States census, Alleghany county had manufactures of all kinds employing capital, and yielding annual products as follows :

	No. of manufac-tories.	Capital in-vested.	Value of ma-terial.	Hands em-ployed.	Value of an-nual product.
Pittsburg	819	\$5,944,383	\$5,677,890	8,436	\$10,038,721
Alleghany city.....	120	1,469,790	1,156,018	1,817	1,844,706
Alleghany county.....	328	3,441,721	2,590,498	4,400	4,802,605
Total	1,267	10,855,844	9,424,406	14,653	16,686,032

The great bulk of the above aggregate of nearly seventeen million dollars of the product of industry is made up of manufactures of various kinds of iron, steel, nails, glass, cotton, clothing, boots and shoes, cabinet-ware, whiskey, flour and provision-packing. Iron, of course, takes the lead, and enters into almost all kinds of manufactures to a greater or less degree.

It is proper to remark here, that little reliance is to be placed upon the accuracy of census returns, generally, in matters of business which relate to the actual substance of men so intimately as the above queries indicate. Various motives instigate different persons to give replies susceptible of constructions very wide of the mark aimed at by the government—sometimes above, perhaps, but generally very far below the real value of the property or business undergoing investigation. Business men are proverbially jealous of all intermeddling in their affairs; and so, however good the object of the meddler may be, or how innocent soever the instrument employed, the replies are usually so colored, as it is supposed will best subserve the interests of their maker. Hence, such returns should be used under a full view of the circumstances and with many grains of allowance. In the case of Pittsburg and vicinity, all commercial returns, lately compiled, present very different results from those of the census. That city is well known to be one of the most prominent in all the western valleys for the construction of steamers—both of wood and iron—an interest which does not fully appear in the census returns. It is said that the number of steamers built at this place, during a series of years, will average about one per week. Supposing this statement to be correct, and that the value of the machinery and joiner-work was included under those heads, which is hardly probable, there is still the cost of material and labor required to construct fifty-two hulls, unaccounted for, which, at the moderate average valuation of ten thousand dollars each, would amount to five hundred and twenty thousand dollars.

This is but a single item; and it is not at all improbable that many more might be cited, less important to be sure, but still capable of adding their quota to the general aggregate. In western Pennsylvania—that is, in the twenty-two counties west of the Alleghanies—there were different varieties of iron works in thirteen of the counties, to the number of one hundred and forty, involving the investment of \$6,887,376.

The principal, and, in fact, almost the only accessible market for the products of this immense capital, is Pittsburg. During late years, it is well known many of them have remained idle, owing to the low, unremunerating prices of iron. But the late advance of prices in Europe, and the present high rates, are stimulating this important interest, and, inviting capital, and labor to engage in it, with good prospects of an adequate reward. Pittsburg must, therefore, soon reap a rich harvest in the augmentation of her traffic from this source. Pittsburg, however, is not entirely dependent on the suburban counties for her iron manufactures. There are in the city fifteen rolling-mills, having a capacity for making 49,200 tons of bar, rod, hoop, sheet, and boiler iron, nails and spikes, and bar and sheet steel, annually. Of the above fifteen works, six are employed in the conversion of steel; of which they made, in 1850, 6,078 tons. In the same works there were 205 nail machines, capable of turning out 1,000 kegs of 100 lbs. each, or an aggregate of 10,250 tons. The aggregate value of the products of these fifteen works is estimated at \$3,425,000.

The pig-iron consumed in these and similar manufactories is supplied by the foundries located upon the several rivers which communicate with the mountainous districts. The ore is principally furnished to the foundries by the neighboring farmers during the winter season, when their labors are not required in agricultural occupations. Digging the ore, and delivering it to the furnaces, felling trees, and converting the wood (which is unfit to transform into lumber) into charcoal for the use of the furnaces, and raising produce for the subsistence of the laborers employed in the manufacture of iron, afford abundant and profitable employment to the agriculturists of the surrounding country, and contribute largely to the trade and commerce of Pittsburg.

The manufacture of glass is carried on by thirty-three different establishments in this city, which is scarcely less noted for the quantity and variety of this article, annually classed among its exports, than for the larger and more valuable interest just described.

These remarks are intended to convey some idea of the principal manufacturing, and consequent commercial, interests of Pittsburg, as now in progress; but it may be well to add that they may be extended almost indefinitely. There is no known limit to their capacity, or to the elements necessary for their augmentation. Wood, coal, ores, and agricultural resources, all abound in the utmost profusion, and at the greatest possible convenience. All that is wanting to constitute Pittsburg the "Birmingham" of the American continent is labor.

The commercial interests of Pittsburg are hardly less important than the manufacturing. The enrolled tonnage of the port in 1851 was about 17,000 tons, consisting of 112 steamers, employing officers and crews of 2,588 persons, and carrying 466,661 passengers. Of the property carried on the river steamers, either as to amount, character, or quantity, no returns are at hand, and there is no very satisfactory mode of ascertaining its value. The best mode of ascertaining its character which now presents itself is by the examination of the returns of the canal commerce of Pittsburg, as made to the commissioners of the State works.

Comparative statement, exhibiting the exports by canal of some of the leading articles during three seasons.

Articles.	1852.	1847.	1846.
Cotton.....lbs..	1,670,922	1,056,138	1,000,971
Hemp.....do..	1,165,057	3,311,618	1,287,886
Tobacco, unmanufactured.....do..	20,490,918	14,777,059	24,696,742
Groceries.....do..	1,724,070	1,978,822	1,571,889
Hardware, cutlery.....do..	433,669	246,897	239,353
Iron—pig.....do..	16,557,572	65,537	} 2,675,341
castings.....do..	607,995	250,910	
blooms.....do..	411,620	13,836	
Cast steel.....do..	7,364,436	549,416	319,736
Lead.....do..	5,000	188,078	325,085
Nails and spikes.....do..	3,033,036	51,760	82,732
Bacon.....do..	39,586,694	12,713,427	21,661,236
Beef and pork.....bbls..	10,367	41,225	19,620
Butter.....lbs..	434,495	747,645	800,265
Flour.....bbls..	.....	297,940	156,412
Lard and lard oil.....lbs..	5,995,693	5,319,378	2,929,286
Tallow.....do..	865,509	62,946	291,313

This and the following tables include the amount of the articles specified, moved from and received at Pittsburg on all the public improvements during the years named.

Comparative statement, showing some of the leading articles imported into Pittsburg by canal during the years named, each ending December 31.

Articles.	1852.	1847.	1846.
Produce not specified.....pounds.....	358,231	1,257,620	871,500
Oats.....bushels.....	43,087	21,360	19,080
Leather.....pounds.....	237,616	312,239	386,925
Coffee.....do.....	17,102,061	9,927,605	10,290,993
Dry goods.....do.....	36,117,244	23,201,074	12,651,818
Groceries.....do.....	17,885,702	7,833,925	6,923,856
Hardware.....do.....	17,457,753	14,501,693	10,522,463
Iron, pig.....do.....	20,225,558	21,979,353	} 15,410,661
castings.....do.....	814,300	124,662	
blooms.....do.....	14,232,693	14,942,390	
bar and sheet.....do.....	15,292,015	4,397	2,833,879
Nails and spikes.....do.....	156,500	15,886,711	575,402
Fish.....barrels.....	32,644	19,926	19,600

On the average, these figures indicate a very gratifying increase in the canal commerce of the city, but especially in the iron trade for 1852. In this fact, and in the greatly increased importations of dry goods and groceries, may be seen the evidence of the stimulation which the advanced prices have already imparted to the iron manufactures.

Statement showing the imports and exports by canals at Pittsburg, during the year ending December 31, 1852.

Articles.	Exports.	Imports.
Agricultural products, not specifiedpounds . . .	5,106,651	358,231
Barleybushels . . .	1,906	1,475
Bran and shipstuffsdo . . .	1,951	19,670
Ryedo . . .	902	4,309
Corndo . . .	400	1,137
Cottonpounds . . .	1,607,922	.....
Haytons . . .	58	73
Hemppounds . . .	1,165,057	542,600
Dried fruitdo . . .	13,262	43,087
Oatsbushels . . .	311	.....
Ginseng and beeswaxpounds . . .	277,633	.....
Hogs' hairdo . . .	494,064	.....
Seedsbushels . . .	3,270	817
Tobacco, unmanufacturedpounds . . .	20,490,918	75,800
Wheatbushels . . .	9,839	.....
Deer and buffalo skinspounds . . .	288,048	.....
Feathersdo . . .	390,835	.....
Furs and peltriesdo . . .	197,319	.....
Dry hidesdo . . .	190,258	26,000
Leatherdo . . .	522,412	237,676
Wooldo . . .	4,108,694	29,540
Barkcords . . .	170	813
Boards and plankfeet . . .	235,272	144,030
Hoop-polesNo. . .	6,500	21,500
Laths, less than 5 feetdo . . .	149,400	.....
Shinglesdo . . .	60,000	6,000
Stavesdo . . .	5,000	6,250
Woodcords . . .	22	2
Boots, shoes, and hatspounds . . .	2,836	2,603,066
Drugs and medicinesdo . . .	186,988	424,900
Dry-goodsdo . . .	412,986	36,117,244
Dye-stuffsdo . . .	5,385	140,400
Earthenwaredo . . .	68,731	4,746,790
Glasswaredo . . .	1,075,705	800
Groceriesdo . . .	1,724,070	34,987,763
Hardware and cutlerydo . . .	433,369	17,457,773
Liquors, foreigngallons . . .	3,164	4,965
Paintspounds . . .	33,728	200,200
Cordage and baggingdo . . .	82,883	150,500
Saltbushels . . .	158,437	96,450
Stonewarepounds . . .	6,753	.....
Tobacco, manufactureddo . . .	17,000	2,132,400
Whiskeygallons . . .	779,877	.....
Ashespounds . . .	285,957	6,929,875
Coal, mineraltons . . .	9,415	4
Copperpounds . . .	91,653	131,600
Iron, pigdo . . .	16,557,572	20,255,558
castingsdo . . .	607,995	814,300
blooms and anchorsdo . . .	411,620	14,232,693
bars and sheetsdo . . .	7,364,436	15,292,015
Lead, bars and pigsdo . . .	5,000	4,500
Nails and spikesdo . . .	3,033,036	156,500
Steeldo . . .	23,221	341,500
Tindo . . .	.....	1,663,800
Bacondo . . .	39,586,694	5,000
Beef and porkbarrels . . .	10,367	.....
Butterpounds . . .	434,495	.....
Cheesedo . . .	399,571	3,700
Fishbarrels . . .	169	32,644
Flourbarrels . . .	236,904	1,048
Lard and lard oilpounds . . .	5,995,628	.....
Dried beefdo . . .	30,143	.....
Tallow and candlesdo . . .	365,509	.....

STATEMENT—Continued.

Articles.	Exports.	Imports.
Brick.....number..	600	345,395
Burr and mill-stones.....pounds..	8,600	222,706
Lime.....bushels..	4,625	.....
Marble.....pounds..	5,276	1,217,600
Slate for roofing.....do.....	.....	1,440,800
Stone.....perches..	1,741	125
Agricultural implements.....pounds..	21,401	65,580
Furniture.....do.....	234,052	447,103
Oils (except lard).....gallons..	24,299	34,970
Paper and books.....pounds..	137,152	1,087,093
Rags.....do.....	951,005	20,717
Sundries.....do.....	10,117,893	1,964,308
Soapstone.....do.....	.....	32,000
Brimstone.....do.....	.....	1,750,500
Spanish whiting.....do.....	.....	339,600
Boats cleared.....number..	4,826	.....
Passengers.....miles travelled..	1,142,192	2,787,179
Amount of tolls collected.....dollars..	208,933	.....

It must be remembered, that while these tables embrace all articles imported and exported on the State works, they show nothing of the exports of manufactures or receipts of goods and produce by the Ohio river. Pittsburg has virtually a canal connexion with Cleveland and Erie, on the lake, which contributes largely to her trade, and opens to her iron manufactures the lake markets. She is also in communication with Cleveland and Chicago by railway. But her river commerce is also of immense value. Some idea may be gained of its magnitude from the fact that, during the year 1852, no less than sixty-nine steamers were constructed at that point, of an aggregate of 15,000 tons, or an average of 213 tons each. And all this tonnage, besides that built at other points below, finds sufficient and lucrative employment; if not in the Pittsburg trade directly, then at points below.

LOUISVILLE, KENTUCKY.

Louisville is situated on the southern bank of the Ohio river, near the falls, in latitude 38° 3' north, and longitude 85° 30' west, 52 miles from Frankfort, 1,400 from New Orleans, 600 from St. Louis, 650 from Pittsburg by water, and 596 from Washington.

This is the commercial city of Kentucky, and one of the five great places in the valley of the Mississippi. Situated at the falls of the Ohio—the only great obstruction in a navigation of 2,100 miles from the Alleghany river to the Gulf of Mexico—it has, in this very circumstance, some great commercial advantages. One of these is, that, except at high water, which occurs but at short periods, the largest class of steamboats seldom ascend above that point. It is also naturally the mart of an extensive and fertile country southwest of it, and also of a portion of Indiana on the north. The country immediately around the “falls” is also fertile, supplying an abundance of market products for a large population. Its growth has been more moderate

than that of Cincinnati and St. Louis, but it has been steady; and the same causes which resulted in its rise will continue to operate for a century to come. The following are the most important statistics of this city:

1. *Growth and population.*

Years.	Population.	Increment.	Ratio.
In 1800	600		
In 1810	1,300	700	115 per ct.
In 1820	4,000	2,700	208 per ct.
In 1830	10,090	6,090	152 per ct.
In 1840	21,000	10,910	109 per ct.
In 1850	43,217	22,217	105 per ct.

The population of Louisville (in 1852) is 51,726, showing just about the same rate of increase—10 per cent. per annum. In 1860, at this rate, Louisville will contain about 90,000 inhabitants. The neighboring town of New Albany (Indiana) is quite a large place, and will, doubtless, continue to grow. So, also, Jeffersonville (opposite Louisville) will be a town of considerable importance.

2. *Commerce.*

In Mr. Casseday's History of Louisville, the commercial business of Louisville is represented thus:

1. *Groceries.*—The principal imports of Louisville, in groceries, &c., were:

Sugar	15,615	hhds.
Molasses	17,500	bbls.
Refined sugar	10,100	packages.
Coffee	42,500	bags.
Rice	1,275	tierces.
Cheese	25,250	boxes.
Flour	80,650	bbls.
Salt	110,250	bbls.
Salt, Turk's island	50,525	bags.
Bagging	70,160	pieces.
Rope	65,350	coils.

The value of these was estimated at *ten million six hundred thousand dollars.*

2. *Dry goods.*—The aggregate annual sales of dry goods are estimated at *five million eight hundred and fifty-three thousand dollars.*

3. *Hardware, queensware, saddlery, &c.*—The aggregate of other sales of merchandise amounts to *three million eight hundred and sixty-six thousand dollars.*

3. *Pork business.*

The number of hogs put up this season in Louisville, New Albany, and Jeffersonville, round the "falls," is estimated at 275,000, which shows a large and increasing business. A large number of the farmers of Kentucky drive their hogs to the Louisville market; and, in the last two or three years, the business has been extended.

4. *Steamboats and navigation.*

Louisville embarked in the steamboat business at a very early day, and still employs a large number of steam vessels. In the year 1851 (*vide* United States Steam Report) there were *sixty-one* steam-vessels registered at Louisville, carrying 15,180 tons.

A large number of steamboats are annually built at Louisville and New Albany.

5. *Manufactures.*

Louisville is a commercial and not a manufacturing town. Hence, its manufacturing establishments are small as compared with Pittsburg and Cincinnati. Yet they make, in the aggregate, a large amount. The following are the principal:

	Number.	Hands.	Product.
Foundries	15	930	\$1,392,200
Soap and Candles	6	59	409,000
Bagging	3	120	184,000
Breweries	6	30	108,600
Cotton and wool	3	135	173,500
Clothing	45	1,157	941,500
Feed and flour-mills	9	47	283,800
Furniture	25	446	638,000
Glass	1	50	50,000
Oil	3	16	140,000
Paper	1	36	113,000
Rope	11	166	460,000
Tobacco, &c.	82	1,050	1,347,500
Leather	9	64	176,000

The manufactures of Louisville (exclusive of mere mechanical labor) probably amount in value to *six millions* of dollars per annum—certainly a very good foundation for more extensive operations.

6. *Railroads.*

Louisville will, in the course of two or three years, have an extensive system of railways. The principal lines will be as follows, viz.:

1. Lexington and Louisville railroad, finished; and will connect at Lexington with numerous other lines.

2. Louisville and Nashville line. This will connect her with the entire net-work of southern railroads.

3. Louisville and Cincinnati railroad—which will connect her with all the northeastern railroads.

4. Jeffersonville and Columbus line; which will connect at Indianapolis with all the northern, Indiana, and Michigan lines.

5. New Albany, Salem, and Michigan city line. This will connect, at Orleans, with the Ohio and Mississippi railroad, and thus make a continuous line to St. Louis, and will be continued north to Michigan city and Chicago, Illinois.

These railroads, when completed, will connect Louisville with the most distant parts of the Union, and enable her to avail herself of her great commercial advantages.

Louisville is situated in the centre of a large district of level and rich land. Its site for building is almost indefinite. Provisions are cheap; and its position for commerce one of the best in the interior of the United States. Its growth is not so rapid as that of some places, but is very uniform; so that the growth in future may be very certainly counted upon at the same rate. Allowing for some decrease in the ratio of growth, and it will probably, in half a century, have half a million of inhabitants.

A statement recently published shows that there are navigating the Ohio and Mississippi rivers an aggregate of 269 steamers, measuring 60,792 tons, and which are valued at \$3,895,000, that can pass through the present locks in the canal around the rapids at Louisville. There are also navigating the same rivers 76 steamers, measuring 48,052 tons, and valued at \$3,714,000, which are too large to pass through those locks, and therefore cannot participate in the trade of the upper Ohio, being nearly one-half the valuation of the steam stock engaged on those waters.

Valuation, in 1850, of the cities named.

	Estimated.	True.
St. Louis	\$27,968,833	\$50,000,000
Cincinnati.....	41,848,536	49,310,925
Louisville.....	31,533,904	31,533,904

ST. LOUIS, MISSOURI.

Lying upon the bank of the finest river on the continent, in latitude 38° 37' 28" north, and longitude 90° 15' 30" west from Greenwich, and backed by untold acres of lands, rich in all the elements of agriculture, forests, and mines, which may be made tributary to her commerce, St. Louis is entitled to important consideration in the investigation of commercial affairs on the western rivers. Having already reached an enviable position among her sister cities, she is looking westward with a system of railways intended not only to bring all the rich agricultural and mineral treasures of the Missouri basin into her markets, but event-

ually to extend beyond the Rocky Ridge to the valley of the Great Salt lake, and still further onward to the golden shores of the Pacific ocean. Though these ultimate results are some years distant, yet a glance at the accompanying map will satisfy any one that a full development of the immense resources of that portion of the Mississippi valley north and west of St. Louis, and most of which has not as yet been reduced to the first stages of culture, but must sooner or later pay its tribute to the trade and commerce of St. Louis, will be sufficient to gratify the most sanguine expectations of those engaged in pushing forward the improvements tending to such an end. Whether these railways are extended beyond the Rocky mountains or not, therefore, there is a territory belonging to the great valley which can scarcely avoid becoming tributary to the business of this city, much larger and more prolific of all the elements of wealth than can be found adjacent to any other city in the West. This fact alone is decisive of the future greatness of St. Louis, provided she puts forth her energies towards the progress of the means for the exhumation of the resources of this country. Her connexions with eastern cities, through Cincinnati and Chicago, are already decided upon and secured beyond contingency, as will be seen by reference to the description of canals and railways.

This is now one of the most important of the river-ports. Surrounded by an extensive back country of unsurpassed fertility, well watered and endowed with all the advantages requisite to support a dense and thriving population, St. Louis bids fair to become, at no distant day, one of the first cities in the United States in point of population and commercial wealth. It is situated on the Western shore of the Mississippi river, about 196 miles above the mouth of the Ohio, 20 miles below the mouth of the Missouri, its principal affluent, and 40 miles below that of the Illinois. Still further northward the Fever, the Wisconsin, and other rivers from the country eastward, and the Des Moines and Iowa, with some less notable streams from the west, fall into the Mississippi, conveying the rich products of the extensive prairie lands on their borders to the markets of St. Louis. Here these products are usually exchanged for merchandise and supplies necessary to the settlement and subsistence of a new country. Many furs are also brought down these various streams to St. Louis, and exchanged for the goods and supplies which constitute the stock in trade of the western trapper and the Indian trader. Above that city these waters are navigable only by the lighter draught or smaller class of boats, while below it the large and splendid New Orleans packets find their rapidly increasing trade. These facts involve the necessity of a transshipment of almost the entire bulk of produce and merchandise arriving at St. Louis, and intended for points either above or below that city, before it can proceed to its destination; and St. Louis is thus constituted the great receiving and distributing depot for all the upper country of the Mississippi and Missouri basins. To the vastness of this country, therefore, the immense fertility of its soil, and its rich mineral resources, inducing an inexhaustible tide of immigration, does St. Louis owe her late rapid growth in population and prosperity.

The city is one of the oldest French trading and military posts in the Mississippi valley, and has been looked upon for many years as the key

to the great territory to which we have referred; but, until the last twenty years, its progress was very slow. In 1840 it could claim but 16,469 inhabitants, whereas in 1850 it numbered a population of no less than 82,744 souls, showing an increase of 66,000 souls, and an average rate of duplication once in four years. She has, moreover, grown much more rapidly during the last ten years than at any former period. Thus, in 1800, St. Louis had 2,000 inhabitants. During the last fifty years her population has been doubled once in $9\frac{1}{2}$ years; during the last 40, once in 9; the last 30, once in 7; the last 20, once in $5\frac{1}{2}$; and the last 10, once in every 4 years. Such has been the almost unprecedented growth of St. Louis from natural causes. What, then, may not be expected as the result of the construction of her numerous railways now in progress, or projected, in connexion with her natural advantages? The opening of these artificial routes will give her easy access to numerous deposits of lead, iron, coal, and copper ores, within a circuit of 90 miles, equal to the wants of the whole Mississippi valley for centuries, which have not, to this time, been brought to use. The lack of necessary means of transportation has heretofore precluded the successful working of these numerous mines, though they have been known to exist in richness rarely if ever excelled. The completion of the "Pacific," the "Hannibal and St. Joseph," the "St. Louis and North Missouri," and other projected railways, which is now determined, and will open easy communication with these mineral regions, besides developing the resources of large tracts of country second to none other in agricultural richness. Owing to these promising natural features, the hidden wealth of which will be brought to light and rendered available through these stupendous lines of internal improvement, the people of St. Louis confidently anticipate a continuation of their present rate of increase during the next ten years, when her capacity will be equal to the support of nearly 500,000 inhabitants, when her mines may vie with those of Sweden and Great Britain, and her manufactures and agricultural productions, her railway and river tonnage, and her aggregate commerce, may not be exceeded by those of any other region of the world.

A more detailed account of the different lines of public improvement in progress will be found under the proper head, in another part of this report, and their situation may be ascertained by reference to the accompanying railway map.

The following tables, compiled from annual statements, will exhibit something of the growth and character of the commerce of St. Louis during a term of years.

Comparative statement of some of the principal articles landed at St. Louis during six years—ending December 31, 1852.

Articles.	1851.	1850.	1849.	1848.	1847.	1846.
Wheat.....bush.	1,700,708	1,792,074	1,792,535	2,194,789	2,432,377	1,838,926
Flour.....bbls.	793,892	292,718	306,412	387,314	308,568	220,457
Corn.....bush.	1,840,909	968,028	305,383	699,693	1,016,318	688,649
Oats.....do..	794,421	697,432	252,291	243,700	202,265	95,612
Barley, &c.....do..	101,674	69,488	46,263	55,502	57,380	10,150
Pork....casks & tierces.	15,298	2,969	.....	.....	.....	.....
Pork....boxes & bbls.	103,013	101,762	13,862	97,642	43,692	48,981
Pork, bulk.....pieces.	768,819	449,556	.....	.....	.....	.....
Pork, bulk.....tons.	147	.....	.....	.....	.....	.....
Salt.....sacks.	216,933	261,230	291,709	204,741	106,302	177,724
Salt.....bbls.	46,250	19,158	23,553	38,809	41,380	58,948
Hemp.....bales.	65,366	60,862	46,290	47,270	72,222	33,853
Lead.....pigs.	503,571	573,502	590,293	705,718	749,128	730,829
Tobacco.....hhds.	10,371	9,055	9,879	9,014	11,015	8,588
Beef....tierces & casks.	5,640	2,586	10,867	9,369	5,735	.....
Beef....bbls.	8,872	6,049	12,336	7,806	4,720	1,716
Hides.....pounds.	90,736	94,228	68,902	62,097	71,877	63,396
Whiskey.....bbls.	47,991	25,959	29,985	29,758	22,239	29,882
Sugar.....hhds.	29,276	25,796	26,501	26,116	12,671	11,603
Sugar.....bbls.	20,854	5,035	.....	.....	.....	.....
Sugar.....boxes.	15,833	11,328	7,348	14,812	20,111	5,752
Coffee.....sacks.	101,904	73,673	67,353	78,842	77,767	65,128
Molasses.....bbls.	40,231	29,518	29,214	21,943	21,554	14,996
Lard.....do..	14,465	61,525	58,279	67,339	32,021	26,462
Lard.....tierces.	37,743	17,925	15,801	6,579	2,150	.....
Lard.....kegs.	14,450	11,549	18,845	14,180	8,595	14,730
Bacon....casks & tierces.	16,701	30,035	16,280	29,423	14,425	11,803
Bacon....boxes.	1,564	1,320	3,245	6,622	1,289	1,648
Bacon....pieces.	6,629	49,321	.....	.....	.....	.....
Lumber.....M feet.	16,280	14,676	24,188	22,137	16,017	.....
Shingles.....M.	7,805	4,316	7,334	15,851	13,098	.....
Lath.....M.	1,265	283	1,290	2,598	2,817	.....

Over and above the articles here enumerated there are mentioned some fifty-one others, including nearly all articles of produce and merchandise prominent in the trade and productions of the West. The above, however, have been selected as showing the bulk of the commerce of the river at this point.

Below are presented tables exhibiting the number and tonnage of boats arriving at St. Louis in the prosecution of this trade during a series of five years:

Whence.	1851.	1850.	1849.	1848.	1847.
New Orleans.....	300	301	313	446	502
Ohio river.....	457	493	406	429	430
Illinois river.....	634	788	686	690	658
Upper Mississippi.....	639	635	806	697	717
Missouri river.....	301	390	355	327	314
Cairo.....	119	75	122	194	146
Other points.....	175	215	217	396	204
Total number.....	2,625	2,907	2,905	3,179	2,969

Tonnage of steamboats and barges was, in 1850.....	681,256
Do.....do.....do.....do.....do..... 1851.....	683,140
Wharfage collected in 1850.....	\$41,195
Do.....do.....do..... 1851.....	48,156

Showing, that while the number of arrivals has fallen off, the loss is more than compensated by the enlarged capacity of the boats, as exhibited by the increase of tonnage.

The foreign commerce of St. Louis, consisting of importations, is as follows :

Sugar and molasses.....	\$289,753
Hardware, &c.....	133,401
Railroad iron.....	100,211
Earthenware.....	98,786
Tin plates, tin, copper, iron, &c.....	81,482
Dry goods and fancy goods.....	24,287
Brandy, wines, gin, &c.....	24,712
Burr-stones.....	2,259
Drugs.....	2,618
Total.....	<u>757,509</u>

Amount of hospital money collected at the same port.....	\$2,941
Amount of duties collected.....	239,318
Hospital money expended in relief to sick and disabled boatmen.....	3,441

No estimate of the total value of the commerce of St. Louis for 1851 has been made, nor, indeed, would it be an easy task to prepare such with any degree of accuracy. Enough, however, is here shown to exhibit the importance which it must soon attain, and the power and influence it will ultimately exert on the commerce of the Atlantic cities.

NOTE.—St. Louis and Cincinnati, as already noticed, are being connected by the Ohio and Mississippi railroad. This road is all under contract, and crosses the Wabash river at Vincennes. From this point a railroad is under contract to Evansville, and finished from Evansville to White river, about thirty-six miles; the whole will be completed the present year. Henderson, in Kentucky, is on the Ohio river, twelve miles below Evansville. From this point a railroad has been surveyed through the State of Kentucky, passing Madisonville, Hopkinsville, and Trenton, striking the Tennessee State line about twelve miles north of Clarksville, and the whole distance in Kentucky is about ninety miles; and sufficient funds have been subscribed to grade, culvert, and bridge it. Henderson is at a point about central to that portion of the great Illinois coal field lying south of the Ohio river. This road passes over these coal beds for about fifty miles. The best workable vein, near Madisonville, is 8½ feet thick, good roofing and drainage; and the mines are so situated that the coal cars, when laden, will descend with grades on lateral roads of about thirty feet per mile; and the coal can be carried on a good road for about one cent a ton per mile. The citizens of Nashville and the county of Davidson are now deeply interested in securing the stock to connect the residue of the distance in Tennessee, about fifty miles; and the Kentucky and Edgefield company have taken \$205,000 of the stock. This road will secure to Nashville her fuel at the cheapest rate, and open a direct communication between the southeast and Atlantic seaboard from Florida to the Capes of Virginia; and as it starts at Henderson, opposite the centre of the great Wabash valley, from which the States of South Carolina, Georgia, East and West Florida, now get their supplies by way of New Orleans and the gulf, this communication will supply all the northern portions of those States with all their breadstuffs, stock, &c., at about as cheap a rate as it can be done when the articles arrive at Charleston or Savannah, so far as carrying is concerned; and the road must, necessarily, be one of the greatest thoroughfares in the United States, embracing, as it does, every variety of climate and agricultural production, and the shortest communication to the seacoast; and the attention of the public is now being anxiously turned to this great work. The country over which it passes is nearly “champagne” in Kentucky, and all highly agricultural.

STEAM MARINE OF THE INTERIOR.

As the rivers of the great valley west of the Alleghany ridge—the Mississippi and its tributaries—constitute the most important portion of our river navigation, a full report of the business transacted upon those waters is very desirable, especially in this connexion; as it would show not only the relative value of the commerce of the rivers, as compared with that of the lakes, but also the exchanges among the several different points upon the rivers. Regrets have before been expressed that returns have only been received from a few of the more important river cities in detail. It is thought best, however, to state the amount of tonnage employed in that trade, as the best means at hand of submitting proper approximate statements of the commerce of the great rivers. The character of the trade, and the principal articles of produce entering into it, will be sufficiently shown by the detailed statements of the commerce of the largest cities. This trade has long been considered of the highest importance by our most distinguished statesmen, who foresaw the necessity of making provisions for its prospective augmentation, as well as by the highest commercial authorities who have ever advocated a liberal policy of internal improvements, and also by private individuals engaged in commercial affairs.

Mr. Calhoun, in his able report to the Memphis convention, convened for the purpose of considering the valuable interests involved, amounting to more than three hundred millions, and to concert measures for improving the navigation of the "western waters," says: "Looking beyond, to a not very distant future, when this immense valley—containing within its limits one million two hundred thousand square miles, lying, in its whole extent, in the temperate zone, and occupying a position midway between the Atlantic and Pacific oceans, unequalled in fertility and the diversity of its productions, intersected by the mighty stream, including its tributaries, by which it is drained, and which supply a continuous navigation of upwards of ten thousand miles, with a coast, including both banks, of twice that length—shall be crowded with population and its resources fully developed, imagination itself is taxed in the attempt to realize the magnitude of its commerce."

The trade on the Mississippi and its tributaries is now a matter of great public concern. By its rapid advance and its great future it claims equal notice with the foreign trade and the trade of the lakes, and perhaps more than either as one of the main sources of the wealth of the confederacy.

The following remarks from De Bow's Review show the interest that is felt in this matter: "The free and uninterrupted navigation of these great inland waters must, of course, be a matter of prime interest to the country. They are to the populous nations on their banks as the ocean itself, over which commerce, not kings, presides. No construction of State powers, as contradistinguished from Federal, can exclude these arteries of trade from the pale of government regard and protection. They are points of national concern. No State, nor alliance of States, can apply the remedies which their exigencies require. No narrow views of economy, no prospective expenditure, however vast.

could be allowed to deter the legislature of the Union from approaching the solemn act of duty which is involved here."

The following resolutions were, with others, adopted by the Memphis convention:

"That safe communication between the Gulf of Mexico and the interior, afforded by the navigation of the Mississippi and Ohio rivers, and their principal tributaries, is indispensable to the defence of the country in time of war, and essential also to its commerce.

"That the improvement and preservation of the navigation of those great rivers are objects as strictly national as any other preparation for the defence of the country; and that such improvements are deemed by this convention impracticable by the States or individual enterprises, and call for the appropriation of money for the same by the general government."

The following statements, compiled chiefly from a valuable and useful report, already referred to, on the steam marine of the inland waters, are presented here to exhibit the necessity for secure inland navigation, and as having a special bearing on the trade of the Mississippi valley and the St. Lawrence basin:

"The order in which the several collection districts on the lakes and rivers of the interior are shown, commences on Lake Champlain, from which it extends up the St. Lawrence river and Lake Ontario to the Niagara river; thence up Lake Erie, the Detroit river, and Lake Huron, to Michilimackinac; thence up Lake Michigan to Chicago; thence across the Mississippi river, and down that stream to New Orleans; thus extending on a natural line of interior navigation, which has but two slight interruptions, from the waters of the Gulf of St. Lawrence to those of the Gulf of Mexico, a distance of not less than 2,850 miles, upon which is employed, for purposes of trade and travel, a steam tonnage of 69,166 tons.* The Ohio basin forms of itself a cross-section some 1,100 miles in length, embracing simply the districts on that river and its tributaries.

"Immediately west of Lake Superior lies the Minnesota district, with a collector at Pembina, on the line between our own and the British possessions, and a deputy at St. Paul, on the Mississippi, within the Territory of Minnesota. This is a new district, and steamboats employed on its waters have hitherto been enrolled at St. Louis. During the years 1850 and 1851, three or four good steamers ran regularly between St. Louis and St. Paul, and Fort Snelling, two of which took several large pleasure parties almost two hundred miles up the Minnesota (St. Peter's) river. A small boat (the only one yet built in the Territory) has been running the past year above the falls of St. Anthony, 1,700 miles from the mouth of the Mississippi. Steamers run earlier and later on the waters of the Minnesota than those of the region of the northern lakes, in the same latitude.

"Following the water-flow south from the Minnesota district, we reach the Gulf of Mexico by the Mississippi river, along which another inte-

* This distance is traced from Montreal to Lewiston on the regular line of steamboat navigation; thence by land (the first interruption) to Buffalo; thence on the regular line of steamboat navigation to Chicago; thence by the Illinois and Michigan canal (the second interruption) and the Illinois river, to the Mississippi; and by that river to the Gulf.

rior section may be constructed, to show separately the strength of that division of our steam-marine. This section presents the following results :

Steam-marine of the Mississippi Valley.

Districts.	No. of steamers.	Tonnage.	No. officers, crews, &c.	Passengers
		<i>Tons. 95ths.</i>		
Minnesota*				
St. Louis.....	131	31,833 92	2,340	367,793
Memphis.....	3	450 00	15	34,000
Vicksburg.....	6	937 87	101	46,800
Natchez†.....				
New Orleans.....	113	34,736 00	3,958	434,000
Total.....	253	67,957 84	6,414	882,593

* New district.

† No enrolment.

Steam-marine of the Ohio basin.

Districts.	No. of steamers.	Tonnage.	No. officers, crews, &c.	Passengers
		<i>Tons. 95ths.</i>		
Pittsburg.....	112	16,942 68	2,588	466,661
Wheeling.....	46	7,190 67	651	243,170
Cincinnati.....	111	24,709 07	2,789	2,460,726
Louisville.....	61	15,180 66	1,913	270,000
New Albany*				
Evansville*				
Nashville.....	18	3,578 13	397	24,340
Total.....	348	67,601 31	8,338	3,464,967

* New districts.

“By a summary of aggregates, it appears that the entire strength of the steam-marine of the lakes and rivers of the interior is comprised in 765 vessels, measuring 204,725 $\frac{1}{2}$ tons, and employing 17,607 persons as officers, crews, &c. Of this aggregate, 663 are ordinary steamers, measuring 184,262 $\frac{1}{2}$ tons, and employing 16,576 persons; 52 are propellers, measuring 15,729 $\frac{1}{2}$ tons, and employing 817 persons; and 50 are ferry-boats, measuring 4,733 $\frac{1}{2}$ tons, and employing 214 persons. Of the lake steamers, 56 of the ordinary, and all but two of the propellers, are moved by high-pressure engines, and 48 of the ordinary by low-pressure. All of the river steamers, and all of the ferry-boats, have high-pressure engines. Low-pressure engines have at several periods been partially tried on the western rivers, and abandoned. In the year 1818, *three* boats of this description were built on those waters; in 1819, *seven* boats; in 1820, *two*; in 1822, *one*; in 1823, *one*; in

1824, *two*; in 1825, *six*; in 1826, *eight*; in 1827, *four*; in 1828, *two*; in 1829, *three*; in 1830, *two*; in 1831, *four*; total, *forty-seven*; of which thirty-three were built at Cincinnati, five at Louisville, three at New Orleans, and the remaining six at different points on the Ohio. On the lakes, except for propellers, high-pressure engines have now comparatively few advocates, and within the last four or five years very few of them have been built.

“The highest of the navigable waters of the United States is Lake Superior, which is embraced in the district of Michilimackinac, with the St. Mary’s river, Green Bay, and the Straits of Mackinac. Following the water-flow from this district, we reach the Gulf of St. Lawrence through Lakes Huron, Erie, Ontario, and the St. Lawrence river; and the Atlantic coast by Lake Champlain and the New England improvements in one direction, and in another by the Erie canal and the Hudson river.

Tabular statement of steamers on the rivers.

Places.	No.	Tonnage.	No. officers, crew, &c.	Passengers carried.	Average distances.
St. Louis.....	131	81,838	2,340	367,793	892
Memphis.....	3	450	15	34,000	.....
Vicksburg.....	6	937	101	46,800	.....
Natchez.....					.....
New Orleans.....	113	34,736	3,958	434,000	.....
Nashville.....	18	3,578	397	24,340	750
Evansville.....					.....
New Albany.....					.....
Louisville.....	61	15,185	1,913	270,000	1,001
Cincinnati.....	111	24,709	2,789	2,400,796	.....
Wheeling.....	46	7,190	651	243,170	220
Pittsburg.....	112	16,942	2,588	466,666	280
Total.....	601	235,661	14,752	4,287,555	.....

In order to show correctly the currents of actual travel by the waters of these several lines of interior collection districts, with the local movement at the principal port of each, the following statement of the several lines is presented:

Lines of travel.	Number of passengers.
1. By the St. Lawrence and the lakes.....	1,514,290
2. By the Mississippi and Missouri rivers.....	882,593
3. By the Ohio and its tributaries.....	3,464,967
Total.....	5,861,850

Statement of the total number of persons who arrived at and departed from the principal port of each collection district of the interior, by steamers, railroad cars, stage-coaches, canal boats, and steam ferry-boats, during the year ending June 30, 1851.

LINE OF THE NORTHERN FRONTIER.

Ports.	By steam-boats.	By railroad cars.	By canals.	By stages.	By steam ferry-boats.	Total.
Burlington.....Vt..	155,000	81,816				236,816
Plattsburg.....N. Y.	3,500					3,500
Ogdensburg.....do..	60,562	79,408			104,620	244,590
Sackett's Harbor.....do..				5,952	1,240	7,192
Cape Vincent.....do..						
Oswego.....do..	22,830	33,615	230			56,675
Rochester.....do..	210	277,139				277,349
Lewiston.....do..	22,987	45,944			2,400	71,331
Buffalo.....do..	171,557	381,586	43,000		26,280	622,423
Erie.....Pa..	60,630			21,920		82,550
Cleveland.....Ohio..						
Sandusky City.....do..	2,190	157,751				159,941
Toledo.....do..	31,842					31,842
Detroit.....Mich..	369,430	197,399			352,000	918,829
Mackinaw.....do..	41,212					41,212
Chicago.....Ill..	85,800	71,253	42,770			199,823
Total.....	1,027,750	1,325,911	86,000	27,872	486,540	2,953,073

LINE OF THE MISSISSIPPI.

*St. Paul, Minnesota.....						
St. Louis, Missouri.....	318,713			18,582	49,080	386,375
Memphis, Tennessee.....					34,000	34,000
Vicksburg, Mississippi.....	10,800				36,000	46,800
†Natchez, Mississippi.....						
New Orleans, Louisiana....	419,000				15,000	434,000
Total.....	748,513			18,582	134,080	901,175

LINE OF THE OHIO.

Pittsburg, Pennsylvania ...	428,745				37,911	466,656
Wheeling, Virginia.....	139,170			27,998	104,000	271,168
Cincinnati, Ohio.....	270,796	159,287			2,190,000	2,620,083
Madison, Indiana, in the district of Cincinnati.....		70,149				70,149
Louisville, Kentucky.....	120,000	36,500			150,000	306,500
*New Albany, Indiana.....						
*Evansville, Indiana.....				775		775
Nashville, Tennessee.....	24,340					24,340
Total.....	983,051	265,936		28,773	2,481,911	3,759,671

* New districts.

† No enrolments.

RECAPITULATION.

Lines.	By steam-boats.	By rail-road.	By canals.	By stages.	By steam ferry-boats.	Total.
Northern frontier	1,027,750	1,325,911	86,000	27,872	486,540	2,953,073
Mississippi valley	748,513	.....	.....	18,582	134,080	901,175
Ohio basin	983,051	265,936	.....	23,773	2,481,916	3,759,676
Total.....	2,759,314	1,591,847	86,000	75,227	3,102,536	7,614,924

It is not surprising that a first attempt to collect and embody this information should have fallen short of complete success at all points. The wonder is, rather, that so many facts should have been obtained, of a reliable character, as are given in the preceding tables. The deficiencies are few in number; and had more time been devoted to the collection of this particular class of facts in the Cuyahoga, Miama, and Vicksburg districts, they would have been hardly worth mentioning.

There are several centres of interior commerce and navigation, at which it would seem of interest to know the *radiation* of trade and travel, as shown by natural and artificial channels of communication, and the boats and other descriptions of conveyance in or upon them. One of these centres is at the head of the Ohio river, another at the foot of Lake Erie, a third at the head of Lake Michigan, and a fourth on the Mississippi, below the outflow of the Illinois and the Missouri rivers. The heavy commerce that centres midway of the Ohio valley, though reaching up the Muskingum, the Wabash, the Cumberland, and the Mississippi, by natural streams, and back into Ohio and Indiana by artificial channels, is more *direct* in its main lines, which extend to Pittsburg in one direction, and to New Orleans in another. In the first and last of the four districts named, the number of boats and men, and the amount of tonnage, employed on each of the several streams to which the trade of those districts extend, as well as the *travel* upon each, are shown by the following subdivisions of the whole number of boats therein severally enrolled.

Subdivision of the St. Louis district.

Number of steamers from St. Louis.	In what trade.	Tonnage.	Number of officers, crews, &c.	Pressure.		Number of passengers.	Average distance carried.	Longest trip.
				High.	Low.			
26	To New Orleans.....	12,575	628	All.	None.	64,008	.....	<i>Miles.</i> 1,195
27	To Illinois river.....	4,527	412	"	"	48,799	.....	320
28	To Missouri.....	6,148	495	"	"	57,284	.....	1,780
42	To Upper Mississippi..	7,038	716	"	"	140,822	.....	960
3	To Cairo	658	54	"	"	7,800	.....	200
5	Ferry-boats.....	885	35	"	"	49,080	.....	1
131		31,833	2,340			366,793	.....	.....

Subdivision of the Pittsburg district.

Number of steamers at Pittsburg.	In what trade.	Tonnage.	Number of officers, crew, &c.	Pressure.		Number of passengers.	Average distance carried.	Longest trip.
				High.	Low.			
		<i>Tons.</i>					<i>Miles.</i>	
7	Cincinnati.....	2,451	470	All.	None	89,828	479	.....
16	Monongahela river.....	1,332	224	"	"	112,142	56½	.....
2	Youghiogeny river.....	294	29	"	"	9,862	33	.....
2	Beaver river.....	203	30	"	"	70,600	29	.....
2	Wheeling.....	371	34	"	"	19,600	93	.....
3	Alleghany river.....	334	42	"	"	7,000	56	.....
3	Zanesville.....	370	44	"	"	2,890	257	.....
42	St. Louis, Nashville, &c.	8,817	1,296	"	"	110,323	1,133	.....
13	Transient boats.....	1,500	292	"	"	6,500	150	.....
11	Coal steamers.....	674	84	"	"	.....	494	.....
11	Ferry steamers.....	594	44	"	"	37,911	.....	.....
112		16,942	2,589			466,656	.....	.....

The main trade of each of the other four districts named is in a direct line from the second, nearly north and south, by Lake Michigan and the Illinois river, and the Illinois and Michigan canal; and from the third in a direction indicated by the course of Lakes Erie and Huron and that of the Erie canal. The points embraced by the ramifications of travel, however, are more numerous; and hence the following subdivisions are intended only to include them, and show the total number of passengers who arrived at and departed from the principal port of each of these districts, by the several descriptions of conveyance mentioned, during the period included in all the preceding tables—the year ending 30th June, 1851.

Buffalo subdivision.

Conveyance.	No. of passengers arrived at and departed from Buffalo.
By ordinary steamers.....	157,251
By propellers.....	14,300
By ferry-boats.....	26,280
By the Buffalo and Rochester railroad.....	262,386
By the Buffalo and Niagara Falls railroad.....	119,200
By the Erie canal.....	43,000
Total.....	622,423

Chicago subdivision.

Conveyance.	No. of passengers arrived at and departed from Chicago.
By ordinary steamers.....	81,960
By propellers.....	3,900
By the Galena and Chicago Union railroad.....	71,253
By the Illinois and Michigan canal.....	42,770
Total.....	199,883

RECAPITULATION AS TO TRAVEL.

Principal ports.	Number of passengers.
To and from St. Louis.....	367,795
To and from Pittsburg.....	466,656
To and from Buffalo.....	622,423
To and from Chicago.....	199,883
Total.....	1,656,757

Showing a recorded movement at these four commercial centres of the interior, (of the Northwest, indeed,) of one million six hundred and fifty-six thousand seven hundred and fifty-seven persons in the course of a year, where the resident population is but 217,946. No fact can better illustrate the activity of our people.

By the national census for the year 1850, the population of each of the four cities at which this movement is shown, is stated as follows :

St. Louis.....	77,860
Pittsburg, 46,601; with Allegheny city.....	67,862
Buffalo.....	42,261
Chicago.....	29,963
Total of the four commercial centres.....	<u>217,946</u>

Statement of the amount of marine risks taken, and of losses paid, on vessels and cargoes of the United States, in the several collection districts of the interior, for the year ending June 30, 1851.

Districts.	Amount insured.			Losses paid.			Value of property destroyed.
	On hulls.	On cargoes.	Total.	On hulls.	On cargoes.	Total.	
Vermont.....	\$20,000 00	\$387,455 00	\$507,455 00		\$500 00	\$500 00	\$500 00
Champlain.....							
Oswegatchie.....	3,500 00	19,122 59	22,622 59				
Cape Vincent.....	4,662 00	1,802 00	6,464 00				
Sackett's Harbor.....	85,306 00	173,698 00	259,004 00	\$12,008 00	11,000 00	23,008 00	26,300 00
Oswego.....	673,350 00	1,693,216 00	2,366,566 00	36,066 77	15,017 43	51,084 20	70,880 41
Genesee.....	30,400 00	105,000 00	135,400 00				
Buffalo Creek.....	1,169,100 00	5,227,668 00	6,396,768 00	46,100 00	43,000 00	89,100 00	206,994 00
Presque Isle.....							500 00
Cuyahoga.....	189,000 00	1,962,275 00	2,151,275 00	4,833 66	1,730 00	6,563 66	8,521 00
Sandusky.....				350 00		350 00	1,650 00
Miami.....							
Detroit.....							63,400 00
Michilimackinac.....							
Milwaukee.....							
Chicago.....				26,997 00	11,430 00	38,427 00	44,613 00
Minnesota.....							
St. Louis.....							230,492 00
Memphis.....							
Vicksburg.....							
Natchez.....							
New Orleans.....							
Nashville.....							
Evansville.....							186,624 17
New Albany.....							
Louisville.....							
Cincinnati.....	956,357 49	16,082,082 33	17,038,439 82	76,021 59	181,406 89	257,428 48	310,000 00
Wheeling.....	80,833 33	683,934 00	764,767 33		1,989 03	1,989 03	2,652 00
Pittsburg.....	1,813,413 33	3,008,966 00	4,822,379 33	16,452 60	13,972 98	30,424 98	38,715 00
Total.....	5,025,922 15	29,345,218 92	34,371,141 07	218,839 62	280,045 73	995,207 52	1,568,106 73

The total amount of property thus shown to have been destroyed on the lakes and rivers of the interior, in the course of the year which ended on the 30th day of June, 1851, is much below the common estimate. But it is here presented only as an *approximation*, to receive just so much respect as statements made up in the manner of this are generally entitled to. It is perhaps quite as likely to be near the truth, however, as the exaggerated estimates usually made in such cases by interested parties who have a particular purpose to subserve. And with reference to it, must be steadily borne in mind the fact, heretofore mentioned, that the year embraced was one of unusual exemption from serious disasters on the lakes and interior rivers of the United States.

A list, containing the names of 618 steamboats lost on the rivers of the Ohio basin and the Mississippi valley, from the period of the first introduction of steam navigation thereon to the close of the year 1848, has been prepared by Captain Davis Embree, one of the oldest steamboat masters ever engaged upon the western waters.

This list shows the place where, and the time when, each of the boats so lost was built; the amount of its tonnage; the date of its loss; the length of time it had been running when lost; its original cost; the depreciation of its value by use; and the sum finally lost in its destruction. Of the 618 boats it embraces, 45 were lost by *collisions*, 104 by *fires*, and 469 by *snags* and other obstructions to navigation.

The following statement shows aggregate results :

Causes.	Number of boats.	Tonnage.	Original cost.	Depreciation of value.	Final loss.
Lost by collisions.	45	7,769	\$730,286	\$346,762	\$383,524
Lost by fires.	104	22,058	2,064,512	1,096,143	968,369
Lost by snags.	469	79,261	7,104,950	3,733,852	3,368,088
Total.	618	109,088	9,899,748	5,176,757	4,719,991

The losses sustained through explosions, collapsing of flues, and bursting of steam-pipes, are not included in this statement. With reference to losses of those descriptions, some interesting information is given at the close of Captain Embree's list, as also concerning the average life of steamboats on the western waters, the subjects of marine insurance thereon, the monthly and yearly cost of running boats, &c.

The history of the rise and progress of the steam-marine of the United States is one of the most interesting and wonderful things in our national advancement. Although one steamboat was built at Pittsburg as early as the year 1811, and although eleven other boats were built on the Ohio river and its headwaters within the next five years, it was not until the year 1817 that steam navigation could be said to have been fairly introduced upon the Mississippi and its tributaries. Previous to this year, there were twelve steamboats upon these waters, having an aggregate carrying capacity of 2,235 tons. From 1817 to 1834, the number of boats increased to 230, and the aggregate of tonnage to 39,000 tons. In 1842 there were 475 boats on the same waters: in 1851 this number had been increased to 601.

Official reports made to the Treasury Department in 1842, stated in detail the steamboat tonnage on the Mississippi and its tributaries in that year. The following table shows the increase from 1842 to 1851.

Comparative Statement.

Districts.	Tonnage.			
	1842.	1851.	Increase.	Decrease.
New Orleans.....	28,153	34,736	6,583	.....
Saint Louis.....	14,725	31,834	17,109	.....
Cincinnati.....	12,025	24,709	12,684	.....
Pittsburg.....	10,107	16,943	6,836	.....
Louisville.....	4,618	15,181	10,563	.....
Nashville.....	3,810	3,578	.....	232
Wheeling.....	2,595	7,191	4,596	.....
Vicksburg.....	.....	938	938	.....
Memphis.....	.....	450	450	.....
Total.....	76,033	135,560	59,759	232

The year following the real commencement of regular steamboat navigation on the waters of the Mississippi and its tributaries, (1817,) the first steamer employed on the upper lakes was built and launched on Lake Erie. In 1819 the waters of Lake Huron were first ploughed by the keel of a steamer, and in 1826 those of Lake Michigan. In 1832 a steamboat first appeared at Chicago, and in 1833 there were but eleven small steamers on the three lakes named. This date may therefore be fairly taken as that of the real commencement of steamboat navigation on the upper lakes.

Ten years later (February, 1843) a report was made to Congress of the number and tonnage of steamboats employed on those waters, "from January 1, 1841, to January 1, 1843." Though this is a very loose way of stating a matter of this kind, and does not give the true amount of the steam tonnage enrolled and employed in either *one* of the two years included—necessarily overstating it—yet the facts thus presented are used for the purpose of comparing them with those now ascertained, as showing correctly the steam tonnage of the year which ended on the 30th June, 1851.

Comparative Statement.

Districts.	Tonnage.		
	1841-'43.	1851.	Increase.
Buffalo creek.....	6,773	25,990	19,217
Presque Isle.....	2,813	5,691	2,878
Cuyahoga.....	1,855	6,418	4,563
Miami.....	887	1,745	858
Detroit.....	2,053	16,469	14,416
Mackinaw.....	.....	1,746	1,746
Chicago.....	.....	652	652
Total.....	14,381	58,711	44,330

These comparative statements show that in a period of nine years the steamboat tonnage of the Mississippi valley has nearly doubled itself, and that in a period of eight years that of the upper lakes has more than quadrupled itself: very significant facts touching increase of population, production, and trade.

The average size of steamboats now running on the lakes is found to be 437 tons; that of the steamboats of the Ohio basin $206\frac{3}{5}$ tons; and that of those of the lower and upper Mississippi, the Arkansas, the Missouri, and the Illinois rivers, $273\frac{7}{8}$. On the Mississippi and Ohio rivers there are many steamers of from 300 to 500 tons each, and a number from 600 to 800 each; but the large number of light-draught boats, built to run in periods of low water on those rivers, and in all seasons on the smaller streams emptying into them, carry the general averages down to the figures given above. Several of the passenger steamers of the lakes are of eleven hundred tons and upwards each.

Comparative Statement.

	Number.	Tonnage
Northern lakes of the United States.....	164	<i>Tons and 95ths.</i> 69,165 87
Mississippi valley .....do.....	253	67,957 84
Ohio basin.....do.....	348	67,601 31
Total for interior of the United States.....	765	204,725 12

The cost of steamboats on the lakes and rivers of the interior, varies from eight to ninety and from ninety to one hundred dollars per ton. Taking the lowest price, which is that attainable in the Ohio basin, as the standard, we have as the original value of the $204,725\frac{12}{100}$ tons of steam tonnage engaged in the transportation of passengers and the carrying trade on the lakes and rivers of the United States, for the year ending June 30, 1851, an aggregate of sixteen million three hundred and seventy-eight thousand dollars; an amount of capital that goes entirely out of existence, and has to be re-invested every three and a half to four years—the period of the “natural life” of a steamboat on the waters of the interior.

This fact indicates very clearly the immense extent of the employment provided and of the material consumed, in keeping up the steam tonnage of the United States to the standard required by the travel and trade of the country.

Statement of the number of steam and sail vessels enrolled, registered, or licensed, in the several collection districts of the United States, that were lost on the lakes and rivers of the interior in the year ending June 30, 1851, with the cause and manner of loss, and the number of persons who perished thereby.

Districts.	Number of vessels lost.										Number of persons lost.		
	By tempest.		By fire.		By collision.		By snags.		Total.		On the lakes.	On the rivers.	Total.
	Lakes.	Rivers.	Lakes.	Rivers.	Lakes.	Rivers.	Lakes.	Rivers.	Lakes.	Rivers.			
Vermont, Vt.....													
Champlain, New York.....													
Oswegatchie, New York.....													
Cape Vincent, New York.....													
Sackett's Harbor, New York.....	2		2						4				
Oswego, New York.....	15		1		4			2	20	2	23		23
Genesee, New York.....													
Niagara, New York.....													
Buffalo Creek, New York.....	8								8		11		11
Presque Isle, Pennsylvania.....	1								1		4		4
Cuyahoga, Ohio.....	2								2		8		8
Sandusky, Ohio.....					1				1				
Miami, Ohio.....													
Detroit, Michigan.....	3			2					3	2	1		1
Michilimackinac, Michigan.....													
Milwaukie, Wisconsin.....													
Chicago, Illinois.....	2				1				3		20		20
Minnesota, Min.....													
St. Louis, Missouri.....		1		1		4		5		11		97	97
Memphis, Tennessee.....													
Vicksburg, Mississippi.....													
Natchez, Mississippi.....													
New Orleans, Louisiana.....				11		1		5		17		51	51
Nashville, Tennessee.....								1		1			
Evansville, Indiana.....													
New Albany, Indiana.....													
Louisville, Kentucky.....					3			4		7		29	29
Cincinnati, Ohio.....		1		11		7		15		34		451	451
Wheeling, Virginia.....													
Pittsburg, Pennsylvania.....						1		1		2			
Total.....	33	2	3	28	6	13		33	42	33	67	628	695

In this table we find, at three periods, the following number of boats, with their tonnage, which have been built, worn out, and lost by disasters, in the west, prior to the year 1849:

Boats.	Tonnage.	Average tonnage.	Average number of years they lasted.
684	106,135	155	$4\frac{1}{2}$
552	90,791	164	$3\frac{3}{4}$
420	80,220	191	$3\frac{1}{2}$
1,656	277,146	167	$3\frac{3}{4}$

RECAPITULATION.

Boats built prior to 1849	1,656
Boats lost by disasters (nearly $44\frac{1}{2}$ per cent).....	<u>736</u>
Losses on boats, as per tables.....	\$5,643,791
Losses on cargo	<u>12,698,529</u>
Total loss.....	<u>18,342,320</u>

GENERAL AVERAGES.

Of the 765 steam-vessels on the waters of the interior, 164 run on the lakes, and 601 on the rivers.

Of the aggregate tonnage of these 765 steam-vessels of the interior, (viz: 204,725 tons) $69,165\frac{8}{9}\frac{7}{5}$ tons is upon the lakes, and $135,559\frac{1}{9}\frac{5}{5}$ upon the rivers.

Of the 164 steam-vessels on the lakes, 105 are ordinary steamers, 52 are propellers, and 7 are ferry-boats.

Of the 601 steam-vessels on the rivers, 558 are ordinary steamers, and 43 are ferry-boats.

The average tonnage of all the steam-vessels on the lakes (ferry-boats excepted) is 437 tons.

The average tonnage of all the steam-vessels on the rivers (ferry-boats excepted) is $235\frac{4}{9}\frac{2}{5}$ tons.

The average tonnage of the ordinary steamers on the lakes is $503\frac{6}{9}\frac{3}{5}$ tons, and that of the propellers $302\frac{4}{9}\frac{8}{5}$ tons.

The average number of persons employed on the ordinary steamers of the lakes is $19\frac{1}{2}$ to each; and the numbers employed on the propellers is $15\frac{1}{2}$ to each.

The average number of persons employed on the ordinary steamers of the rivers is 26 to each; the boats of the Ohio basin averaging a fraction *under* 26, and those of the Mississippi valley averaging a fraction *over* 26.

The 7 steam ferry-boats enrolled on the lakes measure $555\frac{6}{9}\frac{4}{5}$ tons; the 43 steam ferry-boats enrolled on the rivers measure $4,177\frac{9}{9}\frac{4}{5}$ tons.

Of the 558 ordinary steamers on the rivers, 317 are enrolled in the districts of the Ohio basin, and 241 in those of the Mississippi valley.

Of the 157 ordinary steamers and propellers on the lakes, 31 are enrolled on Lake Champlain, the St. Lawrence, and Lake Ontario; 66 are enrolled on Lake Erie; and 60 at Detroit and on the lakes above.

Of the 43 steam ferry-boats on the western rivers, 31 are in the Ohio basin, and 12 in the Mississippi valley.

A remarkable equality is found to exist, at the present time, in the distribution of the steam tonnage of the interior among the several lines of navigation heretofore specified:

The line of the St. Lawrence and the lakes has $69,165\frac{8}{9}\frac{7}{5}$ tons of it;

The line of the Mississippi valley has $67,957\frac{8}{9}\frac{4}{5}$ tons of it; and

The line of the Ohio basin has $67,601\frac{8}{9}\frac{1}{5}$ tons of it.

The 17,607 persons employed on the steam-vessels of the interior, as officers, crews, &c., are distributed as follows:

On the lakes and the St. Lawrence.....	2,855
On the Mississippi river and its tributaries.....	6,414
On the Ohio river and its tributaries.....	8,338

The tabular views of vessels lost on the waters of the interior, shows a total loss of 118—76 on the rivers, and 42 on the lakes.

Of this whole number, 35 were lost by tempest, 31 by fire, 19 by collision, and 33 by snags. All the losses on the rivers were of the class of boats denominated "ordinary steamers" in this report. Nearly all the losses on the lakes were of sail-vessels, schooners and brigs.

The loss of lives, as shown by same tabular view, amounted to a total of 695 for the year—628 on the rivers, and 67 on the lakes. This statement is probably under the truth, except as to the Cincinnati district, which is thought to have more assigned to it in the table than its real proportion of the fatal calamities of the year. But this information is always difficult to obtain, and can hardly be had in an entirely reliable form without a more determined and longer-continued effort than was possible in the present instance.

GRAND RESULT.

The entire steam-marine of the United States, employed on the coast and in the interior, separate and combined, is shown in the following tabular view, with the aggregate tonnage thereof, the total number of persons engaged upon the same as officers, crew, &c., and the entire number of passengers, distinguishing between those conveyed upon ferry-boats and those conveyed upon steam-vessels of all other descriptions.

United States steam-marine.

Description of vessels.	No.	Tonnage.	No. of officers, crew, &c.	Pressure.		Passengers carried annually.
				High.	Low.	
<i>Coast.</i>						
		<i>Tons. 95ths.</i>				
Ocean steamers.....	96	91,475 60	4,548	3	93	190,993
Ordinary steamers.....	382	90,738 40	6,311	152	230	3,782,572
Propellers.....	67	12,245 73	542	50	17	53,705
Steam ferry-boats.....	80	18,041 13	369	10	70	29,315,576
Total coast.....	625	212,500 91	11,770	215	410	33,342,846
<i>Interior.</i>						
Ordinary steamers.....	663	184,262 32	16,576	615	48	2,714,874
Propellers.....	52	15,729 12	817	50	2	44,440
Steam ferry-boats.....	50	4,733 63	214	50	.....	3,102,531
Total interior.....	765	204,725 12	17,607	715	50	5,861,845

RECAPITULATION.

	No. of vessels.	Tonnage.
Steam-marine of the United States—Coast.....	625	<i>Tons and 95ths.</i> 212,500 91
Steam-marine of the United States—Interior.....	765	204,725 12
Total	1,390	417,226 08

	By ferry-boats.	By all other steam-vessels.
Passengers of the coast division.....	29,315,576	4,027,270
Passengers of the interior division.....	3,102,531	2,759,314
Total	32,418,107	6,786,584

The strength of the steam-marine of the United States is thus shown to be comprised in thirteen hundred and ninety vessels, measuring four hundred and seventeen thousand two hundred and twenty-six and $\frac{9}{16}$ tons, and manned by twenty-nine thousand three hundred and seventy-seven-men.

MARINE DISASTERS ON THE WESTERN WATERS IN 1852.

The annual statements of marine disasters on the western rivers and lakes, during the year ending December 31, 1852, exhibit serious results. On the rivers, 78 steamers have been lost: 48 of which were snagged, 16 destroyed by explosions, 4 by fire, and the remaining 10 by various other mishaps, such as collisions, wrecks, &c.

By these disasters 454 lives were lost.

In addition to the above losses to the steam-marine on the rivers, there were lost 4 barges, 73 coal boats, 32 salt boats, and 4 flat-boats. The aggregate loss of property attending these casualties is not ascertained.

On the lake or northern frontier, the annual statement of Captain G. W. Rounds exhibits the loss of life for 1852 at 296, and of property at \$992,659. He recapitulates the losses as follows:

Amount of loss by collisions	\$261,950
Do. by other casualties.....	730,709
Do. by steam vessels has been	638,620
Do. by sail.....do.....do.....	359,039
Do. by Amer'n do.....do.....	907,487
Do. by British do.....do.....	65,172
Do. on Lake Ontario by steam	\$49,350
Do. on.....do.....by sail	29,589
	78 939

Amount of loss on Lake Erie by steam.....	\$543,470	
Do. ....do....by sail.....	197,830	
	<hr/>	\$741,300
Do. on Lake Huron by steam.....	16,000	
Do. ....do....by sail.....	53,600	
	<hr/>	69,600
Do. on Lake Michigan by steam.....	800	
Do. ....do.....by sail.....	78,020	
	<hr/>	78,820
Do. on Lake Superior by steam.....		24,000

Of the 229 disasters here detailed, 7 occurred in the month of April, 19 in May, 24 in June, 15 in July, 16 in August, 21 in September, 27 in October, 85 in November, (55 in one gale of the 11th and 12th,) and 15 in December. Six steamers, 7 propellers, and 35 sail vessels have gone out of existence entirely. In many instances the amount of losses, as above stated, have been matters of estimate, as many must necessarily be; but much pains and care have been taken to procure, in each case, the opinion of competent men who were most familiar with the circumstances.

These statements show the whole number of lives lost on the western waters in 1852 to have been :

On the rivers.....	454
On the lakes.....	296
	<hr/>
Total.....	<u>750</u>

NEW ORLEANS, LOUISIANA.

The city of New Orleans is situated on the left bank of the Mississippi river, about 100 miles from its mouth, in latitude 29° 57' 30" north, and longitude 90° 8' west. It is 953 miles below the mouth of the Ohio; 1,149 below the mouth of the Missouri, by the course of the river; 1,397 miles in a direct line, southwest from New York; 1,612 from Boston; and 1,172 from Washington by post-route. The population of the city in 1800 was about 8,000; in 1810, 17,242; in 1820, 27,176; in 1830, 46,310; in 1840, 102,193; and in 1850, with its suburbs, 125,000; showing a duplication of inhabitants during the last half century, on the average, once in twelve years. This, considering the character of the climate, and the fact that only about six months of each year are devoted to active business, is very extraordinary. The business population has always been somewhat migratory; many persons going there for the transaction of business during the winter season, and returning north to spend the summer months.

For commercial purposes, New Orleans occupies a very superior and commanding situation. It is the natural *entrepot* for supplies destined to all parts of the Mississippi valley, as well as the *depot* for those products of that salubrious region which seek a market seaward. By means of the Mississippi river and its tributaries, an inland trade is opened to her grasp, the magnitude of which has never been equalled. Steamers may leave her wharves and proceed on voyages of several

thousand miles without breaking bulk. The Mississippi and its affluents are flanked on either side by extensive territories, unsurpassed in richness of soil, which readily yield a harvest to the labors of the agriculturalist, whether it be of cane, corn, or cotton. These are the principal staples of the valley, and the receipts of each of their products at New Orleans are rapidly increasing. Heretofore, the river has been the only channel depended upon for their transportation. Several lines of railway are in process of construction now, however, to facilitate the transportation of cotton and sugar, produced at a distance from the river, to market, and thus enlarge the area of production. These bulky products will not bear an extensive land carriage by the old mode, and result in wealth to the producer; but the construction of railways for their cheap transit to the river, even, will not only change the prospects of the interior planters for the better, but will add greatly to the wealth and commerce of New Orleans, which is eminently a place of exchange and distribution. It is the great depot of the southwestern plantations, where cotton and sugar crops are bought and sold while still in the field, or "advanced" upon prospectively if necessary. It has also an extensive trade with Texas, Mexico, and the Gulf ports, as well as a very heavy foreign export trade. These facts will be fully illustrated by the accompanying tables. She has, besides, a large coasting trade with the Atlantic ports, the value of which can only be known generally by its results.

Since the acquisition of California by the United States, and the discovery of its mineral wealth, and the consequent opening of important trade to the Pacific, the relative importance of New Orleans to New York and other Atlantic cities has not been as well maintained as it was before. The Atlantic cities, but particularly New York, have received most of the California trade and commerce, owing to the establishment of lines of extensive ocean-steamers via Panama and Nicaragua, and the many steamers, and clipper and other ships, engaged in such trade from those ports, sent around Cape Horn. Sanguine expectations are entertained in New Orleans of the favorable results to that city, in respect to the Pacific trade, when the Gulf or Tehuantepec route is opened, either as a route of passage for ships by canal or a route of transit by railway. Doubtless, these anticipations would be realized; but, at the same time, the advantages of such route, it is believed, would accrue in an equally favorable degree to the Atlantic ports. The capital, shipping, and seamen, supplied by those cities to the whaling, Pacific, China, and East India trade, could not readily be transferred to New Orleans, even with the great advantages such route would afford that city. As the recipient, however, of the vast and inestimable resources of the Mississippi valley—which natural advantage can never be destroyed by artificial communications from that valley to the Atlantic—New Orleans will maintain its rank as one of the largest commercial cities of the world.

To present some of the advantages enjoyed by New Orleans as a commercial city, the following extracts are made from an article published in *De Bow's Review* in 1846, prepared by the present Assistant Secretary of the Treasury, William L. Hodge, esq. Mr. Hodge having been for many years a resident of New Orleans, intimately and person-

ally connected with the business interests of the city, was fully competent to do justice to the subject which he has discussed.

Mr. Hodge says:

"No city of the world has ever advanced as a mart of commerce with such gigantic and rapid strides as New Orleans.

"Her commercial life may be said to date after the cession of Louisiana to the United States, in 1803; as previous to that her commerce was insignificant; and yet, in this short period of about forty years, she already ranks as the *fourth city* of the world for the magnitude and value of her commerce, being exceeded only by London, Liverpool, and New York. The foreign importations of New York greatly exceed those of New Orleans; but if the whole of the foreign and coasting trade of both ports are taken into view, it might be a matter of doubt whether the *bulk*, and possibly the *value* of merchandise that enters and leaves the mouth of the Mississippi, is not fully equal to that which enters and leaves Sandy Hook. At any rate, if it is not now, it will in a very few years not only equal but exceed it, and place New Orleans the third in rank of the commercial cities of the world. * * *

"The facilities and convenience of transacting business at New Orleans are fully equal to, and in many respects superior to those of any other place. It is the centre of immense exchange operations; and any amount of funds can at all times be obtained at the shortest notice under good letters of credit, and bills negotiated with great readiness and facility on any prominent point in the United States, or any of the commercial cities of western Europe; and the banking institutions afford all reasonable accommodations to the local wants and trade of the city.

"Some European cities can show more splendid quays or magnificent docks for the accommodation of shipping, and the landing and loading of cargoes, far exceeding in appearance and durability anything of the kind in New Orleans, but in no way superior in point of actual convenience to the unpretending wharves of the city.

"As is generally known, the surface of the alluvial soil of Louisiana, including, of course, the site of the city, is considerably below the river in ordinary stages of high-water, and the country is protected from inundation by a raised and solid embankment called the '*Levee*,' extending on both sides of the river below, and a great distance above the city. Outside of the levee the bank of the river is called the '*Batture*,' which in many places is increasing from the continual alluvial deposits, while in other places the river has what is called '*a falling bank*,' and the water gradually encroaches on the land. In the former case the levee is advanced as the batture increases, and this has been the case in a large portion of the front of New Orleans, where in some parts the levee has, in the last 25 years, advanced full 1,000 feet; and the front warehouses now stand for a long extent that distance from the water, affording a splendid space for the vast bulk of produce that is annually landed and shipped. The wharves are constructed outside the levee on massive piles, driven with a heavy iron ram into the mud, and extending over the river into the water sufficiently deep to admit the heaviest steamboats and ships to lie up against them; heavy sleepers connect the piles at their tops, and on these piles the platform is laid

of thick planking, the edges of which are separated about one inch, to prevent the accumulation of dirt which falls through these interstices into the river flowing below, and in five minutes after the heaviest storm the whole surface is in perfect condition to receive any description of merchandise. These wharves are thus planked back until they join the crown of the levee, in some places 150 to 200 feet, which is made firm and solid by a constant coating of shells, and always kept in good order. One of these wharves presents an unbroken front on the river of 1,500 feet, and others 600 to 800 feet, and in the business season it is usual to see these fronts entirely occupied with steamboats lying bow on, and each with her stage rigged out to the wharf, actively engaged in loading or unloading. The wharves intended for sea-going vessels are detached from each other with an intervening dock, and each wharf accommodates a tier of vessels, which, unlike the steamboats, are moored up and down the river, one outside the other, three, four, and five tiers deep, with a broad common stage communicating with the levee, and extending on the bulwarks of the vessels to the outside one; the timber, plank, and all the conveniences for this staging, being furnished by the city, who even also supply tarpaulins to protect the goods in case of rain.

“These details are given to show to those who are familiar to shipping, the very great facilities and convenience that are afforded here, and without which it would be impracticable to get through the vast amount of business that is transacted in the city, except with great inconvenience and enormous expense.”

Having thus sketched the commercial position of the city, as it then was, and the advantages and *facilities* which it possessed for a rapid continued advancement, Mr. Hodge proceeds to predict the future greatness of this depot of the commerce of the Mississippi valley and the Gulf of Mexico. He alludes to the dispatch given to the discharge of steamers and other vessels, and then passes to the question whether New Orleans will probably retain her immense trade, and how she will be affected by the constant augmentation of population, and the inevitable development of the resources of the mighty West. But as these speculations with respect to the future of New Orleans have been for some time past in a rapid course of realization, it is considered unnecessary to reproduce them here.

The tables herewith exhibited, presenting, somewhat in detail, the commerce of New Orleans at different periods, will show that Mr. Hodge, in his most sanguine predictions, did not over-estimate the effect which time would produce, through the facilities he then enumerated.

The following table will show the value of some of the principal articles imported into New Orleans from the interior, at several periods, during the last ten years:

Articles.	1851-'52.	1845-'46.	1841-'42.
Apples.....	\$61,068	\$53,550	\$46,274
Bacon.....	6,348,622	1,671,855	521,912
Bagging.....	780,572	917,710	783,991
Bale rope.....	677,040	255,951	443,149
Beans.....	65,980	66,340	21,986
Butter.....	411,628	203,580	50,572
Beeswax.....	7,695	54,000	10,981
Beef.....	669,657	580,784	86,511
Buffalo robes.....	95,500	56,705	156,100
Cotton.....	48,592,222	33,716,256	24,425,115
Corn-meal.....	7,452	9,762	7,528
Corn.....	1,790,663	1,556,181	357,434
Cheese.....	253,543	114,784	37,940
Candles.....	323,616	31,383	14,372
Cider.....	900	405	3,390
Coal, western.....	425,000	131,400	55,292
Dried apples and peaches.....	4,920	2,134	3,956
Feathers.....	72,275	115,175	10,422
Flaxseed.....	5,190	6,584	9,588
Flour.....	3,708,848	3,770,932	2,198,440
Furs.....	1,000,000	900,000	250,000
Hemp.....	257,235	309,800	18,165
Hides.....	247,374	135,495	32,461
Hay.....	160,302	213,810	65,540
Pig iron.....	1,860	37,905	7,084
Lard.....	3,925,845	2,729,381	1,138,919
Leather.....	189,300	51,750	16,920
Lime.....	52,881	8,387	415
Lead.....	880,332	1,982,087	1,053,815
Molasses.....	4,026,000	1,710,000	450,000
Oats.....	347,454	202,039	337,969
Onions.....	34,368	13,958	66,676
Oil, linseed.....	19,708	31,780	10,675
Oil, castor.....	120,148	45,201	183,300
Oil, lard.....	395,192	49,514	.....
Potatoes.....	456,190	160,587	39,302
Pork.....	5,250,541	3,666,054	1,542,467
Porter and ale.....	4,060	1,270	4,112
Packing yarn.....	14,651	5,900	4,552
Skins, deer.....	24,950	87,280	32,194
Skins, bear.....	240	960	2,500
Shot.....	67,600	49,648	51,240
Soap.....	15,924	9,082	5,796
Staves.....	278,122	147,654	25,000
Sugar.....	11,827,350	10,265,750	3,600,000
Spanish moss.....	34,976	8,832	12,192
Tallow.....	26,140	148,590	76,065
Tobacco.....	7,196,185	4,144,562	3,699,160
Twine.....	18,728	4,404	10,790
Vinegar.....	552	675	1,563
Whiskey.....	1,097,640	936,832	360,070
Window-glass.....	48,127	11,324	11,044
Wheat.....	129,836	807,572	337,215
Other various articles, estimated.....	5,500,000	5,000,000	3,000,000
Total.....	108,051,708	77,193,464	45,716,045

The annexed table exhibits the total valuation of property from the interior during the last eleven years.

1851-'52	\$108,051,708	1845-'46	\$77,193,464
1850-'51	106,924,083	1844-'45	57,199,122
1849-'50	96,897,873	1843-'44	60,094,716
1848-'49	81,989,692	1842-'43	53,728,054
1847-'48	79,779,151	1841-'42	45,716,045
1846-'47	90,033,256		

Statement showing the value of exports and imports at New Orleans, annually, from 1834 to 1851, inclusive.

Year.	Value of exports.			Value of imports.
	Domestic produce, &c.	Foreign merchandise.	Total.	
1834.....	\$22,848,995	\$2,797,917	\$25,646,912	\$13,781,809
1835.....	31,265,015	5,005,808	36,270,823	17,519,814
1836.....	32,226,565	4,953,263	37,179,828	15,113,265
1837.....	31,546,275	3,792,422	35,338,697	14,020,012
1838.....	30,077,534	1,424,714	31,502,248	9,496,808
1839.....	30,995,936	2,185,231	33,181,167	12,064,942
1840.....	32,998,059	1,238,877	34,236,936	10,673,190
1841.....	32,865,618	1,521,865	34,387,483	10,256,322
1842.....	27,427,422	958,753	28,386,175	8,031,190
1843.....	26,653,924	736,500	27,390,424	8,170,015
1844.....	29,442,734	1,055,573	30,498,307	7,826,759
1845.....	25,841,311	1,316,154	27,157,465	7,345,010
1846.....	30,747,533	528,171	31,275,704	7,222,941
1847.....	41,788,303	233,660	42,021,963	9,222,504
1848.....	39,350,148	1,617,229	40,967,377	9,380,439
1849.....	36,957,118	654,549	37,611,667	10,050,697
1850.....	36,698,277	407,073	38,105,350	10,885,775
1851.....	53,968,013	445,950	54,413,963	12,958,294

Statement of the receipts on account of duties collected at New Orleans from 1835 to the 30th of June, 1852, inclusive.

1835.....	\$961,365 86	1844.....	\$857,131 12
1836.....	1,422,341 03	1845.....	1,218,435 24
1837.....	594,132 70	1846.....	988,973 48
1838.....	725,447 75	1847.....	734,578 82
1839.....	1,227,131 19	1848.....	2,115,219 69
1840.....	1,143,322 31	1846.....	1,565,845 34
1841.....	852,258 90	1850.....	1,961,859 71
1842.....	883,234 85	1851.....	2,319,370 21
1843.....	385,596 29	1852.....	2,282,082 28

No. 10.—Statement exhibiting the number of American and foreign vessels, and also their tonnage, employed in foreign trade in the district of New Orleans, which entered and cleared annually from 1826 to 1851, inclusive.

Years.	AMERICAN VESSELS.						FOREIGN VESSELS.						TOTAL.				
	Entered.			Cleared.			Entered.			Cleared.			Entered.		Cleared.		
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	
1826.....	48	691	.....	68	144	.....	23	622	.....	22	943	.....	72	313	.....	91,087
1827.....	66	657	.....	89	793	.....	30	937	.....	30	240	.....	97	354	.....	120,083
1828.....	76	821	.....	85	841	.....	39	791	.....	38	731	.....	116	612	.....	124,072
1829.....	67	680	.....	87	657	.....	32	535	.....	33	172	.....	100	215	.....	120,829
1830.....	83	243	.....	106	017	.....	35	393	.....	36	317	.....	118	636	.....	142,334
1831.....	70	231	.....	96	753	.....	55	541	.....	53	558	.....	131	772	.....	150,311
1832.....	68	637	.....	88	236	.....	56	942	.....	59	620	.....	125	579	.....	147,856
1833.....	71	476	.....	86	031	.....	62	346	.....	60	580	.....	133	822	.....	146,601
1834.....	69	131	456	119	230	.....	67	199	398	71	599	.....	136	330	793	183,829
1835.....	518	.....	587	137	391	316	58	690	317	58	778	834	156	370	904	196,169
1836.....	95	833	632	147	838	210	50	294	190	48	110	713	146	127	822	195,948	
1837.....	460	91	790	668	175	563	174	645	186	45	523	634	186	435	854	221,086	
1838.....	139	792	764	217	126	169	43	184	168	42	142	782	182	906	932	259,273	
1839.....	603	.....	654	177	257	219	56	618	208	54	772	822	183	165	982	232,029
1840.....	182	292	850	277	021	252	73	185	265	73	350	921	265	477	1,115	336,371	
1841.....	683	193	003	741	244	988	253	731	634	73	577	942	264	637	1,000	317,565	
1842.....	564	179	777	644	244	110	222	75	698	218	73	668	786	255	475	862	317,778
1843.....	833	261	053	808	292	473	223	90	450	220	80	697	1,066	351	503	1,028	373,170
1844.....	727	211	282	711	237	050	281	99	705	289	101	056	1,008	310	987	1,000	338,106
1845.....	752	237	268	639	243	543	320	126	719	331	129	561	1,072	363	987	970	373,104
1846.....	635	203	898	639	238	448	266	111	874	274	110	023	1,072	315	772	913	348,471
1847.....	652	232	477	741	274	112	333	170	059	397	166	766	1,075	402	536	1,138	440,878
1848.....	600	200	428	667	287	887	370	165	678	462	145	612	1,098	366	106	1,029	336,499
1849.....	686	229	245	714	293	456	412	196	204	317	194	234	1,098	425	449	1,131	487,690
1850.....	522	175	065	493	211	800	374	174	884	350	158	137	896	349	949	843	369,937
1851.....	542	194	776	645	292	934	328	134	136	322	128	612	870	328	332	967	421,566

MOBILE, ALABAMA.

Mobile is situated on a bay and river, bearing the same name, just at the point where the latter enters the former, and about thirty miles from the entrance of the bay into the Gulf of Mexico. It is in latitude 30° 40' north, and longitude 88° 21' west. The city is on the west side of the river, distant from Pensacola, Florida, 55 miles; from New Orleans 160 miles; from Tuscaloosa 217 miles; and from Washington 1,013 miles. It had a population in 1830 of 3,194 persons; in 1840, of 12,672; and in 1850, of 20,513; showing, from 1830 to 1840, a duplication about once in five years, and from 1840 to 1850, a rate of duplication once in about sixteen years. About forty miles above the city, Mobile river is formed by the junction of the waters of the Tombigbee and Alabama rivers. These latter are both navigable for steamers, and a portion of the distance for vessels. Steam navigation on the Tombigbee extends to Tuscaloosa, Alabama, and Columbus, Mississippi. Vessels requiring five or six feet draught of water can ascend to St. Stephens, about ninety miles from the bay. The Alabama river is navigable by steamers to Montgomery, three hundred miles; and by vessels drawing five to six feet, one hundred miles, to Claiborne.

Mobile bay is about thirty miles in length, with an average breadth of twelve miles. The principal channel from the gulf has a depth of eighteen feet water at low tide, and on the upper bar, near the mouth of the river, there is about eleven feet at low tide; and eighteen to nineteen feet at high water. Owing to this fact, vessels of heavy draught, when laden, have to proceed to sea at high tide. The tonnage registered and enrolled at this port, in 1840, was 17,243; in 1841, it was 15,714; in 1846, 22,537; and in 1851, it was 27,327 tons. The tonnage entered and cleared from and to foreign ports in those years was as follows:

Years.	Entered.	Cleared.	Total.
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
1841.....	60,548	83,276	143,824
1846.....	77,190	97,051	174,241
1851.....	55,684	121,265	176,949

The region of country around Mobile, and flanking Mobile river and its various affluents, possesses a soil of the most fertile character, which, being reduced to a high state of culture, must look to Mobile as the depot for the shipment of surplus products, as well as the *entrepot* for all foreign supplies, or necessaries not produced in that section. The face of the country is level, and remarkably adapted to the cheap construction of railways. It will be seen by reference to page 289 of this report, that this feature in the topography of the country has not been overlooked, and that several very important lines of railway are already under contract, and in progress toward completion, which must largely increase the commerce of Mobile, not only with the surrounding country, but with foreign ports. The following statistics of the trade and

commerce of the port during several years past, compiled from various authentic sources, will show, that with only some five or six hundred miles of river navigation by which to reach the interior, her business has reached a very enviable position, both in imports and exports. It should be remembered, moreover, that Alabama is, comparatively, a new State, and more sparsely settled than many others, all parts of which are more directly accessible by natural channels. Mobile can hardly be said to have commenced her growth till since 1830, since which period she has grown in a more rapid ratio than any other southern city. The agricultural resources of the State of Alabama are supposed to be second to those of hardly any other for the production of the staple articles of that climate; and when, three years hence, nearly every portion of the State will become directly connected with Mobile by the completion of her system of railways, it may well be expected that the growth of that city will increase beyond all previous periods of her history.

Statement showing the exports and destination of cotton from the port of Mobile during the last ten years ending August 31.

Years.	Great Britain.	France.	Other foreign ports.	United States.	Total.
	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>
1852.....	307,513	95,917	27,048	144,626	575,104
1851.....	250,118	46,005	26,373	96,029	418,525
1850.....	162,189	39,973	11,927	111,452	325,541
1849.....	290,836	63,290	44,525	140,993	539,642
1848.....	228,329	61,812	29,070	120,350	439,561
1847.....	131,156	39,293	19,784	116,674	306,907
1846.....	206,772	66,821	26,824	115,164	415,581
1845.....	269,037	68,789	52,811	130,601	521,238
1844.....	204,242	49,611	18,885	195,714	465,462
1843.....	385,029	53,645	26,903	113,668	479,245
1842.....	185,414	49,544	6,919	77,161	319,038

This statement exhibits very little evidence of an extension of the area cultivated during the series of years presented, which is a corroboration of the necessity for easy communication with a market. After the opening of the railways, no doubt a rapid gradual increase in the exports of cotton will be observed. Besides cotton, a large quantity of staves, lumber, and naval stores are shipped from Mobile seaward. The business in staves and lumber, during the last three years, was as follows:

Articles.	1852.	1851.	1850.
Staves.....No..	228,481	360,779	677,943
Sawed lumber.....feet..	10,189,655	6,816,054	7,293,896

Statement showing the quantity of some of the principal articles of imports into the port of Mobile during the last five years ending August 31, 1852.

Articles.	1852.	1851.	1850.	1849.	1848.
Bagging	17,012	30,402	24,901	29,200	27,275
Bale rope	16,585	30,926	22,460	26,679	27,011
Bacon	11,500	16,637	9,269	6,482	11,392
Coffee	28,538	25,236	18,928	26,104	26,415
Corn	83,380	98,086	79,038	25,573	21,505
Flour	74,329	95,054	70,570	52,311	33,069
Hay	26,852	27,143	23,189	17,470	11,787
Lard	22,481	20,021	10,562	8,044	10,914
Lime	31,027	23,745	19,322	21,155	9,893
Molasses	18,095	23,673	18,042	10,647	15,245
Oats	20,985	29,121	12,429	15,290	13,160
Potatoes	22,014	16,248	20,243	19,041	29,059
Pork	15,589	23,949	8,016	5,282	11,595
Rice	1,491	1,832	1,387	1,169	1,227
Salt	154,351	128,700	154,183	131,273	70,710
Sugar	6,083	6,634	7,760	5,528	7,673
Whiskey	15,597	28,868	21,440	17,895	21,345

The total value of the foreign imports at Mobile, during the last two years, may be seen by the figures annexed :

Years.	Value of imports.	Duties collected.
1852	\$701,918	\$131,249
1851	440,404	96,276
Increase	261,514	34,973

This shows an increase of about sixty per cent. in one year, which is certainly very handsome, and augurs well for the future prospects of Mobile in the direct import trade.

The present may well be termed the railway era ; and, perhaps, there is no other place in the whole confederacy likely to experience greater benefits, in proportion to its present population, from such improvements than Mobile. The railways now in progress, terminating at that point, must constitute her the *entrepôt* of foreign supplies for a very large extent of country.

The annexed table will show the tonnage entered from and cleared to foreign ports, in the district of Mobile, during a long series of years—from 1826 to 1851, inclusive. For reasons explained elsewhere, the tonnage cleared best exhibits the amount engaged in the export trade of that city.

Statement exhibiting the number of American and foreign vessels, and also their tonnage, employed in foreign trade in the district of Mobile, which entered and cleared annually from 1826 to 1851, inclusive.

YEARS.	AMERICAN VESSELS.			FOREIGN VESSELS.			TOTAL.				
	Entered.		Cleared.	Entered.		Cleared.	Entered.		Cleared.		
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	
1826.....		13,178		16,086		1,596		14,774		17,893	
1827.....		14,312		13,696		3,163		17,475		16,769	
1828.....		13,360		15,359		4,146		17,506		20,424	
1829.....		11,883		14,494		5,400		17,283		19,447	
1830.....		10,490		22,277		4,826		15,316		26,336	
1831.....		16,126		14,707		11,840		21,966		23,660	
1832.....		10,700		18,764		11,915		22,615		31,148	
1833.....		11,238		29,067		9,918		21,156		38,353	
1834.....	52	8,685	120	29,272	35	10,308	96	18,993	156	39,886	
1835.....	75	16,894	119	32,795	42	14,059	37	30,884	156	45,460	
1836.....	79	14,915	114	35,340	43	16,323	43	31,298	157	52,707	
1837.....	122	17,211	156	53,822	17,230	10,725	92	27,531	185	64,547	
1838.....	122	27,191	244	70,134	32	11,996	33	39,187	277	82,590	
1839.....	128	21,857	200	48,286	45	17,408	44	39,265	244	63,282	
1840.....	146	41,208	251	94,551	61	25,564	57	66,772	308	118,103	
1841.....	107	23,965	153	47,451	69	36,583	69	176	83,276	292	118,103
1842.....	81	19,706	146	51,247	64	38,264	64	38,095	145	89,342	
1843.....	138	48,892	200	79,107	96	56,648	96	55,900	234	135,007	
1844.....	102	27,095	134	47,097	86	53,676	86	53,938	188	80,771	
1845.....	137	47,654	190	80,932	117	62,952	116	62,491	254	142,523	
1846.....	69	24,722	110	46,044	89	52,468	88	51,607	158	77,190	
1847.....	50	16,596	57	23,103	79	43,162	77	43,135	129	59,758	
1848.....	55	16,135	146	67,574	76	45,491	82	61,636	131	61,636	
1849.....	55	20,858	149	76,523	101	66,213	107	71,593	156	87,061	
1850.....	40	11,914	76	32,268	112	84,106	106	80,717	152	96,020	
1851.....	23	9,186	129	63,747	96	46,498	103	52,518	119	55,654	

FLORIDA.

The geographical position of this State, the peculiar productions to which its climate and soil are adapted, its extensive seacoast, and numerous rivers and harbors, and its various and valuable resources, and especially its important relation in respect to the commercial and navigating interests of the other States, render a particular notice of it in this report peculiarly appropriate. Communications addressed to the undersigned by citizens of that State, in response to notes requesting information for such notice, are published herewith. Some of the documents accompanying these letters are appended. The information contained in these letters and documents in relation to the internal improvement of the State, and of its rivers and harbors, to its productions and resources, and its present trade and commerce, and that anticipated, is so copious that it is not deemed necessary to make any additions. Though these papers are voluminous, and though there are matters mentioned in them not directly pertinent to the object of the resolutions of the Senate, under which this report is made, and notwithstanding the undersigned may not coincide with the intelligent writers in all respects as to some matters they refer to, yet it has been considered just to them, and to the State, not to exclude any part of them.

A paper respecting "*the Gulf of Mexico and Straits of Florida*," prepared chiefly from notes and data furnished by an intelligent and distinguished officer of the engineers, and a map made by the "Coast Survey," to accompany that paper, are also herewith published, as being of general and national interest, and especially to the trade, commerce, and navigation of the United States.

As stated in the papers now published, though Florida can furnish ample and superior materials for ship-building from her inexhaustible forests, but few vessels are built in that State; and in fact most of those employed, and even most of those owned in Florida, are owned and navigated by citizens originally from the northeastern States. The business of wrecking on those dangerous coasts and reefs is also pursued principally by the same class of persons, now residents of the keys, and other residents, emigrants from the Bahamas, who have become citizens of the United States, and by Cuban Spaniards. It may also be observed, that intelligent persons, acquainted with this subject, have suggested that, upon a rigorous exclusion by the British imperial and colonial governments of our fishermen from just participation in the northeastern fisheries; the latter may find in those at the southern extremity of the Union, resources for similar employment, equally profitable to them, and as advantageous to the confederacy; and that the realization of such prediction may injuriously affect the trade and interests of the British colonies. One great advantage of the southern fisheries is, that they may be carried on throughout the year. Such diversion of the occupation of our hardy eastern fishermen from the fisheries now used by them to those appurtenant to the State of Florida, would also be accompanied by a large increase of the vessels built in that State by mechanical labor now employed in the eastern States in such business. The injurious effect upon the similar interests of the British colonies can readily be anticipated, and particularly when it is consid-

ered that, in the climate of Florida, mechanical labor can also be employed without cessation throughout all seasons.

The papers now published refer to other matters worthy of investigation and deliberate reflection by the statesmen of this confederacy. The great importance to the commercial and navigating interests of the Atlantic ports and of the gulf, extending beyond the Isthmus of Panama, of completing at an early period the fortifications at Key West and at Tortugas—of expediting the valuable labors of the “Coast Survey” in that quarter—of erecting proper light-houses, beacons, and buoys, &c., on the keys and coasts—of making Key West a naval station and a principal commercial depot and rendezvous for our shipping, and a point for the deposite of coal and provisions in large quantities, and of having a public navy-yard there—is strongly and cogently contended for in those papers. Doubtless, when the extensive fortifications now in progress at the two points designated are completed, our naval vessels, though of inferior force, can readily, in case of war with any other nation, by operating from Key West and from the Tortugas, owing to their peculiar position, keep the Carribean sea, the Gulf of Mexico, the Straits of Florida, and the entire southern coast of the United States, free from the depredations of any naval enemy. When steamers become more generally substituted for sailing-vessels, the long and circuitous voyage that large vessels from Atlantic ports to the Gulf of Mexico, and further south, now often make through the Mona passage, or through the “Windward passage,” and going on the south side of Cuba, (and around Cape Antonio, when bound into the gulf,) can be avoided, thereby saving several hundreds of miles of navigation generally with unfavorable winds. It has been estimated that exceeding four hundred millions of dollars in value in ships, merchandise, and produce, (a large proportion of the two latter items from and to the valley of the Mississippi,) annually passes near to Key West and Tortugas, and can be protected or controlled from such points. By the completion of the proposed improvements of the routes of passage or transit between the Atlantic and Pacific oceans, at Atrato, at Panama, or at Nicaragua, and especially if the route at Tehuantepec should be made susceptible of passage by a canal or transit by a railroad, the amount of property that will pass near to the two points designated will be immensely augmented.

Amongst the topics referred to in the papers now published, is the alleged probability of the extensive substitution, before the lapse of many years, of oils produced from the turpentine and rosin of the southern States, for spermaceti and other oils. If full credence is yielded to the writer's anticipations—that resinous oil (recently highly improved as to its manufacture) is destined to affect the profits of the labor and capital of the eastern States, now so extensively employed in the whale fisheries, and already greatly reduced by the decrease of the sperm whale—this subject becomes one worthy of grave consideration. It is alleged that, on account of its cheapness, resinous oil is already employed in the adulteration of most other expensive oils, and that it is beginning to be much used for machinery, for various manufactures, and for lights, in lieu of other oils.

Reflection upon the suggestions just adverted to, and others con-

tained in the letters respecting Florida, annexed hereto, and the accompanying statistical data, shows how closely blended, and intimately interwoven with each other, are the interests of the most remote sections of this confederacy, and how strong the bands are by which the perpetuity of our glorious and happy Union is secured. If the interests of one kind of industry in one section are assailed and injured by foreign illiberality, there soon opens in another part of this vast empire a new field for employment of a congenial character, to which that industry can be profitably applied. And they show that, upon the decrease of an important article of commerce, and valuable for use to the whole country, the enterprise and ever-ready inventive talent of our countrymen soon find new and fully commensurate means of supplying the necessities of civilized life and the wants of commerce. A cheap substitute for the product of distant seas is obtained from our illimitable and exhaustless forests, and new employment in its procurement and manufacture.

The suggestions in the paper upon the "Cotton Crop of the United States," appended hereto, and in relation to the vast capabilities of that region of this continent designated therein as the "*Cotton Zone*," (as yet but partially developed,) and as to the effect of the increased production of that highly important staple upon the destinies of this confederacy, deserve deliberate attention and reflection. This topic has been heretofore alluded to in this report, but it is deemed proper to publish the fuller statistical data in relation to cotton afforded by this paper, compiled from the best authorities. The influence of the interests of that region, and of the commercial and navigating interests of other sections, based upon and connected with it, is, in the conduct of the government of this country, conducive to the preservation of peace with other nations, and especially with those nations that afford profitable markets for that product. The restraints imposed by self-interest upon those foreign governments which must look to such products as the means for employment of several millions of manufacturing laborers, and hundreds of millions of capital, and as the basis of their commercial prosperity, from heedlessly engaging in disputes, or coming into collision with us, are much more powerful and effective in the preservation of amity than treaty stipulations, however formally and solemnly concluded.

The treasury tables show the value of all our domestic exports to foreign countries, for the last ten years, to be about \$1,258,332,000; the annual average value to be about \$125,583,000. Of these the south and southwestern States (being the region before mentioned as the "*Cotton Zone*") have, in the same period, exported upwards of \$651,767,000 worth of *cotton*, being an average amount of \$65,176,000 in each year; and it is estimated that upwards of \$40,000,000 is now annually used for home consumption, and for manufacture in the United States for exportation. The aggregate amount *exported* in 1849 and 1851, of the crops of cotton of 1848 and 1850, exceeded two thousand millions of pounds; and the avails of the exports of the crop of 1850 amounted, alone, to \$112,315,317. The same tables show the production, exportation, and home consumption of rice, and other products of the region referred to. The upper Mississippi, or western States, ex-

port to foreign countries chiefly breadstuffs, provisions, and the like. The annual average of the last exports specified for the last ten years, from all the States, is less than \$27,000,000. Most of all these varied products are carried to foreign countries by American vessels, owned in the middle and eastern States, and manned by American seamen from the same section. The return cargoes, purchased with the proceeds of such products, are chiefly obtained through the agency of the intelligent merchants of the Atlantic cities, who thus protect the agriculturist from the unjust exactions of a *foreign* trader, unrestrained by a responsibility that can be enforced by *our* judicial tribunals, and without the stimulants to fair dealing springing from the ties of interest and feeling created by national brotherhood.

How cheering is the confidence these things inspire in every truly American heart, that the bands of union between the United States cannot be rent asunder by the efforts of foreign foes. They show that the infinite and varied resources of these States render them independent of, and impregnable to, any efforts from abroad to injure our commercial or other industrial pursuits, by illiberal exactions, impositions, restrictions, or prohibitions. They show that we have within ourselves the means and ability to meet and counteract any and all illiberality; and they also show that the preservation of our mutual interests, and the prosperity of our common country, depend, under Providence, upon ourselves alone; and that the cultivation of fraternal feelings and good will, the strict and faithful observance of the stipulations of our constitutional compact, and the never-ceasing inculcation and rigid observance of just and liberal principles and rules of conduct towards each other in all things, is the high and solemn duty of every American citizen.

The amount contributed by those States bordering on the Gulf of Mexico justifies me in calling attention to the following letter from the assistant Secretary of the Treasury, W. L. Hodge, Esq.:

WASHINGTON, 1852.

My DEAR SIR: In reply to your inquiry as to the probable annual value of the trade of the American ports in the Gulf of Mexico, I do not exactly understand whether you mean to confine it merely to the value of the *merchandise* which arrives at and leaves those ports, or to include likewise the value of the shipping employed in the transportation of that merchandise. In connexion with the question of a ship-canal through Florida, the Senate, in the late session of Congress, requested information from the Treasury Department as to the probable value of the property which annually passed round Cape Florida, which the department, in its answer to the resolution, estimated at two hundred and fifty millions of dollars. This estimate seems large, and was generally so considered at the time, but I am, on further reflection, now convinced that it was an *under* instead of an *over* estimate, and I will give you the data on which this opinion is founded.

The great difficulty in arriving at the true value of the Gulf trade, is the impossibility to ascertain the amount of the coasting trade from the Atlantic ports, as no record is furnished to the custom-house of even the kind of goods shipped coastwise; and, of course, nothing even

approaching to the correct value can be ascertained from the outward manifests. Perhaps the most valuable cargoes shipped in American ports are those by the packet-ships to New Orleans, from Boston, New York, and Philadelphia, and I have no doubt that some single cargoes are not unfrequently worth one million of dollars, and that half a million is a very common value for them. Some four years since, one of these Boston packets—a vessel of 1,000 tons—was missing, and considerable anxiety was felt for her safety, and from the inquiries made as to the amount of insurance effected on her cargo, and the ascertained value of some of the heaviest invoices by her, it was pretty well ascertained that her cargo was worth \$700,000. When it is recollected that the entire supplies of the States on the lower Mississippi, and a large portion of those for the States higher up that river and its tributaries, are received through that city, the magnitude of them may to some extent be appreciated. The value of goods arriving at New Orleans from the American Atlantic ports, I should think would, at a low estimate, be at least fifty millions of dollars; but, in order to be perfectly on the safe side in this respect, I will estimate at that sum all the supplies thus received at *all* the Gulf ports, including New Orleans, Mobile, Pensacola, St. Mark's, Apalachicola, and all the ports of Texas.

The value of foreign importations at New Orleans is about fifteen millions of dollars, and for the other ports of the Gulf not less than five millions more.

Very correct statistical details are kept at New Orleans of all the receipts of produce from the interior, with the quantity of each; and an annual statement is published, with the estimated value, based upon the current prices of the year, approximating, probably, as near, or more near to the true value than such statements usually do. These statements show that the value of this produce annually received at New Orleans from the interior ranges from ninety to ninety-five millions of dollars; and allowing ten millions for the local consumption, it would leave eighty to eighty-five millions of dollars as the annual value of the *export* trade of New Orleans.

Mobile exports little but cotton, and the average receipt of which, there, is about 500,000 bales, worth at present prices about \$22,000,000. The exports, including cotton from the ports of Florida, and those from Texas, may, in the aggregate, be safely placed at ten millions more, showing a total of exports from the American ports on the Gulf of about \$115,000,000.

Upon the above data, then, the statement of the merchandise entering and leaving the American ports of the Gulf will be as follows :

Foreign imports	\$20,000,000
Coastwise imports	50,000,000
Exports	115,000,000

Making a total of..... 185,000,000
as the aggregate value of the merchandise shipped and received at those ports.

I have not at hand, for reference, the record of shipping arriving from the ocean at New Orleans annually, but it exceeds 600,000 tons,

and at all the other ports of the Gulf it would probably be 300,000 tons more, making an aggregate of 900,000 tons, which, at the value of \$75 per ton, would be \$67,500,000; and as these vessels make the voyage *in and out*, the entire value of the *tonnage* which annually passes Cape Florida would \$135,000,000; which, added to the preceding amount of merchandise, would make a grand aggregate of \$325,000,000 of property which annually passes to and from the American ports of the Gulf of Mexico. Although this estimate is made up in round sums, without going very particularly into detail, I have no doubt it is considerably below the real amount.

The value of the *exports* from the ports of the Gulf could, with a little care and attention, be very correctly ascertained, for they principally consist of articles of domestic produce, such as cotton, sugar, molasses, flour, lard, bacon, &c., &c., the *quantities* of which can always be ascertained from the outward manifests; and the *prices* are a matter of record, from day to day, throughout the year, in the daily publications of the public journals and price currents. The custom-house record, of course, exhibit the value of foreign importations; and the only difficulty in arriving at the correct value of the trade of the Gulf would be in the coastwise shipments from the Atlantic ports. Nor do I see how this can be correctly ascertained, and it will have to remain as a matter of conjecture, though, in placing it, as I have done in this communication, at fifty millions of dollars, I feel well assured it is considerably below the actual value.

I regret extremely, that under the heavy pressure of official duties, particularly at this time, I cannot devote more time to the subject of your injury, and am obliged to give you such a hastily-prepared and crude communication.

Very truly and sincerely,

WM. L. HODGE.

ISRAEL DE WOLFE ANDREWS, Esq.

There cannot be any surprise that the attention of the country, particularly the commercial portion, has within a few years been directed in a special manner to the value of the domestic and foreign commerce flowing through the Straits of Florida and Gulf of Mexico. That attention will now annually increase, for obvious causes; and, therefore, no apology is deemed necessary for the prominent position that subject, in connexion with the State of Florida, occupies in this part of the report, to which particular attention is requested.

Letter from the Hon. E. Carrington Cabell.

CITY OF WASHINGTON,
House of Representatives, August 29, 1852.

DEAR SIR: I cheerfully comply with the request in your favor of the 10th inst., to furnish you memoranda of the works of internal improvement, and for the improvement of rivers and harbors, heretofore undertaken in Florida, and which it is anticipated are to be undertaken by the general government, or by the State, or associations in it; and likewise as to the general resources of the State. You can use these notes in any manner you please in your forthcoming report to the treasury.

There is not, perhaps, any State of the confederacy that can be more benefitted by the construction of judicious works of internal improvement, and by the improvement of its harbors, than Florida. Thirty-one years have elapsed since the provinces of East and West Florida were taken possession of by the United States, under the treaty of cession concluded in 1819. No works of internal improvement, except the "King's road," in East Florida, and a short and small canal (never completed) near Lake *Okechobe*, and De Brahme's surveys, in 1765, &c., were commenced by the British or Spanish governments whilst the provinces were under the control of either of those powers; and since their transfer to the United States, various circumstances have combined to retard the development of their valuable commercial, agricultural, and other resources.

The fortifications then near Pensacola, that at St. Mark's, the fort at St. Augustine, and an old defence called Fort George, near the mouth of the river St. John's, were all the military defences worth mentioning existing in the provinces at the cession. The United States have since established a navy-yard and works for the repair of vessels of war, and erected other forts, and built a naval and marine hospital near Pensacola; are building fortifications at the Tortugas, and at Key West, and near the mouth of the St. Mary's river, and have placed the fort at St. Augustine in good condition; but no other part of the extensive and exposed gulf and seacoast of the State is in any degree fortified; nor are there proper preparations made for the construction, at an early period, of such defences. The entire Atlantic and Gulf coast of the United States, from Passamaquoddy to the Rio del Norte, is about 3,500 miles, and of this extent the coast and reefs of Florida, from St. Mary's, around the Tortugas, to the Perdido, comprise upwards of 1,200 miles, extending over 8° of latitude and 7½° of longitude; being more than one-third of the whole coast.

Within a few years past, our "coast survey" has been commenced, but with meagre and inadequate appropriations, not at all in just proportion either to the necessities of the work, or to the amounts yielded for such surveys in other sections less important to the whole country. No canal or railroad has been constructed by the federal government in Florida, but the expenditure of a few thousands of dollars (whilst Florida was a *Territory*) for the removal of obstructions in some of the rivers and harbors, and for two or three partial surveys of important routes of a national character, has given rise to allegations that profuse grants have been made for her benefit. She has, too, been unjustly re-

proached as being the cause of the immense expenditures so profitlessly made in the Seminole war; and by some she is held responsible for all the folly, waste, extravagance, impositions, speculations, and frauds committed in that war by the *employees* of the federal government, though not citizens of the State. A similar class have had the infamous audacity to impute to her people the purposed origination of the war, and a desire for its protraction, as a source of pecuniary gain. A devastated frontier of several hundred miles, and the butchery by the savages of hundreds of men, women, and children, throughout the State, and the utter ruin brought upon many of her citizens by that war, ought to be sufficient to prove the falsity of this accusation. Those who have propagated or countenanced such unscrupulous slanders against the people of Florida have not, when challenged, exposed a single case in which any citizen of the State has obtained payment of any demand against the United States, founded on fraud; and the public records of Congress and of the federal departments will verify the declaration that scores of Floridians have been refused payment of just claims, or postponed on the most frivolous pretexts and discreditable suspicions.

If attempts have been made in any instance, by individuals claiming to belong to Florida, to obtain from the federal treasury claims not founded in strict justice, such dishonorable exceptions do not excuse wholesale imputations against the citizens of the State generally, nor justify the excitement of prejudices against them, and the withholding payment of just demands.

Both of the provinces, when acquired by the United States, (excepting only a small portion of country around the city of Pensacola, at the *western* extremity, and the region contiguous to the city of St. Augustine, and to the lower part of the river St. John's, in East Florida,) were in the possession of warlike and hostile bands of savages. The territories, when ceded, were covered with British and Spanish titles to lands, some for tracts of several thousands of acres. The "Forbes grant"—extending from the St. Mark's to the west side of the Apalachicola river, and including also the site of the city of Apalachicola, and several thousands of acres contiguous thereto, further west, and the adjacent islands of St. George and St. Vincent, and Dog island, and reaching upwards of sixty miles from the coast into the interior—covered an area of upwards of one million two hundred thousand acres. Most of the lands which had not been previously granted were included in the concessions by the King of Spain to the Duke of Alagon, the Chevalier De Vargas, and the Count of Punon Rostros, clandestinely made whilst the treaty of cession was being negotiated, and which, though annulled by a codicil to the treaty, are still claimed by the grantees, and those to whom the grants have been assigned, to be valid and in force. A decision has recently been given by the United States court in Florida, in a suit brought upon the Alagon or "Hackley grant," against its validity. The procrastination since 1821 of the definitive ascertainment and confirmation or rejection of alleged Spanish titles, has been a serious evil to the State, and aided to retard its settlement and progress.

The removal of many of the Indians from the upper and middle sections to below 28° (N. L.) on the peninsula, was effected about 1825, under the treaty made with the chiefs at Camp Moultrie in

1823. Though this measure opened a large portion of the country to settlement, and when adopted was generally commended, experience has proved that it was injudicious policy. It has been the prolific cause of subsequent troubles, and of great sacrifice of life and property by the people of Florida, and of immense expenditures by the federal government; the responsibility for which, as before stated, has been most unjustly attributed to the inhabitants of the State. The measure referred to has put back the State at least a fifth of a century. Four large bands or towns of Indians, located on the Apalachicola, remained there till 1834, when they were removed peaceably, in conformity with treaty stipulations, to the Indian territory west of the Arkansas. In 1835 the Seminoles, Miccosukies, and other tribes, (*concentrated*, as above stated, near the fastnesses of the peninsula,) in resistance to the enforcement of treaties stipulating for their emigration west of the Arkansas, commenced predatory hostilities that soon ripened into open war, which lasted for seven years, and was attended with but limited and partially creditable success to the federal government, or to its officers, either in arms or in diplomacy. The best measure adopted by the United States during the war was the "armed occupation" act of 1842; though the policy pursued by the federal government, in the execution of the law, until the act of July 1, 1848, was passed, decreased its benefits. The contest was abandoned by the United States in 1842, an "*arrangement*" with the yet unsubdued Indians then being made (similar to two others after 1835, which they had violated) by the general officer commanding the United States regular forces in Florida; and which last "*arrangement*," in *disregard of the previous treaties*, stipulated that those Indians, headed by the chiefs Arpiarka and Bowlegs, might remain on the peninsula. Their whole number, it is estimated, cannot exceed eight hundred, and they are *on paper* restricted to prescribed limits, embracing many hundreds of square miles in area. Since that "*arrangement*," repeated disturbances, attended by bloodshed and the destruction of property, have occurred, owing, it is alleged by the citizens, to the depredations of the Indians outside of the country reserved for them; and, on the other hand, asserted by those inimical to the people of Florida to be occasioned by the encroachments of the frontier population upon the Indian reservation. The officers of the federal government have not restrained the Indians to the limits of the "*reservation*;" and while this duty is neglected, collisions and conflicts between the savages and the settlers near to the lines are inevitable. Means are now being adopted to effect the removal of the few hundred warriors and women and children yet remaining (and it is said in a state of destitution) on the lower end of the peninsula, and which efforts it is hoped may be successful; but if they fail, prompt and efficient measures will certainly be taken by the *State* government to abate this evil, so blighting to the prosperity of Florida.

It is a striking fact in the history of the provinces of Florida, that since their first discovery by the Spaniards, nearly three centuries and a half ago, they have never enjoyed twenty successive years of peace and tranquillity, undisturbed by domestic warlike conflicts or foreign hostile invasion. They have changed owners and masters several times. The late disturbances with the Seminoles brought destruction

and ruin upon many Floridians, and the insecurity to life and property since 1835 not only deterred emigration to Florida, but hundreds of worthy and valuable citizens abandoned their plantations, and, with their families, went to other southern States, where they would not be daily liable to massacre and devastation, owing to the neglect, by the federal government, of the duty of protection.

The creation by the territorial legislature of some ten or a dozen banks, to three of which were given territorial bonds or guaranties to raise their capital, and the failure of all these corporations prior to or in 1837, the inability of any of them to retrieve their credit, and the liability imputed by the foreign holders of the "faith bonds" and "guaranties" to the State of Florida, since organized, for several millions of dollars, have been a serious drawback to the settlement and growth of the State. The State constitution expressly inhibits the State legislature from levying any tax for the redemption of these imputed obligations; those who effected the adoption of such restriction contending that the people of the State are not justly responsible for the improvident acts, allowed by Congress, of the territorial authorities, who, they insist, were the creatures solely of federal legislation and federal executive power, and also that the bonds were purchased by the holders in disregard of the conditions of the acts of incorporation, and with full knowledge of all the facts. Some contend, also, that the territorial banks were created without any competent legal power in the territorial legislative council therefor.

The annexation of Texas first, and the subsequent acquisition of California, and the discovery of gold there, also diverted emigration from Florida to those States.

These events have greatly retarded the growth and prosperity of the State; and the present backward condition of her internal improvements should not be mentioned without also adverting, at the same time, to them *as her apologies*. Her people are as public-spirited and as enterprising as those of any other section, but their energies have been stifled by the series of untoward circumstances alluded to. Blessed with a genial climate and a fruitful soil, and advantages for improvement, with facility and cheapness unsurpassed by any country, it is believed Florida is destined, in time, to become a populous and one of the richest and most prosperous States in the Union.

The severe restrictions imposed in 1832 and 1834 upon our Cuba and Porto Rico trade are ably and fully exposed by Senator Mallory in his recent pamphlet on that subject. They are a serious grievance to the State. But for those restrictions, we should sell annually to those islands many thousands of dollars worth of agricultural products, stock, &c. The restrictions should be forthwith abrogated, if the commercial and agricultural interests of the Gulf and Atlantic southern States are entitled to any consideration; and, indeed, the dictates of sound policy and equal justice to every section of the Union imperatively demand the repeal of those laws.

It is proper, also, to state here that the failure of the federal government to fulfil in good faith its obligation to indemnify Spanish inhabitants for the spoliation of 1812, 1813, 1814, and 1818, when the provinces (then belonging to Spain) were invaded by the troops of the

United States ; and the withholding of protection to the citizens of Florida during the protracted Indian hostilities which commenced in 1835 ; and the refusal to indemnify the many hundreds of citizens whose property was devastated by the savages, owing to the flagrant neglect of the federal government to fulfil its duty of affording proper protection to them ; and, likewise, the refusal to pay others their just dues for supplies furnished to troops in service, and for services rendered the federal government—are all matters that have been severely felt in Florida, and have all materially retarded its prosperity.

The only railroad in Florida now in operation is the Tallahassee and St. Marks road. It was built about 1834, by an incorporated company. It now runs from Tallahassee to the seaport at the site of the ancient Spanish fortress of St. Marks, at the junction of the St. Marks and Wakulla rivers, a distance of about 23 miles, and is in good condition. Between twenty and thirty thousand bales of cotton, and large amounts of other produce and of merchandise, are annually transported over this road. It originally crossed the St. Marks river, and run to a point on the bay of St. Marks, or Apalache, a short distance below its present terminus, where a flourishing village soon sprang up, but which was in 1843 totally demolished by an unprecedented hurricane and flood from the Gulf, by which many lives were lost. This railroad is now owned chiefly by General Call. The cost of construction, of rebuilding it, and of repairs, has probably been \$250,000 ; but it is generally considered to be a good investment. If it is intersected by the contemplated great Central road, hereafter spoken of, it will increase in value. The Georgia "Brunswick Company," hereafter alluded to, it is understood desire to connect with this road ; and projects have been in contemplation to extend the Tallahassee road to Thomasville, Georgia, and to other points in Georgia, without reference to the Brunswick Company. Such extension will add to its importance.

Plank roads are being projected at several detached points in Florida, for short distances, and one several miles in length is now in course of construction from New Port (a rival town to St. Marks, situate a few miles above it, on the St. Marks river) to the Georgia line.

A small private railroad was constructed a few years ago, leading to Forsyth & Simpson's extensive manufactories and mills, near Bagdad, on Black Water river, West Florida ; but it became useless, and has been taken up.

In 1835, a company was incorporated to build a canal or railroad to connect the Apalachicola river (through Lake Wimico) with St. Joseph bay ; at which it was intended to establish a shipping port for the produce brought down the Chattahoochie, and Flint, and Apalachicola rivers, and from the surrounding country, and for receiving and forwarding merchandise to the interior, and as a rival to the city of Apalachicola. A road about nine miles long was put in operation, but, in consequence of the difficulties attending the passage of large steamboats through the shoal waters of the lake, it was abandoned in 1839 ; and another road running from St., Joseph, north, about thirty miles to Iola, a village established on the west side of the Apalachicola, a mile above the Chipola river, was constructed at an expense of upwards of \$300,000. A bridge of superior construction, several hundred yards in

length, was thrown across the Chipola, and the railroad continued upon it. A town was soon built, at the southern terminus, on the bay of St. Joseph, which bay has an excellent harbor, easily accessible to merchant vessels of the first class usually employed in southern trade. In 1841, the railroad, in consequence of pecuniary embarrassments of the company, occasioned by its immense expenditures, was abandoned, and soon after, the rails were taken up and sold to a railroad company in Georgia. Many persons contend that the site has superior advantages, and that with judicious management it would have succeeded, and that it may be resuscitated at some future period under favorable auspices. The proper and judicious improvement of the harbor of Apalachicola would, of course, prevent this, and especially if the inland communication along the coast (hereafter mentioned) from South Cape to the Mississippi is undertaken. Apalachicola now ships to foreign ports and coastwise upwards of \$6,000,000 worth of cotton and other produce annually; and receives a corresponding amount of merchandise for transportation into the interior; and has, besides, considerable trade.

Some miles of the Florida, Alabama, and Georgia railroad, near Pensacola, were graded as hereinafter stated several years ago; but that work has been suspended for the present.

Excepting some local improvements at the city of St. Augustine, made by the federal government, and which were necessary for the preservation of its property there, the foregoing, it is believed, comprise all the works of the character you inquire of heretofore constructed or partially constructed in Florida.

Florida has several capacious and secure harbors, and of easy entrance. No less than twenty-six important rivers—the Perdido, the Escambia, the Black Water, and Yellow rivers, (through St. Mary de Galvez bay,) the Choctawhatchie, the Apalachicola, (into which flow the Chattahoochie and the Flint,) the Ockolockony, the St. Marks, and Wakulla, through St. Marks or Apalache bay,) the Wacissa and Oscilla, the Suwanee or Little St. John's and its tributaries, the Withlacoochy, and Alapahau, and Santaffei, the Weethlockochee or Amixura, the Hillsborough, the Nokoshotee or Manatee, the Talachpko, or Peas creek, the Caloosahatche, the Otsego, the two Caximbas, the Galivans river, Harney's river and Shark river; besides other streams of lesser note—flow from or through the State into the Gulf of Mexico. The five first named rivers extend into the State of Alabama. They already bear upon their waters to the Florida Gulf shipping ports valuable products, which could be greatly increased by comparatively trifling artificial "internal improvements," and the value of the public and private lands in Alabama, contiguous to them, much enhanced. The Chattahoochie river is the boundary between Alabama and Georgia, and is navigable for steamboats for upwards of 150 miles northward from its junction with the Flint, where they form the Apalachicola. The Flint extends upwards of 100 miles, into one of the most productive sections of Georgia. The Ockolockony, the Oscilla, the Suwanee and the two first named of its tributaries, all extend into Georgia; and if all of them are not susceptible, by artificial improvement, of being made navigable for steamboats of a large class, they can be made equal

to most of the ordinary canals in operation in the middle States, to within a few miles of their respective sources, in affording facilities for the transportation of produce to the coast, and of merchandise into the interior. Every one of the rivers named, not only at their respective outlets to the gulf, but with reference to their navigation in the interior, is susceptible of artificial improvement, the beneficial effects of which would be commensurate to the expense incurred. The country at large would not only be benefitted by the promotion and extension of the agricultural and commercial interests of the contiguous region, and the development of new sources of wealth and prosperity that the improvement suggested would cause, but the facilities for cheap and ready defence of an extensive coast frontier (now greatly exposed to a foreign maritime enemy) that such improvements would afford would be of incalculable *national* advantage. In fact, the federal treasury, as to most of them, would be more than reimbursed for all outlays (if it undertook the works) by the enhanced value of the public lands in their vicinity, and their consequent increased sales; and if undertaken by a State or States, or by corporate associations, and a proper portion of the lands were granted in aid of the works, the United States would be remunerated by the increased value of the portion retained. The States of Alabama and Georgia are directly interested in the improvements referred to to an extent quite equal to the interest of the State of Florida. Some years since, the legislature of the last named State directed an examination of the Ockolockony river with a view to its improvement; and it has, also, at different times, made examinations with a view to the improvement of the navigation of the Chattahoochie and Flint rivers; and it has expended some money on both. Alabama has as yet done but little to promote the interests of her southeastern counties in obtaining facilities for the transportation of produce to the gulf through Florida.

It is believed that the improvement of the bays and harbors, and of their outlets, to the gulf or sea, can be rendered easier, less expensive, and more substantial and permanent, by the adoption of the system of closing unnecessary *delta* or outlets; and, instead of removing bars or deepening channels by *excavation*, making portions of them positive and immovable obstructions; thereby confining the waters to as few channels as possible, and causing them to force and deepen those channels for their *debouchement* to the gulf or sea. Especially on the *southern* Atlantic coast, and in the gulf, is this plan deemed to be the most eligible.

Several different examinations, reconnoissances, or surveys have been made of some of these rivers, and their outlets, and reports furnished as to their susceptibility of advantageous improvement; which can be found by reference to the public documents, of which a list is annexed in note A.

That an inland water communication from the Mississippi river to *South Cape*, in Middle Florida, could be obtained for steamboats of a medium size, and coasting craft, was many years ago maintained by high authority. The expense necessary to obtain such inland communication, by canalling between the nearly continuous line of bays or sounds running parallel with the gulf coast from *South Cape* to the Mississippi, and by closing the mouths of one or two streams, and stopping a few shoal inlets, is really trifling when the immense advantages to flow

from such work are estimated. But I will not dilate on this undertaking. The public documents enumerated in note A afford full information on the subject, and demonstrate to my judgment, the entire practicability of effecting results especially beneficial to the western States, and to Alabama and Florida, and, when such communication is extended across the peninsula to the ocean, important to the Atlantic States.

On the Atlantic or eastern coast of Florida, above or North of *Cape Sable*, there are several important streams, which could also be improved by widening, straightening, and deepening, and by removing obstructions in the navigation, at comparatively trifling expense, considering the benefits that would result therefrom in the same way above mentioned.

The sound behind the tongue of land terminating at Cape Florida receives the Miami river, Little river, Arch creek, Rio Raton, and Snake creek, and extends several miles north, parallel with the sea-shore. New river inlet, Hillsborough river and inlet, Jupiter inlet, St. Lucia river and inlet, Halifax river and inlet, Mosquito river and inlet, Mantanzas river and inlet, St. Augustine harbor, North river, San Pablo creek, St. John's river, Nassau bay and river, and the river St. Mary's, (the latter being the boundary between Florida and Georgia,) are all important points on the Atlantic coast. As is heretofore stated, in respect of the gulf coast between South Cape, in Middle Florida, and the Mississippi, a nearly continuous line of inland "sound navigation," for coasting craft and steamboats of the medium size, drawing six or seven feet, it has been suggested, (and with great plausibility,) may be effected from Cape Florida to the mouth of the St. Mary's river by closing securely and permanently some of the inlets mentioned, and by excavating less than thirty miles of canal, and by widening and deepening, in a few places, the natural channels of the interior communications now existing; being the "sounds," and also the "lakes" and rivers, adjacent to, and extending, (with but trifling interruption,) along the entire eastern coast of the State, and running parallel with the sea-shore, at a short distance therefrom, in the interior. And it has been predicted that, after such improvement, the natural effect of the tides from the sea, through the "inlets" remaining open, and of the accumulation of the waters flowing into the sounds from the interior, and restrained to such outlet to the sea, and the currents caused thereby, would be, not only to increase the depth of the channels of the sounds, but to deepen several feet and keep open the entrances from the ocean at St. Augustine, and St. John's, and to such extent as always to admit large vessels adapted to foreign trade. The entire expense of such improvements, it is estimated, would not exceed two hundred and fifty thousand dollars. But if it should be three or four times that sum, it would not equal the value of the benefits resulting in a national point of view, and to other States besides Florida. Such improvements would render the entire coast from St. Augustine to Cape Florida forever *impregnable* to any enemy, and even exempt it from annoyance; without the necessity of fortifications, except at the outlets to the sea, left open, and deepened, as suggested; and many coasting vessels from the eastward, going southward, might, by such inland communication, avoid the necessity of stemming the strong current of the "gulf stream;" of

crossing the Bahama banks; and also the other hazardous experiment of hugging Cape Carnaveral, and keeping close to the Florida coast, in trying which so many such vessels bound southward are wrecked. The documents referred to in note A will give you valuable information on all these points.

The clearing out of the small streams emptying into the sounds at the southern part of the peninsula, and the connexion of the sources of those streams by canals with the interior and fresh waters of the Pahhayoke or Everglades, covering an area of at least eighty by thirty miles, and with the large and deep fresh-water lake Okechobe, further north, and with the interior river Kissimme, running into said lake from Tohopekaliga lake and other lakes, (the waters extending ninety miles north from the mouth of the river,) would not only reclaim vast quantities of rich sugar lands, now submerged by the overflow of the waters, at certain seasons, but would be the means of facile *interior* communication, and also between every part of the interior region and the seacoast, and afford easy and cheap transportation for all the produce intended for exportation to foreign ports or shipment coastwise. The extensive swamp called Halpatioke would become dry and cultivatable. And the character of the country is such, that the cost of such improvement would not be great. The upper soil is light and easy of excavation; the substratum of clay with which it is underlaid is tenacious, and prevents the difficulties so often caused by caving or sliding. The face of the country is level, and no material obstructions arising from rocks will be found. The principal obstacle to the undertaking is, that it is of a character which renders it necessary that every portion of it should be commenced and carried on to completion simultaneously, and speedily, requiring a large laboring force and united, combined, and concurrent action.

So, too, on the western coast of the peninsula, the deepening of the outlets, and the connexion of the rivers emptying into the Gulf with the same interior waters above mentioned, would be equally beneficial. The vast swamp called the Big Cypress, or Atseenhoofa, could be reclaimed. And the completion of such works on both sides would probably effect a means of passage for small coasting vessels and steamers across the peninsula, thereby avoiding the perilous navigation of the keys and reefs farther south, and extending southwestwardly, upwards of a hundred miles from Cape Florida and Cape Sable, into the gulf.

The improvements suggested in the two last paragraphs are subjects of comment in the valuable documents annexed to a report made by Senator Breese, of Illinois, from the Committee on Public Lands of the Senate, at the 1st session, 32d Congress, August 28, 1848, Doc. No. 242. Other important information as to the agricultural capabilities, and products, and trade, and fisheries, and other resources of Florida, is to be found in these documents.

On the peninsula a railroad from Tampa Bay to the navigable waters of the St. John's, near the head of the navigation of that river, has been spoken of, and will probably in a very few years be undertaken. When the adjacent country becomes more densely populated, such work will certainly be constructed.

Another road from Tampa, running northwardly up the peninsula, avoiding the water-courses on both sides, and extending as far up as Jacksonville, has been strongly urged, and has many advocates.

Above Tampa, on the peninsula, various projects have been suggested to connect the lower with the upper region of the peninsula, and to connect the Gulf of Mexico with the Atlantic.

It is said that the head waters of the Kissimme can be connected with those at the sources of the St. John's river, so as to be navigable for boats transporting produce.

A canal for boats or barges drawing four or five feet, has been spoken of as practicable, at small expense, from the Ocklawaha, a branch of the noble river St. John's, to the navigable waters of Weethlockochee, or Amixura.

A canal from the sound near Smyrna, on the eastern edge of the State, to lakes which are the head waters of the St. John's river, a few miles west of the seacoast, or from a point on the sound to the same waters, some distance farther south, has also been suggested.

A railroad from Pilatki, on the St. John's river, to such point as may be ascertained to be the most eligible, on the gulf coast, near Cedar Keys, or near Waccassah bay, has likewise been spoken of; as has also a similar work from Jacksonville, on the St. John's; and also one from the mouth of the St. Mary's to the same points on the gulf. In fact, several different railroads from the west side of the St. John's river, farther down to the gulf, are in contemplation.

One from Picolati, intended to extend east to St. Augustine; one from the head of navigation on Black creek; and one from Jacksonville, or a point near that town, to some point on the gulf, or on the Suwanee river, have been spoken of; and, likewise, a railroad from St. Mary's river to the Suwanee. Charters have been obtained in past years, from the Florida legislature for some of the last-mentioned works, to be undertaken by corporate associations; but none of them, it is believed, have as yet had any route properly surveyed, preparatory to carrying out their charters and commencing such work practically. The routes of two of these contemplated works are laid down on the map enclosed to you, of one of which it is understood some years since a reconnoissance was made by an officer of the United States army (Captain Blake,) since killed in battle in Mexico. The same officer made a partial survey of the harbor of Tampa, and of a portion of the eastern coast of the State, and of the sounds contiguous thereto, which are referred to in the said list of documents, marked A.

The "thorough-cut," or "great ship-canal," or "ship-railway" across the head of the peninsula, has been written about a great deal within the last thirty years. It has formed the subject of congressional speeches and reports, and of newspaper essays; and, many years since, a board of United States engineers, at the head of which was General Bernard, made a partial survey, with a view to ascertain its practicability and its cost. His report and maps of his surveys are to be found in vol. iv. Ex. Doc., 2d sess. 20th Cong., 1828-'9, Doc. No. 147. Different *termini* have been indicated on the gulf side for this work. The St. John's river has generally been mentioned as the most eligible *terminus* of said work on the eastern side. An appropriation of \$20,000 will

probably be made at this session of Congress for the completion of the survey for this work.

Whilst the certain practicability of effecting the completion of this stupendous and magnificent project to the full extent anticipated by some of its advocates has by many been deemed questionable, (and it seems General Bernard did not believe in its favorable success,) yet other disinterested and impartial persons, of a high order of intelligence, and possessing accurate knowledge of the location through which the canal must be constructed, and of the soils to be excavated, confidently contend that it is entirely practicable. The immense cost of the construction of a *ship-canal* is an insuperable obstacle to its being undertaken by the State of Florida, or by any association of individuals there. The State constitution contains provisions virtually restraining the legislature from borrowing money on the faith and credit of the State, even for such purpose. Therefore, if such work is undertaken, it must be by the general government, and upon the most considerate estimates, founded upon previous examinations and accurate surveys by scientific and impartial engineers. The same observations apply to the construction of the "*ship-railway*" that has been suggested. If the construction of *either* of these works is ascertained to be feasible, it will be beyond all question the most important undertaking of the kind in the United States. No one can deny that its beneficial results will be eminently "*national*." Whensover any route inside of the Gulf of Mexico, whether through Texas, through eastern Mexico, or by Vera Cruz, or by Tehuantepec to the Pacific, may be established, a passage across Florida, as a means of speedy and safe travel, and for the transportation of merchandise, will become imperatively necessary, to enable the eastern and middle Atlantic States to participate fully in the benefits of such route. The proposed canal or road may be located on a direct and straight line drawn along the coast, from Cape Hatteras (to pass which, in sailing from New York, a considerable deflexion east must be made) to the mouth of the Rio Coatzacoalcos, on the gulf side of the isthmus of Tehuantepec. The legislature of Louisiana, smothering all selfish local considerations, at a recent session adopted resolutions asking Congress to institute examinations as to the Florida "*ship-canal*;" and patriotic and enterprising citizens of eastern and western States, with wise forecast, look to the ascertainment of its practicability as a result of the highest importance to the general interests of the whole confederacy—as well to the Atlantic, southern, northern, eastern, middle, and interior States, and those on the Pacific, as to the gulf and Mississippi States. Our Atlantic merchants see that it will greatly facilitate our future trade, not only with the Pacific generally, but with China and with the East Indies.

Whatever doubts may be entertained as to the practicability of the construction and successful operation of a "*ship-canal*" or "*ship-railway*" across the peninsula, it is not doubted that canals for *boats* drawing six or seven feet water may be made, either from the head of navigation on Black creek, or from one of the two southernmost prongs or branches of the St. Mary's river, or from the St. John's river, directly to the capacious, deep, and never-failing lake, called "*Ocean pond*," about thirty miles westwardly of Whitesville, on Black creek, and about forty

miles from Jacksonville, on the St. John's river. From this lake it is supposed such canal can be continued to the navigable waters of the Santaffee, and, by the improvement of the navigation of that river and of the Suwanee to the gulf, can also, without doubt, be constructed; and the expense is not estimated to be so great as to render it an injudicious investment. It is believed also by some persons, that a similar canal for *boats*, commencing at the head of navigation near the great southern bend of the St. Mary's river, and running across near to the southern margin of the vast lake or swamp called Okefenokee, and directly to the head-waters of the Suwanee, with proper improvements to the navigation of the St. Mary's and Suwanee rivers, is practicable, and would be highly beneficial as a means of transportation of produce, lumber, naval stores, and merchandise, and that it would also drain and reclaim tens of thousands of acres of the richest lands in that region. Such work would be greatly beneficial to the State of Georgia, which State has heretofore made examinations and surveys, with a view to its construction.

A railroad has been projected from Brunswick, Georgia, to the gulf coast, on which coast different points for its termination have been indicated. It is stated that an association is now being organized to raise funds and commence such work. Some years since, partial reconnoissances, and some unperfected surveys, were made of such work, from Brunswick, on two different routes entering Middle Florida; but, from circumstances not fully understood, the commencement of the work was postponed, and the results of the surveys have never been made public. Unless the proposed work should enter Florida much farther to the *east* than has been stated is intended, and become connected with the great trunk or Central railroad hereafter spoken of, so that it would result to some benefit to East Florida, it will be regarded with disfavor in that section of the State, and meet with such opposition as probably will prevent its extension into the State at all. It would certainly be a competitor and rival of the Central Florida railroad, if allowed to abstract from it the southwestern travel and transportation, for the benefit of southern Georgia, by leaving the State of Florida in the western section.

To all the suggested improvements terminating on the gulf coast, near to the *delta* of the Suwanee, some persons have objected that formidable difficulties will be encountered to their successful operation, owing to the want of a safe and good harbor there, of easy access near to the shore for vessels drawing over seven or eight feet, and owing also to alleged hazards attending the approach of that part of the gulf coast. I do not, however, hesitate to say that I regard these objections as fallacious, and that safe and good harbors for vessels of twelve or fifteen feet draught can be found, and which can also be greatly improved by artificial means.

The first great work to be undertaken by the State of Florida, is, in my judgment, unquestionably, at the present time, the trunk or Central railroad, commencing at Pensacola, and running eastwardly from Deerpoint, at the opposite side of Pensacola bay, along or as near the route of the old Bellamy or Federal road as is practicable to the river St. John's; the distance being about three hundred and fifty miles. A road can be run from St. John's to St. Augustine, from Jacksonville, thirty-eight

miles, and from Picolati, eighteen miles. All the different sectional interests of the upper portions of the State would be promoted by such work. Lateral railroads to necessary points on the gulf coast, and to the towns where the country trade is carried on, north of the main road, can be made. These lateral roads could be extended into Alabama and Georgia, and, when it may be deemed advisable, connected with the railroads in those States; and in a few years not merely Florida, but her conterminous sister States, will be interlaced and bound together, and mutually strengthened by bands of iron. The sugar, cotton, tobacco, rice, Sisal hemp, tar, turpentine, rosin, and resinous oils and lumber, and other products of those fertile regions, can be speedily, cheaply, and safely transported to market, either on the gulf or Atlantic, or for exportation to foreign ports or shipment coastwise, in time of war or of peace; and in time of war material aid for the defence of the coast against foreign assault from any quarter of the State, can always be at once furnished from the interior. Yet in the construction of such work, the just share of the general improvement fund of the State due to that section detached from the immediate and direct advantages and conveniences of this road, and lying farther south than its effects would be felt, should not be expended, but should be scrupulously retained for the benefit of such section. The facilities such road would afford the federal government for the cheap and rapid transportation of the mails in times of peace, and the like facilities given for the transportation in time of war of troops, munitions of war, and subsistence, would be of incalculable *national benefit*. The river St. John's, which is generally spoken of as the eastern terminus of the Central railroad, extends from its mouth three hundred miles south, running nearly in the middle of the peninsula, its sources being chains of large lakes extending south beyond the sources of the Kissimme. The bar at the entrance of the St. John's cannot ordinarily be passed by vessels drawing over thirteen feet, but inside it is navigable by vessels of twenty-five feet draught as far up as Jacksonville, and by those drawing twelve feet up to Lake George, and two feet water can be had to Lake Poinsett. The tide seems to have influence at Volusia. The trade of the river at present is chiefly lumber. More than thirteen large lumber mills (mostly steam) are on the river above and below Jacksonville, the principal town upon the river. About three hundred and fifty vessels annually are loaded with lumber and produce on the St. John's. The quantity of lumber annually shipped from the St. John's river is estimated at 50,000,000 of feet. An effort will be made this fall to deepen the water on the bar, which it is sanguinely anticipated can be done, so as to admit vessels at low water drawing twenty or twenty-five feet, and by an expenditure of about twenty thousand dollars. Should it be effected, though it should cost twenty times such amount, it would be a wise disposition of the money. In case this work succeeds, so soon as the great Central road is finished to the St. John's, a large and flourishing commercial city is sure to spring up in a few years at the terminus on the river, wherever it may be.

Partial surveys of the eastern part of one proposed route for this road, terminating at Jacksonville, the prominent point on the St. John's; were made some years ago by an association of eastern capitalists,

chiefly from Boston; but they have never been made public, and it is stated the association was prevented by the Indian war from progressing with the undertaking.

A railroad has been contemplated from Pensacola, across the southern corner of Alabama to Montgomery, Alabama; or to Columbus, Georgia; or to some point in Georgia, lower down on the Chattahoochie river; and to unite with some of the Georgia roads running to the Atlantic seaboard. Great interest is felt in the completion of this road at the city of Pensacola, and throughout the surrounding country, and on the different routes proposed for it; and the federal government is also deeply interested in its being finished, insomuch as it would afford certain means for the defence and protection of the valuable public property at Pensacola—worth many millions of dollars, and as the federal treasury would be benefited by the enhanced value of the public lands in Alabama through which the road would run, and their increased sales. On these points I refer you to the documents specified in note B, hereto annexed. The surveys for the chief part of one of the contemplated routes of this road were, it is understood, perfected some years since, and several miles of the road near Pensacola were graded, and other work done. It has, however, been suspended for some time, awaiting the action of Congress granting the right of way through the public lands, and also grants of alternate sections along the line of the road. Bills making such grants have passed the Senate at different sessions, but, as yet, the association have been unable to obtain the concurrent action of both houses at the same session to the same bill.

Connected as the *great Central railroad* of the State will be, at Pensacola, (or at any of the gulf ports that may be selected,) with the commerce to distant foreign or American ports in the gulf and elsewhere, and especially with steamships to Tehuantepec as soon as the *inter-oceanic* communication is made at that isthmus, (whether the Florida road is extended to Mobile and New Orleans or not,) it must soon become the principal line of southern and southwestern travel to and from the eastern and middle States, to California and Oregon, and the Pacific generally. It is the natural and direct course of such travel. The sagacious and enterprising merchants of the Atlantic cities engaged in the Pacific trade, and in the trade to China and to the East Indies, will also soon discover that such work may be used to promote their interests. Of its profitable success as a pecuniary investment, little doubt can be entertained.

A canal from St. Andrew's bay to the Chipola river has been contemplated for many years, and an association has been incorporated to construct such work. Full surveys have been made, and the feasibility of constructing either a canal or a railroad fully demonstrated. It is in the hands of citizens of respectability, who possess means to complete it, with such assistance as may be afforded by the general government, and by the State. Extensive tracts of valuable public lands, in the vicinity of this work, have been *reserved from sale* by the United States for "naval purposes." These reservations are profitless, and the lands should be sold. Their being held as at present is injurious to the country in which they are situated. Sound and judicious policy

demands that the federal and State governments, both, should encourage the speedy construction of the canal or road from St. Andrew's bay. The bay has a good entrance for large vessels, and it is a safe and capacious harbor. Intersecting, as such work probably would, (by an extension for a short distance into the interior,) the great Central State railroad, its completion at once will be a valuable auxiliary to the cheap and speedy construction of the latter.

The State legislature, however, (under the advice of the "State Board of Internal Improvements," composed of citizens from each section of the State,) will, it is expected, this fall, when its *biennial* session is held, devise some additional measures for carrying out the most judicious plans of internal improvement to those heretofore adopted. The schemes, wiles, and intrigues of speculators and jobbers, pecuniary and political, it may be anticipated, will, in Florida, (as sad experience has proved in other States,) have to be encountered and overcome, and thwarted, by the just and patriotic citizen. Attempts, by means direct and indirect, to appropriate the lands given to the State for purposes of "internal improvement"—the "swamp lands"—and every other available resource, to objects merely local, sectional, and selfish, will, it may be conjectured, be made; but the sleepless vigilance of the guardians of the public and general weal will be faithfully exerted to prevent any combinations for such purposes being successful. That *cliques*, having their own interests exclusively in view, have so often elsewhere been able to consummate their designs, will admonish the executive and legislature to watchfulness and caution. I place the firmest reliance on the intelligence, patriotism, and prudence of those departments of the government of my State in this regard.

The cost of the great Central Florida railroad, it has been estimated, will not probably fall short of four millions of dollars. The proceeds of the sales of town lots at the extreme termini, and at several points on the route where the trade of the surrounding country will be concentrated, will go far in aid of the work. But unless the federal government does, as it should do, grant to the State alternate sections on both sides of the road on its entire line, and for several miles laterally, as the State has not at present the adequate means for its construction, it will probably be deferred. Few foreign capitalists are disposed to embark in such an undertaking, as a permanent investment of their means, especially when the proposed work is in a country distant from them, and the progress and conduct of which work they cannot personally attend to; and the assistance of those who may subscribe for *stock*, as a matter of present speculation by *its* sale, is generally of doubtful value. I append hereto a statement obtained from the General Land Office, (marked C,) exhibiting the number of acres of public lands in Florida, "surveyed" and "unsurveyed," on the 30th of June, 1851; also, the quantity "offered for sale," and the quantity "sold," up to the same day, and other authentic and valuable information as to the federal domain in the State. By a reference to the last annual report of the General Land Office, it will be seen that Ohio, with an area of 12,354,560 acres *less* than Florida, has received grants *in aid of* "internal improvements" for 681,135 acres *more* than Florida; Indiana, with an area of 16,293,960 acres *less*, has received 1,109,861

acres *more*; Iowa, with an area of 5,346,560 acres *less*, has received 326,078 acres *more* than Florida, and claims (and justly) 900,000 in addition as having been granted, making 1,225,078 acres more than Florida; Wisconsin, with an area of 3,420,160 *less*, has received 358,400 acres *more* than Florida; Illinois, with an area of 2,472,320 *less*, has received 2,246,490 acres (the Central Railroad grant) *more* than Florida; and a similar disproportion will be seen to exist with respect to other States. And with respect to donations for schools, &c., a like disproportion exists between the allowances to her and to most of the other States; and, by some process, whilst Louisiana is reported as having 8,877,998 acres of swamp-lands, Michigan and Arkansas, each, upwards of *four millions and a half*, Mississippi 2,239,987 acres, Illinois 1,883,412, Missouri 1,517,287, Wisconsin 1,259,269, Florida is set down as having 562,170 acres! But this, it is understood to be, is because all those lands in the regions yet unsurveyed are not yet officially reported; nor have the State designations progressed as far as the other States mentioned. The swamp-lands in Florida will probably exceed those in any other State. Most of the lands heretofore offered, and yet remaining unsold, (and sixteen-sevenths of the lands *offered* are yet *unsold*,) will remain unsold for many years to come, unless some of the public improvements suggested should enhance their value. At least eleven-twelfths of all the lands in the State are yet owned by the United States. A very large portion of them, even if the principal improvements suggested should be made, would not probably for some time afterwards be sold at the present minimum price of the public lands. The fact that of 17,043,111 acres surveyed and offered for sale prior to June, 1851, but 1,000,407 acres have been sold, (and many of them have been *offered* for sale for twenty-seven, twenty-five, twenty, fifteen or ten years,) proves that in the present state of things they are utterly worthless to the United States. On the proposed routes of the great Central railroad there are, in different sections of the State, vast tracts of these lands at present of no value to the general government, to the State or to individuals. Rich and exhaustless beds of marl are to be found in several sections of the State. Those at Allum Bluff, on the Apalachicola river, but a short distance from the place where the great Central road will probably cross, are of great value. That road alone will, by the cheap transportation of the *marl*, afford facilities for fertilizing the lands contiguous to it in every section of the State, but especially in Middle and West Florida; and at the same time the lumber, tar, turpentine, rosin, and resinous oils that may be obtained from most of such lands, prior to their being thus prepared for and put in cultivation, could be readily conveyed to market by the same means.

Florida is the fifth State in size in the confederacy. Her area is 59,268 square miles or 37,931,520 acres. *She possesses an advantage had by no other State of the Union. She alone, of all the present United States, can cultivate and raise advantageously, and for the supply of the other States on this side of the continent, tropical fruits and other highly valuable tropical products!* She will have no rival in this respect among her sister States till further "extension" and additional "annexation" is effected. You are referred on this subject to the public documents and other authentic books specified in the note D, hereto annexed. In a

few years, whether in time of war or in time of peace, not only the Atlantic cities, but the entire valley of the Mississippi, can be supplied by her with most tropical productions with greater facility, and cheaper, than they can be procured from Cuba, or from any other of the West India islands. A tithe of the sum necessary to purchase Cuba, if Spain should be willing to dispose of it, and a fiftieth part of the amount of expenditure necessary to conquer and annex that island by arms, or to obtain it in any other mode, honorable or dishonorable, if expended by the federal government (even as above indicated, by liberal grants of land) in aid of works of internal improvement in Florida, would render that State more valuable than Cuba ever can be to this confederacy. Such policy might also subdue some of the covetings and cravings many seem to have for the "Queen of the Antilles," (as they designate that island,) and obviate in some degree the necessity which they insist now exists of its being forthwith wrested from Spain and possessed by the United States. War and bloodshed would also be thereby averted.

The most judicious policy that can be adopted by the federal government with reference to Florida, in my judgment is, to transfer without delay to that State every acre of public lands within its borders, stipulating that the proceeds thereof hereafter realized by the State shall be exclusively devoted to internal and harbor improvements within the State; the United States reserving only the necessary sites for light-houses, fortifications, and other structures, under the control of the federal government. At any rate, the transfer of all lands that at this time, or hereafter, have been offered for sale at \$1 25 per acre *for ten years, and that remain unsold*, should be made, and a similar rule could be wisely applied to all the States wherein public lands lie.

No one, it is presumed, will deny that the *coast frontier* of every part of the United States is peculiarly a subject of legitimate concernment for the *federal* government, or that, to a certain extent, the States have yielded the partial control thereof to the United States; and that, in some respects, it may be regarded as the common property of the people of all of the States of this confederacy. The lines of jurisdiction between the States and the federal government, and between the respective State governments, as to such coast frontier, are distinctly marked by the federal constitution. The *federal government* has not been invested by the States with any *right of property* to the coasts. By article 4, section 2, *clause 1*, of the federal compact, it is stipulated that "*the citizens of each State shall be entitled to all privileges and immunities of citizens in the several States;*" and it has been held that the free right of navigation, of commerce, and of piscary, and in fine of every usufructuary privilege of the coast waters, (not essential and exclusively *local*,) and that are *common rights*, as distinguished from exclusive rights of *property*, in a State, or in individuals, pertain equally to the citizens of the United States of every State of the confederacy, without distinction in favor of the citizens of that State of which such coast is the frontier. Such police regulations as sound policy may render necessary can be rightfully established and enforced *by that State*, and it may enact laws for the protection and conservation of such *common rights*, and to regulate their use, so as to prevent their abuse; but such

laws must apply equally to its own citizens as to the citizens of the other States. The general rights of navigation and of commerce by all, and that of piscary in waters not exclusively *local*, cannot be withheld for the exclusive benefit of its own citizens. But *no other State* may rightfully legislate as to such privileges on the coasts of a sister State; nor does the federal government possess any constitutional power to regulate by law the right of piscary on the coasts of a State, nor to cede by treaty, or otherwise, the privilege of using such fisheries to a foreign power, or its subjects, *any more* than it can regulate by law any other common right in a State, or cede away a part of the territory of a State to a foreign power. To *defend* and *protect* such coast frontier in which the citizens of the United States in all the States have such *common interest*, as well as because it is a part of *one* of the States; to "*repel invasions*," (see article 1, section 8, clause 15, Constitution United States,) is the bounden duty of the federal government. It is, in the clause just cited, invested with full power; and the national compact *twice* enjoins the fulfilment of such duty, (see clause last cited, and article 4, section 4;) and the same instrument contains an express constitutional guaranty that "*it shall protect each of them [the States] against invasion*," &c. The federal government builds fortifications, and navy yards, and ships, and armories, and arsenals, and military, and naval, and marine hospitals, and custom-houses, and it establishes lines of mail steamers to Great Britain and Europe and to the Pacific; it has erected and maintains an Observatory, and a Military and Naval Academy; has a "Coast Survey" establishment; sends ships-of-war on exploring expeditions; and Congress, within the last fifteen years, has spent millions of dollars for the making and publication of all kinds of books, on all kinds of subjects. Some of the improvements on the coasts, and leading to the coasts of Florida above noticed, are as directly and immediately important and essential for the "*defence*" and "*protection*" of that section "*against invasion*" as forts, ships, &c., can be *elsewhere*. This, it is true, is owing, in some degree, to the peculiar geographical position, insular formation, and character of that section. Under such circumstances, to deny the legitimate constitutional power of the federal government to "*provide for the common defence*" by aiding and promoting such necessary improvements in Florida, is to deny to it the power to employ the proper and necessary *means* of fulfilling such constitutional duty. Whilst the obligation of the general government to "defend" and "protect" a State "*against invasion*" in time of war is conceded, to object that the federal constitution does not allow prudent and proper and necessary *preparation* by it, in time of peace, for the fulfilment of such duty economically, advantageously and successfully, is extending "the salutary rule of strict construction" into absurdity. The attenuated logic by which objections are made to the means of defence and protection as unconstitutional, because forsooth the resort to such means may also, and otherwise, promote other interests of the State, or of the confederacy, has little weight with me. But when the aid desired can be yielded in the exercise of the undoubted constitutional authority of Congress to dispose of the *public lands* for the common benefit, all scruples with respect to grants of such lands in aid of those improvements in the States where the lands lie should be extinguished. The

impolicy and injustice of the federal government retaining all the lands unsaleable at the present *minimum* price fixed by it for a series of years after they have been offered for sale, without yielding any taxes for them to the States wherein they lie, not contributing anything in any mode for the making and repair of ordinary highways and bridges through them, is severely felt by every resident (whether rich or poor) of a country in which there is a large quantity of unsold public lands. The personal labor the settler is compelled to yield in this way, to enhance the value of the property of the United States, in addition to his other taxes, is an onerous burden. Difficulties will probably ensue from the granting to one sovereign State the control and ownership of lands within another sovereign State, even if the lands are made liable to just taxation; and still greater difficulties will arise as to the adoption of any just rate of distribution among the States. Some proposed rules of distribution are absurd as well as iniquitous. By the rule of population, New York would at this time receive 33 acres to every one received by Florida, and yet Florida has 1,200 miles of seacoast to defend, whilst New York has less than 150 on her Atlantic frontier. Florida has 7,671,520 acres more in area than New York. She is larger than New York and Massachusetts or New York and Maryland together; she is larger than New York, New Jersey, and Connecticut all together; and, leaving out Maine, more than *twice* as large as all the other five New England States together. Florida has no mountains; and properly improved she will have within her limits less waste land, not susceptible of cultivation, than either New Hampshire, or Massachusetts, or Maryland, or New Jersey, though neither of those States is *one-seventh* of her size; and she would be capable, in a few years, if improved as suggested, of sustaining comfortably a larger population than New York of itself, or all the New England States united. Population is a shifting rule, and not based on any just principle when adopted with reference to grants to the States. If the grant is intended to be given to the citizens of each State disposed to emigrate to and settle on such lands, the federal government had better make the grant directly to the occupant. The only true and just rule as to grants in aid of works for coast defence, or any other national objects, is *the necessity or importance of such work*, and the advantage that will result to the country therefrom. The policy of promoting the settlement of an exposed frontier State by free grants of lands to occupants, and to the State in aid of internal improvements, is, it is conceived, quite as obvious, and fully as strong, as any *policy of defence*, as to a future war with a naval power, that can be adopted. The expense incurred in one such war of three years, necessary to defend the 1,200 miles of seacoast in Florida, would probably exceed fourfold all that is necessary for the government to yield in aid of internal improvements in that State! Our entire national coast should be defended: "No foe's hostile foot should leave its print on our shore." The dishonor of a successful invasion by an enemy will be as great, if the assault be made at Cape Sable or Apalachicola, as if made at Philadelphia or Washington. Besides, if such improvements are made, the means of defence thereby permanently established in Florida will enable the federal government to provide more readily and early for other exposed points, and

to furnish troops which could not be withheld or abstracted from Florida, in her present condition, during such war, without gross dereliction of federal duty.

That the scientific and able engineers educated for and in the federal service ought to be (when the federal government has so little appropriate employ for them as at present, and generally in times of peace) assigned to duty in the *States*, in surveys for public improvements, is an opinion becoming quite general; and if such course is adopted, it will probably prevent the abolition or reduction of such corps. The services of such officers would be most valuable to Florida in her surveys for the various works I have mentioned above.

The population of Florida, by the last census, was but 47,167 white persons, 928 free colored, and 39,309 colored slaves; in all, 87,407. If Congress will encourage and foster the growth and prosperity of the State by aiding and promoting the works indicated, in the manner suggested, emigration thither from Maryland, Virginia, North Carolina, Kentucky, Tennessee, Missouri, and other States, will speedily commence; and by the year 1860, her population will be quadrupled, her resources and wealth augmented in still greater ratio; and *the most exposed and defenceless section of the Union rendered impregnable*. By even yielding to the State merely the lands *made valuable* by the works *she may construct*, and with the means thereby afforded for the employment of labor in the construction of such works, she will be enabled to do much. Grant her *all* the vacant land, and (excepting the "ship canal") she may effect *all* that her own interests or those of her sister States demand, now or hereafter.

A reference to the map of Florida now sent to you, made at the Bureau of Topographical Engineers in 1846, and to a chart of the light-houses of the United States, also enclosed, will show you that, with upwards of 1,200 miles of dangerous sea-board, there are fewer light-houses in the State than there are appurtenant to the cities either of New York or Boston. Property of upwards of two hundred millions of dollars in value, it is estimated, annually passes along a large portion of the Florida coasts, which are, in many places, as much exposed and dangerous as the coast of any section of the Union.

In the document referred to in note E, annexed hereto, you will find stated the value of the property annually wrecked on the keys and reefs and coasts of *South* Florida, and which is carried into Key West for adjudication of the salvage, for each of the ten years last past. A large amount wrecked elsewhere, on the upper coast, and that which is *totally lost*, is not estimated; nor is the great loss of human life adverted to. The average value of all the property *annually* wrecked and lost on *all* the Florida coasts and reefs cannot be less than *a million of dollars!*

You are referred to the statements procured from the Treasury Department, herewith sent to you, and to the documents specified in note F, for the tonnage and foreign exports and imports, and other statistics of the State.

You will find in some of the documents I send you authentic information as to the *fisheries* on the coast of Florida. It is predicted that, before many years, these fisheries will become a source of profitable

employment to thousands of seafaring men, who will be induced thereby to become residents of the islands and coasts contiguous to them; and they will be looked to particularly by the inhabitants of the great western valley for the supply of that article of subsistence; and other sections of the Union, and foreign countries, may likewise be furnished from them. They pertain exclusively to the State, the constitution whereof asserts its right; *and they are regarded as destined to be of as much importance and value as the fisheries on the coast of the British colonies at the northeast end of this continent.*

In addition to the documents above mentioned, I enclose you a letter (G) respecting the State of Florida from that intelligent officer, J. C. G. Kennedy, esq., of the "Census Bureau;" and also a statement, (H,) compiled from the laws, of all the appropriations of money or lands made by Congress since the acquisition of the Floridas, in anywise in aid of public improvements therein.

Though hundreds of invalids and valetudinarians annually resort to Florida from the North and West, during the winter months, the State has been slandered as being insalubrious. The letter of Mr. Kennedy proves that on the score of health she stands *ahead of any other southern State*, and is exceeded by *but one old State and but two new States of the Union*. Some transient visitors to Florida, ignorant of the ordinances of Providence for the preservation of health in tropical regions, and ignorant of the genial effect of the climate upon the soil, and comparing the soil of Florida with the rich bottom-lands of the western and middle States, denounce the lands of Florida as "barren sands," as "worthless," &c. Mr. Kennedy's testimony, founded on the unerring test of official statistics of facts, disproves all these notions, and establishes the fact that *in proportion to the improved lands, and in proportion also to her population, her agricultural products exceed in value those of any other State of the Union*; and so, also, in proportion to her slave population, they exceed in value those of any other of the slave States.

Very respectfully, your obedient servant,

E. C. CABELL.

ISRAEL D. ANDREWS, *U. S. Consul.*

APPENDIX.

C.

Statement compiled from report of Commissioner of General Land Office as to public lands in Florida, June 30, 1851, and other documents in the General Land Office.

Area in square miles.....	59,268
Area in acres.....	37,931,520
Surveyed.....	22,314,689
Unsurveyed.....	15,616,831
Offered for sale.....	17,043,111
Sold.....	1,000,407
Surveyed and not offered.....	5,271,578
Advertised in fall of 1851.....	1,783,220
Surveyed and not sold.....	21,314,282
Donations and grants for schools, (16th sections,) and for university.....	954,583
Kentucky deaf and dumb asylum.....	20,924
Internal improvements, grant on admission.....	500,000
Grants to individuals, "armed occupants," under acts of 1842 and 1848, patented up to June 30, 1851.....	52,114
Public buildings, seat of government.....	6,240
Grants for military services, &c., (general military land warrants located in Florida).....	31,240
Reserved for "live-oak" for navy.....	163,888
[This does not include sites for forts, light-houses, &c., or town lots of United States in Pensacola and St. Augustine, nor the keys and islands on the coasts, all of which are reserved for the present; the departments having decided that an act of Congress is necessary to release a reservation by the President for any purpose.]	
Reservation for town of St. Mark's.....	305
Confirmed private claims, (Spanish grants, &c.).....	1,939,789
Swamp lands returned to June 30, 1851, not including those in the regions yet unsurveyed, and others not designated, supposed to amount to several millions of acres.....	562,170
Reserved temporarily for Indians under General Worth's arrangement, including "neutral ground" prescribed by War Department, estimated at.....	3,600,000
Land sold in year ending June 30, 1851, 27,873 acres: receipts same time, \$34,842. The expenses in Florida, of the United States, as to the public lands, for some years exceed the receipts.	

G.

CENSUS OFFICE, WASHINGTON CITY,

August 23, 1852.

DEAR SIR: In compliance with your request, I enclose you sundry printed statements compiled in this office in January last from the official returns, relating to the population, products, &c., of Florida, and also of other States, so far as is necessary to verify the comparisons made below. The statements are generally correct; but typographical and other errors which exist to an inconsiderable extent, will be rectified in the official publication soon to be made. These corrections will not change materially any of the results given.

It seems:

1. That the number of deaths in Florida in the year ending June 1, 1850, was 933, the population being 87,400. This is but one in 93 (and a fraction) in that year, and is less in proportion than in any other State of the Union, except *Vermont*, *Iowa*, and *Wisconsin*.

The Territories of Oregon and Minnesota, it appears, had fewer deaths in 1850, in proportion to their population, than any State. This may in some degree be accounted for by the fact that emigration thither is mostly of male adults in the vigor and prime of life, and there are in these countries comparatively fewer aged and infirm persons, and fewer children, than in the old settled States.

2. The entire area of Florida, in acres, is 37,931,520; and of this there were in 1850 only 349,049 acres of improved land. The official average valuation of these improved lands, made by the returning officers, is \$18 per acre, being much less than the average valuation of improved lands in any other State or Territory.

Florida has less improved lands than any State, except Rhode Island and California.

3. Florida has acres of improved lands	349,049
Unimproved, attached to above.....	1,236,240
Cash value of improved lands	\$6,323,109
Value of farming implements and machinery.....	\$658,795
Horses	10,848
Mules, &c.....	5,002
Milch cows	72,876
Working oxen.....	5,794
Other cattle.....	182,415
Sheep.....	23,311
Swine.....	209,453
Value of live stock.....	\$2,880,058
Wheat, bushels of.....	1,027
Rye, bushels of	1,152
Indian corn, bushels of.....	1,996,809
Oats, bushels of	66,586
Rice, pounds of.....	1,075,090
Tobacco, pounds of	998,614
Ginned cotton, bales of 400 pounds each.....	45,131

Wool, pounds of.....	23,247
Peas and beans, bushels of.....	135,359
Irish potatoes, bushels of.....	7,828
Sweet potatoes, bushels of.....	757,226
Buckwheat, bushels of.....	55
Value of orchard products, in dollars.....	1,280
Wine, gallons of.....	10
Value of produce of market gardens.....	8,721
Butter, pounds of.....	371,498
Cheese, pounds of.....	18,015
Hay, tons of.....	2,510
Other grass seeds, bushels of.....	2
Hops, pounds of.....	14
Flax, pounds of.....	50
Silk cocoons, pounds of.....	6
Cane sugar, hhd. of 1,000 pounds.....	2,752
Molasses, gallons of.....	352,893
Beeswax and honey, pounds of.....	18,971
Value of home-made manufactures.....	\$75,582
Value of animals slaughtered.....	\$514,685

4. It seems that, in proportion to the quantity of improved lands, Florida produces more cotton than any other State. So, also, in proportion to the slave population, she produces more cotton than any other slave State. So, also, in proportion to her entire population, she produces more cotton than any other State of the Union.

5. She produces more sugar (from cane) in proportion to the lands in cultivation, and also in proportion to her slave population, and also in proportion to her entire population, than any other State of the Union, except Louisiana and Texas.

6. Florida raises a greater quantity of tobacco than any of the other States, except Connecticut, Maryland, Virginia, North Carolina, Tennessee, Kentucky, Ohio, Indiana, and Missouri; and, in proportion to the lands in cultivation, and to the population, greater than several of those States. She raises a greater number of bushels of sweet potatoes than any State of the Union, in proportion to the land in cultivation, and slave population, and aggregate population.

7. The number of cattle in Florida compares with that of any State, in the same way.

8. No account of oranges, figs, olives, plantains, bananas, yams, or other tropical fruits, or of the *coompty* or *arrow-root*, or Sisal hemp, or other tropical productions, can be given at this time from this office.

There is great difficulty in estimating the *value* of the different products of the different States, and of the same products in different States; but, from a general and hasty estimate from the best data I can refer to, and from comparison, I am satisfied the value of the agricultural products of Florida, (of course in the State,) in proportion to the area of improved lands, and to the population, slave or free, and both, will compare favorably with the value of the products of any State of the Union. When, therefore, the lower value of the land and of the agricultural implements used is estimated, and also the superior health

of the State is considered, your anticipations of the comparison being advantageous to your State will be realized.

Florida is behind many of the States in her corn crop, and she raises but a small quantity of wheat, rye, or oats; and it appears the value of all investments in the State of Florida in cotton manufactures is \$80,000, which is of cotton goods—making 624,000 yards of sheeting annually. It is impossible at this moment to furnish the statistics of the lumber business in Florida, which amounts to a large sum annually.

I have the honor to be, sir, with great respect, your obedient servant,
 JOS. C. G. KENNEDY, *Superintendent.*

Hon. E. C. CABELL.

F.

TREASURY DEPARTMENT,
Register's Office, August 25, 1852.

DEAR SIR: I have caused a clerk to compile the memoranda desired by you of the statistics of commerce and navigation in Florida in 1850-'51, which are as follows:

1850, imports from foreign ports.....	\$95,109
1851.....do.....do.....	94,997
1850, exports to foreign ports.....	2,607,968
1851.....do.....do.....	3,939,910

Tonnage in 1850, 9,365 tons; in 1851, 11,272 tons.

Of the exports in 1850, \$2,546,471 was from Apalachicola; and in 1851 there was \$3,858,983 from the same port. In 1851 the foreign exports from St. Mark's were \$61,755. Much more than half of the tonnage of the entire State is from Key West.

Of the value of shipments of foreign or domestic merchandise or products from and to Florida ports, *coastwise*, to and from other ports of the United States, no returns are made to the treasury. It is presumed that the value of the shipments of cotton, tobacco, rice, sugar, lumber, tar, turpentine, and other products of Florida so shipped *coastwise*, vastly exceeds the value of the foreign importations.

The exports, foreign and *coastwise*, from Florida ports, greatly exceed the products of the State. This you will perceive by comparison of the Census Office returns, and estimating them with the statistics you can procure from the chamber of commerce of each port, or merchants, of the *coastwise* exports, adding the latter to the foreign exports above given. This is accounted for by the fact that a large amount of the products of the States of Alabama and Georgia is sent to the Florida Gulf ports for shipment.

I have the honor to be your obedient servant,

N. SARGENT.

Steam-marine of the United States on the Gulf of Mexico, from Cape Sable to the Rio Grande.

Districts.	Ocean steamers.	Ordinary steamers.	Propellers.	Tonnage.	High pressure.	Low pressure.	Crews.
				<i>Tons and 95ths.</i>			
St. Mark's, Florida.....		2		45 00	1		5
Pensacola.....		1		98 00		1	8
Mobile.....		78		13,146 00	78		2,790
New Orleans.....	12		2	7,410 00	4	9	395
Galveston.....		10		1,588 59	10		200
Brazos St. Iago.....		5		657 00	5		75
Total	12	95	2	23,244 59	98	10	3,473

The above is taken from Messrs. Gallagher & Mansfield's report of 1852. The steamers at Apalachicola are not stated. There are between fifteen and twenty steamers running on the Apalachicola, Chattahoochee, and Flint rivers, and in St. George sound, and along the coast from that port, the tonnage of which amounts to perhaps 3,500 tons, and the number of hands so employed not less than 350. Messrs. G. & M. say, in a note to their account, "only those vessels at New Orleans which ply on the Gulf of Mexico" are given by them; the Mississippi river boats being stated in another part of their report. Key West is not given in the above; but there are not more than two steamers along the coast not included.

The Gulf of Mexico and the Straits of Florida.

The Gulf of Mexico is the southern boundary of this confederacy from the "Dry Tortugas" to the mouth of the Rio Grande del Norte; and it is remarkable for the absence of capes and of indentations, in comparison with other seas. The coast between these points is about 1,500 miles in extent. The streams emptying into the gulf from the State of Florida are mentioned in another part of this report. Proceeding westwardly, the following rivers debouch into the same common reservoir: The Alabama, Tombigbee, and Mobile rivers, with the waters of their respective tributaries; some, reaching inland into the States of Mississippi and Georgia, enter the Gulf through Mobile bay, from the State of Alabama. The Pearl and Pascagoula, from the State of Mississippi, and the mighty Mississippi, (appropriately styled "*Pater Fluviorum*,") by its different delta flow through the State of Louisiana. Still further west, the Sabine dividing Louisiana and Texas, and the Angelina and Neches; the Trinity and Buffalo bayou, (through Galveston bay;) the Brazos San Bernard, and the Colorado, (by Matagorda bay;) the Navidad and La Vaca (by La Vaca bay;) the Gaudalupe and San Antonio by Pass Cavallo; and the Nueces—all flow into the gulf from the interior of Texas. The Rio Grande divides Texas from our sister republic of

Mexico, and extends from its outlet, (latitude $25^{\circ} 56'$ north, longitude $97^{\circ} 12'$ west from Greenwich,) northwest, as such boundary, to El Paso, at the 32d parallel north latitude; and still further northward to its sources in the mountains of New Mexico, more than 1,300 miles in length from its mouth. The cities, towns, or shipping ports of Tampa, Cedar Keys, St. Mark's, Apalachicola, St. Joseph's, St. Andrew's and Pensacola, in Florida; the city and shipping-port of Mobile, in Alabama; the towns of Pearlinton and East Pascagoula, in the State of Mississippi; the city and port of New Orleans, in Louisiana; and Sabine City, Galveston, Houston, Velasco, Brazoria, Matagorda, Lavacca, Indianola, La Salle, Saluria and Copano, Corpus Christi, Brazos Santiago, and Brownsville, in Texas—are all situated on or contiguous to the shore of the gulf.

The Mexican States of Tamaulipas, Vera Cruz, Tobasco, and Yucatan, to Cape Catoche, form the southwestern and southern gulf coast. The rivers Tigre, San Fernando, Santander, the Panuca, and the Tula, (by Tampico harbor,) the Tuspan, the Alvarado, and the San Juan, the Coatzacoalcos, the Tobasco, Laguna de Santana, Lake de Terminos, the Rio San Pedro, the Usumasinta, and the San Francisco, with others of less importance, flow into the gulf from Mexico; and the towns of Matamoros, Tampico, Tuspan, Vera Cruz, Alvarado, Minatitlan, Frontero, Laguna, Vittoria, and Campeachy, Sisal and Merida, are all upon or near to the coast.

A glance at the map of this continent will show that this great estuary is of an irregular circular form, embracing from 18° to 30° north latitude, (upwards of 750 miles,) and from 81° to 98° west longitude, (nearly 1,000 miles;) that the extent of the coast, from Tortugas to Cape Catoche, is about 2,700 miles; and that the waters of the gulf cover over 750,000 square miles. Inside the gulf there are none but small islands close to the mainland, except those off the capes of Florida and those adjacent to the coast of Yucatan. The distance from Tortugas ($24^{\circ} 31'$ north latitude, longitude $83^{\circ} 07'$ west) to Cape Catoche (latitude $21^{\circ} 30'$, longitude $87^{\circ} 11'$) is a little more than 260 miles, and the course about southwest. Projecting nearly between these two points, but several miles nearer to Cape Catoche than to Tortugas, is Cape Antonio, (latitude $21^{\circ} 52'$, longitude $84^{\circ} 59'$), the southwestern extremity of the island of Cuba, which island reaches some 70 miles north and eastwardly, and then some 580 miles further to the east. Cuba on the south, and the reefs and keys of Florida on the north, (between 75 and 80 nautical miles distant,) form the entrance of the "Straits of Florida."

It is more a practical fact than a mere figure of speech that these straits are but a continuance of every river falling into the Gulf of Mexico; and that the place where their united waters, flowing through these straits, mingle with those of the Atlantic ocean, is the true mouth of each and all of these rivers.

The "straits" extend from the Tortugas up to latitude $27^{\circ} 50'$, their entire length being more than three hundred miles; their course from Tortugas to Cape Florida is nearly east, and, after rounding that cape, is nearly north. After this change of course, they are confined, on the west side, by the eastern peninsular coast of Florida, and on the east side by the Bahama banks, the Bimini isles, and the westernmost Bahama islands, and the Matanilla reef, (to latitude $27^{\circ} 35'$ north, longitude

79° 11' west,) where their barrier on that side ceases. The distance from the "west head" of the "Great Bahama" island (latitude 26° 42' north, longitude 79° 05' west) to the Florida shore, due west, (longitude 80° 3' west,) is less than seventy miles; and, in the entire course of those straits, at no point does their width exceed eighty miles. The immense waters of the gulf, contributed by the numerous rivers above named, and others of less magnitude, are all forced, on leaving the gulf, by the powerful currents coming into the mouth of the gulf from the south and southeast, through the Caribbean sea, from the coasts on this side of both American continents as far south as the Amazon, and beyond Cape St. Roque, and even from the equator and western shores of Africa, across the Atlantic ocean, through these narrow straits. The vast volume of water thus confined rushes through these straits sometimes at a velocity of five miles per hour. After passing the Matanilla reef, the *Gulf Stream*, as it is called—gradually spreading till opposite the capes of the Delaware, it is widened to upwards of two hundred miles—continues increasing in width still further north and east; and its influence as a current, and upon the temperature of the waters of the North Atlantic, is perceptible as high up as the Banks of Newfoundland, and beyond the 44th degree of north latitude.

There is no other such sea as the Gulf of Mexico, so entirely surrounded as it is by countries of such superior agricultural, mineral, and commercial resources. No similar gulf exists, the natural and *indispensable* outlet for vast interior States, with a population of many millions of republican freemen, unequalled by any people, noticed in ancient or modern history, for general intelligence, industry, enterprise, and independence, and who are consequently thriving and prosperous beyond example. These States extend upwards of twelve hundred miles from its shores. Their wealth is exhaustless. Their population may be quintupled, and they can still sustain such number in plenty! Their soil, and especially that of the great valley of the Mississippi, is of surpassing fertility; and their contributions to the commerce of the world, through this gulf, are the varied productions of a region spreading over 18 degrees of latitude and the same degrees of longitude, and adapted to the diversified wants of nearly every other country. And this great "inland sea," though easy of egress, is, at the same time, readily susceptible of defence as a *mare clausum*, by the States situate on its shores, against any foreign intrusion they may decide to interdict. The Mediterranean or Adriatic is not equal to it, nor the Baltic, nor the sea of Marmora, nor the Euxine, superior to it, in this respect.

The realization of the magnificent project, conceived by the genius of Cortez, of making the Gulf of Mexico a great thoroughfare for the commerce between Europe and China and the East Indies, and the Pacific ocean generally, by a communication through the Isthmus of Tehuantepec, will immeasurably augment the importance of this sea. To the benefits which that great man, more than three hundred years ago, foresaw would result to *European* commerce, must *now* be superadded the advantages such communication will give to *American* commerce with Asiatic countries, and in the Pacific, not inferior in value to that of *Europe*.

But especially would such communication be valuable to the United States of America for the facilities and security it would afford to the

intercourse and trade between those portions of this confederacy bordering on the Pacific ocean and those on the Atlantic side of this continent. It is not deemed extravagant to estimate that the trade, commerce, and navigation of the United States, through *Tehuantepec alone*, if a ship canal there be practicable, would, within five years from the completion of such canal, exceed the aggregate value of all the present external trade and commerce and navigation we now have, large as it is. Markets would then soon be open to our enterprising merchants in supplying to the hundreds of millions of inhabitants of Asia, and the rich, extensive, and populous islands in the Asiatic seas, not only articles of necessity, but also of luxury, from our surplus but still constantly increasing stores; and our trade with the islands in the Pacific, and to the foreign States on its shores, would, within the same period, increase tenfold. We could then, as to all this trade and commerce, enter into full competition with every other commercial power—and even if all were combined against us—on terms of great advantage, that would soon obtain and secure for us a permanent ascendancy. A railroad across the same isthmus would result advantageously to us in the same way, though not to the same extent.

A ship canal, or railroad, at either of the other routes of passage or transit to the Pacific, further south, generally spoken of, (Nicaragua, Panama, or Atrato)—and a railroad is already in progress at Panama—must advance our commerce and navigation in the same way; but it is not believed they can be as valuable to this country as the “*Gulf route*” would be, if put in successful operation.

These great improvements are alluded to because, whichever of them is adopted, and if all of them should be put into operation, most of the trade, commerce, and navigation to or through them, or in any wise arising from them, must necessarily pass through the “*Straits of Florida*.” All of such trade, commerce, and navigation, through *Tehuantepec*, from the Pacific, not expressly destined for gulf ports, whether bound to Atlantic ports or Europe, or elsewhere, would be obliged, in getting out of the gulf, to go near to Tortugas and Key West.

The chief portion of all our trade, commerce, and navigation, with Cuba and the West Indies, and especially with Jamaica and the Windward islands, and with the eastern coasts of South America, now passes through these straits, and likewise the trade, commerce, and navigation of Europe with those places, in sailing-vessels, on the homeward voyage. Steam-vessels, on their outward passage from the Atlantic States, also pass through the straits, and most of our coasting-vessels, even of the largest class, bound for the gulf—they, generally, crossing the Bahama banks. The voyage through the Windward passage, or the Mona passage, going near Jamaica, and round Cape Antonio, is sometimes pursued; but it is several hundred miles longer, and is attended with its peculiar hazards, and also delays, that render the other passage preferable.

An estimate of the trade, commerce, and navigation of *the Gulf* now annually passing through the Straits of Florida; and also of the other trade, commerce, and navigation of the United States and of other countries, above referred to as pursuing the same channel, has stated it

as probably amounting to \$400,000,000, (four hundred millions of dollars.) That it must increase, and rapidly, and to an immense amount, and particularly that of the United States, if we are blessed with a continuance of peace, no one can doubt.

With reference to this trade, commerce, and navigation, the Straits of Florida, and the islands, and keys, and coasts of Southern Florida, and particularly the positions of *Key West* and *Tortugas*, are of the highest consequence to this country in time of war and of peace. They are equally as important to the commercial and navigating interests of the Atlantic States, and of the Atlantic seaports as to those of the gulf States and of the gulf ports. They are important to the same interests in California and Oregon. They are important to the agricultural interests of the great valley of the Mississippi. They are important as the outposts of the military and naval *defences* of the entire gulf and southern Atlantic coasts, and as points from which to *assail* an enemy. They are essential for the protection of all our commercial and navigating interests, not merely in, or to, or from, the gulf, but with Cuba and most of the West Indies, and with the eastern coasts of this continent further south, and with South America. The prospect of an extensive and valuable trade with the rich countries bordering on the Amazon and its tributaries being soon opened to us, is favorable; and the recent auspicious changes in the affairs of the Argentine Republic promise an increase of our commerce with the La Plata and the States on its waters. Our commerce is extending with Brazil and with the States on the western shores of South America; and all of the trade, commerce, and navigation, just enumerated, and that in the Pacific, and through it to China and the Asiatic seas generally—the anticipated augmentation of which is before adverted to—must of necessity pass within sight of these two positions above designated, and most of it through the entire extent of the “straits.”

Tortugas is to the Gulf of Mexico, to the Straits of Florida, and to the Caribbean sea, and in fact to the entire West Indies, what Malta is to the Mediterranean and Adriatic seas, and the countries on their shores. The position of Gibraltar with reference to the commerce passing through the *Gut* into and out of the Mediterranean is not as commanding as is the position of Key West, with reference to all the immense commerce of this country, foreign and domestic, and that of foreign countries, passing through the Straits of Florida. The fortifications at the Dardanelles do not more completely control the entrance to the sea of Marmora and that to the Euxine; or the Castle of Cronberg that of the Báltic through the sound at Elsinore; than the forts at Key West and Tortugas will, when finished and garrisoned, and aided by the modern naval power of steam frigates—the most formidable ever known—control the entrance to the Straits of Florida and its entire passage.

Key West is one of the finest harbors in the United States. The largest ships-of-war can enter it at any time with facility. The anchorage is secure, and it, and also the Tortugas, are being well fortified. Tortugas protects Key West on the south and west, and the latter is equally essential to the full protection of the former. As Key West has a channel of ingress and egress from and to the Gulf of Mexico, as

well as from and to the Straits of Florida, and supported as it is by Tortugas, having similar channels, it would require for the blockade of a naval force in either thrice the strength of the force blockaded; and the blockading force must necessarily be so divided as to prevent any junction giving it effective superiority. These two positions will be formidable to any power that may provoke this country to a war, and that has possessions in, or convenient to, the West Indies; for, besides the Gulf of Mexico, and not only the Havana and Matanzas, but the entire island of Cuba, and every other West India island, and the whole Caribbean sea and its coasts, could be successfully blockaded by a vigilant and effective force of war-steamers to rendezvous there. From thence any point in the region named could be assailed in a few hours.

Another consideration gives consequence to this position with reference to the interests of the trade, commerce, and navigation, before referred to. From a report made to the Coast Survey office by the agent of the underwriters of our Atlantic and other seaports, it appears that, from the year 1845 to November 1, 1852, the number of American vessels wrecked on the Florida reefs, keys, and coast, and brought into Key West, was 252; and the aggregate value of the ships and cargoes was \$7,932,000. The salvors were awarded on this property \$798,317, or about *ten per cent.* average salvage; and the expenses incurred were \$389,380—about *five per cent.* more: amounting in all to \$1,187,697, or about *fifteen per cent.* loss to the owners or insurers. In this statement, the foreign vessels and cargoes wrecked there are not included. It is estimated they equal at least *one-fifth* of our own in number and value. Those vessels that were supposed to be entirely lost, and the crews of which probably perished, are not estimated in the statement. The system for the regulation of the business of assisting wrecked vessels, and for securing the fidelity, honesty, and vigilance of the "*salvors*," now enforced by the admiralty court at Key West, under authority of acts of Congress, is judicious and salutary.

The extended introduction and use in navigation of steam power, defying the currents and the storms; the acquisition of more accurate knowledge of the reefs, and keys, and coasts, and currents, and the course of the winds; and the improved skill and greater care on the part of navigators, and the erection of further necessary light-houses, beacons, buoys, &c.—it is hoped, may decrease the number of wrecks on those reefs and coasts, and the immense losses sustained thereby, chiefly by *eastern* merchants, or ship-owners, or insurance offices; but there will always be many unavoidable casualties attendant upon that navigation. The subject of devising further means, looking to the prevention of shipwrecks and consequent loss of human life and destruction of property on the reefs in the vicinity of Key West, commends itself to the consideration of every philanthropic statesman. Provision for the destitute mariner cast upon those islands or coasts by shipwreck is also a subject meriting attention.

There is no navy or ship-yard at Key West. There are no public establishments for the repair or refitting of ships injured in battle or by storm, or by having been ashore, nearer than Pensacola, on the gulf side, and Norfolk, in Virginia, on the Atlantic side. There is no naval

hospital at Key West. There are no naval or military *magazines* or storehouses. There are no supplies of naval or military *armaments* or *munitions of war*. There are no public supplies of provisions; no *coal* for steamers, or other *naval or military stores* of any kind, or places to deposit them in, if taken there. There are no *materials* for the repair or refitting of vessels. There are no public workshops, or artisans, implements, or tools, or machinery, or tackle, for such object. And the case is the same at Tortugas. The nearest government establishments are at Pensacola, six hundred miles across the gulf, and Norfolk, nine hundred miles up the Atlantic coast.

Every dictate of prudent foresight demands a change in these respects. At the present session of Congress, an appropriation of twenty thousand dollars is made "for establishing a depot for coal, for naval purposes at Key West." No appropriation allowing further progress in the fortifications at Key West or Tortugas has, however, been made. It is believed, sound economy dictates that such amounts should be given as would enable them to be completed, and the armaments and military stores supplied to them forthwith.

Key West will hereafter be more looked to as a rendezvous for our merchant-ships passing near to it. The great utility of a public ship-yard and dock there, must be apparent to all who reflect on the subject. That port should be relied upon as a certain depot for coal and provisions and stores of all kinds, but especially for ship-chandlery and materials for repairing and refitting our ships-of-war and merchant-vessels, injured in any way, if they should put in there, or be taken in by "salvors." The establishment there of a naval hospital would be a just and a judicious measure. If made a stopping-place for the United States mail steamers between Chagres and New York and New Orleans, and all others going to, or returning from the South, the advantage thereby afforded of shipping wrecked goods by the large steamers directly to New York or to New Orleans would be important to the insurers and others interested. The adoption of the measures suggested could not but result beneficially to the country in every respect. To wait till circumstances of necessity force such results—till private interests are constrained or induced to build up private establishments, and provide the means for making Key West a rendezvous and haven and depot, as suggested—is, it is conceived, short-sighted policy. Public and general interests are involved, and public governmental aid should be yielded. Key West will become more and more essential as a place of depot for American coal as the steam navy and steam mercantile marine increases. If Tehuantepec should be made a good route of transit or of passage to the Pacific, Key West, being in the direct pathway of steamers from thence to the Atlantic ports and to Europe, and about *midway* of the voyage to and from New York, will be absolutely indispensable to the steamers in that business as such depot.

Cogent arguments are urged in favor of Key West being made a principal naval station, and for establishing a navy-yard there of the first class. Besides those arising from its peculiar advantages of position, before alluded to, in time of war and of peace, the facility of procuring all kinds of naval timber cheaply, and also of tar, pitch, and

turpentine, from the contiguous public domain on the peninsula, is a matter deserving consideration. At any rate, it should be made an auxiliary yard for the *repair* and *refitting* of vessels-of-war injured in battle or by storm, even if it should be deemed injudicious to *construct* or *build* ships there. Large sums have heretofore been expended at Port Mahon and elsewhere in foreign ports, by the United States, for similar limited public establishments. If provision is made by law, allowing, on proper terms, the use of such works for the repair and refitting of wrecked merchant-vessels, it would be highly advantageous to the commercial and navigating interests of the Atlantic seaboard.

The superior eligibility of Key West as a naval station and depot, and the sound policy of fortifying it strongly, have long since been urged upon the government by officers of the army and navy at the head of their profession. President Monroe's message, January 20, 1823, and Secretary Thompson's communication referring to Commodore M. C. Perry's report, *Am. Sta. Pa., tit. Naval Affairs, p. 871*; also Commodore Rodgers's report, November 24, 1823, *ibid., p. 1121*; also President Jackson's executive order, April, 1829, and Secretary Branch's report in 1829, *Sen. Doc. 1st sess. 21st Cong., vol. 1, No. 1, p. 37*; and Commodore Rogers's report, *ibid., p. 236*; also President Jackson's message, March, 1830, and Secretary Branch's letter and Captain Tatnall's report, *Sen. Doc., 1st sess. 21st Cong., vol. 2, No. 3, pp. 1, 2, and 5*; also Secretary Conrad's report, December, 1851, *Ex. Doc. No. 5, p. 9, 1st sess. 32d Cong.*; and Gen. Totten's report, *ibid., pp. 25-52*; and Lieutenant Maury's report, *ibid., pp. 116 and 179 to 184*; and Lieutenant Maury's essays in *Southern Literary Messenger* of May, 1840, *pp. 310, 311, &c.*; and numerous similar papers to be found in the published documents of Congress since 1821, show this. The late Commodore David Porter, at different times, officially and unofficially, in communications published in the newspapers, expressed his unequivocal concurrence with Commodore Rodgers in the opinion he gave of the great importance of Key West and Tortugas, and of the policy and measures that should be adopted with respect to those points. And when Commodore Porter was in the service of the republic of Mexico in her struggle for independence with Spain, he used Key West, then first being settled, as a point of rendezvous, from which he was enabled to well nigh destroy the commerce of the Havana and Matanzas, though sought to be protected by a superior Spanish fleet under Admiral Laborde.

In the celebrated report to Congress, April 8, 1836, (*Ex. Docs., vol. 6, No. 243, 1st. sess. 24th Cong.*), made by General Cass, then Secretary of War under General Jackson, and which, it has been considered, embodies all the arguments against the general system of coast fortifications as an economical or as the best means of defence for this country, positions like Key West and Tortugas are excepted from the general objections to the system, insomuch as they are not within the class of ordinary coast fortifications on the main land. They are rather auxiliary naval works. *Ibid., pp. 11, 15, &c.*

The opinions expressed as to the value of Key West and Tortugas to the United States, in the documents and papers above referred to, are by no means peculiar to the eminent men and officers who thus expressed them, nor are they, in the least degree, novel. Similar views,

it is well known, were entertained and expressed, by British engineers and other British naval and military officers, to that government a long time ago. Great Britain took the Havana and the provinces of East and West Florida from Spain, in the war of 1762-'63. On the restoration of peace in February, 1763, she relinquished the Havana and Cuba, but retained the Floridas, which remained in her possession till 1783, when they were retroceded to Spain. Whilst in possession of them, the British government caused partial surveys to be made of the reefs, keys, and coasts; and the reports of her officers represented the Tortugas, and other islands and keys adjacent to the coast, as commanding, if fortified and aided by a small naval force, the trade of the Havana, of Matanzas, and of the entire gulf and Straits of Florida. Excepting the Floridas, the whole gulf coast (Louisiana and the viceroyalty of Mexico) was at that time possessed by Spain. The British officers represented truly, that the Tortugas and the other Florida keys were of more importance to Great Britain, in a naval and military point of view, than the Havana; because, whilst they are a check upon it, and, as has been before mentioned, they could effectually blockade it, aided by an efficient naval force, the Havana has no countervailing check or control over them with such naval force to sustain them. It is true, objections have been preferred to these views. It has been asserted that Key West and Tortugas are "unhealthy." The census reports of 1850, as to the number of deaths there, and the official reports of army and navy, medical, and other officers, and the experience of the residents of the Florida keys for the last twenty years, disprove this assertion. It has been stated that the isolated position of these two points renders the construction and maintenance of public works there more expensive than at other places. This is not correct to any very great extent, and it is not a good reason for withholding the means if the advantages are superior, or the necessities greater, for such works there than at other places. Besides, these two works will cost for the construction less than the aggregate of the cost of four frigates, (if estimated at only \$600,000 each;) and it must be remembered that our naval ships ordinarily require in eight years the amount of their prime cost for repairs, refitting, &c.

The objection has also been urged that, if such forts were besieged, there would be difficulty in affording them subsistence or other succor. It is not easy to imagine the probable necessity of such succor, except produced by a course of flagrant negligence and want of precaution, with respect to them, that it is not likely would be pursued by our government in time of war, nor by our army or navy officers. And it is denied, if such were the case, aid could not be rendered from the adjacent coasts, especially if some of the keys (such as Bahia Honda and Key Vacas) nearer the capes are protected by small defences, as should be, and can be done, at trifling expense; and if it can be supposed that there was no naval force of the United States on the gulf competent to repel the enemy. The assertion has been made in crude essays in political newspapers, and it has been elsewhere re-echoed, that Cuba, the Havana, and the Moro Castle, are "the true and only keys to the defence" of the shores of the South, "and to the immense interests there collected," and that Key West and Tortugas were not the con-

trolling positions stated in the documents referred to. It is believed that but a solitary instance exists where such opinion has been acquiesced in by any distinguished naval or military officer.

Such peculiar opinion, with respect to the relative value of these positions, and of Cuba, and of the Havana, and of the Moro Castle is unsupported by any sound reasons founded on undisputed facts, and it has generally been urged to sustain ulterior views of policy beyond the mere protection of our commerce. The idea of the Havana being regarded as a key to the gulf, when Key West and Tortugas are fortified and supported by a small naval force, is preposterous. They are to windward of Cuba, and are located at the *centre*, while the Havana is outside the *periphery* of the circle of the commerce of the gulf and straits; and they have different channels of ingress and egress to the gulf and the straits, while the Havana has but one, and that to the straits. Vessels bound to or from the gulf, or further south, do not ordinarily pass as near to the Havana as to the Florida keys. They seek to avoid the iron-bound and generally leeward coast of Cuba, and the currents near it.

As points from which to make an offensive or aggressive demonstration by sea, either in the West Indies or to the south, or in the Atlantic beyond the Caribbean sea, as has before been observed, Key West and Tortugas are the most favorable positions in possession of the United States. Foreign statesmen and military and naval officers are not unapprized of this; and hence, upon the breaking out of a war between us and any naval power of Europe, a large naval force will be forthwith dispatched by the enemy to their vicinity, and, as was predicted by Commodore Rodgers in 1823, "*the first important naval contest in which this country shall be engaged, will be in the neighborhood of this very island,*" [*Key West.*]

In confirmation of the correctness of those remarks, it is not inappropriate to refer to debates in the British Parliament more than thirty-three years ago, in which eminent and sagacious British statesmen, who doubtless received the views they expressed from British military and naval officers, (as is the practice of wise British statesmen on such subjects,) unequivocally attest the value to the United States of these positions, obtained by the then recent cessions of the Floridas, by Spain. [Vide Lord Lansdowne's speech, in May, 1819 *Hans. Parl. Deb.*, vol. 40, p. 291; Mr. Macdonald's speech, June 3, 1819, *ibid.*, p. 902; Mr. Maryatt's, *ibid.*, p. 893; Sir Robert Wilson's, *ibid.*, p. 871; Lord Carnarvon's, *ibid.*, p. 1413; and Lord George Bentinck's, February 3, 1848, *ibid.*, vol. 96, pp. 7 to 42.]

This is not the only time similar views were expressed in the British Parliament; and it has been stated on good authority, that, anterior to the cession of 1819, an eminent, watchful, and far-seeing English statesman called public attention to the importance of the *Tortugas*, and to the expediency of the British government taking possession of and fortifying those islands.

One of the most useful public undertakings in the Union is the "Coast Survey." Its labors on the Florida reef, keys, and coasts were commenced in 1848, and are extending up the gulf and Atlantic coasts. Appended to a statement of wrecks at Key West in 1847, (published

p. 105, Sen. Doc. No. 242, 1st sess. 30th Cong.) is the following printed note, made by one of the then Senators from Florida :

[NOTE BY J. D. W. IN 1848.]—"It is not a little surprising that, in the *twenty-seven* years Florida has been held by the United States, no complete nautical survey has been made of the '*Florida reef*.' During such time the *British* government has had ships-of-war, (among them the brig Bustard,) with scientific officers, engaged for months in such surveys ; and even in surveying the harbor of Key West, and other of our harbors there! The charts used by our navigators are the old Spanish charts, and those made by the British from 1763 to 1784, and of the *recent* British surveys alluded to, and compilations of them by Blunt and others—all imperfect in many particulars, and erroneous in others. *We have no original American chart of all the reefs and keys!* That accomplished and scientific officer at the head of the '*Coast Survey*,' Professor Bache, has informed me, that if the means were appropriated by Congress, the entire reef and all the keys, from the Tortugas up to Cape Sable, could be surveyed *in one season*. The expense, to enable the work to be finished *in one season*, might not fall short of \$100,000 ; as, to effect it, three or four different parties of officers must be employed. But the benefits of such work would greatly outweigh this amount ; and it will not cost less, to devote two or three years to it."

No intelligent man, after investigation and reflection, can question the great value of the "coast surveys." They have been prosecuted with diligence on this coast, as the results show, since the first appropriation of \$7,500 was made in 1848. The annexed map, showing the coast of the Gulf of Mexico, and also the relative positions of Cape Catoche and of Cuba, and of the Bahama banks and islands, to the peninsula, and to the islands, keys, and reefs of Florida, and also of the Atlantic coast as far north as Charleston, has been furnished from the "Coast Survey" office, upon request, expressly for this report. It will be found to be highly useful. Some portions of the coasts therein delineated have not as yet been fully surveyed, though the work, as it respects the coasts of the United States, is progressing as rapidly as the limited means yielded will allow. The parts unsurveyed have been laid down from the former surveys alluded to, and from the partial, or preliminary, *reconnaissances* made by the Coast Survey officers. The beneficial effects of the labors of this valuable public establishment (characterized as those labors are by that perfect accuracy attainable only by the highest degree of science and professional skill) should be conceded by all, though it seems such is not the case. It is to be lamented, as a drawback to these and all similar works for the *prevention* of casualties of any kind, and particularly those by shipwreck, that they are not generally appreciated. Their salutary results are silently effected, and therefore unperceived by many. Even the merchant, whose property is saved from destruction by the charts of hidden dangers, and of safe channels and harbors, furnished by the "Coast Survey," reflects but little to whom he owes its preservation. But the tempest-tossed mariner, when his ship and his life are in peril, from which there is no escape except by the aid these charts give him, then

feels their inestimable value, and cherishes the guide there found as his best friend.

WRECKS.

The following statement has been compiled from Sen. Doc. No. 242, 1st session 30th Congress, pp. 25, 26, and *ibid.*, pp. 99 to 105; also Sen. Doc. No. 3, 2d session 30th Congress, 1848, pp. 30, 31, &c.; also Sen. Doc. No. 42, 1st session 32d Congress, 1851-'52, p. 11; and other documents referred to in the foregoing paper, and in Mr. Cabell's letter, which precedes it. See also Mr. Hoyt's (agent) report to "Board of Underwriters" in New York, for 1852:

Wrecks on Florida reefs from 1844 to December 15, 1852.

Year.	Number of ves- sels.	Value of ves- sels and car- goes.	Salvage.		Expenses.		Salvage and expenses.	Loss. Per ct.
			Per ct.	Amount.	Per ct.	Amount.		
1845.....	29	\$725,000	12.7	\$92,694	10.5	\$76,870	\$169,064	23.3
1846.....	26	781,000	9.4	69,600	4.9	86,108	103,700	14.8
1847.....	37	1,624,000	6.7	109,000	6.4	104,500	213,500	13.1
1848.....	41	1,282,000	11.1	125,800	9.2	74,260	200,060	21.8
1849.....	46	1,305,000	11.2	127,810	8.5	91,350	219,160	18.7
1850.....	30	922,000	13.2	122,331	8.3	77,169	200,000	21.5
1851.....	34	941,500	12.1	75,852	8.4	89,148	165,000	20.5
1852.....	22	663,800	8.2	80,112	8.2	81,988	162,100	16.4
Total.....	265	8,194,300	10	803,699	12.9	630,885	1,434,584	22.9

The *foreign* vessels are not included in the above, except in the first three years, when there were 17 British, and 84 American, and 6 of other nations. Foreign vessels included, since 1847 the number of wrecks is altogether about 290 vessels. The expenses are distinct from salvage, being charges against vessels, &c., in port, as harbor fees, wharfage, storage, auction commissions, exchange, commissions for advances, support of crews, repairs, refitting, &c.

THE COTTON CROP OF THE UNITED STATES.

This paper is not intended to be an essay upon the questions respecting which much has been written as to the time when, and by what people, "*cotton-wool*" was first used for making cloth; or when, or by whom, it was first *cultivated* for use; or when, and with what nations, it first became an article of commerce. Several different and various publications, official and unofficial, readily attainable in most parts of this country, each, afford all the information on these points that can, in any degree, be practically useful to any person. Nor is it intended to discuss in this paper, or even to intimate an opinion respecting those topics of political economy connected with the different "*cotton interests*," which have divided public sentiment in this country in years past. The sole object is to present *data*, gathered and compiled from authentic sources, relating to the cultivation and production of cotton—its past increase

in the United States as an article of commerce, and its probable still greater importance and value.

Two kinds of cotton are grown in the United States :

1. That indifferently called "long staple," "black seed," "lowland," or "sea-island." When raised inland, it is sometimes called "Mains."

2. The "short staple," "green seed," "upland," also sometimes called "petit gulf," or "Mexican."

The first generally commands twice or thrice the price of the latter kind, and superior sea-island often brings a much higher amount. Very choice qualities of sea-island cotton have commanded upwards of a dollar *per pound*. Sea-island cotton is prepared for market with great care, being mostly cleaned by hand, or by the "roller" gin; the "saw" gin, used to separate the wool of the "short staple" from its seed, injuring the fibre of the "long staple." The long staple is usually put in *round* bags, not exceeding 350 pounds in weight, whilst the short staple is, in late years, compressed into square bales of generally 450 or 500 pounds each, and in some States more. The annual yield of the long staple is generally from 75 to 150 pounds of cleaned cotton to each acre of average good land cultivated, or from one to one and a half and two bags of 300 pounds to each able plantation hand employed; whilst the short staple yields from 150 to 250 pounds of cleaned cotton to the acre, or from three to seven bales of 400 pounds to each hand. In the best seasons, upon land of the first quality and with good cultivation, eight, nine, and sometimes ten bales of upland cotton, to the hand, have been produced. The hands employed in the cultivation of cotton, and the product of whose labor is thus estimated, are estimated as if not engaged in the cultivation of corn, potatoes, and other products, &c., for the support of the plantation.

The regions in the United States adapted to the profitable raising of *sea-island cotton* are not so extensive as those in which the short staple can be advantageously cultivated, and the crop of sea-island has consequently not increased in the same proportion as the short staple. And the demand for sea-island is not so great, as it is chiefly used for the manufacture of laces, fine cotton threads, and cotton cambrics of the most delicate texture. It is now also used with *silk* in the manufacture of several articles passed off as *silk goods*. No country has produced any cotton equal in fineness, length, and strength of fibre, and of such whiteness, as the sea-island of South Carolina, Georgia, and Florida. This superiority is doubtless, in a degree, owing to the peculiar adaptation of the climate and soil of parts of those States to the favorable production of that kind of cotton; but it is also attributable to the great attention given to its cultivation by intelligent and observing planters, availing themselves of the aid of chemical and agricultural science—making experiments from year to year for improving the processes of cultivation, and for increasing the excellence as well as the quantity of the product; and who profit by the practical experience of their antecessors of more than half a century.

The treasury accounts exhibit the progress of the "sea-island" cotton crop of this country from 1805 to 1852, inclusive, fuller than they do the progress of the crop of "upland" cotton, for the reason that the former has been mostly *exported*, whilst a large portion of the latter has

always been consumed in the United States. Prior to 1805, no distinction was made in the treasury reports between the "sea-island" and "other cotton," styled, in a treasury report of 1836, "*common cotton.*"

The treasury account show that, during the years 1790-'91, and '92, about 733,044 pounds of cotton of all kinds, foreign and domestic, valued at \$137,737, were *exported* from the United States. There had been *imported* into the United States previously, and during that period, foreign cotton to a considerable amount. The *importations* within the years named were about 889,111 pounds, which, valued at the same price as that *exported*, amounted to \$202,014. The *importations* of foreign raw cotton during those three years exceed the exportations 156,067 pounds; and, consequently, either the whole of the domestic crops, and likewise that much of the foreign (and imported) raw cotton, was then consumed in the United States; or a portion of the domestic crops was exported, and a greater amount than is above stated of the foreign raw cotton was consumed in the United States. The quantity of foreign raw cotton consumed in the United States in these three years is, however, estimated in a treasury report of 1801 at 270,720 pounds, which would make the exportation of domestic cotton in those years 114,653 pounds. It is known that some, though limited quantities of *domestic* raw cotton were sent to Great Britain in the years specified; but the correct accounts thereof cannot now be obtained, and therefore, with this explanation, it has been deemed proper to state *all* the *exportations* for those years as *foreign* cotton, as in fact most of them were.

The only accounts of the entire annual crops of the United States that can be obtained are unofficial, except the decennial census statements. The "*commercial*" accounts are usually stated as from the first of September of each year, to the 31st of August following; it being presumed that, by the day last mentioned, the entire crop of the *previous year* will have been received in the home market; and the amount of such *receipts*, consequently, affords tolerably correct *data* for estimating the "*entire crop*" of that year. The official or *treasury* accounts, ending each year on the 30th day of June, (the last day of the fiscal year of the federal government,) and before the entire crop of the previous year has been received in market, the crops of the two preceding seasons are often confounded. Nevertheless, by comparison of the different accounts with each other, estimates may be made of the crop of each season, closely approximating to general correctness.

The exports of "sea-island" cotton from the United States, within certain periods, have been as follows:

In 1805, '6, and '7.....	23,809,752 pounds.
In 1808 (embargo).....	949,051 "
In 1809, '10, and '11.....	25,297,867 "
In 1812, '13, and '14 (war).....	11,022,993 "
In 1815.....	8,449,951 "
In 1821, '22, and '23.....	34,731,389 "
In 1849, '50, and '51.....	27,505,378 "
In 1852.....	11,738,075 "

The annual exports of "sea-island" cotton for the last *nineteen* years, excepting the years 1845, '46, '49, and '52, were *less* in quantity than the exports of the same kind in 1805. The fluctuations in the prices of "sea-island" cotton have not been so great as in those of "other cotton." The "embargo," laid December 22, 1807, and which continued in force till March 1, 1809, affected the crops of 1808 and 1809, as to quantity produced, and prices; and the war with Great Britain (declared in June, 1812, peace being fully restored in January, 1815,) injuriously affected the production and prices of all cotton for the years 1812, '13, and '14. The annual consumption in the United States of raw "sea-island" cotton, it is estimated, is not now more than one-hundredth of the amount exported, being in 1852 estimated to be about 100,000 pounds. Though the treasury accounts from 1805 to 1820 distinguish in the tables of *exports* between domestic and foreign cotton exported, and the quantities and values of the different kinds of cotton, and that exported in foreign and that in domestic vessels; since 1820 to *separate values* of "sea-island" and of "other cotton" are not stated in the published reports. It appears that for many years Great Britain has generally received nearly four-fifths, and France about one-fifth, in quantity, of the "sea-island" cotton exported.

It has been stated that a process of dividing, or splitting, the coarser "upland" cotton, and of substituting the divided fibre for the fine "sea-island," in the manufacture of the finer muslins, has recently been discovered in Europe; and which, it has been conjectured by some, may cause a diminution of the value of "sea-island" cotton. The account is not fully credited; but if the fact be as stated, it is considered that the expense and labor of dividing the coarser cotton must exceed the additional cost of the production and preparation of the "sea-island" for market, to that of the "upland;" and more than the ordinary difference between the prices of the different kinds. And it is also believed that articles manufactured from cotton naturally fine, must excel in appearance, strength, and durability, any made from cotton the fineness of which is produced by artificial means, like those intimated; and that for a long time to come, markets equally as certain and as profitable as now exist for all the "sea-island" cotton that can be raised in the United States, (as before observed, necessarily limited in quantity,) may be certainly depended upon.

A comparison of the *exportations* of "sea-island" cotton with those of "all other" domestic raw cotton will show that, whilst in 1805, '6, and '7 the former amounted to 23,809,752 pounds, the quantity of the latter exported during the same period was 114,182,256 pounds; the proportion of "sea-island" to "all other" being less than a *fourth*, and to the entire exportation less than a *fifth* in quantity. In 1821, '22, and '23 the proportion of "sea-island" to the entire exportation was less than a *twelfth* in quantity; and in 1849, '50, and '51 that proportion was less than a *ninetieth*! In the year 1852, the "sea-island" exported was 11,738,075 pounds, and the proportion to the entire exportation of 1,093,230,639 pounds was less than *one ninety-third*.

The "upland" cotton crop of the United States has increased since 1790, with a rapidity unexampled, in history, by any product of agriculture, in any country. Its augmentation in respect of quantity, as

well for *home* manufacture and *consumption* as for *home* manufacture for *exportation*, and as an article of *foreign* commerce in its "raw" state, and likewise the increase of its importance and value as an article of commerce after its manufacture in *foreign* countries, are also unparalleled. The consequence it has attained as an article of necessity, in affording the means of employment to the manufacturing classes of Europe (and especially Great Britain) and of this country, is also without precedent.

The *exportations* of domestic *upland* cotton anterior to 1805, separately from "sea-island," cannot be given for the reasons before stated.

The *exportation* of "sea-island" in certain periods is stated above. The *exports* of "other cotton," or "upland," and likewise the "total exports" of all domestic raw cotton, in the same periods, were as follows:

Exports of raw cotton from the United States.

Years.	Domestic "upland" cotton.	Total domestic cotton of all kinds.	Official valuation.
	<i>Pounds.</i>	<i>Pounds.</i>	
In 1805, '6, and '7	114,182,256	137,992,011	\$32,004,006
In 1808.....	9,681,394	10,630,445	2,220,984
In 1809, '10, and '11	191,012,086	206,309,953	33,274,408
In 1812, '13, and '14	54,703,407	65,726,400	8,087,628
In 1815.....	74,548,796	82,998,747	17,529,244
In 1821, '22, and '23.....	408,560,381	443,291,770	64,638,062
In 1849, '50, and '51	2,560,715,584	2,589,220,962	250,696,900
In 1852.....	1,081,492,564	1,093,230,639	87,965,732

The official returns show that the increase of the aggregate of the *exportations* of all kinds of domestic raw cotton, since it has become a prominent article of foreign commerce, (except whilst the embargo of 1808, and the war of 1812, 1813, and 1814, affected our foreign trade, or when adventitious and unfavorable circumstances shortened the crop,) has been unchecked and regular. That increase, since 1805, has been upwards of *twenty-eight-fold* in quantity, and more than *nine hundred per centum* in value, and the steadiness of the augmentation will be manifest by taking the aggregate of each successive *three* years after 1804, down to and including 1852, omitting only the years when all the commerce of the United States was shackled and reduced, as above noticed.

The *importations* of foreign *raw cotton* into, and the *exportations* of foreign *raw cotton* out of, the United States, (the difference being *consumed* in the United States) are stated below for certain years, as taken from the treasury returns:

Years.	Imports of foreign raw cotton.		Exports of foreign raw cotton.		Difference.	
	Pounds.	Dollars.	Pounds.	Dollars.	Pounds.	Dollars.
In 1805, '6, and '7.....	7,881,415	1,831,327	6,494,439	1,506,610	1,386,976	324,719
In 1821, '22, and '23.....	1,256,614	239,020	1,093,362	203,327	163,242	25,732
In 1849, '50, and '51....	584,127	29,622	184,034	11,340	400,093	18,682
In 1852.....	244,548	12,521	.....	.....	244,548	12,521

The quantities and values for every year have not *all* been found in the treasury returns; but the one may generally be estimated from the other, and from the prices of domestic cotton the same year. It appears that the price of some foreign cotton was formerly very high; but the average of medium "*upland*" domestic cotton is now too great for the *foreign* cotton imported. As before observed, the *entire* exports of 1790, '91, and '92, are set down as foreign raw cotton; inasmuch as they were less than the imports of same cotton in same years. The total amount of the crops of the United States in those three years has been variously estimated; but the accounts of the *imports* and *exports* of foreign raw cotton, (before stated with explanations,) show that the cotton then produced in the United States *was not sufficient for the domestic consumption in those years!*

Our importations have swelled in the aggregate from about \$388,000,000, in 1805, '6, and '7, to \$542,220,689, in 1849, '50, and '51. In the year ending June 30, 1852, they amounted to \$212,613,282. In considering this increase, it should be recollected that this statement does not show the increased *consumption* in the United States, of the foreign articles, which in some instances is greater than appears by such account.

In former years a large portion of these importations was destined for *exportation* from the United States to foreign countries, and was not consumed here. We received the freights upon such of them as were carried in our ships, in or out; and import duties, less the drawback on exportation, and the incidental expenses of storage, &c. This "carrying" trade has decreased more in proportion than any other. The following account of such aggregate importations and exportations of all foreign merchandise, and likewise the next following account as to *foreign cotton manufactures* imported and exported in different periods, will illustrate these remarks. The *difference* is the true amount of such importation *consumed* in the United States. The accounts, or general tables, annually published by the treasury, do not direct attention to past changes in the course and character of our trade, commerce, and navigation; and therefore its true decrease or increase, and its *actual*

retrogression or progress, in every respect, is not manifest without close investigation of several different tables.

The value of importations and exportations of *foreign* merchandise, and "difference," (being the amount *consumed* in the United States,) in certain periods, were as follows:

Years.	Imports.	Exports.	Difference, consumed in U. S.
1790, '91, and '92.....	\$83,700,000	\$2,804,295	\$80,895,705
1793, '94, and '95.....	135,456,268	17,125,277	118,330,991
1796, '97, and '98.....	225,367,270	86,300,000	139,067,270
1799, 1800, and '1.....	281,689,427	131,296,598	150,388,829
1802, '3, and '4.....	225,999,999	85,600,640	140,399,359
1805, '6, and '7.....	388,510,300	173,105,813	215,404,487
1808 (embargo).....	56,990,300	12,997,414	43,992,886
1809, '10, and '11.....	198,200,300	61,211,616	136,988,684
1812, '13, and '14 (war).....	112,000,000	11,488,141	100,511,859
1815, '16, and '17.....	359,394,274	43,079,975	316,314,299
1818, '19, and '20.....	283,325,300	56,600,408	226,724,892
1821, '22, and '23.....	223,406,502	71,132,312	152,274,190
1824, '25, and '26.....	261,863,559	82,467,412	179,396,147
1827, '28, and '29.....	242,486,419	61,656,631	180,829,788
1830, '31, and '32.....	275,097,310	58,460,478	216,636,832
1833, '34, and '35.....	384,535,385	63,640,041	320,895,344
1836, '37, and '38.....	444,686,656	56,054,117	388,632,539
1839, '40, and '41.....	397,179,828	51,153,918	346,925,910
1842, '43, and '44.....	273,350,921	29,759,102	243,591,819
1845, '46, and '47.....	385,491,999	34,704,611	350,787,388
1848, '49, and '50.....	480,994,685	49,172,988	431,821,697
1851.....	216,224,932	21,698,293	194,526,639
1852.....	212,613,282	12,037,043	200,576,239

The "bullion and specie" imported and exported, are included in the above. It corrects some errors (though trivial) in former tables.

The value of importations and exportations of *foreign manufactures* of cotton and "difference," being the amount *consumed* in the United States in certain periods, was as follows:

Foreign cotton goods imported and exported, &c.

Years.	Imports.	Exports.	Difference, consumed in U. S.
1821, '22, and '23.....	\$26,391,495	\$5,863,132	\$20,528,363
1824, '25, and '26.....	29,753,307	7,112,522	22,640,785
1827, '28, and '29.....	28,674,440	5,646,493	23,027,947
1830, '31, and '32.....	34,352,203	7,540,409	26,811,794
1833, '34, and '35.....	33,173,215	9,069,209	24,104,006
1836, '37, and '38.....	35,626,258	6,602,600	29,023,658
1839, '40, and '41.....	33,169,701	3,287,810	29,881,891
1842, '43, and '44.....	26,178,789	1,550,156	24,628,633
1845, '46, and '47.....	42,586,782	1,661,891	40,924,891
1848, '49, and '50.....	54,285,149	2,214,361	52,070,788
1851.....	22,164,442	677,940	21,486,502
1852.....	19,689,496	991,784	18,697,712

A reference to the more detailed statement appended will show that, for some years past, most of the above specified importations have been of the finer kinds of manufactures, made chiefly from the "sea-land" cotton, or the best qualities of "upland." Our domestic manufactures, though improved greatly as to quantity, have hitherto been mostly of the medium, or of the coarser or lower-priced goods, made from ordinary "upland" cotton, manufactured with less labor, and more cheaply than the finer goods. A reference to the following compiled account, and to the more detailed table appended, of our domestic cotton manufactures, *exported* since 1826, will verify this statement, as to the *quality* thereof. A comparison of these statements with those of our exportations of *raw cotton* will show that, whilst our exports from cotton have, since 1821, increased nine-fold, the importations of our foreign cotton manufactures have but a little more than doubled. Our exportations of domestic cotton manufactures have nearly destroyed the exportations of foreign cotton manufactures, and taken the place of them.

The treasury returns of *exports* show to what countries the foreign cotton manufactures, and also to what countries the domestic cotton manufactures, were sent from the United States; and an investigation as to the facts, in this respect, would be interesting and useful to the merchants and statesmen of this country; but the limits to which this paper is restricted precludes, at this time, anything on this subject but the suggestion now made.

Exportations of domestic cotton manufactures in certain years and periods.

Years.	Value.
In 1826.....	\$1,138,125
In 1827, '28, and '29.....	3,429,103
In 1830, '31, and '32.....	3,674,070
In 1833, '34, and '35.....	7,477,192
In 1836, '37, and '38.....	8,845,962
In 1839, '40, and '41.....	9,647,186
In 1842, '43, and '44.....	9,093,110
In 1845, '46, and '47.....	11,955,932
In 1848, '49, and '50.....	15,385,758
In 1851.....	7,241,205
In 1852.....	7,672,151

Though the quantity of *foreign* "raw" cotton consumed in the United States is readily ascertainable by deducting the exportations of such cotton from the importations; and though the value of the foreign manufactures consumed may be ascertained by a similar process, and a tolerably correct estimate made of the quantity of raw cotton (of the United States) used in such manufactures; yet it is well nigh impossible to ascertain with certainty the quantity of domestic raw cotton *consumed* in this country.

In the *first* place, the quantity consumed in "household" or "home made" manufactures of many different kinds, and that which is con-

sumed in the infinite various uses to which it is applied throughout the country, and especially in the States where it is grown, has to be guessed, without very certain data. So also the quantity destroyed by fire, or otherwise, in its transportation to the southern shipping port, or by sea, before it is taken into the account, cannot be ascertained. The rates of insurance from the Gulf to the Atlantic ports are very high, and should be some criteria by which to judge of the extent of these losses.

The last census returns state the value of all the "home-made" manufactures in the United States to be \$27,544,679. Of these, the States of North Carolina, South Carolina, Georgia, Florida, Alabama, Tennessee, Arkansas, Mississippi, Louisiana, Texas, and Kentucky, made upwards of \$14,635,000; being more than half, though the aggregate of their white population is less than a fourth of the whole white population of the United States. In those States cotton is a principal material in such manufactures; and they are made by every class, and used by every class of the population. It is not considered extravagant to allow for the raw cotton used in "home-made" or "household" manufactures in the United States, including that applied to other uses, \$7,500,000, equalling, at 11.31 cents per pound, 66,372,000 pounds, or 165,930 bales of 400 pounds each.

And it is estimated that 7,500 bales of 400 lbs. each, or 3,000,000 of pounds, are annually lost or destroyed, and not put into the account of the crop, as above stated. It is valued at \$339,000.

The second item is the amount furnished the domestic manufactories of cotton in the United States, to ascertain which, even approximately, recourse must be had to unofficial statements of manufacturers, and to commercial accounts, that cannot be otherwise than imperfect; and to the more authentic, but still somewhat uncertain accounts, taken from the last census returns. The census returns of 1849-'50 of the cotton manufactories in the United States give the following statement:

Number of manufactories in the United States.....	1,094
Amount of capital invested.....	\$74,501,031
Bales of cotton used—(at 400 lbs. each, equal to 256,496,000; at 450 lbs. each, equal to 288,558,000).....	641,240
Tons of coal used.....	121,099
Value of all raw material used.....	\$34,835,056
Number of hands employed—(males, 33,150; females, 59,136).....	92,286
Entire wages per month—(males, \$653,778; females, \$703,414).....	\$1,357,192
Value of entire products.....	\$61,869,184

The quantity of cotton used is stated in *bales*. A bale is estimated in another part of the census accounts to weigh 400 lbs. It is believed such estimate, as to the cotton *furnished our manufacturing establishments*, is underrated at least 12½ per centum. Most of the cotton used in those manufactories is "*upland*," the bales generally, for the last five years, averaging 450 pounds. That the other census accounts relating to the "*entire crop*," (including "*sea-island*" and "*upland*,") though

stated in *pounds*, mention the bales as "of 400 lbs. each," does not make the *above* reduction of these bales to pounds, at 450 lbs. to each bale, incorrect. The estimate of 400 lbs. is carried through all the statements and estimates in this paper, (except in the above,) to enable ready comparisons to be made.

The "products" of these establishments are stated to have been, in 1849-'50, 763,678,407 yards of sheeting, and 27,860,340 lbs. of thread, yarn, &c., and 13,260 bales of batting, and are valued at \$61,869,184. The value of domestic woollen manufactures is stated at \$43,207,555; that of domestic iron manufactures, of all kinds, at \$54,600,000. The value of 1,177,924 barrels of ale, beer, &c., or of the 42,133,955 gallons of whiskey and "high wines," or of 6,500,500 gallons of *rum*, manufactured, is not stated. The annual wages of the hands employed in cotton manufactories, it will be seen by the census returns, amount to \$16,286,304. The woollen manufactories employ 22,678 male, and 16,574 female hands—in all 39,252—whose annual wages amount to \$8,399,280. The iron manufactories employ 57,017 male, and 277 female hands—in all 57,294—whose annual wages amount to \$15,000,000; and breweries and distilleries employ 5,487 hands, the value of whose labor is not given!

Deduct from the value of the "products" of these cotton manufactories in 1849-'50, stated to be \$61,869,184, the value of the *exports* of domestic cotton manufactures for the same year, \$4,732,424, and the balance, \$57,134,760, is the value of the domestic cotton manufactures, made in our own cotton-manufacturing establishments, and *consumed* in the United States.

The value (and afterwards the quantity) of *raw cotton* for these respective portions of the domestic cotton manufactures of the United States, may be ascertained by a deduction of 50 *per centum* of the value of the manufactures, for the cost of manufacture, wastage, profits, &c., and calculating the quantity corresponding to such value, at the price for that year, of fair "upland" cotton. The correctness of this mode will be verified, as to the year 1849-'50, by reference to the items in the census account of the manufactures of cotton above given, of the value of raw materials used, and "bales of cotton" used, and "value of entire products," and to the expenses of manufacture, as set forth in that statement.

The quantity of domestic raw cotton consumed in the United States, in *foreign* manufactures, has been estimated by a similar calculation with reference to the "difference" between the importations into, and exportations from, the United States, of such foreign manufactures before given. The enhanced value of the foreign cotton manufactures is stated at 100 *per centum* more than the raw cotton, and includes freight, insurance, duties, and all other expenses; and the cheaper labor in foreign countries, and the higher value of the sea-island cotton, generally used in such manufactures, and profits, &c., have also been considered.

The following estimate of the quantity of domestic "raw cotton" *consumed in the United States*, in domestic and in foreign manufactures, and in "household" or "home-made" articles, &c., for the year ending June 1st, 1850, is believed to be nearly correct.

Consumption of cotton in the United States in 1849-'50.

In domestic manufactures—deducting value of those exported from value of entire manufactures, and also 50 per cent. for cost of manufacture, profits, &c.—about.	\$29,000,000=256,638,000 lbs.
In <i>foreign</i> manufactures, (from domestic cotton,)—deducting from imports, (\$20,108,719) value of exports of same, (\$427,107)=	\$19,681,612; and 50 per cent. for cost of manufacture, duties, profits, &c., &c.
	9,840,800= 87,087,000 “
In “household,” or “home-made” manufactures.	7,500,000= 66,372,000 “
<hr/>	
Total consumption of raw cotton in the United States in 1849-'50.	\$46,340,800=410,097,000 “

The total consumption in cotton *manufactures* same time—foreign and domestic—including “home-made,” amounted to more than \$82,000,000, upwards of *three-fourths* of which were made in the United States.

Fractions are equalized in this estimate, and the value stated at the official average valuation of all cotton for that year. The cotton, of which the foreign manufactures consumed in the United States are composed, being mostly “sea-island,” its value should perhaps be higher; but in such case, the values of the other cotton ought to be reduced in proportion to quantity and price, to make the correct average. The values of “sea-island” and “upland” should be kept separate in the treasury accounts.

The domestic consumption, of course, increases each successive year, equally with the population, and the discovery from time to time of new uses to which cotton may be applied also adds to the consumption; and a full crop increases it.

Similar difficulties exist with respect to the ascertainment of the quantity and value of the “*entire crop*” of raw cotton, in each year. Various means of estimating the entire crop are adopted. In one mode, the *first* item is the quantity and value of *exportations* of raw cotton. The quantity is furnished quite correctly for this item, by the treasury returns of exports; except that the value is not always accurately given in them. The value stated in the treasury returns of exports can, however, generally be rectified, if erroneous, by reference to the general “prices current” of the same year, to be found in commercial newspapers. The price stated for 1851-'52 is 8.05 cents; and it is conceived the average is too small according to the commercial accounts of this country, and of Great Britain and France. It should be at least 9 cents. Nevertheless, in this paper the treasury price is adhered to. The *second* item is the quantity furnished the manufactories of domestic cotton. To ascertain this, even approximately, recourse can generally only be had to the unofficial statements of the manufacturers, and to commercial accounts, which cannot be otherwise than imperfect. The *third* item is the quantity used in what are generally called “household” or

“home-made” manufactures, before adverted to. The *fourth* item is the quantity destroyed by fire or otherwise, and not received in market, or taken in the above accounts.

Another mode of estimating the “*entire crop*” is by estimating the number of acres of land in cultivation for cotton, and the number of agricultural laborers employed in cultivating it; the increase of such arable land, and of the labor by emigration to the cotton States, from other southern States; and the general yield of the land compared with past years; all derived from intelligence obtained by correspondence, or the public prints, and information generally diffused as to the effects of the season with reference to a full or a short crop, injuries by drought, storms, rains, caterpillar, &c. Of course this last mode is a mere estimate. The most reliable data is that furnished by commercial and manufacturing dealers; though it has been observed that very often the estimates as to forthcoming crops, by purchasers, are too large, whilst, on the other hand, those who sell are prone to make them too small.

The following is an estimate of the entire crop of 1849-'50, given as an example of the first mode above mentioned of estimating such crop, and it is believed to be nearly correct. The year 1849-'50 has been selected, because the entire crop of that year is stated in the “census returns;” between which and the estimate now given a comparison can be made.

Entire crop of 1849-'50.

Exportations of domestic raw cotton . . .	635,382,000 lbs.	=\$71,984,600
Used for manufactories in the United States	288,558,000 “	= 32,607,000
“ <i>Household,</i> ” or “ <i>home-made</i> ” manufactures	66,372,000 “	= 7,500,000
Destroyed by fire or otherwise, and not received in market.	3,000,000 “	= 339,000
	_____	_____
Entire crop of the United States in 1849-'50.	993,312,000 “	=112,430,600

Fractions are equalized in this statement, and the values estimated according to the treasury average valuation, for all cotton, that year.

A table, giving an estimate of the entire annual crop from 1790, up to and including 1852, is annexed.

The statement in the census returns of the production of cotton in the United States is for the year ending June 1, 1850. The day specified was before the crop of the *season* of 1850 could have been ascertained. The statement is, of course, of the crop of the previous season of 1849, stated in the treasury returns of “*exports,*” &c., for the year ending on the 30th of June, 1850. The treasury accounts of the exports of raw cotton for the year ending June 30, 1849, (the crop of the season of 1848,) state that 1,026,602,269 pounds were *exported*, being more than the *entire crop* stated in the census returns; and the quantity *exported* in 1851 (of the crop of the season of 1850)

was 927,237,089 pounds. The crop of 1849 was a very short crop. It was also actually less than the crop of the season of 1839, of '42, of '43, of '44, or of '47; though its *value*, owing to the high prices received for it, was more than that of any previous crop. The exports of the crop of 1848 were 391,220,665 pounds *more* than those of the crop of 1849; and yet its value was \$5,587,649 less. The *exports* of the crop of the season of 1840 were, as above stated, 927,237,089 pounds, and they were valued in the treasury accounts at \$112,315,317; whilst the exports of the crop of 1851 were 1,093,230,639 pounds—being 165,993,550 pounds *more* than the crop of 1850; and by the treasury account they were valued at \$87,965,732, or \$24,349,585 *less* than the exports of 1850.

Besides the census returns of the cotton crop of the season of 1849, given below, a statement from the same returns is given of the area of each State producing cotton for sale; the area of acres of improved lands in each; and the population of each; which may be useful for reference and comparison.

Entire crop of the season of 1849, taken from the census returns.

States.	Bales of 400 lbs.	Total number of pounds.	ACRES OF LAND.		POPULATION.		
			Entire area.	Improved.	Whites.	Colored.	Total.
Indiana*	5	2,000	21,637,760	5,019,822	977,628	10,788	988,416
Illinois*	8	3,200	35,459,200	5,114,041	846,104	5,366	851,470
Kentucky*	1,669	667,600	24,115,200	6,068,633	761,688	220,717	982,405
Virginia*	3,947	1,578,800	39,265,280	10,360,135	895,304	526,357	1,421,661
Florida	45,078	18,031,200	37,931,520	349,423	47,167	40,234	87,401
Texas	57,945	22,378,000	151,865,440	635,913	154,100	58,492	212,592
Arkansas	64,987	25,994,800	33,406,720	780,333	162,068	209,639	209,639
North Carolina	98,028	39,211,200	29,120,000	5,443,137	553,295	315,608	868,903
Louisiana	163,034	64,213,600	29,715,840	1,567,998	255,416	262,323	517,739
Tennessee	192,635	77,054,000	28,160,000	5,087,057	756,593	245,732	1,002,325
South Carolina	300,901	120,360,400	17,920,000	4,074,855	274,623	393,884	668,507
Mississippi	494,774	197,909,600	30,174,080	3,489,640	295,758	310,797	606,555
Georgia	499,091	199,636,400	37,120,000	6,378,479	521,438	384,561	905,999
Alabama	564,429	225,771,600	32,462,080	4,435,614	426,507	345,164	771,671
Total	2,484,531	993,812,400	548,373,120	58,805,080	6,927,959	3,167,594	10,095,553

* These States are not considered as producing cotton for exportation. The bales only are given in the "census returns," and are stated to be of 400 pounds each. As the entire "sea-island" crop is included in this statement, the bags of which are usually less than 400 pounds each, it is perhaps as nearly correct an average as can be made, as to all the cotton produced and put in bags or bales, though bales of "upland" now actually average 450 pounds in most of the States.

The above is compiled from the published report of the Superintendent of the Census, dated December 1, 1851. The report dated December 1, 1852, is variant from the above, and states the entire crop at 2,465,624 bales, or 987,449,600 pounds. Both are below the actual crop.

The cotton crop of the United States now amounts to upwards of seven-tenths of all the cotton produced in the world. The quantity annually *exported* from the United States is about eight-tenths of the aggregate of all exported by all countries.

The following estimates, compiled from the best authorities, sustain these statements:

Cotton crop of the world, of 1851, and exports of all countries in 1852.

United States.....	1,350,000,000 lbs.	1,093,230,639 lbs.	exported.
Egypt, &c.....	40,000,000 "	25,000,000 "	" "
East Indies.....	200,000,000 "	150,000,000 "	" "
West Indies.....	3,100,000 "	3,000,000 "	" "
Demerara, Berbice, &c.	700,000 "	500,000 "	" "
Bahia, Macelo, &c....	14,000,000 "	11,000,000 "	" "
Maranham, &c.....	12,000,000 "	9,000,000 "	" "
Pernambuco, Aracati, Ceara, &c.....	30,000,000 "	25,000,000 "	" "
Brazil, China, and all other places.....	250,000,000 "	40,000,000 "	" "
Total....	<u>1,899,800,000</u>	<u>1,366,730,639</u>	

The first column of the above states all that is estimated to be consumed, in the countries named, in "household" manufactures and for various domestic uses, as well as that used in their home cotton manufactures, and likewise all exported to other countries. In the second column is estimated the exports to contiguous foreign countries for manufacture, as well as the exports to Europe, &c. In the East Indies such exportations, to contiguous countries, is not *less* than the amount stated. An English writer, in 1824, (Smither's History of Liverpool, p. 116,) says, with respect to China, that cotton and cotton manufactures are "estimated to employ, directly and indirectly, nearly *nine-tenths* of the immense population of that country. A very large proportion of what is made is used for internal consumption, particularly the very finest and most costly fabrics. Nankeens and chintzes form the principal articles of their exportations."

This estimate, it is believed, overrates the number of persons so employed. One-tenth of the 350,000,000 there may be so employed, but not more. The United States exported, in 1852, upwards of \$2,200,000 of domestic cotton manufactures (coarse white muslins) to China. We formerly procured some nankeens from China; but our imports of cotton goods from thence are now comparatively nothing. The above estimate as to the crop in China is doubtless too small, but the production there is decreasing.

There is not now any serious cause for apprehension by the agricultural, commercial, or manufacturing interests of the United States, of successful competition with the southern States of this confederacy, by any other country, in the production of cotton.

From the day our independence was recognised by Great Britain, till within a few years past, her leading statesmen, with but few ex-

ceptions, used every effort and devoted every faculty and power to diminish and prevent all necessity for dependence, in any degree, by her capitalists, (having large and increasing investments in manufactures and commerce,) upon any of the products of the United States. The younger Pitt—the most enlightened and sagacious, and therefore the most liberal statesman Great Britain has had in her councils within a century past, did not approve such policy towards us; but he was overruled. In Jay's treaty of 1794, as originally agreed to by the negotiators, it was attempted, by different provisions, to restrict us in the exportation to any part of the world, even in our own vessels, of our own raw cotton! Our negotiator, it seems, did not appreciate the future importance and value of this product to his own country, which had then recently embarked in its cultivation. British sagacity, however, not only foresaw it, but sought to stifle the enterprise in its infancy. These provisions were of course expunged from the treaty by the United States Senate, before that body would "advise and consent" to its "ratification." If the liberal and wise counsels of Mr. Pitt had been adopted and adhered to by Great Britain, she would have advanced in wealth and prosperity, and in all the true elements of strength, and power, and greatness, in a much greater degree than she has since 1783; and it would not have been any detriment to her that the consummation of the certain destiny of this country would thereby have been accelerated. We should not, as in former times, before the war of 1812, have had our commerce injured by open spoliations. That war would not have occurred. We should not have had, before and since the war, our agricultural and commercial interests fettered and crippled by her illiberal restrictions and regulations on the one hand, and by our countervailing legislation on the other. Until within a few years past, Great Britain has not relaxed her illiberal and selfish policy; and the cotton interests of the United States have seemed to be especial objects of her unceasing hostility.* She has used every exertion, and availed herself of every means she possessed, to create competition and rivals to the southern States of this confederacy in the cultivation of cotton, and to relieve herself from any dependence upon those States for the means of employment for her working classes, in the manufacture of cotton, and in auxiliary avocations. She experimented in its cultivation, at great cost, in her West India colonies, with the advantage of slave labor, until she abolished the institution of "domestic servitude" in those colonies, as to those who had been held as "slaves." She then tried "apprentice" labor, with still more unfavorable success. She tried the cultivation of cotton in every one of her numerous possessions in the different quarters of the globe, where the climate and soil allowed any expectation of a favorable result. She encouraged its cultivation in different countries, not politically connected with her. Every kind of labor has been employed in these experiments: free labor; Irish, Scotch, Anglo-Saxon, and African; colonists, apprentices, coolies, Chinese,

* A member of the English Parliament—ex-Lord-Chancellor Brougham, who was considered somewhat famous—in a speech respecting our cotton manufactories, soon after the war which ended in 1815, said: "It is well worth while to incur a loss upon the first exportation, in order, by the *glut*, to *stifle*, in the *cradle*, those rising manufactures in the United States which the war had *forced* into existence, contrary to the natural course of things."

convicts, and slaves ; Christians and Pagans, civilized and savage. Of her efforts to induce its cultivation elsewhere than in this country, we had no right to complain. But of her illiberal restrictions and wrongs done to us, we had ; and they engendered no little ill feeling towards her in this country. Her statesmen, since the war of 1812, have urged in justification of her course, that they were to "counteract" the measures of the United States, at different times, affecting her commerce and manufactures unfavorably. The conduct of the government of the United States has, however, from the outset, always been solely defensive and countervailing. We have not been in any instance the first to adopt illiberal and injurious measures. We have been constrained in past times to enact and enforce laws, necessary in proper self-defence, against her illiberality, not only antecedent to the war, but since. That different relations were created by measures adopted under the administration of that profound and able statesman, Mr. Peel, and that they now exist between the two countries, is because Great Britain felt that every attempt to embarrass, or fetter, or restrain, or otherwise injure the trade and commerce of this country, would certainly recoil upon herself. The futility of warring against the natural laws governing trade and commerce, and against advantages given by the superior adaptation of climate and soil, and experienced and effective (because united) labor for the production of an article like cotton, and the folly and presumption of any nation striving to establish for itself an exclusive and selfish monopoly or control of all things, is fully demonstrated in the former course of the British people towards us. It is, perhaps, best for her that her experiments in making cotton, to "root the Yankees out," have so signally failed ; for the cotton crop of the United States is the main link connecting the two countries commercially ; and if it is broken, the entire trade between them will soon become comparatively valueless to both.*

And the efforts to induce to the production of cotton, to compete with the United States, have not been confined to Great Britain. France attempted it in Algeria, without favorable success. It has been tried by the Turkish Sultan, and a superintendent and intelligent and experi-

* The following has been extracted from an article, very abusive and denunciatory of this country, and its institutions and people generally, contained in a recent number of "Blackwood's (Edinburgh) Magazine." The parts now *italicised* betray the feelings and motives of the author :

"In the year 1789, only one million pounds of cotton were grown in the United States ; now, the produce amounts to about 1,500,000,000 of pounds ! How great a stimulus this has proved to the employment of slave labor, by which it is raised, and to the rapid multiplication of the slaves themselves, can easily be imagined. The influence of the potato on the social, moral, and industrial character of the Irish people, has long been recognised among us. But the history of the cotton-plant shows how powerful a control an obscure plant may exercise, not only over the social character of a people, but over their general material prosperity, their *external political power*, and their relations with the world at large. The cotton shrub, which seventy years ago was grown only in gardens as a curiosity, yields now to the United States an amount of exportable produce which, in the year ending with June, 1850, amounted to seventy-two millions of dollars, of which from thirty to forty millions were clear profit to the country. With its increased growth has sprung up that *mercantile navy, which now waves its stripes and stars over every sea ; and that foreign influence which has placed the internal peace—we may say the subsistence—of millions in every manufacturing country in Europe, within the power of an oligarchy of planters.* * * * The new and growing commerce soon gave birth, likewise, in the free States themselves, to a large *mercantile, manufacturing, and moneyed party, whom self-interest* has constantly inclined to support the views and policy of the southern States."

enced slave laborers procured from the State of South Carolina, but the trial did not succeed profitably. It has been tried in different places, on the extensive shores of the Euxine, opened to the commerce of Christendom by the cannon of the allies at Navarino, in 1827; it has been tried in Mexico, in Central America, in the different republics of South America, and in the empire of Brazil; it has been tried in different parts of the East Indies, and in Africa; and the fact has been fully and conclusively tested and established, that the soils, seasons, climate, and labor, of no country can successfully compete with those of that vast region of this confederacy which has been appropriately styled the "COTTON ZONE," in the raising of this product. It is proper, however, to state that many of the most intelligent cotton planters of that region insist that their now generally conceded superiority is not so much attributable to any radical difference of the soil or dissimilarity of the climate in that region, from those of several other countries in like latitudes, as it is to the advantages afforded by the aggregated and combined, and cheap, and reliable labor they derive from that patriarchal system of domestic servitude existing throughout the "Cotton Zone," and to the superior intelligence, and greater experience, and skill, and energy, of the American planter; and to the improved and constantly improving *systems* of cultivation pursued by them—the most affluent attending personally to his own crop.

The "Cotton Zone" extends from the Atlantic ocean to the Rio del Norte, and includes the States of South Carolina, Georgia, Alabama, Mississippi, Louisiana, and those portions of the States of North Carolina, Tennessee, and Arkansas, that lie below 35° north latitude; and all of the State of Florida above the 27th parallel of north latitude; and all of the State of Texas between the Gulf of Mexico and the 34th parallel of north latitude. The region described is an area of upwards of four hundred and fifty thousand square miles; but large portions are mountainous, or covered with water, and in each State more than two-thirds, from various other causes, it has been estimated, is not adapted to the growing of cotton advantageously.

The annexed table shows the estimated cotton crop of each of the States mentioned that produced raw cotton for exportation in 1852; the number of agricultural laborers employed in the cultivation of cotton in each State; the estimated quantity in each State of lands now appropriated to the growing of cotton; and the quantity, not in cultivation in cotton, but that which may be advantageously applied to the growing of that product, when a farther supply is needed; the number of agricultural laborers necessary to till such lands; and the probably attainable product of such land and labor.

Estimate of crop in 1852, and of crop Cotton Zone may produce.

States.	Bales of 400 pounds.	Hands employed.	Acres in cotton in 1852.	Area susceptible of cultivation in cotton.	No. of hands necessary therefor.	Probable production in bales of 400 pounds.
Florida.....	80,000	20,000	160,000	6,000,000	750,000	3,000,000
Texas.....	100,000	25,000	220,000	10,000,000	1,250,000	5,000,000
Arkansas.....	100,000	25,000	200,000	3,000,000	375,000	1,500,000
Louisiana.....	200,000	50,000	400,000	3,000,000	375,000	1,500,000
Tennessee.....	220,000	55,000	440,000	2,000,000	250,000	1,000,000
South Carolina.....	310,000	77,500	620,000	200,000	25,000	100,000
Mississippi.....	650,000	162,500	1,300,000	6,000,000	750,000	3,000,000
Georgia.....	740,000	185,000	1,480,000	3,000,000	375,000	1,500,000
Alabama.....	750,000	187,500	1,500,000	6,000,000	750,000	3,000,000
Total*.....	3,150,000	787,500	6,300,000	39,200,000	4,900,000	19,600,000

* North Carolina, Virginia, and Kentucky, are not included, as they cultivate other products more than *cotton*.

In the above estimate of the number of hands employed in the cultivation of cotton, it will be noticed that nearly two-thirds of the slave population of the States within the "Cotton Zone" are excluded. Some are engaged in the cultivation of sugar-cane, rice, tobacco, and other products; others procure lumber, or superintend mills, or are employed on steamboats; some are mechanics, some domestic servants; and with them must be included those of advanced age, or infirm, and the women and children. Many of these doubtless contribute to the cotton crop, when living on plantations, but more labor is abstracted from cotton in various ways, than is given by them to it. A large number of slaves living in villages, towns, and cities, perform no agricultural labor whatever. It should also be stated, that in portions of some of the States, upwards of fifteen per cent. of the agricultural labor in cultivating cotton is performed by white citizens, who cultivate their small crops themselves. This is full proof that "*labor*" is not "degraded" there.

The hands are estimated at an average of four bales for each hand, and the land is estimated at eight acres for each hand, or 200 pounds for each acre. A reference to the table, (*ante*, p. 736,) showing the entire area in acres of each of the States within the "Cotton Zone," and other States, and the area of all the "improved" lands in each of said States, and the population of each free State, is necessary for comparison with the above, and that both may be considered understandingly.

It will be seen that the "Cotton Zone" is, when the necessity occurs, capable of sustaining and of employing in the cultivation of cotton, in addition to the slaves now there, a much greater number than the entire slave population of the States of Maryland, Virginia, Missouri, Kentucky, and North Carolina, or the probable increase for a long time.

The present free colored population and slave population of those States, and of those in the "Cotton Zone," is estimated as follows:

States.	Free colored.	Slaves.
Maryland.....	74,077	90,368
Virginia.....	53,829	472,528
Missouri.....	2,544	87,422
Kentucky.....	9,736	210,981
North Carolina.....	27,196	288,412
Total.....	167,382	1,149,711
Florida.....	925	39,309
Texas.....	331	58,161
Arkansas.....	589	46,982
Louisiana.....	17,537	244,786
Tennessee.....	6,271	239,461
South Carolina.....	8,900	384,984
Mississippi.....	899	309,898
Georgia.....	2,880	381,681
Alabama.....	2,272	342,892
Total aggregate.....	207,986	3,197,865

These five first-named States are the sources from which the "Cotton Zone" derives additional colored agricultural labor by emigration. If the demand for "raw cotton," or, after its manufacture, for *exportation*, should increase, as some intelligent persons anticipate will ere long be the case, upon the extension of our commerce to the Pacific, to China, the East Indies, and the Asiatic seas generally, and to our southern sister American republics, the lighter labor required of those engaged in cultivating cotton, and its constant concomitant "Indian corn," in comparison with that necessary in the growing of tobacco, hemp, rice, and other crops—the decreased cost of the support of the labor employed in cultivating cotton in the "Cotton Zone," and particularly in the southern portions—the healthfulness of such occupation—the cheapness of the lands—the equal, if not greater, certainty of the crop—the certain market it always finds, and the greater profit derived from its cultivation—are causes combining to induce large emigration from the five States above mentioned, within the next few years, to the southern portions of the "Cotton Zone." Though the cotton crop will thereby necessarily be greatly augmented, it will not recede; for the labor once removed, and the lands settled, it will remain upon them, and the crops will increase so long as the demand justifies such increase. In process of time the annual product of cotton in the United States can be augmented to six times its present yield, and it will not be more astonishing than its augmentation since 1790. And on this point it should be observed, that when the cultivation becomes more extended, and to all sections of the "Cotton Zone," covering more than eight degrees of latitude, and more than eighteen degrees of longitude, the probability is lessened of any untoward season, or other casualty, affecting the aggregate crop injuriously, and consequently the average supply, and the prices, will become more regular and uniform.

The following table of all the exportations from the United States since 1789, up to and including 1852, will be found useful in estimating the value of the cotton crop.

Exportations (specie, &c., included) from the United States since 1790.

Years.	Total.	Domestic.	Foreign.
1790, '91, and '92.....	\$59,970,295	\$57,166,000	\$2,804,295
1793, '94, and '95.....	107,125,277	90,000,000	17,125,277
1796, '97, and '98.....	185,441,400	99,141,400	86,300,000
1799, 1800, and '1.....	243,753,227	112,456,629	131,296,598
1802, '3, and '4.....	205,982,267	120,381,627	85,600,640
1805, '6, and '7.....	305,446,134	132,340,321	173,105,813
1808, (embargo).....	22,430,960	9,433,546	12,997,414
1809, '10, and '11.....	180,278,036	119,066,420	61,211,616
1812, '13, and '14 (war).....	73,310,674	61,822,533	11,488,141
1815, '16, and '17.....	222,149,764	179,069,799	43,079,975
1818, '19, and '20.....	233,115,323	176,514,915	56,600,408
1821, '22, and '23.....	211,833,799	140,701,487	71,132,312
1824, '25, and '26.....	253,117,367	170,649,955	82,467,412
1827, '28, and '29.....	226,948,184	165,291,553	61,656,631
1830, '31, and '32.....	242,337,034	183,876,556	58,460,478
1833, '34, and '35.....	316,170,983	252,530,942	63,640,041
1836, '37, and '38.....	354,569,032	298,514,915	56,054,117
1839, '40, and '41.....	374,966,165	323,812,247	51,153,918
1842, '43, and '44.....	300,238,060	270,478,958	29,759,102
1845, '46, and '47.....	386,783,744	352,079,133	34,704,611
1848, '49, and '50.....	451,685,671	402,513,683	49,172,988
1851.....	218,388,011	196,689,718	21,698,293
1852.....	209,641,625	197,604,582	12,037,043

From the foregoing tables, and others contained in this paper, or annexed hereto, it appears that cotton and domestic manufactures now constitute more than one-half of the exports of the United States of agricultural products and domestic manufactures thereof. They constitute more than two-fifths of the total exportations of all kinds, including "products of the sea," "products of the forest," as well as the "products of agriculture" and "manufactures," "bullion and specie," &c. The statements from the treasury books show, with reference to "exportation," how far behind cotton every other agricultural product is, as to its increase, beyond the necessary consumption of the United States, since cotton has been cultivated for the foreign market. Generally a country does not export any but its *surplus* productions. Vast as the increase of some of our other agricultural products besides cotton has been, such increase has, in but few seasons, exceeded the increased wants of our population, constantly and rapidly augmenting by emigration.

It is important, in connexion with the tables hereinbefore given, to notice the importations and exportations of bullion and specie. The following is a statement thereof since 1821:

Bullion and coin imported and exported since 1821.

Years.	Value of imports.	Difference.	Value of exports.	Difference.
1821, 1822, and 1823.....	\$16,532,632	.....	\$27,661,226	\$11,128,594
1824, 1825, and 1826.....	21,411,566	\$895,426	20,516,140	.....
1827, 1828, and 1829.....	23,044,483	1,862,107	21,182,376	.....
1830, 1831, and 1832.....	21,369,413	4,519,369	16,850,044	.....
1833, 1834, and 1835.....	38,113,447	26,947,213	11,166,234	.....
1836, 1837, and 1838.....	41,664,411	27,855,780	13,808,631	.....
1839, 1840, and 1841.....	19,466,622	.....	27,228,089	7,761,467
1842, 1843, and 1844.....	32,237,780	20,449,236	11,788,544	.....
1845, 1846, and 1847.....	31,969,263	17,549,761	14,419,502	.....
1848, 1849, and 1850.....	17,640,256	.....	28,769,262	11,129,006
1851.....	5,453,981	.....	29,465,752	24,011,771
1852.....	5,503,544	.....	42,674,135	37,170,591
Aggregate.....	274,407,398	100,078,892	265,529,935	91,201,429

It is not within the proper range of this paper to comment upon any of the different opinions entertained with respect to the causes and effects of the fluctuations exhibited in the above statement, and in the detailed table annexed hereto of these imports and exports. Some political economists contend that what is called the "balance of trade" being in favor of or against the United States, as shown by the importation or exportation of bullion and specie, is the best evidence of the prosperous or unprosperous condition of our trade and commerce. On the other hand, others insist that such importation or exportation is no true test on either side; and that when any country has a surplus of bullion and specie, it is best to export a portion of the redundant supply; and that then those articles, besides fulfilling their proper functions of being the media and regulators and equalizers of trade and commerce, become themselves legitimate subjects of trade and commerce like other products; and that this rule especially applies to a country *producing* the precious metals.

The sole object, however, of the reference now made to the importation and exportation of bullion and specie is to notice the fact, equally forcible as respects both of these theories, that but for exportations of raw cotton, according to the treasury statistics, more than forty-eight millions of bullion and specie would have been required annually, since 1821, to have been exported (in addition to all that was exported) to meet the balances of trade against us that would have existed but for those exportations of raw cotton. It is true the treasury accounts of *exports* are not safe criteria as to values, they being in the United States, as in other countries, generally undervalued; but without the exportations of cotton from the United States, the balance-sheet would be a sorry exhibit of our condition as a commercial people, and of general prosperity. Our other exports, and especially of other agricultural

products, are, when separately estimated, really insignificant in comparison with cotton. A table of the exportations of the principal domestic exports, since 1821, is appended. The following statement shows the principal domestic exports in the years 1821, '22, and '23, and in the years 1850, '51, and '52 :

Articles.	1821, 1822, and 1823.	1850, 1851, and 1852.
Total exports of domestic produce.....	\$140,701,381	\$526,005,614
Cotton	64,638,062	272,265,665
Tobacco.....	18,154,472	29,201,556
Rice.....	4,878,774	7,273,513
Flour.....	14,363,696	29,492,044
Pork, hogs, lard, &c.....	4,003,337	15,683,772
Beef, hides, tallow, &c.....	2,282,318	4,795,645
Butter and cheese.....	604,106	3,119,506
Skins and furs.....	1,940,424	2,628,732
Fish.....	2,894,229	1,391,475
Lumber, &c.....	4,156,078	15,054,113
Manufactures of all kinds.....	9,013,259	51,376,348

Among other articles not specified in this statement there was exported in 1852 over \$1,200,000 of oils, \$1,200,000 of naval stores, \$500,000 of pot and pearl ash, \$2,500,000 of wheat, \$2,100,000 of Indian corn and meal, and \$1,100,000 of "raw produce," kind not stated in returns.

The relative importance and value of the cotton crop of the United States to the other leading agricultural products of this country, and other principal articles of our domestic and foreign commerce, is more striking when the circumstances attendant upon the progress of each crop, and the others respectively, are considered. The augmentation of our population—the vast extension of our territory—the great increase of the area of our lands in tillage—the immense additions to our agricultural labor in our native population and in foreign emigrants—have given us consequent vastly increased resources and ability for greater production. As before shown, however, the greater portions of most of the agricultural products of the United States, and of the manufactures of them, except cotton, *consumed in the United States*. The fact that the *exportations* from the United States of many of its most important products have not increased in proportion to our increase of population, resources, and ability, and that the article of *raw cotton* is a signal exception, surely is some evidence of its value and of the real position and actual increase of the wealth and prosperity of the cotton region. When it is recollected that very little of the additional labor given by *foreign emigration* inures to the cultivation of cotton, (and it is estimated that not more than one in 600 of the agricultural emigrants go to the cotton region;) and when the extent of internal improvements in the States where cotton is not grown, to transport their produce to market, is considered, it will be seen that this advancement of the cotton region is solely the result of steady industry, regulated by the intelligence to make it advantageous. The increased labor of that region has been almost exclusively derived from those contiguous States that do not cultivate cotton. The disparity between the increase of cotton and

that of other agricultural products appears much greater when these facts are considered; and the doctrine that labor advantageously applied, and not population merely, is the true foundation of a country's wealth and prosperity, is fully verified.

The treasury accounts before referred to show that the aggregate increase of our foreign *importations* of merchandise has not equalled our increased exportations of raw cotton, and that it, as before stated, has most of all other articles enabled us to keep down the balance against us created by such importations. And it should be noticed, also, that the increase of importations is mainly for the use and consumption of those portions of the country that do not produce cotton. The consumption of imported merchandise and products in the cotton region may be greater than the proportion of its white population to that of other sections, but in the aggregate it is much less, and it is also much less than the proportion of its whole population to that of the other States.

Adding the increase of the *exportations* of our domestic manufactures of cotton to the exportations of raw cotton, the comparison between it and other agricultural products is still more favorable to it. Prior to 1826, such *exportations*, if any were made, were not specified in the treasury returns, and all our importations of cotton goods specified in those returns are exclusively those of *foreign* manufacture that had been imported hither. And the nearly total decrease of the importation of foreign raw cotton, and the manufactures thereof, and the substitution therefor of our own product, and manufactures thereof, should also be estimated.

Nor is the supply furnished from the cotton crop for the numerous "household" or "home-made" manufactures used in the United States an unimportant item constituting its value. The aggregate of the value of all these manufactures was, in 1849, upwards of \$27,540,000, and it is estimated, as before stated, that the cotton consumed in them is worth annually upwards of \$7,500,000. But for our own crop, this would have to be imported.

Though it is not intended to express any opinion in this paper upon the policy of a protective tariff, it is proper to say that the increase of our domestic cotton manufacturing establishments, within a few years past, has well nigh been as astonishing as the increase of the cotton crop, especially when the advantages of cheap labor and low interest for capital borrowed, and other advantages possessed by British and European manufacturers, are considered. Against such advantages, our manufacturing establishments already use about *one-third* of the entire crop of raw cotton of the United States. Prior to the war of 1812, they were of little consequence. They first became of importance during that war. They now supply more than *three-fourths* of the cotton manufactures *consumed* in the United States. Such supply for *home consumption* of our domestic cotton manufactures exceeded fifty-seven millions of dollars in 1849-'50. We exported in same year upwards of four millions seven hundred thousand dollars of our domestic cotton manufactures to foreign countries; and these exports in 1852 amounted to upwards of seven million six hundred thousand dollars. Our importations of foreign cotton manufactures in 1852 were \$19,689,496, and of this we exported \$991,784, consuming the balance of \$18,697,712.

It will be noticed that our exportations of domestic cotton manufactures are over two-fifths of the value of foreign cotton manufactures consumed in the United States. Deducted from the same consumption, it leaves only \$11,025,561 as a balance of the foreign manufactures so consumed.

We now pay annually out of the avails of the cotton crop in Great Britain and Europe about \$10,000,000 to those countries for manufacturing for us that portion of our raw cotton which is first exported thither, and the manufactures thereof then imported into the United States; but they are at the same time the purchasers of *two-thirds* of our *entire crop*, and most of the articles they send us could not be manufactured here at the same cost to the consumer; and the cotton producers insist that the foreign market is the most valuable to them, and that they have the right to sell their crops where and to whom they choose, and to employ and pay whomsoever it pleases them to manufacture it. Our domestic cotton manufacturers are, however, destined to increase still more. Everything indicates that an immense commerce will ere long arise in the Pacific ocean, and through it to China, the East Indies, and the Asiatic seas generally. The commercial nations of the world are now about to embark in a struggle for the control of that commerce which may perhaps continue through the present decade. But the superiority of position, the greater diversity of the productions of the United States, and the enterprise of our merchants and navigators, will insure the supremacy to us. The domestic cotton manufacturers of the United States may, it is believed, rely upon immensely increased markets for the goods they now manufacture being afforded by the commerce thus opened. The amount necessary to supply these new markets, it has been anticipated by some, will require, in a few years, cotton equal in quantity to the present "entire crop" of "upland" cotton of the United States. The superior facilities for such commerce which our merchants will possess with respect as well to the outward as to the return trade, will enable them to sell our domestic cotton manufactures in those markets more advantageously than any other country can sell the same kind of goods. The official statistical tables show that the domestic cotton manufactures of the United States have not only increased in proportion beyond the increase of our aggregate population, and in a proportion beyond any other prominent article of manufactures, but, in fact, such increase of the cotton manufactures of the United States since 1826, with reference to *exportations*, exceeds in value the aggregate of the *increase* of all our other domestic manufactures added together!

A gentleman holding a high position in the legislative department of the federal government, and whose intelligence on this subject is not surpassed by any, estimates that in 1852 the capital invested in cotton manufactories in the United States is at least \$80,000,000; that the value of the annual products of such manufactories is at least \$70,000,000; that as many as 100,000 male and female laborers are employed in such manufactories; and that quite 700,000 bales, or 315,000,000 pounds of cotton, worth at least \$35,000,000, will be spun and sold as thread and yarn, or wove into muslin and other manufactures, in this year—1852.

With reference to our foreign commerce especially, the increased consumption in the United States of foreign and domestic cotton manufactures, in lieu of articles that must have swelled our importations still more than has been the case, is an important consideration. But for our cotton, until our domestic products of wool, of silk, and of flax, had become sufficient for our necessities, we should have been compelled to rely on foreign countries. Cotton and its manufactures have decreased the demand for the other articles. In this respect the increased consumption of cotton and its manufactures in the United States and in foreign countries should be regarded by those who deprecate an excess of importations over exportations as injurious to a country, as having been greatly beneficial to our foreign commerce, inasmuch as it has lessened the *importations* by us of the other articles mentioned.

If the *exportations* of raw cotton from the United States should, contrary to general anticipation, decrease from any cause, unless its place, as an article of exportation, could be fully supplied by an equivalent amount of domestic manufactures of cotton *exported*, its cultivation and product must, of necessity, also decrease in a corresponding degree; and the 787,500 of able agricultural laborers, and the 6,300,000 acres of arable land now devoted to its production, would be diverted, by the same necessity, to the production of other articles, (wheat, rye, corn, barley, oats, and the like,) and the raising of stock for provisions, (beef, pork, lard, butter, &c.) The result, it can be foreseen, would be the cheapening of those articles, and rendering their production in the present grain growing and stock raising States less profitable than at present, and the agriculturists and stock raisers in these States would also then lose their markets in the cotton growing States, besides having to encounter competition from them in other markets; and besides, some of the surplus labor of the cotton growing States would then be employed in manufactures and mechanical pursuits, now chiefly engrossed by other States, from which the supplies are now received by the cotton growers.

The causes of the fluctuations in the prices of cotton have been subjects of investigation and discussion among the political economists of the United States, and others interested, but hitherto their investigations and discussions have not resulted in much practical good. Conventions of cotton producers have been held in the Southern States, and different theories advanced as to these causes, and different remedies suggested. Disagreements as to the causes of these fluctuations have produced differences of opinion as to the remedies and preventives; and consequently, heretofore, no measures of a practical character have been adopted. In some instances the causes are widely different from those producing similar effects as to other products. Doubtless the extent of the crop has, ordinarily, no inconsiderable influence on the price; and yet, whilst the crop of 1850, the *exportations* alone of which were 927,237,089 pounds, which at 12.11 cents, brought \$112,315,317, the short crop of 1848, the exportations of which were but 635,383,604 pounds, brought 11.31 cents, or \$71,984,616; and the crop of 1848, the exportations of which were 1,026,642,269 pounds, brought 6.5 cents, or \$66,396,967; and repeated instances will be found in the annexed tables, where large crops have brought large prices, and short

crops short prices. The extent of the crop cannot, therefore, in all cases be regarded as governing the prices. The prices of freights have some influence. Much more depends upon the condition of the foreign and domestic cotton manufactories—the general depression or prosperity of trade, commerce and navigation, and the state of the money market. The manufacturers at home and abroad have to resort to extensive credits to carry on their works, even to purchase the raw cotton; and the scarcity of money is certain to cause a corresponding depression in the price of cotton. But the primary and chief cause of these fluctuations is to be found in the fact, that very often, so soon as raw cotton leaves the possession of the planter, whether it is purchased from him or not, it becomes the stake for the most hazardous gambling among those who should be styled commercial speculators and gamblers, rather than merchants. When it is seen that a rise of cotton of one cent per pound creates a difference in the value of that *exported* from the United States alone, of *ten millions of dollars* (and of course a rise of a mill, *one million*, and of a *tenth of a mill*, one hundred thousand dollars;) and when it is recollected that raw cotton is regarded as a cash article, and used in lieu of exchange for remittances abroad, it can readily be imagined that temptations and inducements exist to the most hazardous speculations in that article, by those who imagine they foresee an advance in its price, and who, so soon as they purchase, exert themselves to effect the results they desire. The establishment of “*Planters’ Union Depots*” at the chief shipping ports in the South, for the storing of cotton for *sale*, and also similar depots at or near the chief Atlantic cities, has been proposed as a remedy for, and prevention of, the evils complained of. And the establishment of similar depots at different points in Continental Europe has also (since recent occurrences in Great Britain, indicating a revival of the ancient hostility to the cotton interest of the United States) been suggested. Doubtless, the establishment of such “*Continental Depots*” would open new, as well as extend the existing markets for our raw cotton, among the continental manufacturers; and it would greatly encourage and promote the latter, and cause them to become formidable competitors and rivals to the manufacturers of Great Britain, and it is not unlikely some practical measures of the kind will be adopted. Direct trade between southern ports and Europe, so far as it respects the cotton exported thither, has been looked to as likely to relieve the planting interest from the effects of the fluctuations as to prices, and at the same time to relieve it from the exorbitant and onerous charges it is at present subject to, by shipments to Eastern Atlantic ports before shipment to Europe; but it is strongly doubted whether the result of such change, without further preventives, would not be merely another illustration of the old fable of the fox and the flies. The planter will always be subject to similar exactions to those now made; and they will be increased, till he restrains himself from parting with the plenary and personal control of his crop, in any way, except by absolute sale. He will not be relieved whilst the payment of advances on his crops, or other mercantile debts incurred on their credit, constrain him, year after year, as to the disposition of them. To be relieved, he must become less dependent on the store-keeper, and more self-dependent; and then he can constrain the purchaser to come

to his plantation to purchase his crop, and if he is not paid a fair price, refuse to part with it, and keep it in store until he can get such price. When planters generally adopt and adhere to such system, it will be of little consequence to them what charges their crops are subjected to after they leave their hands, and they will be unaffected by the fluctuations occasioned by speculations and gambling. The foreign and domestic manufacturers will also find that it is their interest to get rid of the intermediate commercial agencies, and expenses, between them and the planter, and will unite in the adoption of such system.

Appended hereto are tables of the exports of raw cotton in 1852, exports of domestic cotton manufactures, same year; exports of foreign cotton manufactures, same year; and imports of cotton manufactures, same year. Particular attention should be given to them. On such reference, the fact cannot escape observation, that the government of the United States, by liberal and judicious (and judicious because liberal) arrangements with the different governments of this and the southern continent of America, by enabling these countries to pay for our domestic cotton manufactures in their products, which we do not raise, may open extensive and profitable markets for us, thereby promoting the prosperity as well of the manufacturer as of the producer of cotton. And once open and establish such market, the demand would in a few years, it is anticipated, be equal to the whole of our present exportations. The field of commerce before us, and for us, in these countries, and in the Pacific and East Indies, is unbounded.

These facts fully demonstrate not only the futility of all the expedients that may be adopted by foreign governments to supplant the cotton crop of this country, but also the inefficiency and folly of any measures of restraint or coercion that may be contrived by them to "counteract" whatever policy the United States may decide to adopt, at any time, to sustain and maintain the great interests involved in the cotton crop. If it should become necessary, the cotton-growers of this confederacy can, of themselves, withhold from any foreign country every pound of cotton; and the labor now employed in its cultivation could be, in one season, restricted to growing merely enough for our own consumption. It is an error to suppose that such measure would be ruinous, or even permanently injurious to them. Such labor could be employed in the cultivation of other products—in the rearing of stock, and articles of subsistence, and in the improvement of the lands; with little detriment that would not be temporary, and with less loss and inconvenience to them, than a similar revolution in industrial pursuits and productions would cause in any other country. That the cotton-producers of the United States may rightfully exercise the power, which, by union and concert of action, they unquestionably possess, of decreasing or increasing the aggregate annual supply, and regulating its price, so as to secure the receipt of its just value, cannot be denied. Owing to the multiplied charges and expenses to which his cotton is subjected before he receives its proceeds, the planter is generally the person who makes the least profit from it. What are believed to be the most practical preventives have been before alluded to. Means and ways of avoiding imposition will suggest themselves to the intelligent planter, and his example will be followed by his neigh-

bors. Ere long our manufactories will furnish us with all of the cotton goods we need, at our own doors, and of our own manufacture, from the product we have raised. But whatever we may determine to do, no governmental policy of any foreign country, hostile to our interests—no combination of such governments—can release or lessen the absolute dependence upon the “Cotton Zone” of the United States, which all who manufacture or use this product are, and must continue to be subject to, till Providence decrees the change by means now unforeseen and unanticipated.

Before 1791, foreign raw cotton was admitted in the United States duty free; but, after the first of January of that year, it paid a duty of three cents per pound, till the double duties were imposed by the act of July, 1812. During the war, and till April, 1816, it paid six cents, and since that day it has paid three cents, till, by the act of 1846, it was made free. Alexander Hamilton, in 1791, recommended the “repeal” of the duty as “indispensable” for the security of the “national manufacturers” of cotton.

Within two-thirds of a century, this product has become one of the most important of the agricultural products of the world, and an article of necessity for which no adequate substitute can readily be had. It is now by far the most valuable article of *commerce* existing between different nations. The foreign commerce of no one nation, in wheat, or wheat-flour, or other cereal products for the subsistence of man—or in beef, pork, or other provisions, even if estimated together—has ever been, or is now, as great in value as that of the United States in the article of raw cotton produced in the United States, and in manufactures therefrom. The articles of tea, tobacco, ardent spirits, wines, silks, and coffee, have ranked high on commercial lists; but none of them have equalled, in any one country, the present rank of American cotton and its manufactures: and the articles just specified are, too, all luxuries, not absolutely indispensable for subsistence or raiment, and for all of them substitutes may be found. In fact, if the importation or use of every one of these articles were destroyed or decreased by legislative enactments, or the equally arbitrary decrees of fashion or custom, or by other means, the next generation, would not feel the deprivation. The abandonment of other articles formerly used instead of manufactures of cotton, and the general use of the latter, and especially of the ordinary kinds, throughout the world, (induced by their cheapness and superiority,) renders them indispensable to the comfort of man till something is discovered to supply their place. For half a century, nearly every people—of every degree of civilization, of every class of society, and in every variety of climate—has adopted the use of cotton manufactures. Such is the character of the product, and so diversified are the articles that can be manufactured from it, that they have taken the place of many other articles widely different from each other; and they are applied to various and dissimilar uses, in climates of different temperature, and among different races and nations, whose habits and customs are as unlike as their respective countries. The manufactures of this product in the world, now equal the manufactures of animal wool, of flax, and of silk, all combined.

The statements now made are of incontrovertible facts, verified by

the official statistics, not only of the government of the United States, but of foreign governments, and by the commercial accounts of this country and of other countries. They establish, it is believed, the correctness of all the opinions advanced in this paper as to the paramount importance of the cotton crop of the United States, not merely to our own country, but to the world, over every other agricultural product that has been, now is, or is likely to become, an article of commerce between nations. They certainly prove that it is the chief element and basis of the commercial prosperity of this confederacy, and as well with respect to the trade between the States as to the commerce of all with foreign nations.

The statistics adduced show the following facts :

The cultivation of cotton and its preparation for market in the United States, at this time, employs upwards of 800,000 agricultural laborers. As has been stated, 85 per centum of this number are slaves ; and the residue (120,000) are white citizens, who are found in every part of the Cotton Zone, raising cotton by their own labor, on their own lands—a practical refutation of the slander that "*labor is degraded*" in that region. These citizens and their families are sustained in part by the cotton crop. And for every *two* able-bodied cotton-field hands, it is estimated that at least *three* of inferior physical capacity for labor are employed in raising subsistence or in domestic avocations on the plantation, or reside in the cities, &c. All these are supported from the avails of the cotton crop.

At least \$25,000,000 in value of breadstuffs, provisions, salt, sugar, molasses, tea, coffee, shoes, blankets, articles of clothing, and other articles of necessity or comfort, is annually required for such laborers and others engaged in such production or preparation, or who possess the capital (lands, slaves, &c.) employed therein; and of live stock, agricultural implements, machines, bagging, rope, &c., chiefly furnished by the other States of the confederacy from their own products and manufactures, or, through them, from foreign countries who purchase our cotton.

Cotton employs upwards of 120,000 tons of steam tonnage, and at least 7,000 persons engaged in steam navigation in its transportation to southern shipping ports. In some sections it pays freights to railroads for such transportation. Its first tribute to the underwriter is for insurance against casualties in its transportation from the interior.

Cotton affords employment and profit to the southern commission merchant or factor, and to the many and various laborers engaged in carting, storing it, &c., in the southern port ; and a second tribute is paid to the underwriter for insurance against fire whilst in store. The "compressing" and relading it for shipment coastwise to eastern Atlantic cities, or to foreign ports, and insurance against the dangers of the seas, give additional employment, and cause additional charges.

The transportation of that portion of the crop sent along the gulf coast to the principal gulf ports, or coastwise to eastern Atlantic cities, employs upwards of 1,100,000 tons of *American* shipping in the gulf and Atlantic coasting trade, and upwards of 55,000 American seamen engaged in such trade. As no foreign vessel can participate in the trade, the freights are highly profitable. They ordinarily average from

the gulf ports to New York not less than five-eighths of a cent per pound freight.

In the eastern Atlantic cities, the wharfinger, those who unlade the vessel, the drayman, the storekeeper, the commission merchant, the cotton-broker, the weigher, the packers who compress the bales by steam power or otherwise, the laborers, and those who charge for "mendage," "cordage," &c., &c., the fire insurer, and the shipper, the stevedore, and numerous other persons in those ports, find profitable avocations arising from cotton, whether destined for a home or for a foreign market.

If destined for a home market, it pays the expenses of relading for shipment coastwise, or of inland transportation, by railroad or otherwise, till it reaches the manufactory. It gives employment at this time to upwards of \$80,000,000 of capital invested in such manufactories. It affords means of subsistence to about one hundred thousand operative manufacturing laborers, male and female, whose aggregate annual wages exceed *seventeen millions of dollars*. The manufactories consume coal, use dyestuffs, employ machinists and other mechanics, and encourage, because they aid to sustain the carpenter, the mason, the shoemaker, the tailor, and, indeed, all others in their vicinity for whom they create employment. Calculating interest on the capital invested, and all other expenses, estimated at \$62,000,000 annually, (including raw cotton worth \$35,000,000,) they furnish manufactures valued at \$70,000,000. And there are, it is believed, at least 25,000 persons in the United States who find profitable avocations in the receiving and sale or shipment of these domestic cotton manufactures, whether consumed at home or abroad.

More than 800,000 tons of the navigation of the United States engaged in the foreign trade are employed in carrying American cotton to Europe and elsewhere, and upwards of 40,000 American seamen are given employment in such vessels.

It is estimated that the foreign tonnage and seamen employed in carrying American cotton to Europe and elsewhere to foreign countries amount to about one-sixth of that of the United States so employed. An amount of cotton not equal to the average annual crops of Alabama, Georgia, Mississippi, and South Carolina, united, is annually furnished by us, and provides means of employment in Europe for upwards of \$300,000,000 of capital, invested in cotton manufactories, and to more than 3,000,000 persons of the "working classes" and others, who receive, store, sell, transport, or manufacture the raw product, and to many others, engaged in the sale or shipment of the manufactures.

And not the least valuable of all the uses of this product to the people of the United States is, that it affords to the household of the humblest citizen, of every occupation—to the husbandman, the mechanic, and the laborer, whether distant from the marts of commerce or without the pecuniary ability to resort to them—and to the planters and their dependents, the masters and the servants, the means of supplying themselves, by their own handiwork in its manufacture, with numerous, and various, and inappreciable comforts, which, without it, they would have difficulty in obtaining. In yielding them such comforts, it stimulates them to industry and frugality; it gives them contentment; and

it fosters and cherishes that elevated spirit of independence, and that equally ennobling feeling of *self-dependence*, under favor of Providence, which ought to be universal constituents of American character. Not less than \$7,500,000 in value of the products of the cotton-fields of the South is annually appropriated to such uses.

Every interest throughout the land—at the north and the south, in the east and west, in the interior, and on the Pacific as well as the Atlantic coast—receives from it active and material aid. It promotes essentially the agricultural interests in those States where cotton is not produced. It is the main source of the prosperity of the mechanic, the artisan, and other laboring classes, as well as that of the merchant and manufacturer, in every section of the Union. Everywhere it has laid, broad, and deep, and permanent, the foundations of the wealth and strength of the United States, and of their independence of foreign nations. More than anything else has this product made other nations, even the most powerful, dependent on the “United States of America.” More than any other article, nay, more than all of other agricultural products united, has cotton advanced the navigating and commercial interests of the eastern Atlantic States, and of the whole Union. It, more than any other agricultural product, has cherished and sustained those interests, not merely by its direct contributions, but by awakening commerce in other countries, from which they have received profitable employment. Neither the whale-fisheries nor the mackerel and cod-fisheries have been of the same importance and value to those interests as the annual cotton crop of the United States (since the war of 1812) has been for its transportation coastwise, and exportation to foreign countries. Like the light and heat of the sun, the genial effects of this inestimable blessing, which Providence hath bestowed upon this favored people, reach every portion of the land. They extend to every city, and town, and village, and hamlet, and farm-house—to the ship, to the steamboat, to the canal-berge, and to the railroad. Throughout the length and breadth of this vast empire, there is not a tenement in which manufactures of this product are not found. In the sacred temples, in the halls of justice and of legislation, in the counting-house, in the workshop, in the stately mansions of the rich and lowly dwellings of the poor, wheresoever man resorts, may they be seen. Cotton is found in the silken tapestries and decorations of the fashionable parlor, and it contributes more to various articles in less costly furnished apartments. It is used in the luxurious couch of the affluent, and in the pallet of the indigent. Every trade, calling, occupation, profession, and interest—all classes, in all seasons, and at all times—in the United States, need and use manufactures of cotton, in habiliments for the person and otherwise, in ways as various as their wants. The editor in his gazette, the author in his book, the lawyer in his brief, and all in their correspondence, use paper made from cotton. And not only have cotton and manufactures from it entered into and become indispensable to the convenience and comforts of the people of the United States—not only has this boon from the Giver of all good to less than a third of the States of the Union been the primary and copious fountain from which has flowed the chief portion of the vast aggregated wealth of the confederacy—not only has it, for at least

forty-seven years, done more than all else to enable us to attain our present advanced position as a commercial people, equalled but by one nation,—but, unless it is forbidden by a greater than earthly power we shall ere long, *chiefly by the increase of the cotton crop*, hold supremacy over her. The aggregate of our *exportations* of raw cotton since 1821, including that year, is upwards of *one thousand five hundred and thirty-nine millions* of dollars, according to the Treasury returns; and whenever the increased wants of foreign countries require an increased supply, the quantity of at least one thousand and three hundred millions of pounds, which hereafter will probably be produced annually for foreign and home consumption, can be augmented to meet the full demand, and still further increased for many successive years. We possess the resources in land and labor to supply the whole world; and, after retaining all that is required for our own consumption, it may be anticipated that hereafter, whilst we are blessed with peace and fair crops and prices, our annual *exportations* will not be less in value than *one hundred millions of dollars*. With this we can in a few years extinguish our foreign debt, both public and private, and amply supply ourselves with all the necessaries, comforts, conveniences, and luxuries of other countries which we do not yet produce cheaply or in abundance.

There are other important results of the cotton crop of the United States deserving notice. There is one that must suggest and commend itself to all acquainted with the subject, and especially to the wise and intelligent statesman who looks beyond the generation in which he lives, and above the atmosphere of party, upon which comment is omitted in this paper, lest the restrictions referred to in the first paragraph might be considered by some as violated.

But there are two influences of this product (both moral and political, rather than pecuniary) which should not be overlooked. The *first* relates to our own country exclusively, the *second* to its position with other nations.

The influence of the various “cotton interests” in every section of the confederacy in strengthening the bonds and bands of that federal union of the thirty-one States which constitutes our strength, and glory, and pride—its power in insuring the maintenance of the federal compact inviolate, and the maintenance of the laws of the land enacted under it—that influence which unites the promptings and also the restraints of *self-interest* with those of *patriotism*—is neither light nor transient. It is potent and permanent. Cogent and satisfying to every true American are its teachings that no “section” of this confederacy is the *rival* of any other “section,” except in patriotic efforts to advance the welfare of their common country. Their natural, and rightful, and legitimate interests do not clash; and all are best promoted by aiding, sustaining, supporting, and cherishing each other. If any would maintain the false doctrine that a “section” or even a single State, may justly have its equality reduced, its rights and interests disregarded and broken down, or that the local interests of one section may be promoted at the expense of any other of inferior numerical strength; and if, unrestrained by the federative compact, they should attempt the enforcement of such principles,—when the time comes for practical action, the

conservative influences above adverted to, in all sections, may be relied upon for the administration of a rebuke which, though it fails to convince the misguided of their error, will not be the less withering in its effects upon them, or the less powerful in upholding right and in the preservation of concord and union.

With respect to foreign nations, it cannot be denied that by means of our cotton crop we have contributed to the necessities and wants of millions of the people of other lands ; we have created employment for their manufacturing laborers ; we have done much to ameliorate the condition and alleviate the sufferings of all the oppressed and impoverished working classes of the old countries, and added to the sum of human comfort and happiness more than any other people within the last half century. And it has not been a theoretic principal, a transcendental abstraction, or a Utopian scheme of "liberty, equality, and fraternity"—a cheat, like "Dead-sea fruits, that turn to ashes on the lips"—that we have bestowed upon them ; but actual, practical, real, tangible, substantial comforts, apparent to the corporeal senses. And, still more, by it we have been given effective means of check and restraint, and, if need be, of coercion too, as to the governments of those nations who have become, and must continue to be, dependent upon the southern States of this confederacy for the supply of cotton wherewith to provide employment for millions of their working men, women, and children, and wherewith to obtain raiment for all classes—idle and laboring, rich and poor. The necessity for such supply, and the dependence upon the United States for it, is valuable surety for "the peace and good behavior" of those governments towards this country, and towards all others, in "the peace of God ;" and it is also some guaranty against outrage or oppression in their own household.

The true policy of this confederacy, dictated alike by interest and by duty, is to cultivate friendly relations with every other people. All that we enjoy we hold from the bounty of the great Ruler of nations and to fulfil his all-wise purposes. Those who suppose our high mission is inconsistent with the sacred precept, "on earth peace, good will towards men," are in error. Insults may be repelled, wrongs redressed, and justice executed, without violating this rule. Until the people of these confederated sovereignties cease to deserve the blessings of civil and religious freedom, the federal government cannot be transformed into a consolidated military republic, which may, when incited by lust of conquest, wield its mighty power to ravage, despoil, conquer, or subjugate other nations. An illustrious chief magistrate years since proclaimed that "a fixed determination to give no just cause of offence to other nations" was a cardinal rule in the administration of the federal government ; and he also said that "with this determination to give no offence is associated a resolution, equally decided, to submit to none." Illiberality, displays of hostility, and officious intermeddling in our affairs, may engender ill feelings, and provoke to recrimination and retaliation, and cause collisions ; but in their career to the consummation of the high destiny awaiting the American people, if they do not forfeit it by misconduct, they should rigidly adhere to the rule just quoted, and to the other injunction by the same high authority—to "ASK FOR NOTHING THAT IS NOT CLEARLY RIGHT, AND SUBMIT TO NOTHING THAT IS WRONG."

Statement of the value of cotton goods imported during the year ending June 30, 1852.

Imported from—		MANUFACTURES OF COTTON IMPORTED.							Total value.
		Printed or colored.	White and uncolored.	Tambores or embroidered.	Velvets and hatters' plush.	Hosiery.	Thread and yarn, &c.	Other manufactures of.	
Hanse Towns.....	\$259,640	\$21,511	\$94,824	\$1,843	\$1,527,277	\$2,008	\$26,014	\$1,933,117	
Holland.....	1,263	59	201	.....	3,725	.....	4	5,252
Belgium.....	39,722	4,144	1,567	.....	8,543	850	64	54,890
England.....	10,062,463	1,965,452	1,370,540	285,733	524,791	800,466	476,140	15,485,585	
Scotland.....	615,800	111,112	62,441	318	4,577	81,406	288	875,942	
France.....	553,837	374,558	224,713	11,009	83,019	1,572	60,216	1,308,924	
Cuba.....	9,150	32	.....	.....	.....	.....	4	10,117
British East Indies.....	4,425	38	.....	.....	.....	.....	.....	4,463
Other countries.....	7,006	580	517	275	408	607	1,813	11,206	
Total.....	11,553,306	2,477,486	1,754,803	299,178	2,152,340	887,840	564,543	19,689,496	

*Statement of the value of cotton goods of foreign manufacture exported during
the year ending June 30, 1852.*

Exported to—	FOREIGN COTTON GOODS EXPORTED.			
	Printed & colored.	White & uncolored.	All other.	Total value.
Danish West Indies.....	\$2,748	.....	\$550	\$3,298
Hanse Towns.....	4,210	.....	225	4,435
England.....	26,344	\$22,570	2,430	51,344
Scotland.....	12,365	.....	326	12,691
British Honduras.....	95	.....	.....	95
British West Indies.....	12,513	736	3,052	16,301
British American colonies.....	23,204	22,418	5,686	51,308
Canada.....	120,383	108,711	37,889	266,983
France.....	750	.....	.....	750
Cuba.....	3,176	812	15,396	19,384
Porto Rico.....	370	.....	.....	370
Hayti.....	29,983	.....	1,310	31,293
Mexico.....	196,535	223,196	65,095	484,826
Central America.....	1,671	1,222	786	3,679
New Grenada.....	1,003	1,453	3,936	6,392
Venezuela.....	422	.....	.....	422
Brazil.....	4,783	.....	460	5,243
Chili.....	6,856	9,950	172	16,978
Peru.....	.....	1,699	.....	1,699
China.....	.....	7,146	.....	7,146
Africa.....	.....	.....	882	882
South seas and Pacific ocean.....	4,963	1,302	.....	6,265
Total.....	452,374	401,215	138,195	991,784

Exports of raw cotton and domestic cotton manufactures during the year ending June 30, 1852.

RAW COTTON.—\$87,965,732.		MANUFACTURES OF COTTON.—\$7,672,151.				
Sea Island.	Upland.	Value.	Printed or colored.	Uncolored.	Thread and yarn.	Other manufactures of.
Pounds.	Pounds.					
Russia.....	10,475,168	\$962,346				
Sweden and Norway.....	5,939,025	510,103				
Swedish West Indies.....			\$2,525	\$2,144		
Denmark.....	37,042	3,219	917	19,923		\$1,882
Danish West Indies.....	22,138,228	1,890,807				300
Hanse Towns.....	10,259,042	815,188			\$330	
Holland.....			607	126,736		
Dutch East Indies.....			6,117	27,491		.88
Dutch West Indies.....						
Belgium.....	27,157,890	2,227,826				
England.....	726,383,118	58,322,395		3,114		2,817
Scotland.....	15,466,384	1,270,592				
Ireland.....	953,396	73,312				
Gibraltar.....	123,803	12,108			47,776	383
Malta.....					17,216	
British East Indies.....			4,105	300,383		
Cape of Good Hope.....						93
Honduras.....			1,909		84,500	350
British Guiana.....					2,373	307
British West Indies.....			4,473		14,866	138
Canada.....	14,133	1,264	114,203		189,716	3,741
British American Colonies.....	2,449	270	50,372		142,977	55,501
Australia.....					6,583	23,947
France on the Atlantic.....	1,422,268	14,562,061	1,393		6,644	319
France on the Mediterranean.....	537,925	876,495			219	
French West Indies.....			275		11,467	
Spain on the Atlantic.....	1,922,207	158,099	523		4,470	
Spain on the Mediterranean.....	27,379,721	2,412,096				

Whither exported.

STATEMENT—Continued.

Whither exported.	RAW COTTON.—\$87,965,732.		MANUFACTURES OF COTTON.—\$7,672,151.				
	Sea Island.	Upland.	Value.	Printed or colored.	Uncolored.	Thread and yarn.	Other manufactures of.
	<i>Pounds.</i>	<i>Pounds.</i>					
Teneriffe and other Canaries					\$379		
Manilla and Philippine Islands					188,487		
Cuba		294,853	\$22,554	\$4,725	10,095	\$9,369	\$12,670
Other Spanish West Indies				10,483	6,462	214	84
Portugal		98,285	9,340		153		
Fayal and other Azores				88	1,618		
Cape de Verds					3,483		
Italy generally		12,365,445	955,851	430	1,138		
Sicily					214		
Sardinia		5,565,823	416,982		180		
Trieste and other Austrian ports		23,948,434	1,909,717		118,762		
Turkey, Levant, &c.				985			
Haiti				28,925	205,103		84
Mexico				26,285	94,536	131	14,701
Central Republic of America		6,700,091	551,942	7,087	41,309		6,748
New Granada				11,567	19,781	125	8,628
Venezuela				19,239	141,578		9,254
Brazil				240,725	395,550	953	85,277
Cisplatine Republic				1,676	1,016	134	20,621
Argentine Republic				28,552	109,350	2,521	2,304
Chili		18,000	1,175		1,092,293		149,035
Bolivia					180,000		165,313
Peru				6,455	2,201,496		
China				6,238			
South America generally				80	11,814		
Asia generally				329,066	231,838		6,985
Africa generally				17,099	56,791	207	294
South Seas and Pacific Ocean							
Total	11,738,075	1,081,492,564	87,965,732	926,404	6,139,391	34,718	571,638

Specification of exports of foreign cotton manufactures.

Years.	Dyed and colored.	White.	Hosiery, mtis, &c.	Twist, yarn, and thread.	China nankeens.	All other, velvets, &c.	Total exported.
1821	\$379,701	\$320,302	.....	\$6,532	\$874,608	.....	\$1,581,143
1822	572,626	341,371	.....	3,817	741,882	.....	1,664,696
1823	1,206,502	520,506	.....	24,767	865,518	.....	2,617,293
1824	1,544,231	608,068	.....	8,474	321,204	.....	2,481,977
1825	1,105,252	705,339	\$46,311	9,412	443,271	\$94,870	2,404,455
1826	1,032,381	682,407	74,462	34,862	336,295	65,683	2,226,090
1827	964,904	495,188	46,788	63,413	230,448	38,073	1,838,814
1828	1,402,103	406,623	44,988	46,736	324,274	18,015	2,242,739
1829	751,871	302,435	42,222	27,656	397,033	43,723	1,564,940
1830	905,028	475,171	57,104	58,325	348,526	55,310	1,989,464
1831	1,746,442	973,774	57,015	70,254	237,330	144,043	3,228,858
1832	1,094,412	782,356	62,775	29,026	185,945	167,573	2,322,087
1833	1,352,286	710,193	45,937	134,229	112,718	149,155	2,504,518
1834	1,818,578	788,031	43,649	66,403	105,477	48,716	2,866,854
1835	2,308,636	1,193,391	33,994	87,089	55,201	19,526	3,697,837
1836	1,975,156	666,871	16,689	78,176	16,456	12,328	2,765,676
1837	2,103,527	352,591	41,360	86,756	24,874	74,310	2,683,418
1838	826,111	246,312	14,746	29,768	25,380	11,189	1,153,506
1839	945,636	233,927	12,916	34,082	16,246	12,458	1,255,265
1840	838,553	183,468	13,632	53,030	5,630	9,176	1,103,489
1841	574,503	127,228	15,943	198,996	4,404	7,982	929,056
1842	502,072	110,069	4,429	208,193	.....	12,129	836,892
1843*	251,808	33,998	4,881	15,028	.....	2,901	308,616
1844	278,434	90,381	4,325	24,958	.....	6,550	404,648
1845	281,775	162,599	2,455	10,922	.....	44,802	502,553
1846	290,282	357,047	1,780	8,482	.....	15,612	673,203
1847	372,877	83,715	.....	3,808	.....	25,735	486,135
1848	640,919	487,456	20,272	40,783	.....	26,742	1,216,172
1849	424,941	81,690	10,425	7,718	.....	46,308	571,082
1850	274,559	44,724	22,943	21,023	.....	63,858	427,107
1851	440,441	132,020	25,923	20,546	.....	59,010	677,940
1852	452,374	401,215	.....	.....	.....	138,195	991,784

* Nine months.

Domestic manufactures of cotton exported from the United States.

Years.	Printed and colored.	White.	Twist, yarn, &c.	Nankeens.	Not specified.	Total.
1826.....	\$68,884	\$821,629	\$11,135	\$8,903	\$227,574	\$1,138,125
1827.....	45,120	951,001	11,175	14,750	137,368	1,159,414
1828.....	76,012	887,628	12,570	5,149	28,873	1,010,232
1829.....	145,024	981,370	3,849	1,878	127,336	1,259,457
1830.....	61,800	964,196	24,744	1,093	266,350	1,318,183
1831.....	96,931	947,932	17,221	2,397	61,832	1,126,313
1832.....	104,870	1,052,891	12,618	341	58,854	1,229,574
1833.....	421,721	1,802,116	104,335	2,054	202,291	2,532,517
1834.....	188,619	1,756,136	88,376	1,061	51,802	2,085,994
1835.....	397,412	2,355,202	97,808	400	7,859	2,858,681
1836.....	256,625	1,950,795	32,765	637	14,912	2,255,734
1837.....	549,801	2,043,115	61,702	1,815	175,040	2,831,473
1838.....	252,044	3,250,130	168,021	6,017	82,543	3,758,755
1839.....	412,661	2,525,301	17,465	1,492	18,114	2,975,033
1840.....	398,977	2,925,257	31,445	1,200	192,728	3,549,607
1841.....	450,503	2,324,839	43,503	.....	303,701	3,122,546
1842.....	385,040	2,297,964	37,325	.....	250,301	2,970,690
1843*.....	358,415	2,575,049	57,312	.....	232,774	3,223,550
1844.....	385,403	2,298,800	44,421	.....	170,156	2,898,870
1845.....	516,243	2,343,104	14,379	1,174,038	280,164	4,327,928
1846.....	380,549	1,978,331	81,813	848,989	255,799	3,545,481
1847.....	281,320	3,345,902	108,132	8,794	338,375	4,082,523
1848.....	351,169	4,866,559	170,633	2,365	327,479	5,718,205
1849.....	466,574	3,955,117	92,555	3,203	415,680	4,933,129
1850.....	606,631	3,774,407	17,405	.....	335,981	4,734,424
1851.....	1,006,561	5,571,576	37,260	.....	625,808	7,241,205
1852.....	926,404	6,139,391	34,718	.....	571,638	7,672,151

* Nine months.

NOTE.—Previous to 1826 the published treasury statements do not specify these exports as above.

Values of certain domestic products exported, and total value of domestic products exported, including bullion and specie.

Years.	Cotton.	Tobacco.	Rice.	Flour.	Pork, hogs, lard, &c.	Beef, cattle, hides, &c.	Butter and cheese.	Skins and furs.	Fish.	Lumber.	Manufactures.	Total domestic exports.
1821	\$20,157,454	\$5,645,962	\$1,494,307	\$1,298,043	\$1,354,116	\$698,223	\$190,237	\$706,905	\$978,591	\$1,512,808	\$2,122,631	\$48,671,994
1822	1,063,058	6,222,878	1,563,432	5,103,280	1,367,699	844,534	221,041	301,309	915,588	1,307,870	\$8,121,080	49,571,079
1823	20,445,520	6,252,672	1,820,935	4,962,373	1,291,822	739,461	192,775	674,217	1,014,588	1,233,800	3,189,939	47,155,408
1824	21,947,401	4,855,566	1,882,935	5,159,176	1,489,051	707,299	204,205	691,465	1,184,704	4,841,833	58,949,500	53,949,500
1825	36,846,649	6,115,623	1,925,245	4,121,127	1,892,679	890,465	247,751	524,062	1,078,773	5,720,797	66,944,745	66,944,745
1826	25,025,214	5,347,208	1,917,445	4,121,468	1,892,429	738,430	297,705	524,473	957,092	2,011,631	5,720,797	58,031,710
1827	29,859,545	5,816,146	2,343,908	4,434,831	1,555,698	772,636	184,049	441,689	957,447	1,697,176	5,898,631	65,021,691
1828	22,457,229	5,480,707	2,620,698	4,283,669	1,495,880	719,991	176,354	1,064,657	1,064,657	5,548,854	50,669,669	50,669,669
1829	26,575,811	5,135,370	2,514,370	5,090,623	1,493,629	674,965	176,205	326,507	988,068	5,412,820	55,700,193	55,700,193
1830	25,289,492	5,893,112	1,986,824	6,182,129	1,315,245	717,685	162,370	644,760	758,077	5,086,900	50,462,029	50,462,029
1831	31,724,682	4,892,883	2,016,267	10,461,723	1,501,644	829,982	242,796	811,969	924,584	1,864,197	5,086,900	61,277,057
1832	36,191,105	5,909,769	1,523,361	4,974,121	1,928,196	774,037	291,820	756,968	1,058,794	2,006,757	5,059,683	68,137,470
1833	25,859,492	5,785,968	2,774,418	5,642,602	2,151,358	965,076	841,953	690,950	1,038,950	2,809,494	6,557,080	70,317,698
1834	49,448,402	6,595,805	2,122,292	4,560,379	1,796,001	735,219	190,699	791,844	863,674	2,833,814	6,247,993	51,024,162
1835	64,961,302	8,250,577	1,776,732	6,681,761	1,667,322	1,047,594	1,047,594	1,067,594	1,067,594	7,693,073	101,189,082	101,189,082
1836	71,234,925	10,088,640	2,548,750	8,572,599	1,983,344	689,165	114,093	759,958	1,067,594	6,263,691	6,106,593	106,916,680
1837	63,240,102	7,795,647	2,309,279	8,987,269	1,299,796	585,146	96,176	631,905	709,800	3,753,994	7,186,997	93,564,411
1838	61,556,811	7,392,929	1,721,519	8,695,299	1,312,346	628,231	148,191	6,945	810,593	3,166,193	8,307,078	98,688,821
1839	61,238,982	9,392,943	2,460,189	6,925,170	1,777,230	871,646	127,530	6,945	810,593	3,094,806	9,873,462	113,833,634
1840	63,870,207	9,883,957	1,942,076	6,925,170	1,594,894	623,373	210,749	1,231,139	731,733	2,924,846	9,953,020	106,832,722
1841	54,330,841	12,576,703	2,010,107	7,759,646	2,621,637	904,918	504,819	988,262	731,733	3,873,003	9,410,604	92,949,995
1842	47,598,464	9,540,755	1,907,337	7,375,356	2,629,403	1,212,688	388,185	593,451	497,215	1,681,800	6,779,527	77,768,783
1843	40,119,806	6,650,979	1,625,726	8,768,075	2,120,020	1,092,949	508,965	453,569	807,215	3,001,963	9,159,724	99,299,776
1844	54,063,501	8,397,255	2,182,468	6,759,488	3,293,479	1,850,569	578,829	742,189	1,012,015	8,001,963	10,829,701	99,299,776
1845	41,739,643	7,469,819	2,160,456	5,893,593	2,891,254	1,926,509	1,243,359	1,243,359	1,012,015	9,001,963	10,829,701	99,299,776
1846	41,767,841	8,478,270	1,605,069	11,605,069	3,883,884	2,474,208	1,093,057	703,094	8,882,976	8,882,976	10,351,084	107,141,893
1847	53,415,845	7,242,056	3,605,896	26,139,811	6,630,342	2,434,082	1,741,770	1,741,770	703,094	8,882,976	10,351,084	107,141,893
1848	66,998,294	8,504,207	2,381,884	19,194,109	9,008,372	1,905,841	1,093,057	607,150	718,791	11,949,877	12,786,782	132,904,121
1849	66,396,967	5,804,207	2,569,362	11,289,582	6,246,585	1,664,567	1,664,567	512,171	656,223	4,751,583	11,949,877	132,904,121
1850	71,934,616	9,219,093	2,631,567	7,095,570	7,550,287	1,215,463	822,469	436,894	4,751,583	5,063,775	18,186,967	198,668,912
1851	112,815,817	9,219,251	1,924,831	10,824,831	4,388,015	1,689,958	1,124,682	971,762	453,061	6,063,775	18,186,967	198,668,912
1852	87,965,732	10,081,282	2,471,079	11,869,148	3,765,470	1,500,479	1,779,391	798,504	453,061	5,246,191	18,042,930	192,368,954

* Nine months.

Foreign cotton manufactures imported, and the total exported, consumed, &c.

Years.	Dyed and colored.	White.	Hosiery, mits, &c.	Twist, yarn, and thread.	China nankeens.	All others, velvets, &c.	Total imported.	Total exported.	Consumed in the United States.
1921	\$4,806,407	\$2,511,405	\$198,783	\$151,193	\$861,978	.....	\$7,850,711	\$1,581,143	\$6,008,508
1922	5,856,763	2,951,697	433,309	181,843	923,365	.....	10,246,907	1,664,696	8,582,211
1923	4,899,499	2,686,813	314,606	103,259	600,700	.....	8,554,877	2,617,293	5,937,584
1924	5,776,210	2,854,540	587,514	140,069	188,633	.....	8,896,757	2,481,977	6,413,780
1925	7,709,890	3,326,208	545,915	201,549	350,243	.....	12,509,516	2,404,465	10,105,051
1926	5,056,725	2,260,094	404,570	175,143	304,980	.....	8,348,084	2,226,690	6,121,394
1927	5,816,546	2,584,994	489,773	263,772	256,221	.....	9,316,138	1,898,814	7,417,324
1928	6,133,844	2,451,316	640,360	344,040	388,231	.....	10,996,270	2,242,739	8,753,531
1929	4,404,078	2,242,805	586,997	178,120	542,179	.....	8,362,017	1,564,949	6,797,077
1930	4,356,675	2,487,804	587,937	172,765	228,233	.....	7,862,326	2,242,739	5,619,587
1931	10,046,500	4,225,175	837,937	393,414	120,629	.....	16,090,224	3,228,868	12,861,356
1932	6,235,475	2,268,672	1,085,513	318,222	120,076	.....	10,399,733	2,322,087	8,077,646
1933	5,181,647	1,181,512	623,369	343,059	31,001	.....	7,660,449	2,504,518	5,155,931
1934	6,068,823	1,738,482	743,865	379,783	41,337	.....	8,938,290	2,806,854	6,131,436
1935	10,610,722	2,738,493	906,369	544,473	9,021	.....	15,367,585	3,697,887	11,669,748
1936	12,192,980	2,766,787	1,585,608	565,290	28,848	.....	17,876,087	2,765,676	15,110,411
1937	7,087,270	1,611,398	1,267,267	404,693	35,999	.....	11,590,841	2,683,418	8,907,423
1938	4,217,551	980,142	767,856	222,114	27,049	.....	6,599,830	1,153,506	5,445,824
1939	9,216,000	2,154,981	1,879,783	779,004	874,691	.....	14,908,181	1,255,265	13,652,916
1940	3,893,694	917,101	702,078	337,095	1,102	.....	6,504,484	1,103,439	5,400,995
1941	7,434,727	1,578,505	980,639	883,130	1,217	.....	11,797,036	929,056	10,867,980
1942	6,168,544	1,285,894	1,097,621	487,917	53	.....	9,578,515	886,892	8,741,623
1943*	1,739,318	393,105	307,243	216,227	.....	.....	2,968,796	308,616	2,660,180
1944	8,894,219	1,670,769	1,121,460	637,066	.....	.....	13,641,478	404,648	13,236,830
1945	8,572,546	1,823,451	1,326,631	566,769	.....	.....	13,863,282	592,533	13,300,729
1946	8,755,392	1,597,120	1,308,202	656,571	.....	.....	13,350,625	673,293	12,677,322
1947	10,023,418	2,680,979	1,178,824	511,136	.....	.....	15,192,875	1,486,185	14,706,740
1948	12,490,501	2,487,256	1,883,871	727,422	.....	.....	18,421,589	1,216,172	17,205,417
1949	10,236,894	1,498,695	1,815,783	770,509	.....	.....	15,754,841	1,571,082	15,183,759
1950	13,640,291	1,773,302	1,585,173	739,156	.....	.....	20,108,719	427,107	19,681,612
1951	14,449,421	1,469,044	2,117,809	980,839	.....	.....	22,164,442	677,940	21,486,502
1952	11,553,306	2,477,456	2,162,840	887,840	.....	.....	19,689,496	991,784	18,697,712

* Nine months. Previous to 1931 these returns are not fully specified in detail.

Bullion and specie imported into and exported from the United States.

Years ending—	Imported.	Exported.	Import'n over exportation.	Export'n over importation.
September 30	1821	\$8,064,890	\$10,478,059	\$2,413,169
	1822	3,369,846	10,810,180	7,440,334
	1823	5,097,896	6,372,987	1,275,091
	1824	8,379,835	7,014,552	\$1,365,283
	1825	6,150,765	8,797,055	2,646,290
	1826	6,880,966	4,704,553	2,176,433
	1827	8,151,130	8,014,880	136,250
	1828	7,489,741	8,243,476	753,735
	1829	7,403,612	4,924,020	2,479,592
	1830	8,155,964	2,178,773	5,977,191
	1831	7,305,945	9,014,931	1,708,986
	1832	5,907,504	5,656,340	251,164
	1833	7,070,368	2,611,701	4,458,667
	1834	11,911,632	2,076,758	15,834,874
	1835	13,131,447	6,477,775	6,653,672
	1836	13,400,881	4,324,336	9,076,545
	1837	10,516,414	5,976,249	4,540,165
	1838	17,747,116	3,508,046	14,239,070
	1839	5,595,176	8,776,743	3,181,567
	1840	8,882,813	8,417,014	465,799
	1841	4,988,633	10,034,332	5,045,699
	1842	4,087,016	4,813,539	726,523
9 months to June 30..	1843	22,320,335	1,520,791	20,799,544
Year to June 30.....	1844	5,830,429	5,454,214	376,215
	1845	4,070,242	8,606,495	4,536,253
	1846	3,777,732	3,905,268	127,536
	1847	24,121,289	1,907,739	22,213,550
	1848	6,360,224	15,841,620	9,481,396
	1849	6,651,240	5,404,648	1,246,592
	1850	4,628,972	7,522,994	2,894,022
	1851	5,453,981	29,465,752	24,011,771
	1852	5,503,544	42,674,135	37,170,591
Total.....		274,407,398	265,529,935	112,290,606
				103,413,143

The total difference since 1821 is \$8,877,463 excess of importation over exportation. Prior to 1851, the same difference was \$70,059,825.

STATEMENTS OF THE COMMERCE OF THE ATLANTIC STATES AND CITIES

It has been thought proper to place on record, under this head, a few general statements illustrative of the commerce and navigation of our principal Atlantic ports with foreign countries, in a convenient form for comparison with the aggregate of the United States, the internal commerce and navigation of this confederacy, and with that of any or all foreign countries in the world. To this end, some statements relating to the aggregate commerce and tonnage of the United States are also appended. These statements are of an entirely reliable character, most of them having been derived from official sources.

It was under contemplation to prepare specific notices of each of the more prominent of the commercial cities of the seaboard for this portion of the report; but, upon application being made at the several points for the requisite statistics, and the discovery of the entire absence of such accounts as might form a proper basis on which to calculate the value of the coasting and inland or domestic trade centring at the several ports, it has been judged best not to make the attempt.

The trade of New York, Boston, and New Orleans receives a larger quota from the interior than any other cities of the seaboard. This is owing to the fact of their better natural and artificial communication with that region lying between the Alleghany and Rocky ridges. The communication of the rest of the Atlantic cities with the interior country has been chiefly, *hitherto*, with that portion lying *east* and *south* of the Alleghany ridge, and by means of railways and navigable rivers. It will be seen that by far the largest foreign trade is enjoyed by New York—the next in value of importations being Boston; and in value of exportations, New Orleans. The foreign exports of Philadelphia and Baltimore are made up principally of domestic manufactures, for the producing of which they possess facilities seldom surpassed, and of the agricultural productions of the States of which they are respectively the commercial capitals, and of Virginia, or rather those portions of these several States lying east of the Alleghanies. Their importations are chiefly limited to the more bulky and cheaper of such foreign fabrics, or materials and productions, as incur the least risk, and as are most wanted by those classes for whom they export—the richer and finer articles, to which greater risk is attached, being generally purchased of manufacturers' agents, at the larger important cities.

The southern cities have a large foreign and coastwise *export* trade, for the reason that the labor in that portion of the country is principally confined to the production of those articles for which there is not a full *home* demand. The people of South Carolina, for example, are chiefly devoted to the production of cotton and rice, and the exports from Charleston are principally made up of these articles. The same may be said of Georgia, with respect to cotton more particularly, and the exports from Savannah. Both of these ports have excellent harbors, of easy entrance, and the trade of Savannah is rapidly increasing. Just below the city some obstructions exist in the Savannah river, caused by the sinking of vessels during the war of 1812 and '15 to prevent the British from reaching and destroying the city. These are about being removed, and, when their removal is accomplished, vessels of heavy

draught can proceed safely to the wharves at the city. These southern cities import largely of northern manufactures. A statement fairly exhibiting the movement of merchandise *coastwise* would show a domestic importation into the southern cities having a much nearer ratio than the foreign importations to their export trade. While a greater portion of the cotton of the southern States is exported from their own ports directly to Europe, the returns, either in money or merchandise, are received principally through New York—which explains satisfactorily the excess of imports over the exports of that city.

The cities of Baltimore, Charleston, and Savannah maintain their communications with the interior principally by railway; and Mobile by the Mobile river and its tributaries. These, like the northern cities, are pushing lines of railway into the heart of the country. The results which are to follow the construction of such works remain to be seen; and it is a question worthy of grave consideration whether these routes are not calculated to effect remarkable changes in the direction of our interior commerce, which, up to the present time, has of necessity been confined to few; and whether an apparent monopoly which has been enjoyed by two or three cities is not to become, when commerce shall be liberated from the channels of necessity, the common property of all. In any event, there can be no question as to the good effect which the works referred to will have upon the business of the ports where they terminate. By opening a market to extensive tracts of country previously inaccessible, the producing area must be largely increased; and the productions will naturally follow these railways to a market for shipment.

NOTE.—The city of Savannah has also the fine river of the same name, which divides Georgia from South Carolina, navigable by steamboats nearly 200 miles westwardly; and Charleston has tributary to it the rivers Ashley and Cooper, which are both capacious, and unite just below the city, forming Charleston harbor. The latter of these rivers is connected by canal with the Santee river, by which means steam navigation is opened from Charleston to Columbia.

Statement exhibiting the value of exports from and imports into the ports of Philadelphia and Baltimore, annually, from 1834 to 1851, inclusive.

Years ending—	PHILADELPHIA.			BALTIMORE.		
	Value of exports.			Value of exports.		
	Domestic produce, &c.	Foreign merchandise.	Total.	Domestic produce, &c.	Foreign merchandise.	Total.
September 30	\$2,031,803	\$1,957,943	\$3,989,746	\$3,010,458	\$1,155,537	\$4,165,995
1835.....	2,416,099	1,760,191	4,176,290	3,175,491	748,368	3,923,859
1836.....	2,627,651	1,049,956	3,677,607	3,026,154	367,990	3,393,444
1837.....	2,565,712	1,272,857	3,841,599	3,365,173	424,744	3,789,917
1838.....	2,481,543	995,608	3,477,151	4,165,168	359,407	4,524,575
1839.....	4,148,211	1,151,204	5,299,415	4,313,189	263,372	4,576,561
1840.....	5,736,456	1,083,689	6,820,145	5,495,020	273,748	5,768,768
1841.....	4,404,863	747,638	5,152,501	4,787,340	168,006	4,945,346
1842.....	3,293,814	460,080	3,753,894	4,635,507	265,731	4,901,238
1843.....	2,071,945	283,003	2,354,948	2,813,552	195,342	3,008,894
9 months to June 30.....	3,265,027	270,229	3,535,256	4,835,260	291,216	5,126,476
1844.....	3,129,678	444,655	3,574,363	4,941,249	275,740	5,216,989
1845.....	4,157,918	593,087	4,751,005	6,744,110	124,945	6,869,055
1846.....	8,263,311	277,856	8,541,167	9,630,900	119,557	9,750,457
1847.....	5,428,309	304,024	5,732,333	7,016,034	113,427	7,129,461
1848.....	4,850,872	492,549	5,343,421	7,785,892	213,965	7,999,857
1849.....	4,049,464	*452,142	4,501,606	6,566,743	377,872	6,944,615
1850.....	5,101,969	254,067	5,356,036	5,416,798	218,988	5,635,786
1851.....						
September 30	\$4,647,167			\$4,647,167		\$4,647,167
1835.....	5,647,153			5,647,153		5,647,153
1836.....	7,131,503			7,131,503		7,131,503
1837.....	7,857,033			7,857,033		7,857,033
1838.....	5,701,869			5,701,869		5,701,869
1839.....	6,995,285			6,995,285		6,995,285
1840.....	4,835,617			4,835,617		4,835,617
1841.....	6,101,313			6,101,313		6,101,313
1842.....	4,416,138			4,416,138		4,416,138
1843.....	2,479,132			2,479,132		2,479,132
9 months to June 30.....	3,917,730			3,917,730		3,917,730
1844.....	3,741,286			3,741,286		3,741,286
1845.....	4,042,915			4,042,915		4,042,915
1846.....	5,343,643			5,343,643		5,343,643
1847.....	4,976,731			4,976,731		4,976,731
1848.....	6,124,201			6,124,201		6,124,201
1849.....	6,648,774			6,648,774		6,648,774

Statement exhibiting the value of exports from and imports into the port of Charleston, annually, from 1834 to 1851, inclusive—direct trade.

Years ending—	Value of exports.			Value of imports.
	Domestic produce, &c.	Foreign merchandise.	Total.	
Sept. 30, 1834.....	\$11,119,565	\$88,213	\$11,207,778	\$1,787,267
1835.....	11,224,298	113,718	11,338,016	1,891,805
1836.....	13,482,757	201,619	13,684,376	2,801,211
1837.....	11,135,623	81,169	11,216,792	2,510,860
1838.....	11,007,441	24,679	11,032,120	2,318,791
1839.....	10,301,127	66,604	10,367,731	3,084,328
1840.....	9,956,163	55,753	10,011,916	2,058,561
1841.....	7,970,899	31,892	8,002,791	1,553,713
1842.....	7,477,340	17,324	7,494,664	1,357,617
1843.....	7,733,780	6,657	7,740,437	1,294,389
1844.....	7,393,134	3,697	7,396,831	1,131,127
1845.....	8,856,471	5,878	8,862,349	1,142,818
1846.....	6,804,313	18,942	6,823,255	902,427
1847.....	10,388,915	3,371	10,392,286	1,588,750
1848.....	8,027,485	.....	8,027,485	1,481,236
1849.....	9,672,606	1,301	9,673,907	1,475,695
1850.....	11,419,290	908	11,420,198	1,933,785
1851.....	15,301,648	.....	15,301,648	2,081,312

NOTE.—It is a matter of great regret that the application for full statements of the trade and commerce of the flourishing city of Savannah was not received in time for this report.

Statement of the receipts into the treasury on account of duties collected at the ports of Boston, New York, Philadelphia, and Baltimore, from 1835 to the 30th of June, 1852, inclusive.

Years.	Boston.	New York.	Philadelphia.	Baltimore.
1835.....	\$2,612,486 10	\$11,597,466 90	\$2,159,111 30	\$666,937 61
1836.....	2,236,041 22	13,424,717 87	2,637,796 28	1,127,989 62
1837.....	1,328,863 67	9,679,756 05	1,162,610 66	704,247 62
1838.....	2,239,554 67	8,941,208 80	1,882,613 06	1,111,741 85
1839.....	2,162,055 37	14,475,995 91	2,326,384 71	1,166,548 64
1840.....	1,820,173 98	7,167,968 53	1,553,373 07	700,315 88
1841.....	2,307,848 68	8,418,588 60	1,367,259 08	616,025 72
1842.....	2,789,798 72	11,273,499 91	1,659,125 67	610,880 21
1843.....	1,311,225 52	4,072,296 44	559,649 65	228,367 41
1844.....	4,411,372 36	16,792,679 41	2,255,860 77	603,574 65
1845.....	4,676,157 45	17,255,308 60	2,361,325 72	696,724 61
1846.....	4,844,129 75	16,975,972 34	2,136,754 70	674,548 22
1847.....	4,698,226 24	15,524,014 27	1,978,430 99	600,497 34
1848.....	5,033,772 14	20,128,726 89	2,979,931 31	771,708 06
1849.....	4,380,346 89	18,377,814 24	2,329,553 66	649,402 42
1850.....	6,177,970 64	24,952,977 02	3,122,660 40	1,004,961 32
1851.....	6,520,973 85	31,754,964 26	3,783,787 32	1,047,278 67
1852.....	6,250,588 68	28,772,558 75	3,715,126 21	1,063,530 75

Statement exhibiting the number of American and foreign vessels, and also their tonnage, employed in foreign trade in the district of New York, which entered and cleared, annually, from 1826 to 1851, inclusive.

Years.	AMERICAN VESSELS.				FOREIGN VESSELS.				TOTAL.			
	Entered.		Cleared.		Entered.		Cleared.		Entered.		Cleared.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
1826	248,176	.....	208,202	.....	26,285	.....	19,655	.....	274,461	.....	227,887
1827	251,522	.....	232,428	.....	35,887	.....	30,090	.....	287,409	.....	263,518
1828	242,660	.....	202,844	.....	42,319	.....	40,123	.....	284,979	.....	242,967
1829	244,558	.....	205,343	.....	26,049	.....	28,343	.....	270,607	.....	233,686
1830	273,790	.....	210,535	.....	31,391	.....	32,620	.....	305,181	.....	243,155
1831	278,571	.....	225,721	.....	55,107	.....	50,688	.....	333,678	.....	276,409
1832	298,127	.....	218,490	.....	102,358	.....	90,900	.....	400,485	.....	309,390
1833	314,409	.....	232,395	.....	106,099	.....	101,007	.....	430,508	.....	333,402
1834	342,630	1,465	232,934	485	101,067	474	96,151	1,950	443,697	1,485	329,085
1835	374,602	1,528	229,268	480	91,063	433	77,121	2,008	465,665	1,659	366,389
1836	396,906	1,079	274,168	660	137,632	624	126,918	2,202	534,538	1,703	401,086
1837	391,357	1,408	243,966	814	187,837	724	166,111	2,232	579,194	1,614	410,077
1838	342,900	1,553	267,906	900	79,597	372	78,593	1,625	492,497	1,362	346,499
1839	427,627	1,579	322,633	559	135,990	511	124,206	2,138	563,617	1,680	446,839
1840	417,443	1,443	253,149	512	128,488	503	125,619	1,955	547,694	1,570	408,768
1841	423,289	1,081	292,575	528	124,405	484	112,458	2,098	545,931	1,565	405,033
1842	419,076	1,027	299,950	563	150,939	573	151,241	1,987	570,015	1,600	451,191
1843	247,590	801	217,733	276	64,624	271	63,748	1,151	312,214	1,072	288,481
1844	434,960	1,289	371,968	561	141,520	522	126,286	2,123	576,480	1,811	498,254
1845	439,676	1,127	341,094	558	139,542	561	142,431	2,008	579,218	1,688	483,525
1846	493,095	1,237	396,498	564	161,882	564	157,218	2,132	655,877	1,801	553,716
1847	543,065	1,476	435,509	1,048	310,603	925	263,236	2,738	853,668	2,041	758,745
1848	639,305	1,351	491,219	946	293,188	992	367,116	2,870	932,493	2,343	788,339
1849	711,720	1,924	569,711	1,239	406,080	1,140	361,798	3,218	1,117,800	2,673	931,505
1850	734,431	1,379	596,812	1,281	410,900	1,230	355,666	3,163	1,145,331	2,609	982,478
1851	936,679	1,658	793,229	1,579	491,889	1,427	436,853	3,647	1,448,768	3,085	1,230,083

Statement exhibiting the number of American and foreign vessels, and also their tonnage, employed in foreign trade in the district of Philadelphia, which entered and cleared, annually, from 1826 to 1851, inclusive.

Years.	AMERICAN VESSELS.				FOREIGN VESSELS.				TOTAL.			
	Entered.		Cleared.		Entered.		Cleared.		Entered.		Cleared.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
1826	81,538	.....	69,444	.....	5,496	.....	4,445	.....	87,034	.....	73,889
1827	74,705	.....	68,753	.....	4,007	.....	4,097	.....	78,712	.....	72,850
1828	80,350	.....	61,819	.....	8,320	.....	5,880	.....	88,670	.....	67,699
1829	67,222	.....	52,841	.....	6,232	.....	4,625	.....	73,454	.....	57,466
1830	72,009	.....	62,959	.....	5,007	.....	4,870	.....	77,016	.....	67,829
1831	71,232	.....	65,149	.....	8,826	.....	7,596	.....	80,058	.....	72,745
1832	64,268	.....	46,726	.....	17,671	.....	14,131	.....	81,939	.....	60,857
1833	67,714	.....	49,109	.....	24,336	.....	22,378	.....	92,050	.....	71,487
1834	64,347	332	46,411	262	19,457	109	16,236	97	83,804	441	62,647
1835	68,177	318	57,088	68	10,816	68	10,935	71	78,993	359	68,023
1836	69,101	329	49,670	78	15,383	78	14,349	78	84,484	350	64,019
1837	72,684	346	45,185	92	19,031	88	18,284	88	91,715	332	63,469
1838	74,992	374	53,905	54	8,131	53	8,528	428	83,123	337	62,433
1839	96,887	453	64,318	78	14,506	72	13,381	531	111,393	405	77,699
1840	75,479	353	72,288	91	12,223	83	11,340	444	87,702	459	83,628
1841	88,972	428	74,201	70	10,098	65	9,322	498	99,070	455	83,523
1842	86,421	363	65,208	102	14,257	98	13,712	465	94,554	426	78,920
1843	92,419	421	41,573	34	5,525	34	5,899	255	47,944	275	47,472
1844	76,791	394	70,650	71	12,738	59	8,627	447	89,529	453	79,277
1845	77,248	343	63,271	77	14,065	67	12,987	420	91,313	404	76,258
1846	78,843	346	77,243	52	9,205	47	7,627	398	88,048	424	84,899
1847	101,376	435	107,930	186	38,398	153	35,213	621	139,774	583	143,143
1848	99,772	390	77,870	134	20,105	134	20,218	524	119,787	476	96,088
1849	113,825	421	93,322	185	28,798	185	27,005	606	142,623	539	130,327
1850	100,009	352	81,276	185	32,361	170	30,342	537	132,370	479	111,618
1851	117,377	404	102,123	177	42,259	173	38,051	581	139,636	530	140,174

Statement exhibiting the number of American and foreign vessels, and also their tonnage, employed in foreign trade in the district of Baltimore, which entered and cleared annually from 1826 to 1851, inclusive.

Years.	AMERICAN VESSELS.				FOREIGN VESSELS.				TOTAL.						
	Entered.		Cleared.		Entered.		Cleared.		Entered.		Cleared.				
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.			
1826.....	68	860	61	095	4	130	2	931	72	990	64	026			
1827.....	55	092	66	577	4	515	4	191	59	697	70	768			
1828.....	55	382	58	323	5	612	6	631	60	994	64	954			
1829.....	51	613	54	248	6	446	6	890	58	059	61	138			
1830.....	54	806	54	416	6	315	3	836	61	121	58	252			
1831.....	54	790	64	872	10	455	10	276	65	245	75	148			
1832.....	50	936	48	933	20	957	15	648	71	893	64	581			
1833.....	58	170	46	804	24	136	25	499	82	306	72	303			
1834.....	46	983	41	595	18	045	18	520	65	028	58	946			
1835.....	47	901	268	45	245	15	522	77	18	526	63	771			
1836.....	51	782	39	416	18	394	18	507	70	176	57	923			
1837.....	57	114	39	195	39	778	35	708	96	892	74	393			
1838.....	308	421	266	43	588	22	085	93	398	77	106	66	701		
1839.....	58	957	311	49	298	19	804	89	556	78	761	400	68	854	
1840.....	309	237	352	67	718	23	903	109	25	546	82	140	93	261	
1841.....	353	275	347	63	588	20	473	98	23	598	89	748	87	186	
1842.....	65	479	299	61	447	20	425	95	21	260	86	994	82	707	
1843.....	37	134	292	41	473	14	464	70	15	431	51	598	392	56	904
1844.....	61	469	346	69	834	21	344	111	21	205	82	813	457	91	039
1845.....	59	944	344	69	716	20	076	106	22	342	80	020	450	92	058
1846.....	319	563	405	88	404	24	343	128	30	887	89	906	533	119	291
1847.....	82	099	462	114	702	40	966	206	55	228	123	965	668	169	930
1848.....	74	188	406	84	709	28	342	137	36	221	102	530	543	120	930
1849.....	86	485	490	116	158	23	583	143	31	652	110	068	633	149	810
1850.....	70	427	359	89	296	29	161	143	37	523	99	588	521	126	819
1851.....	86	774	309	75	406	26	253	148	30	383	113	027	457	105	789

Statement exhibiting the number of American and foreign vessels, and also their tonnage, employed in foreign trade in the district of Portland, which entered and cleared, annually, from 1826 to 1851, inclusive.

Years.	AMERICAN VESSELS.				FOREIGN VESSELS.				TOTAL.			
	Entered.		Cleared.		Entered.		Cleared.		Entered.		Cleared.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
1826.....	.....	33,637	.....	43,816	.....	.....	289	.....	290	.....	.....	33,926
1827.....	.....	39,716	.....	42,340	.....	.....	317	.....	.....	.....	.....	40,033
1828.....	.....	34,347	.....	46,963	.....	.....	.....	.....	527	.....	.....	34,347
1829.....	.....	30,456	.....	37,006	.....	.....	.....	.....	.....	.....	.....	30,456
1830.....	.....	26,642	.....	38,560	.....	.....	170	.....	17	.....	.....	26,812
1831.....	.....	33,621	.....	41,830	.....	.....	324	.....	510	.....	.....	33,945
1832.....	.....	39,975	.....	43,858	.....	.....	563	.....	829	.....	.....	40,538
1833.....	.....	37,761	.....	42,823	.....	.....	155	.....	237	.....	.....	37,916
1834.....	.....	31,968	.....	40,313	.....	.....	1,366	.....	1,572	.....	.....	33,324
1835.....	156	28,878	222	42,669	23	2,095	23	2,095	162	167	229	30,973
1836.....	139	21,580	237	45,067	53	8,580	58	8,444	172	295	245	30,160
1837.....	113	19,005	231	43,746	72	6,745	68	6,566	168	299	295	25,511
1838.....	96	27,780	219	41,400	72	5,718	67	5,361	203	286	286	25,750
1839.....	131	25,533	210	40,745	78	5,262	73	4,901	204	283	283	33,498
1840.....	126	18,924	171	32,774	82	5,530	84	5,739	178	255	255	30,795
1841.....	96	22,477	195	36,894	72	5,024	74	5,258	174	269	269	24,454
1842.....	102	17,335	164	32,510	85	9,536	83	9,362	166	247	247	27,501
1843.....	81	18,651	118	22,939	62	5,520	60	5,578	166	178	178	26,871
1844.....	42	19,621	162	32,516	107	9,557	109	9,708	104	178	178	14,171
1845.....	90	26,464	160	32,827	96	8,363	91	7,917	197	291	291	14,171
1846.....	117	27,118	196	39,512	115	10,318	118	10,799	213	251	251	29,178
1847.....	125	19,760	191	35,814	101	8,505	108	9,150	240	314	314	34,827
1848.....	99	28,344	202	41,165	101	6,769	93	6,472	230	299	299	37,436
1849.....	136	19,212	187	38,828	94	22,013	93	21,966	200	282,265	282,265	35,113
1850.....	84	28,624	202	41,887	254	35,571	258	35,758	445	445	445	60,794
1851.....	131	38,956	255	48,973	316	28,660	321	28,752	447	523	523	64,195
.....	204	.....	.....	.....	255	.....	256	.....	459	511	511	67,616

1841.....	7,735	1,631,909	7,790	1,634,156	4,538	736,444	4,554	736,849	12,273	2,368,353	12,344	2,371,005
1842.....	6,939	1,510,111	7,024	1,536,451	4,535	732,715	4,529	740,497	11,474	2,242,886	11,553	2,276,948
1843.....	4,872	1,143,523	5,290	1,268,083	2,889	534,752	2,848	523,949	7,761	1,678,275	8,138	1,792,032
1844.....	8,148	1,977,438	8,343	2,010,924	5,577	916,992	5,500	906,814	13,725	2,894,430	13,843	2,917,738
1845.....	8,133	2,035,486	8,197	2,053,977	5,590	910,563	5,583	930,275	13,723	2,946,049	13,780	2,984,252
1846.....	8,111	2,151,114	8,451	2,221,028	5,707	959,739	5,770	968,178	13,818	3,110,853	14,221	3,189,206
1847.....	7,730	2,101,359	8,102	2,202,393	6,499	1,220,346	6,268	1,176,605	14,929	3,321,705	14,370	3,378,998
1848.....	9,643	2,393,482	9,695	2,461,280	7,631	1,405,191	7,634	1,404,159	17,274	3,798,673	17,329	3,865,439
1849.....	11,208	2,658,321	11,466	2,753,724	8,992	1,710,515	8,847	1,675,709	20,200	4,368,836	20,313	4,429,432
1850.....	8,412	2,573,016	8,379	2,632,788	10,100	1,775,623	9,816	1,728,214	18,512	4,348,639	18,195	4,361,002
1851.....	8,951	3,054,349	9,274	3,200,519	10,759	1,939,031	10,712	1,929,535	19,710	4,993,440	19,986	5,130,054

NOTE.—Previous to 1834 the number of vessels arriving and departing was not returned by the collectors.

Statement exhibiting the American and foreign tonnage entered and cleared at ports of the United States during the years ending June 30, from 1842 to 1851, inclusive, with per cent. increase.

Years.	AMERICAN TONNAGE.				FOREIGN TONNAGE.			
	Entered.		Cleared.		Entered.		Cleared.	
	Tons.	Per cent increase.	Tons.	Per cent increase.	Tons.	Per cent increase.	Tons.	Per cent increase.
1842.....	1,510,111	.....	1,536,451	.....	732,775	.....	740,497	.....
1843.....	1,143,523	Decrease.	1,268,083	Decrease.	534,752	Decrease.	529,949	Decrease.
1844.....	1,977,438	72.32	2,010,924	58.58	916,992	71.48	906,814	71.11
1845.....	2,035,486	2.95	2,053,977	2.14	910,563	Decrease.	930,275	2.58
1846.....	2,151,114	5.68	2,221,028	8.13	959,739	5.40	968,178	4.07
1847.....	2,101,359	Decrease.	2,202,393	Decrease.	1,220,346	27.15	1,176,605	21.53
1848.....	2,393,482	13.90	2,461,280	11.75	1,405,191	15.14	1,404,159	19.34
1849.....	2,658,321	11.06	2,753,724	11.88	1,710,515	21.73	1,675,709	19.33
1850.....	2,573,016	Decrease.	2,632,788	Decrease.	1,775,622	3.80	1,728,214	3.13
1851.....	3,054,349	18.70	3,200,519	25.56	1,939,031	9.21	1,929,535	11.45

Statement exhibiting the amount of tonnage belonging to the United States, annually, from 1836 to 1852, inclusive.

States.	1836.	1837.	1838.	1839.	1840.	1841.	1842.	1843.	1844.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Maine.....	276,859	251,569	270,232	282,286	308,062	305,291	281,330	285,381	305,331
New Hampshire.....	20,791	25,114	26,148	29,224	27,376	25,708	23,922	22,709	22,925
Vermont.....	1,152	1,152	4,250	4,232	4,342	4,343	4,343	2,763	2,763
Massachusetts.....	490,389	490,450	499,399	506,375	536,532	545,901	494,895	495,303	501,208
Rhode Island.....	49,345	45,651	44,477	44,573	43,425	42,084	47,243	45,626	48,172
Connecticut.....	70,259	76,307	80,813	82,914	86,948	65,279	67,749	70,278	82,174
New York.....	434,325	445,149	444,007	468,411	455,419	456,654	516,296	557,026	591,297
New Jersey.....	50,513	57,381	66,121	62,541	71,916	53,604	60,742	63,379	68,684
Pennsylvania.....	104,549	97,394	102,427	112,339	119,313	118,968	113,479	112,050	128,341
Delaware.....	17,046	18,049	16,772	19,303	19,772	10,056	10,396	10,321	10,912
Maryland.....	103,353	109,484	104,512	116,205	120,334	113,767	106,856	109,019	111,339
District of Columbia.....	17,451	16,971	19,300	23,142	24,335	16,349	17,711	19,527	19,538
Virginia.....	49,311	43,444	46,053	51,987	54,251	45,359	47,537	47,203	47,255
North Carolina.....	43,745	31,951	36,202	40,901	42,554	28,547	31,682	37,189	37,039
South Carolina.....	17,482	23,637	29,684	31,414	33,666	24,394	23,469	21,577	21,148
Georgia.....	11,268	15,196	19,552	20,993	22,180	16,147	16,536	17,400	17,105
Florida.....	3,677	7,315	8,574	9,673	10,451	5,994	8,288	10,046	9,577
Alabama.....	6,669	10,320	16,107	21,742	17,244	15,715	15,479	16,095	15,214
Mississippi.....						901			1,341
Louisiana.....	81,711	92,376	104,426	109,076	126,613	145,799	144,129	150,067	161,769
Texas.....									
Tennessee.....	3,377	5,194	5,481	4,241	4,733	3,522	3,811	4,813	5,667
Kentucky.....	1,714	1,714	7,734	8,126	1,592	8,360	4,619	5,093	7,114
Missouri.....	3,669	3,669	9,373	9,735	11,259	11,370	14,727	13,589	16,665
Illinois.....									
Ohio.....	16,586	19,373	24,146	23,926	26,442	25,111	24,830	29,458	32,115
Michigan.....	6,864	7,826	9,848	11,000	11,902	11,520	12,323	12,690	15,400
Wisconsin.....									
Oregon.....									
California.....									
Total.....	1,882,105	1,896,686	1,995,638	2,094,379	2,180,761	2,130,743	2,092,392	2,158,602	2,280,093

STATEMENT—Continued.

States.	1845.	1846.	1847.	1848.	1849.	1850.	1851.	1852.	Rate per cent. of increase from 1836 to 1852, inclusive.
Maine.....	Tons. 320,060	Tons. 358,123	Tons. 354,353	Tons. 452,329	Tons. 466,489	Tons. 501,422	Tons. 536,316	Tons. 592,806	114.12
New Hampshire.....	23,771	20,708	20,426	23,956	25,369	23,096	25,428	24,891	19.72
Vermont.....	2,319	2,048	2,560	3,630	3,630	4,550	3,932	5,657	391.00
Massachusetts.....	524,995	541,520	568,520	622,085	636,699	685,442	694,442	767,766	56.56
Rhode Island.....	47,209	49,438	48,010	43,873	43,425	40,489	38,050	41,049	Decrease.
Connecticut.....	91,568	99,023	102,890	111,962	113,850	113,087	116,180	125,088	78.04
New York.....	625,875	655,696	737,625	845,788	911,281	944,349	1,041,015	1,134,831	161.28
New Jersey.....	69,970	76,016	83,728	78,455	82,250	80,300	88,896	96,134	90.31
Pennsylvania.....	147,812	148,058	182,997	211,552	231,653	258,939	284,374	301,723	188.59
Delaware.....	11,935	11,837	14,662	17,452	16,582	16,730	11,880	9,598	Decrease.
Maryland.....	118,164	128,453	139,123	158,495	173,021	193,087	204,945	206,247	99.55
District of Columbia*.....	20,617	22,355	23,458	11,823	13,776	17,011	22,903	26,197	50.12
Virginia.....	50,705	53,541	59,987	68,184	73,283	74,071	68,799	72,538	47.10
North Carolina.....	39,862	41,225	37,932	41,405	44,827	45,219	43,783	50,621	15.71
South Carolina.....	19,615	19,936	27,019	28,659	32,486	36,072	35,187	46,735	167.33
Georgia.....	16,140	18,111	21,024	20,796	19,866	21,690	24,185	25,785	128.83
Florida.....	11,355	11,866	12,563	15,165	14,640	11,273	9,365	9,669	162.96
Alabama.....	17,910	22,537	18,431	22,110	25,068	24,158	27,327	28,533	327.84
Mississippi.....	1,055	1,055	392	561	1,516	1,838	1,405	1,452	Entire ton'ge.
Louisiana.....	170,525	181,258	213,539	227,010	241,947	250,090	263,285	268,171	228.19
Texas.....	.....	.....	2,488	1,352	2,933	4,573	4,913	7,120	Entire ton'ge.
Tennessee.....	2,809	2,809	2,707	2,446	2,911	3,776	3,888	4,634	37.22
Kentucky.....	8,751	8,172	10,388	8,822	13,955	14,820	12,938	11,819	584.54
Missouri.....	18,906	22,426	31,636	36,313	32,355	28,908	34,065	37,862	931.94
Illinois.....	.....	.....	3,952	10,489	17,332	21,242	23,103	25,209	Entire ton'ge.
Ohio.....	35,297	39,917	50,781	62,079	57,941	62,462	58,552	60,338	263.79
Michigan.....	19,776	25,953	28,454	27,250	34,658	38,145	41,775	46,318	574.76
Wisconsin.....	.....	.....	.....	.....	.....	.....	.....	.....	Entire ton'ge.
Oregon.....	.....	.....	.....	.....	.....	.....	.....	.....	Do.
California.....	.....	.....	.....	.....	.....	.....	.....	.....	Do.
Total.....	2,417,001	2,562,081	2,829,045	3,154,035	3,334,015	3,535,454	3,772,437	4,138,439	119.88

*Between 1836 and 1852, Alexandria was retroceded to Virginia, and her tonnage, of course, credited to that State, and deducted from the District of Columbia.

S tatement exhibiting the number and tonnage of vessels built in the United States annually, from 1836 to 1852, inclusive.

States.	1836.		1837.		1838.		1839.		1840.		1841.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Maine.....	162	27,022	149	23,475	144	24,332	145	27,706	181	38,937	131	26,874
New Hampshire.....	7	2,731	4	1,866	9	3,286	7	2,787	6	2,722	8	3,617
Vermont.....	164	22,273	165	20,794	167	19,548	146	24,446	113	17,812	112	28,653
Massachusetts.....	8	1,804	12	1,427	10	2,108	9	1,496	6	1,589	8	1,180
Rhode Island.....	59	4,502	59	4,421	43	3,780	35	2,771	49	4,130	28	3,446
Connecticut.....	135	19,924	136	22,000	113	14,683	106	17,951	72	13,786	63	17,438
New York.....	65	4,652	81	6,767	86	7,057	72	6,770	109	6,792	44	3,417
Pennsylvania.....	74	10,215	65	12,034	58	8,406	49	6,284	103	8,136	107	6,970
Delaware.....	12	935	5	1,945	14	1,256	16	1,221	9	753	6	374
Maryland.....	111	9,691	132	10,392	157	15,464	129	13,093	111	11,737	109	10,738
District of Columbia.....	1	52	6	947	2	200	14	1,215	2	431	3	94
Virginia.....	23	1,481	29	1,618	17	885	10	826	12	925	19	1,473
North Carolina.....	7	554	14	865	11	1,033	25	1,349	24	1,296	26	1,176
South Carolina.....	4	480	7	939	5	1,377	4	443	2	306	5	280
Georgia.....	2	379	2	332	3	416	7	873	2	254	2	241
Florida.....	.....	.....	1	71	.....	.....	3	181	2	66	6	109
Alabama.....	.....	.....	.....	.....	2	57	.....	.....	.....	.....	.....	.....
Mississippi.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Louisiana.....	10	649	16	1,742	13	1,444	11	862	12	1,196	18	1,172
Texas.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tennessee.....	22	3,197	2	972	4	1,266	3	497	1	382	1	45
Kentucky.....	9	1,714	.....	.....	8	1,377	11	2,102	5	1,091	19	4,417
Missouri.....	.....	.....	.....	.....	.....	.....	5	939	8	1,210	.....	.....
Illinois.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ohio.....	6	451	52	10,385	20	4,201	44	6,593	33	4,022	45	7,179
Wisconsin.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Michigan.....	9	922	12	896	12	959	7	583	7	585	.....	.....
Oregon.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
California.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	890	113,628	949	122,988	898	113,135	858	120,988	871	118,311	761	118,893

STATEMENT—Continued.

States.	1842.		1843.		1844.		1845.		1846.		1847.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Maine.....	164	38,041	71	15,121	96	20,200	160	31,105	289	49,748	346	63,549
New Hampshire.....	5	1,696	2	234	3	754	5	2,501	8	2,171	10	5,289
Vermont.....	72	18,632	40	9,974	43	9,585	115	25,962	168	24,321	138	27,770
Massachusetts.....	11	2,516	1	120	7	2,814	8	1,661	10	2,395	10	2,111
Rhode Island.....	92	3,353	12	1,064	25	2,914	22	2,608	35	3,712	42	6,028
Connecticut.....	184	20,241	124	13,299	181	21,519	230	29,343	260	33,233	271	50,995
New York.....	47	3,116	19	1,480	21	1,333	64	4,465	60	5,856	101	9,830
New Jersey.....	212	13,666	63	6,740	141	13,076	178	15,819	161	15,788	228	24,126
Pennsylvania.....	9	7,713	3	246	8	586	9	669	22	2,264	25	2,279
Delaware.....	109	7,937	39	3,679	55	5,418	66	7,257	137	13,818	131	12,692
Maryland.....	49	9,951	11	276	31	850	15	416	23	951	22	802
District of Columbia.....	12	889	9	694	10	717	14	2,057	45	3,465	27	1,525
Virginia.....	19	1,185	21	2,000	12	587	14	859	31	1,885	34	2,385
North Carolina.....	7	482	2	206	7	584	2	102	4	342	3	162
South Carolina.....	1	124	1	45	1	72	1	83	1	21	1	25
Georgia.....	6	384	5	522	1	72	4	257	8	840	2	388
Florida.....	5	282	2	144	.....	.....	.....	.....	.....	.....	.....	.....
Alabama.....	14	1,044	8	288	15	669	14	627	8	451	12	494
Mississippi.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Louisiana.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Texas.....	2	321	2	322	2	271	1	142	4	575	1	167
Tennessee.....	22	5,608	11	1,664	35	7,165	26	5,681	46	8,662	31	5,424
Kentucky.....	.....	.....	.....	.....	9	2,567	.....	.....	11	2,338	60	6,073
Missouri.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Illinois.....	49	7,904	31	5,195	49	9,498	56	11,599	52	9,616	83	18,192
Ohio.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wisconsin.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Michigan.....	.....	.....	5	305	14	2,285	33	2,726	33	5,174	17	3,293
Oregon.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
California.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	1,021	129,085	482	63,618	766	103,536	1,038	146,019	1,420	188,204	1,598	243,734

STATEMENT—Continued.

States.	1848.		1849.		1850.		1851.		1852.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
	Maine.....	366	89,974	344	82,256	326	91,212	254	77,399	354	110,047
New Hampshire.....	9	5,326	12	6,266	10	6,914	7	8,158	14	9,515
Vermont.....	9	1,189	.....	.....	1	77	4	561	.....	.....
Massachusetts.....	181	39,366	118	23,889	121	35,836	133	41,324	161	48,002
Rhode Island.....	13	4,058	13	2,760	14	3,587	12	3,057	14	3,205
Connecticut.....	55	7,387	56	5,066	47	4,820	35	3,414	65	9,035
New York.....	382	68,435	265	44,104	224	58,343	229	76,805	179	72,073
New Jersey.....	77	8,178	87	8,026	57	6,202	70	5,869	38	3,953
Pennsylvania.....	296	29,638	137	24,008	185	21,410	200	28,623	188	31,220
Delaware.....	31	3,206	23	1,880	16	1,849	15	2,059	23	2,923
Maryland.....	146	17,481	152	17,463	150	15,965	130	18,027	119	18,159
District of Columbia.....	17	501	22	609	8	288	74	4,439	27	1,995
Virginia.....	34	2,980	38	3,095	34	3,584	27	1,778	40	3,800
North Carolina.....	43	2,947	29	2,032	33	2,652	33	1,725	32	2,229
South Carolina.....	4	450	8	656	.....	.....	5	625	7	939
Georgia.....	1	212	2	756	5	684	6	2,369	2	323
Florida.....	4	318	1	120	2	80	4	276	1	30
Alabama.....	4	265	3	107	3	114	5	355	2	93
Mississippi.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Louisiana.....	18	1,630	21	1,756	24	1,592	24	2,327	16	1,285
Texas.....	.....	.....	.....	.....	1	106	.....	.....	.....	.....
Tennessee.....	1	55	2	243	.....	.....	.....	.....	.....	.....
Kentucky.....	39	9,275	34	8,423	34	6,461	38	8,862	27	7,314
Missouri.....	38	6,256	19	2,887	5	1,354	11	2,066	11	2,133
Illinois.....	.....	.....	13	2,211	13	1,691	4	314	17	1,217
Ohio.....	63	13,656	63	12,817	31	5,214	25	6,036	77	18,329
Wisconsin.....	.....	.....	.....	.....	.....	.....	1	76	9	556
Michigan.....	20	5,302	25	5,149	14	2,062	9	1,366	16	2,639
Oregon.....	.....	.....	.....	.....	2	122	.....	.....	.....	.....
California.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	1,851	318,075	1,547	256,579	1,360	272,219	1,357	298,205	1,444	351,494

Statement showing the national character of the foreign vessels entered and cleared at ports in the United States, with their tonnage, from 1842 to 1851, inclusive.

ENTERED.

National character of vessels.	1842.	1843.	1844.	1845.	1846.	1847.	1848.	1849.	1850.	1851.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	<i>Tons.</i>
British.....	599,502	453,894	766,747	760,095	813,287	993,210	1,177,104	1,482,707	1,450,539	1,559,869
Hanseatic.....	48,798	38,202	52,669	51,683	63,669	84,875	82,805	72,392	74,776	109,108
French.....	15,876	13,582	17,257	11,536	13,666	30,704	24,970	31,466	30,762	25,252
Swedish and Norwegian.....	23,067	10,568	41,782	38,670	22,407	34,972	30,797	31,172	58,098	62,686
Spanish.....	11,677	7,249	6,974	13,418	7,504	18,852	29,342	29,814	37,296	44,592
Dutch.....	3,471	511	2,501	2,576	4,299	13,621	12,758	7,594	8,867	21,708
Belgian.....	8,429	611	2,209	2,104	3,206	5,358	6,338	5,265	5,193	7,754
Sicilian.....	4,030	920	3,850	5,114	2,861	1,980	3,803	3,017	5,703	5,391
Danish.....	6,080	2,190	5,896	4,363	5,265	9,535	11,100	9,278	11,046	8,662
Prussian.....	1,359	1,916	5,526	3,279	5,409	5,117	5,116	4,536	15,901	15,622
Russian.....	1,973	695	1,824	4,073	2,243	1,220	916	6,627	26,253	17,579
Sardinian.....	1,777	443	1,317	2,652	2,315	5,466	2,964	6,495	11,790	14,746
Austrian.....	462	.....	1,033	3,305	1,844	4,266	2,250	4,178	7,489	6,723
Venezuelan and Colombian.....	3,395	1,491	1,608	1,319	763	1,039	908	978	1,713	1,445
All other foreign vessels.....	2,949	2,480	5,799	6,376	10,901	10,831	14,620	14,996	30,167	37,954
Total.....	732,775	534,752	916,992	910,563	959,739	1,220,346	1,465,191	1,710,515	1,775,623	1,939,091

Statement showing the national character of the foreign vessels entered and cleared at ports in the United States, with their tonnage, from 1842 to 1851, inclusive.

CLEARED.

National character of vessels.	1842.	1843.	1844.	1845.	1846.	1847.	1848.	1849.	1850.	1851.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	<i>Tons.</i>
British.....	599,950	441,535	756,669	770,844	809,797	966,219	1,139,863	1,449,273	1,404,799	1,552,170
Hanseatic.....	52,975	38,277	53,814	55,269	71,787	82,802	81,801	76,553	77,570	110,570
French.....	17,734	12,384	17,863	12,083	14,761	26,746	26,480	31,292	27,644	26,608
Swedish and Norwegian.....	24,544	10,703	38,982	40,494	24,057	29,248	41,080	32,011	59,946	65,689
Spanish.....	9,526	6,981	7,105	13,988	7,062	17,847	28,936	28,294	36,279	41,266
Dutch.....	5,304	637	1,835	2,527	3,435	9,205	19,932	5,135	10,859	19,965
Belgian.....	6,983	2,743	2,867	1,869	3,190	3,896	6,794	5,624	5,131	5,560
Sicilian.....	3,910	1,266	4,139	4,184	4,318	1,875	2,690	2,866	4,455	7,307
Danish.....	6,489	3,619	6,929	3,333	4,910	9,075	11,217	11,033	11,220	8,427
Prussian.....	1,725	1,646	5,155	3,627	5,439	5,811	4,190	4,412	12,192	18,313
Russian.....	2,598	521	2,675	6,609	1,517	1,333	916	5,057	25,253	12,667
Sardinian.....	1,801	260	945	2,105	3,603	5,307	2,693	5,171	9,832	15,075
Austrian.....	753	.....	565	4,434	2,355	5,094	2,548	4,264	6,447	8,125
Venezuelan and Colombian.....	3,008	1,429	1,648	1,298	763	557	817	774	1,938	1,862
All other foreign vessels.....	3,197	1,948	5,623	7,611	11,104	11,650	14,202	13,950	34,629	35,931
Total.....	740,497	523,949	906,814	930,275	968,098	1,176,605	1,404,159	1,675,709	1,728,214	1,929,535

Statement exhibiting the average tonnage of vessels built in the United States, annually, from 1836 to 1852, inclusive.

States.	1836.	1837.	1838.	1839.	1840.	1841.	1842.	1843.	1844.	1845.	1846.	1847.	1848.	1849.	1850.	1851.	1852.
Maine.....	166 80	157 55	168 97	191 07	215 13	275 14	231 96	212 97	210 43	194 41	172 14	183 64	245 88	239 12	279 79	304 72	310 84
New Hampshire.....	869 14	466 50	885 11	395 13	453 66	432 12	339 20	117 00	231 33	500 20	271 37	328 90	591 73	522 17	691 40	1165 43	679 04
Vermont.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Massachusetts.....	135 81	126 02	117 05	167 47	137 62	155 83	255 77	249 35	222 91	225 75	144 77	201 23	217 49	202 45	296 16	310 71	295 15
Rhode Island.....	225 50	118 91	210 80	166 22	264 83	147 51	2 8 73	120 00	402 00	207 62	236 50	210 10	310 61	212 30	256 21	254 75	228 33
Connecticut.....	78 00	74 93	57 79	79 17	84 23	123 07	152 41	83 68	118 53	118 54	108 05	143 52	134 30	90 26	102 55	97 54	139 00
New York.....	147 53	161 76	129 94	169 35	191 47	276 79	110 01	107 25	118 53	127 56	127 80	188 17	179 15	166 43	260 46	265 39	402 64
New Jersey.....	71 57	83 54	82 06	94 03	62 31	77 65	63 30	77 89	63 47	69 76	97 61	97 32	106 20	122 25	108 50	88 84	104 02
Pennsylvania.....	133 04	183 14	144 33	125 24	78 99	65 14	64 43	106 93	92 74	88 27	93 06	105 81	100 13	121 86	115 72	148 18	166 06
Delaware.....	77 91	69 00	89 71	76 31	84 22	62 33	72 31	82 00	73 25	74 22	102 30	91 16	108 42	114 89	116 56	186 00	127 68
Maryland.....	87 30	93 27	93 49	101 49	105 73	83 51	10 40	95 09	98 50	109 95	106 85	96 58	119 80	114 89	106 43	138 67	152 59
District of Columbia.....	52 00	157 33	100 00	86 73	215 50	31 33	12 40	25 09	27 42	37 73	41 35	36 45	96 83	97 68	86 00	59 93	73 89
Virginia.....	64 39	55 79	52 05	82 60	47 08	77 53	78 08	77 11	71 70	149 93	77 03	56 43	87 65	81 44	105 41	65 35	95 00
North Carolina.....	79 14	61 73	93 91	53 91	54 00	45 23	62 37	95 23	48 92	61 35	60 81	54 00	112 50	82 00	80 35	52 37	69 65
South Carolina.....	120 00	134 14	273 40	110 49	153 00	56 00	63 56	103 60	83 43	51 00	83 50	21 00	212 00	873 00	136 50	394 88	161 50
Georgia.....	189 50	166 00	138 66	124 71	137 00	124 00	124 00	45 00	72 00	83 00	105 03	194 00	79 50	130 00	40 00	69 00	30 00
Florida.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alabama.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Louisiana.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Texas.....	64 90	108 37	111 03	76 30	89 63	65 11	74 57	33 00	44 60	44 78	56 37	41 17	90 00	83 62	106 00	.....	80 44
Tennessee.....	145 32	436 00	316 50	165 63	332 00	45 00	160 50	161 00	135 50	142 00	143 75	167 00	55 00	121 50	.....	2 50 00	96 00
Kentucky.....	130 44	.....	172 12	191 09	218 20	232 47	254 91	151 27	234 71	218 50	188 30	174 97	237 82	247 73	190 03	233 21	270 89
Missouri.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Illinois.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ohio.....	75 17	199 71	210 03	149 84	131 53	159 53	161 36	107 45	103 84	207 12	184 92	219 15	216 76	203 44	163 19	241 44	233 04
Wisconsin.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Michigan.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oregon.....	102 44	83 00	79 91	53 29	53 57	.....	.....	61 00	163 21	82 60	156 70	198 70	265 10	135 96	147 28	151 73	164 94
California.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
United States.....	127 73	127 67	129 60	125 98	141 01	135 83	156 23	126 43	131 97	135 16	132 84	152 52	171 84	165 86	200 16	219 75	243 41

Exports and imports from the principal commercial States of the Union for the years 1810, 1820, 1830, 1840, 1850, and 1851.

EXPORTS.

Year.	FLORIDA.		ALABAMA.		VIRGINIA.
	Amount.	Increase.	Amount.	Increase.	Amount.
1810.....					\$4,822,611
1820.....			\$96,936		4,557,957
1830.....	\$30,495	} From 1830 to 1851, 12,820 per cent.	2,294,594	} 707 per ct.	4,791,644
1840.....	1,850,709		12,854,694		4,769,937
1850.....	2,607,968		10,544,858		3,413,158
1851.....	3,939,910		18,528,824		3,087,444

Year.	NORTH CAROLINA.		SOUTH CAROLINA.		GEORGIA.		
	Amount.	Increase.	Amount.	Increase.	Amount.	Increase.	
1810.....	\$403,949		\$5,290,614	} 46 per ct.	\$2,238,686	} 138 per ct.	
1820.....	808,319		8,882,940		6,594,623		
1830.....	399,333	} 7 per ct.	7,627,031		5,336,626		} 71 "
1840.....	387,484		9,981,016		6,862,959		
1850.....	416,501		11,446,892	7,551,943			
1851.....	426,748		15,316,578	9,158,879			

Year.	MARYLAND.		LOUISIANA.	
	Amount.	Increase.	Amount.	Increase.
1810.....	\$6,409,018		\$2,650,050	} 500 per cent.
1820.....	6,609,364		7,596,157	
1830.....	3,791,482		15,488,692	
1840.....	5,495,020		32,998,059	
1850.....	6,589,481		37,698,277	} 135 per cent.
1851.....	5,416,798		53,963,013	

Year.	MAINE.		MASSACHUSETTS.	
	Amount.	Increase.	Amount.	Increase.
1810.....			\$13,013,048	} 36½ per cent.
1820.....	\$1,108,031		11,008,922	
1830.....	670,522	} 126 per cent.	7,213,194	
1840.....	1,009,910		6,268,158	
1850.....	1,536,818		8,253,473	
1851.....	1,517,487		9,857,537	

EXPORTS—Cont. nued.

NEW YORK.			PENNSYLVANIA.	
Year.	Amount.	Increase.	Amount.	Increase.
1810.....	\$17,242,330	.....	\$10,993,398	.....
1820.....	15,163,244	14 per cent.	5,743,549	.....
1830.....	19,697,983	.....	3,791,482	.....
1840.....	11,587,471	245 per cent.	5,736,456	} 33 per cent.
1850.....	41,562,800		4,049,464	
1851.....	68,104,542		5,101,969	

IMPORTS.

FLORIDA.		ALABAMA.	
Year.	Amount.	Year.	Amount.
1830.....	\$32,689	1830.....	\$144,823
1840.....	190,728	1840.....	574,651
1850.....	95,709	1850.....	865,362
1851.....	94,937	1851.....	413,446

VIRGINIA.		NORTH CAROLINA.	
Year.	Amount.	Year.	Amount.
1830.....	\$405,739	1830.....	\$221,992
1840.....	545,085	1840.....	252,532
1850.....	426,599	1850.....	323,392
1851.....	552,932	1851.....	206,931

SOUTH CAROLINA.		GEORGIA.	
Year.	Amount.	Year.	Amount.
1830.....	\$1,054,619	1830.....	\$282,346
1840.....	2,058,870	1840.....	491,428
1850.....	1,933,785	1850.....	636,964
1851.....	2,081,312	1851.....	721,547

ANDREWS' REPORT ON
IMPORTS—Continued.

MARYLAND.		LOUISIANA.	
Year.	Amount.	Year.	Amount.
1830.....	\$4,523,866	1830.....	\$9,766,693
1840.....	4,910,746	1840.....	10,673,190
1850.....	6,124,201	1850.....	10,760,499
1851.....	6,650,645	1851.....	12,528,460

MAINE.		MASSACHUSETTS.	
Year.	Amount.	Year.	Amount.
1830.....	\$572,666	1830.....	\$10,453,544
1840.....	628,762	1840.....	16,513,858
1850.....	856,411	1850.....	30,374,684
1851.....	1,176,590	1851.....	32,715,327

NEW YORK.		PENNSYLVANIA.	
Year.	Amount.	Year.	Amount.
1830.....	\$35,624,070	1830.....	\$8,702,122
1840.....	60,440,750	1840.....	8,464,882
1850.....	111,123,524	1850.....	12,066,154
1851.....	141,546,538	1851.....	14,168,761

Statement exhibiting the value of foreign imports into and domestic exports from the principal commercial States.

States.	FOREIGN IMPORTS.						DOMESTIC EXPORTS.					
	1825.	1835.	1840.	1850.	1851.		1825.	1835.	1840.	1850.	1851.	
<i>Northern commercial States.</i>												
Maine	\$1,169,940	\$353,859	\$625,762	\$856,411	\$1,176,520		\$564,664	\$1,044,951	\$1,009,910	\$1,536,518	\$1,517,457	
Massachusetts	15,845,141	19,800,373	16,513,855	30,374,684	32,715,327		4,262,104	5,564,499	6,268,158	5,253,473	9,837,537	
Rhode Island	907,906	597,713	274,534	258,303	310,630		519,539	182,188	203,006	206,999	223,404	
Connecticut	707,478	489,502	277,072	372,990	342,994		684,837	466,847	518,910	241,262	483,894	
New York	49,639,174	88,191,805	60,440,750	111,123,524	141,546,538		20,651,558	19,126,619	22,676,609	41,502,800	68,104,542	
Pennsylvania	15,041,797	12,389,987	8,464,882	12,066,154	14,168,751		3,936,133	2,125,736	5,736,456	4,043,464	5,101,969	
Total	83,311,436	122,302,219	86,599,865	155,051,466	190,260,840		31,015,734	28,510,224	36,412,949	55,790,116	85,238,833	
<i>Southern commercial States.</i>												
Maryland	4,751,315	5,647,153	4,910,746	6,124,201	6,650,645		3,092,365	2,250,642	5,495,020	6,559,431	5,416,798	
Virginia	553,562	691,255	545,085	426,599	552,933		4,122,340	5,564,735	4,769,937	3,413,158	8,087,444	
Nor'h Carolina	311,308	241,681	252,532	323,692	206,931		553,390	252,715	387,484	416,501	426,748	
South Carolina	1,892,297	1,891,805	2,055,870	1,933,785	2,081,312		10,876,475	6,978,693	9,931,016	11,446,592	15,316,578	
Georgia	343,356	393,049	491,423	636,964	721,547		4,220,939	4,951,000	6,862,959	7,551,945	9,158,879	
Louisiana	4,290,634	17,519,814	10,375,190	10,760,499	12,528,460		10,965,234	23,916,532	32,998,059	37,698,277	53,963,013	
Alabama	113,411	525,855	574,851	865,372	413,446		691,897	5,731,645	12,854,694	10,544,588	18,523,824	
Florida	8,218	98,173	190,725	95,709	94,907		2,865	45,259	1,850,709	2,607,968	8,939,910	
Total	12,259,001	27,009,135	19,697,230	21,166,821	23,250,271		34,525,505	49,741,323	75,199,378	80,269,075	109,843,194	
Unenumerated States.....	709,688	584,338	844,431	1,920,631	2,713,821		1,400,506	22,937,522	2,233,407	887,715	1,607,691	
Total of all States.....	96,340,075	149,895,742	107,141,519	178,198,318	216,224,892		66,944,745	101,189,432	113,895,634	136,946,912	196,689,713	

Statement of tonnage entering and departing from the United States to foreign countries.

States.	1825.				1835.				1840.			
	Inward.	Outward.	Total.	Inward.	Outward.	Total.	Increase.	Inward.	Outward.	Total.	Increase.	
	Maine.....	73,522	116,581	190,103	113,907	127,079	240,986	50,883	138,147	157,589	285,736	44,750
New Hampshire.....	16,614	8,035	23,649	6,564	3,986	10,560	*14,089	12,757	4,864	17,621	7,061	
Massachusetts.....	177,491	150,915	328,406	269,497	248,188	517,685	189,279	321,450	246,760	568,210	50,525	
Rhode Island.....	23,354	23,923	47,273	20,871	21,735	42,606	*4,667	19,397	17,436	36,833	*3,773	
Connecticut.....	92,072	24,395	46,467	18,557	20,146	38,703	*7,764	23,416	24,017	48,017	9,314	
New York.....	294,772	275,729	570,501	1,033,748	932,933	1,065,681	496,150	1,096,990	861,316	1,868,306	801,625	
Pennsylvania.....	88,266	84,820	173,086	78,993	68,023	147,016	*26,070	87,702	83,628	171,330	24,314	
Maryland.....	68,744	70,073	138,817	63,475	63,824	127,300	*11,517	82,140	98,264	175,404	48,104	
Virginia.....	23,236	48,919	72,155	27,904	57,649	85,553	13,398	34,779	54,858	89,637	4,084	
North Carolina.....	32,439	45,593	78,032	22,742	33,820	58,562	*19,470	26,193	41,159	67,352	8,790	
South Carolina.....	45,696	74,601	120,297	53,404	82,179	135,583	15,286	60,645	107,555	168,200	32,617	
Georgia.....	16,885	28,875	45,760	37,265	58,355	95,650	49,800	64,925	88,041	132,966	57,316	
Florida.....	6,682	328	1,005	8,258	11,250	19,508	18,593	11,374	12,508	23,882	4,374	
Alabama.....	6,728	10,730	17,458	30,884	45,460	76,344	58,886	66,772	118,103	184,875	108,531	
Louisiana.....	72,978	77,378	150,356	156,370	196,169	352,539	202,183	285,477	350,371	605,848	258,309	
States unenumerated.....	963,469	1,039,890	2,003,369	1,942,443	1,979,046	3,921,489	1,918,120	2,202,164	2,262,053	4,464,217	542,738	
Total of all States.....	10,202	15,556	23,758	51,520	52,295	103,815	78,037	87,145	91,442	178,587	74,772	
	973,681	1,055,446	2,029,127	1,993,963	2,031,341	4,025,304	1,996,177	2,289,309	2,353,495	4,642,804	617,500	

* Decrease.

STATEMENT—Continued.

States.	1850.			1851.				
	Inward.	Outward.	Total.	Increase.	Inward.	Outward.	Total.	Increase.
Maine.....	143,186	202,137	345,323	59,587	147,184	195,741	342,925	*2,398
New Hampshire.....	11,044	8,213	19,257	1,636	7,397	7,693	15,090	*4,167
Massachusetts.....	611,449	546,952	1,158,401	590,191	661,574	626,800	1,288,374	123,973
Rhode Island.....	19,922	18,475	38,397	1,564	22,892	23,585	46,477	8,080
Connecticut.....	34,152	27,317	61,469	13,452	34,712	30,661	65,373	3,904
New York.....	2,277,720	2,149,096	4,426,816	2,558,510	2,746,129	2,467,132	5,213,261	786,445
Pennsylvania.....	132,370	111,618	243,988	72,658	159,638	140,174	299,812	55,824
Maryland.....	99,588	126,819	226,407	51,003	113,027	105,789	218,816	*7,591
Virginia.....	30,965	65,458	96,423	6,786	34,563	65,347	99,910	3,487
North Carolina.....	28,300	42,232	70,532	3,180	20,318	42,388	65,706	*4,826
South Carolina.....	96,916	125,052	221,968	53,768	93,064	140,508	233,572	11,604
Georgia.....	57,017	72,563	129,580	*23,386	47,096	69,709	116,805	*12,775
Florida.....	17,980	22,156	40,136	16,254	25,225	29,303	54,528	14,332
Alabama.....	96,020	112,985	209,005	24,130	55,684	121,265	176,949	*32,056
Louisiana.....	350,853	369,937	720,790	114,942	328,932	421,566	750,498	29,708
States unenumerated.....	4,007,482	4,001,010	8,008,492	3,544,275	4,497,433	4,487,661	8,985,094	976,602
	341,157	359,992	701,149	522,562	496,007	642,393	1,138,400	437,351
Total of all States.....	4,348,639	4,361,002	8,709,641	4,066,837	4,993,440	5,130,054	10,123,494	1,413,553

* Decrease.

Statement of tonnage entering and departing from northern and southern States.

States.	1885.					1840.					
	Inward.	Outward.	Total.	Inward.	Outward.	Total.	Increase.	Inward.	Outward.	Total.	Increase.
Maine.....	73,322	116,581	190,103	113,907	127,079	240,986	50,883	128,147	157,859	285,736	44,750
New Hampshire.....	16,614	8,035	24,649	6,564	3,996	10,560	*14,089	12,757	4,864	17,621	7,061
Massachusetts.....	177,491	150,915	328,406	269,497	245,188	517,685	189,279	321,450	246,760	568,210	50,525
Rhode Island.....	23,354	23,923	47,273	20,871	21,735	42,606	*4,667	19,597	17,436	36,833	*5,573
Connecticut.....	22,072	24,395	46,467	18,557	30,146	38,703	*7,764	23,416	24,601	48,017	9,314
New York.....	294,772	275,729	570,501	1,033,748	939,933	1,066,681	496,180	1,006,990	861,316	1,868,306	801,625
Pennsylvania.....	88,266	84,820	173,086	78,993	68,923	147,016	206,070	87,702	89,628	171,330	24,314
Unenumerated.....	696,091	684,398	1,380,489	1,542,137	1,422,100	2,064,237	683,748	1,599,859	1,396,194	2,996,053	937,816
	1,423	3,214	4,637	37,461	39,230	76,691	72,054	52,600	55,809	105,409	64,299
Total of northern States.....	697,514	687,612	1,385,126	1,579,598	1,461,330	2,140,928	755,802	1,652,459	1,449,003	3,101,462	996,115
Maryland.....	63,744	70,073	132,817	63,476	63,894	127,300	*11,517	82,140	93,264	175,404	48,104
Virginia.....	23,236	48,919	72,155	27,904	57,649	85,553	13,938	34,779	54,858	89,637	4,084
North Carolina.....	32,439	44,593	78,032	22,742	35,826	58,562	*19,470	26,193	41,159	67,352	8,790
South Carolina.....	45,696	74,601	120,297	53,404	82,179	135,583	15,286	60,645	107,555	168,200	32,617
Georgia.....	16,885	28,875	45,760	37,265	58,385	95,650	49,890	64,925	88,041	152,966	57,316
Florida.....	682	323	1,005	8,258	11,508	19,508	11,503	11,374	12,508	23,882	4,374
Alabama.....	6,798	10,730	17,528	30,884	45,460	76,344	58,886	66,772	118,103	184,875	108,531
Louisiana.....	72,978	77,378	150,356	156,370	196,169	352,539	202,183	255,477	350,371	605,848	253,309
Texas.....	267,388	355,492	622,880	400,303	550,736	951,039	327,159	602,305	865,859	1,468,164	517,125
Total of southern States.....	267,388	355,492	622,880	400,303	550,736	951,039	327,159	602,305	865,859	1,468,164	517,125
Other States not enumerated.....	8,779	12,342	21,121	7,363	8,846	16,209	.....	24,263	23,129	47,392	31,183
District of Columbia.....	.....	.....	.....	6,696	10,429	17,125	*3,996	10,282	15,504	25,786	8,661
Total.....	973,651	1,035,446	2,029,127	1,993,960	2,031,941	4,025,301	1,996,178	2,289,309	2,353,495	4,642,804	617,503

STATEMENT—Continued.

States.	1850.				1851.			
	Inward.	Outward.	Total.	Increase.	Inward.	Outward.	Total.	Increase.
Maine.....	143,186	292,137	345,323	59,587	147,184	195,741	342,925	*2,398
New Hampshire.....	11,944	8,213	19,257	1,636	7,397	7,693	15,090	*4,167
Massachusetts.....	611,449	546,952	1,158,401	590,191	661,574	626,800	1,288,374	129,973
Rhode Island.....	19,922	18,475	38,397	1,564	22,892	23,585	46,477	8,080
Connecticut.....	34,152	27,317	61,469	13,452	34,742	30,661	65,373	3,904
New York.....	2,277,720	2,149,096	4,426,816	2,558,510	2,746,129	2,467,132	5,213,261	786,445
Pennsylvania.....	132,370	111,618	243,988	72,658	159,638	140,174	299,812	55,824
Unenumerated.....	3,229,843	3,063,808	6,293,651	3,297,598	3,779,526	3,491,786	7,271,312	977,661
	101,036	83,987	185,023	79,614	129,201	122,776	251,977	66,954
Total of northern States.....	3,330,879	3,147,795	6,478,674	3,377,212	3,908,727	3,614,562	7,523,289	1,044,615
Maryland.....	99,588	126,819	226,407	51,003	113,027	105,789	218,816	*7,591
Virginia.....	30,965	65,458	96,423	6,786	34,563	65,347	99,910	3,487
North Carolina.....	28,300	42,232	70,532	3,180	20,318	42,388	65,706	*4,826
South Carolina.....	96,916	125,052	221,968	53,768	93,064	140,508	233,572	11,604
Georgia.....	57,617	72,563	129,580	*23,386	47,096	69,709	116,805	*12,775
Florida.....	17,980	22,156	40,136	16,254	25,225	29,303	54,528	14,392
Alabama.....	96,020	112,985	209,005	24,130	55,684	121,265	176,949	*32,056
Louisiana.....	350,853	369,937	720,790	114,942	328,932	421,566	750,498	29,708
Texas.....	777,639	937,202	1,714,841	246,677	717,909	995,875	1,716,784	1,943
	3,671	3,608	7,279	.....	3,363	2,337	5,700	*1,579
Total southern States.....	781,310	940,810	1,722,120	246,677	721,272	998,212	1,722,484	1,943
Other States not enumerated.....	235,036	270,677	505,713	458,321	361,765	515,421	877,187	371,474
District of Columbia.....	1,414	1,720	3,134	*22,652	1,677	1,859	3,536	402
Total.....	4,348,639	4,361,002	8,709,641	4,066,837	4,993,442	5,130,054	10,123,496	1,413,855

* Decrease.

INLAND WATER ROUTES.

The following tables are submitted in reference to the inland water routes, and the character and value of their trade, so far as they could be obtained. Application was made to persons in each of the principal cities for information relating to their inland trade, which was unsuccessful. It is mentioned with the hope that the principal commercial cities on the Atlantic and in the interior will promptly take measures to have this matter receive proper attention.

It is due to the interests of the cities, to the inland trade, and to the railroad interest, that all the information relating to routes, facility of transportation, expense, distance, &c., should be correctly prepared and promptly given to the public in annual statements.

It is necessary to state again, if any complaints are made of interesting local points being unnoticed in this report, the fault is not with the undersigned, but is chargeable to the indifference of those to whom repeated applications were made for the requisite data.

The appended statements have been compiled from official and authentic returns, exhibiting the estimated value of the tonnage of the leading inland water routes which connect the tide waters of the Atlantic with those of the Gulf of Mexico.

There are at the present time *four* great routes to which the interior trade of the country has been chiefly confined—the St. Lawrence, the Erie canal, the Pennsylvania improvements, and the Mississippi river and its tributaries. All these routes are mutually connected by an interior network of railroads and canals, and merchandise may be forwarded from the respective termini of each, upon tide water, to any part of the country, (and by water except upon the Pennsylvania line,) and may be passed with convenience from one to the other. There are important works recently completed, and others in progress, designed to occupy a similar relation to this trade to those already described; but these have too recently come into operation to allow their results to be compared with the above named. None of the former have passed into the great interior basin of the country save the Georgia line, which is yet wanting in those connexions which are necessary to secure to it the trade of an extensive range of country. When completed, the Baltimore and Ohio railroad will add another to what may be termed the *national lines*, and others equally extensive, and perhaps equally important, will soon follow.

Up to the present time, consequently, the routes of commerce between the interior and the sea-board have been those first described. We have, however, unfortunately, accurate and satisfactory returns of the quantity and value upon one route only—the Erie canal. The excellent system prevailing upon that work gives, in great detail, every fact of interest in reference to the source whence received, tonnage, value, character, and direction of all property passing over it. Upon the St. Lawrence canals, values are not given in the reports of the Board of Works of Canada; and these have been estimated to agree, as nearly as possible, with the returned values of the same articles upon the Erie canal. The tables showing the values of produce received at New Orleans from the interior are compiled from the annual statements which

have appeared in the "New Orleans Price Current" for a series of years. There is no mode of ascertaining the value of property passing up the Mississippi river from New Orleans; it has, therefore, been estimated in the following tables to equal three times the amount of importations of foreign goods.

The want of correct statistical information relating to the trade, commerce, and navigation of this confederacy is a sufficient reason for commending, in a special manner, to the public, the volumes recently published, by Professor DeBow, of the University of Louisiana, entitled "The Industrial Resources of the South and West," which can be profitably consulted by all desirous of obtaining commercial information minute in its details and philosophical in its arrangement.

ERIE CANAL ROUTE.

Statement showing the value of each class of property reaching tide-water on the Hudson during a series of years, ending December 31.

Years.	Products of the forest.	Agriculture.	Manufactures.	Merchandise.	Other articles.
1851	\$10,160,656	\$36,394,913	\$4,335,783	\$329,423	\$2,706,733
1850	10,315,117	38,311,546	3,960,864	563,615	2,323,495
1849	7,192,706	38,455,456	3,899,238	508,048	2,319,983
1848	6,909,015	37,336,290	3,834,360	593,619	2,210,623
1847	8,798,873	54,624,849	6,024,518	517,594	3,127,080
1846	8,589,291	33,662,818	4,805,799	276,872	3,770,476
1845	7,759,596	27,612,281	3,432,259	88,497	3,559,658
1844	7,716,032	21,020,065	3,489,570	86,153	2,328,526
1843	5,956,474	18,211,629	2,561,169	56,224	1,667,922

The following brief notices and accompanying tables will serve more fully to illustrate the character of the business of this route in detail, and also convey to the mind of the reader some idea of the influence which the commerce flowing through this channel has had in building up the towns and cities on the tide-waters of the Hudson river.

Albany.—This city, one of the most ancient, and at one time of first commercial importance among the marts of America, has direct relation with colonial trade and lake commerce and navigation.

When it is considered that the extraordinary facilities furnished by the Hudson river toward reaching the great marts on the Atlantic coast called into existence, if they did not actually create a necessity for, those artificial channels through which the great lake commerce finds its way to tide-water, it will be seen that there is a most intimate commercial connexion between the great lakes and the ports on the tide-waters of the Hudson. The whole effect, therefore, of the vast trade under consideration, is not visible without a sketch of the business of those ports—especially as much of the Canada trade, indeed nearly the whole of it, with this country, reaches tide-water by way of Albany, and makes part of the commerce of the Hudson.

There are several cities on the banks of this noble river worthy of

notice. Albany, Troy, Lansingburgh, and Waterford, are all places of thriving business.

Waterford is the most northerly, and lies on the west bank of the river, nearly opposite Lansingburgh, at the point where the Champlain and Erie canals form their junction. It is not a large town but has some flourishing manufactories, among them several flouring mills, which add much to its canal commerce.

Lansingburgh, on the opposite side of the river, a little further south, is an old town, which was engaged in a flourishing river commerce, carried on by means of sloops and schooners, as early as 1770, with New York and the West Indies.

The introduction of steam has caused that trade to cease; and Lansingburgh, being off the line of the canal, has little use for her docks and warehouses at this day.

Troy, three miles south of Lansingburgh, is a large and enterprising modern city of about 30,000 inhabitants, having increased in population, from 1840 to 1850, 9,451. The city lies on both sides of the Hudson, six miles north of Albany, and one hundred and fifty-six from New York. The principal portion of the city is on the eastern bank of the river, over which communication is kept up by ferries and a bridge. Troy is at present, therefore, virtually at the head of steamboat navigation on the Hudson. On the west bank, the canal is connected with the river by a lock, through which boats may pass and thence tow by steam to Albany and New York, or, which is more frequently the case, discharge their cargoes on board barges, of great capacity, which are towed down the river to New York, while the canal craft receive another cargo and return northward or westward. It is this business of transshipment and exchange which forms the principal commerce of Troy, and occasions its rapid growth. It is connected with Boston and New York, as well as Burlington, Rutland, Montreal, and all western cities, by railway, as will be observed by the accompanying railway map.

Albany is the oldest and most important of all the river cities. It was first visited by Hendrick Hudson in 1609, and was settled a few years later, under the appellation of the manor of "Renssellaers-wyck," by a colony of Dutch, under the manorial superintendence of Jeremais Van Rensselaer. It has steadily increased in population, wealth, and enterprise since the date of its settlement, but has throughout adhered to many of its old Dutch customs and names. In 1754 it had attained a population of 1,500 to 2,000; in 1800, 5,349—since which time the number of inhabitants have been doubled, on the average, once in fifteen years, giving it, in 1840, a population of 33,721, and in 1850, 50,771. It is the capital of the great State of New York, and is now easily accessible from all parts of the commonwealth. The capitol is situated on the hill back from the river, commanding a fine view for many miles up and down the stream, as well as over the surrounding country. The elevated position of the city makes it a healthy and delightful residence. The country around is uneven, and in some parts mountainous, but mostly susceptible of a high state of cultivation.

The commerce of Albany is almost as ancient as its settlement, though it was first made a port of entry in 1833. No reliable records

of its river commerce were kept previous to that date. As early as 1770, Albany sloops visited the West Indies in large numbers, and in 1785 the "*Experiment*," a sloop of 80 tons, was fitted out here for China, being the second adventure from this country to Canton. She created great interest in the China seas, returned in safety, and made several subsequent trips. The application of steam as a propelling power has nearly revolutionized the commerce of the ports on the Hudson; and the ancient foreign trade of Lansingburgh, Troy, and Albany is now extinct. In 1791, no less than forty-two sail were seen to arrive at or pass Albany, on their way to places above, in a single day. After Albany was erected into a port of entry, Congress made an appropriation for the removal of the obstructions to navigation, about six miles below the city, known as the Overslaugh. Although much was done to clear the channel and prevent future accumulations, yet the passage is still difficult at low water, and requires further and more efficient improvements. No detailed statements of the river commerce of Albany are at hand; but much may be learned from the excellent reports of the auditor of the canal department with regard to the quantity and value of articles arriving at and going from tide-water. This will give nearly all the commerce of the river at Albany and points above.

The number of vessels arriving and departing from Albany, consisting of schooners, sloops, brigs, steamers, propellers, and scows, was, in 1848, 788, and in 1849, 785. The tonnage entered and cleared at this place, of the same class of vessels, for a series of years was as follows:

	<i>Tons.</i>
In 1838.....	36,721
1839.....	40,369
1840.....	39,416
1841.....	50,797
1842.....	49,356
1843.....	55,354
1844.....	65,507
1845.....	70,985
1846.....	71,011
1847.....	97,019
1848.....	77,983
1849.....	79,122

Much of this tonnage traded to Boston, New York, and Philadelphia.

The following table shows something of the value of the commerce of all the tide-water ports for a series of years, as given in the canal returns :

Years.	Property going from tide-water.		Arriving at tide-water.	
	Tons.	Value.	Tons.	Value.
1837.....	122, 130	\$25, 784, 147	611, 781	\$21, 822, 354
1838.....	142, 802	33, 062, 858	640, 481	23, 038, 510
1839.....	142, 035	40, 094, 302	602, 128	20, 163, 199
1840.....	129, 580	36, 398, 039	669, 012	23, 213, 573
1841.....	162, 715	56, 798, 447	774, 334	27, 225, 322
1842.....	123, 294	32, 314, 998	666, 626	22, 751, 013
1843.....	143, 595	42, 258, 488	836, 861	28, 453, 408
1844.....	176, 737	53, 142, 403	1, 019, 094	34, 183, 167
1845.....	195, 000	55, 453, 998	1, 204, 943	45, 452, 321
1846.....	213, 795	64, 628, 474	1, 362, 319	51, 105, 256
1847.....	288, 267	77, 878, 766	1, 744, 283	73, 092, 414
1848.....	329, 557	77, 477, 781	1, 447, 905	50, 883, 907
1849.....	315, 550	78, 481, 941	1, 579, 946	52, 375, 521
1850.....	418, 370	74, 826, 999	2, 033, 863	55, 474, 637
1851.....	467, 961	80, 739, 899	1, 977, 151	53, 927, 598
1852.....	531, 527	118, 896, 444	2, 234, 822	66, 893, 102

The following table exhibits the proportion of each class of property coming to tide-water. That going west was chiefly merchandise :

Years.	The forest.	Agriculture.	Manufac- tures.	Merchan- dise.	Other ar- ticles.
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
1835.....	540, 202	170, 945	8, 848	2, 085	31, 102
1836.....	473, 668	173, 000	12, 906	1, 176	35, 597
1837.....	385, 017	151, 499	10, 124	354	64, 777
1838.....	400, 877	182, 142	8, 487	298	48, 977
1839.....	377, 720	163, 785	8, 565	499	51, 559
1840.....	321, 769	302, 356	8, 665	104	36, 178
1841.....	449, 095	270, 240	17, 891	155	36, 953
1842.....	321, 480	293, 177	16, 015	185	35, 769
1843.....	416, 173	346, 140	29, 493	201	44, 854
1844.....	545, 202	378, 714	32, 334	245	62, 599
1845.....	607, 930	447, 627	49, 812	253	99, 321
1846.....	603, 010	628, 454	46, 076	1, 796	82, 982
1847.....	666, 113	897, 717	51, 632	4, 831	124, 090
1848.....	603, 272	685, 896	44, 867	6, 343	107, 527
1849.....	665, 547	769, 600	44, 288	5, 873	94, 638
1850.....	947, 768	743, 232	39, 669	7, 105	113, 273
1851.....	913, 267	891, 418	42, 302	4, 580	115, 591
1852.....	1, 664, 677	989, 268	47, 512	10, 605	122, 760

The following table shows the character, quantity, and value of the property coming to tide-water on the State canals during the year 1851:

Articles.	Quantity.	Tons.	Value.
<i>The Forest.</i>			
Fur and peltrypounds..	484,000	242	\$605,200
Boards and scantlingfeet..	427,038,600	711,731	7,213,226
ShinglesM..	47,900	7,185	203,971
Timbercubic feet..	4,237,750	84,755	505,251
Stavespounds..	155,304,000	77,652	737,686
Woodcords..	8,726	24,432	53,591
Ashes, pot and pearlbarrels..	29,084	7,271	841,731
Total of the forest		913,268	10,160,656
<i>Agriculture.</i>			
Porkbarrels..	45,019	7,203	663,898
Beefdo..	76,344	12,215	468,654
Baconpounds..	10,904,000	5,452	980,966
Cheesedo..	25,602,000	12,801	1,663,606
Butterdo..	9,568,000	4,783	1,338,997
Larddo..	10,814,000	5,407	973,324
Lard oilgallons..	240,800	1,204	168,537
Woolpounds..	10,518,000	5,259	4,101,415
Hidesdo..	572,000	286	68,434
Tallowdo..	244,000	122	16,976
Flourbarrels..	3,358,463	362,714	13,436,542
Wheatbushels..	3,163,666	94,910	3,011,110
Ryedo..	288,679	8,083	186,986
Corndo..	7,915,474	221,633	4,427,175
Corn mealbarrels..	7,065	763	20,172
Barleybushels..	1,809,417	43,426	1,429,332
Oatsdo..	3,594,313	57,509	1,348,019
Bran and shipstuffspounds..	44,036,000	22,018	352,285
Peas and beansbushels..	127,500	3,825	141,698
Potatoesdo..	599,950	17,949	341,531
Dried fruitpounds..	1,424,000	712	114,109
Cottondo..	220,000	110	23,994
Unmanufactured tobaccodo..	3,702,000	1,851	813,712
Hempdo..	1,160,000	580	75,469
Clover and grass seeddo..	534,000	267	39,876
Flaxseeddo..	122,000	61	2,426
Hopsdo..	552,000	276	146,287
Total agriculture		891,420	36,394,913
<i>Manufactures.</i>			
Domestic spiritsgallons..	2,787,600	13,938	627,406
Beerbarrels..	56	9	315
Oil meal and cakepounds..	6,810,000	3,405	85,150
Starchdo..	2,560,000	1,280	135,732
Leatherdo..	8,204,000	4,102	1,230,384
Furnituredo..	1,046,000	523	104,385
Agricultural implementsdo..	320,000	160	15,842
Bar and pig leaddo..	36,000	8	820
Pig irondo..	5,916,000	2,958	59,158
Castingsdo..	2,448,000	1,224	73,438
Machines, and parts thereofdo..	148,000	74	14,931
Bloom and bar irondo..	33,350,000	16,675	666,993
Iron waredo..	4,000	2	111

STATEMENT—Continued.

Articles.	Quantity.	Tons.	Value.
Domestic woollens.....pounds..	824,000	412	\$725,819
Domestic cottons.....do....	2,248,000	1,124	539,312
Domestic salt.....do....	12,816,000	6,408	56,387
Total manufactures.....		52,302	4,335,783
Merchandise.....	9,160,000	4,580	329,423
<i>Other articles.</i>			
Live cattle, hogs and sheep.....lbs..	868,000	434	26,100
Stone, lime and clay.....do..	86,286,000	43,143	122,000
Gypsum.....do..	3,242,000	1,621	6,475
Eggs.....do..	3,676,000	1,838	220,652
Mineral coal.....do..	26,110,000	13,055	58,753
Fish.....do..	170,000	85	7,101
Copper ore.....do..	418,000	209	62,667
Sundries.....do..	110,392,000	55,196	2,202,985
Total other articles.....		115,581	2,706,733
Grand total.....		1,977,151	53,927,508

Besides this array of tonnage arriving at tide-water on the canals, there was, in 1851, of the same classes of property, to the amount of \$8,332,441 landed at Troy and Albany by railway from the west. There also went west by railway from Albany and Troy 29,112 tons of merchandise, furniture, and other property.

From the foregoing statements it may be seen that all the property from the Canadas via Lake Champlain, and all that from the western States via the canals or central line of railways, destined for New York or Boston, must pass through these tide-water ports, which it rarely does without being either transhipped or handled sufficiently to pay a tribute to the commerce of some one of them.

Albany and Troy are advantageously connected with Boston, New York, and the lakes Ontario and Erie by excellent water and railway routes, and, from present appearances, must continue to increase in commercial wealth and importance so long as the Atlantic cities on the one hand and the west on the other maintain and multiply their present traffic with each other.

MISSISSIPPI RIVER ROUTE.

Statement showing the value of cotton, hemp, tobacco, sugar, molasses, pork, bacon, and lard, at New Orleans, during a series of years, ending September 1.

Years.	Cotton.	Hemp.	Tobacco.	Sugar.	Molasses.	Pork.	Bacon.	Lard.
1851.	\$48,592,222	\$257,235	\$7,291,765	\$11,827,350	\$4,026,000	\$5,250,541	\$6,348,622	\$3,925,845
1850.	48,756,764	452,088	7,736,600	12,678,180	2,625,000	4,134,632	5,879,470	3,351,404
1849.	41,886,150	695,840	6,166,400	12,396,150	2,400,000	6,632,554	2,922,787	5,024,340
1848.	30,844,314	436,832	3,938,290	8,800,000	2,288,000	6,621,911	2,989,855	4,970,113
1847.	35,200,345	410,096	3,430,544	9,600,000	1,920,000	3,934,047	2,098,788	4,611,050
1846.	32,589,436	903,570	3,604,468	9,800,000	1,440,000	4,511,162	2,935,349	3,804,515
1845.	33,716,256	309,800	4,144,562	10,265,750	1,710,000	3,666,054	1,671,855	2,729,581
1844.	23,501,712	462,740	3,697,390	9,000,000	1,260,000	2,651,172	906,970	1,767,211
1843.	.....	.....	.....	.....	.....	.....	.....	.....
1842.	.....	.....	.....	.....	.....	.....	.....	.....
1841.	24,435,115	18,165	3,699,160	3,600,000	450,000	1,542,467	521,912	1,138,919

Statement of the comparative value of property sent from the seaboard to the interior via the St. Lawrence, the Hudson, and the Mississippi.

Years.	St. Lawrence.	Hudson.	Mississippi.
1851	\$10,956,793	\$80,739,899	\$38,874,782
1850		74,826,999	33,667,325
1849		78,481,941	30,152,091
1848		77,477,781	28,141,317
1847		77,878,766	27,667,512
1846		64,628,474	21,668,823
1845		55,453,998	21,035,030
1844		53,142,403	23,480,217
1843		42,258,488	24,510,045
1842		32,314,798	24,093,570
1841		56,798,447	30,768,966

There should be added to the foregoing table, in order to exhibit fairly the tonnage of the New York or Erie route, the amount of freight carried to and taken from tide-water by the several lines of railway. The following is the estimated business, in tons, taken from official sources, of the Northern or Ogdensburg, the New York Central, and the New York and Erie lines. These different lines landed at tide-water, in the aggregate, 228,107 tons, valued at \$11,405,350; and took from thence to the interior 89,112 tons, valued at \$44,556,000.

Comparative statement showing an estimate of the tons of some of the principal articles landed at tide-water, and going from thence to the interior, via the different routes, in 1851.

Articles.	St. Lawrence.		Hudson.		New Orleans.
	Tons up.	Tons down.	Tons up.	Tons down.	Tons down.
<i>The Forest.</i>					
Lumber.....	10,220	62,351		711,731	
Timber.....	1,725	9,895		81,755	
Shingles.....	76	217		7,185	2
Staves.....	90	9,177		77,652	58,552
Furs.....				242	500
Ashes.....	7	5,576		7,271	
<i>Agriculture.</i>					
Flour.....	2,177	70,966		362,714	160,138
Wheat.....	821	16,867		94,910	5,193
Corn.....	171	3,052		221,633	109,989
Oats.....	1,501	1,746		57,509	6,949
Rye.....	38	284		8,083	
Barley.....	43	69		43,426	
Potatoes.....	110	403		17,949	22,809
Cotton.....				110	321,566
Hemp.....	2	74		580	2,858
Wool.....		15		5,259	
Eggs.....				1,838	
Oil cake.....				3,405	
Tobacco.....	52	135		1,851	54,187
Beef.....		89		12,215	9,077
Pork.....	1,399	3,454		7,203	47,205
Bacon.....	1,635	164		5,452	37,291
Butter.....	2	1,122		4,784	2,417
Cheese.....		37		12,801	1,811
Lard.....		150		5,407	22,766
Tallow.....	30	413		122	196
<i>Manufactures.</i>					
Whiskey.....	230	649		13,938	29,276
Lard oil.....	25	6		1,204	2,117
Leather.....				4,102	
Lead.....				8	9,592
Railroad iron.....	27,994				
Pig iron.....	14,179	66		2,958	62
Blooms.....	9,794			16,675	
Castings.....	1,563	77		1,224	
Nails and spikes.....	1,745				
Sugar.....	3,596				118,273
Molasses.....	398	1			91,500
Salt.....	7,297	124		6,408	
Coal.....	9,054	86		13,055	85,000
Furniture.....			1,465		
Merchandise.....	15,295	923	349,230	4,580	
Sundries.....	12,510	141,412	117,266	74,722	152,350
Total tons.....	120,779	329,621	467,961	1,977,151	1,292,670

These figures show correctly the tonnage arriving at and departing from tide-water on the Hudson by canal, and that passing up and down the St. Lawrence canals, during the past year. Upon the Mississippi

routes the estimates are based upon the best data obtainable. There are no means at hand of estimating with any probable degree of accuracy the "up" tonnage of the Mississippi. With these additions, the following table would show the comparative movement upon the different routes :

Comparative statement showing tonnage and value of merchandise sent from and received at seaboard by way of the New York canals and St. Lawrence and Mississippi rivers for 1851.

	Tons.	Value.
<i>Downward.</i>		
New York canals.....	1,977,151	\$53,727,508
New York railroads.....	228,107	11,405,350
St. Lawrence.....	329,621	9,153,580
Mississippi.....	1,292,670	108,051,708
<i>Upward.</i>		
New York canals.....	467,961	80,739,899
New York railroads.....	89,112	44,556,000
St. Lawrence.....	120,779	10,956,793
Mississippi.....		38,874,782

The movement on the Pennsylvania line is not entered in the comparative statement, because only the through-tonnage, which is supposed to be represented by the amount transported over the *Portage* railroad, is shown. The amount of this tonnage going east upon this road for 1851 was 13,696 tons, valued at \$125,000; total tonnage going west, 10,961 tons, valued at \$2,779,731. The tonnage of the public works of Pennsylvania having an eastern direction is derived chiefly from the produce of the State, which is of great magnitude and importance. For this trade there are two outlets—one by the Columbia railroad, and one by the Tide-water canal, the returns of the tonnage of which will be found annexed.

Tabular statement showing the value of property received at seaboard by the foregoing routes.

Years.	St. Lawrence.	Hudson.	Mississippi.
1851.....	\$9,153,580	\$53,927,508	\$108,051,708
1850.....		55,474,637	106,924,083
1849.....		52,375,521	96,897,873
1848.....		50,883,907	81,989,692
1847.....		73,092,414	79,779,151
1846.....		51,105,256	90,033,256
1845.....		45,452,321	77,193,464
1844.....		34,183,167	57,196,122
1843.....		28,453,408	60,094,716
1842.....		22,751,013	53,782,054
1841.....		27,225,322	45,716,045
		484,924,474	857,658,164

The movements for the past year upon the St. Lawrence and Portage routes only are given, for the want of convenient data. The downward tonnage upon the St. Lawrence canals for 1850 was 212,135, against 329,621 for 1851, upon which the above estimate is made.

The tonnage is estimated to correspond in value with the estimated value of similar articles on the Erie canal.

Statement of property sent westward from Philadelphia by railroad in 1851.

Articles.	Amount.
Agricultural productions not specified.....pounds.....	1,422,600
Barley.....barrels.....	7,248
Cotton.....pounds.....	1,631,600
Hemp.....do.....	347,400
Hops.....do.....	52,000
Potatoes.....bushels.....	1,788
Seeds.....do.....	661
Tobacco, not manufactured.....pounds.....	213,500
Wheat.....bushels.....	2,637
Hides, dry.....pounds.....	1,178,500
Hides, green.....do.....	735,000
Leather.....do.....	684,600
Wool.....do.....	196,600
Boards, plank, &c.....feet.....	546,000
Ale, beer, and porter.....barrels.....	1,156
Bonnets, boots, &c.....pounds.....	5,029,500
Chinaware and queensware.....do.....	5,111,900
Coffee.....do.....	6,851,700
Drugs and medicines.....do.....	2,149,200
Dry goods.....do.....	36,514,700
Dyestuffs.....do.....	63,500
Glassware.....do.....	166,100
Groceries.....do.....	33,735,800
Hardware and cutlery.....do.....	10,071,500
Bagging.....do.....	193,900
Liquors, foreign.....gallons.....	38,187
Paints.....pounds.....	465,300
Salt.....bushels.....	44,558
Tobacco, manufactured.....pounds.....	151,400
Anvils.....do.....	232,500
Coal, mineral.....tons.....	5,162
Copper.....pounds.....	76,800
Gypsum.....tons.....	1,244
Iron, pigs.....pounds.....	836,400
Iron castings.....do.....	2,480,300
Iron, bar and sheet.....do.....	2,801,360
Nails and spikes.....do.....	561,200
Machinery.....do.....	1,089,400
Spanish whiting.....do.....	460,400
Steel.....do.....	760,600
Tin.....do.....	1,247,500
Bacon.....do.....	109,300
Cheese.....do.....	257,700
Fish.....barrels.....	33,210
Pot, pearl, and soda ash.....pounds.....	1,726,500
Marble.....do.....	2,656,000
Agricultural implements.....do.....	7,400
Furniture.....do.....	777,200
Oil (except lard oil).....gallons.....	350,377
Paper.....pounds.....	1,951,600
Rags.....do.....	1,530,900
Straw paper.....do.....	10,200
Tar and rosin.....do.....	2,526,100
Sundries.....do.....	3,359,800

Articles.	Amount.
Live stock.....pounds.....	73,500
Number of cars cleared.....	56,755
Passengers, miles travelled by emigrants going west.....	855,456
Amount of toll received.....	\$392,764 64

*Statement of property received at Philadelphia by railroad from the West,
in 1851.*

Articles.	Amount.
Agricultural productions not specified.....pounds.....	4,142,000
Barley.....bushels.....	21,048
Rye.....do.....	31,193
Corn.....do.....	464,595
Cotton.....pounds.....	581,300
Hemp.....do.....	829,600
Oats.....bushels.....	451,768
Potatoes.....do.....	38,587
Seeds.....do.....	26,039
Tobacco, not manufactured.....pounds.....	6,324,000
Wheat.....bushels.....	121,656
Deer, buffalo, and moose skins.....pounds.....	463,300
Feathers.....do.....	432,700
Furs and peltry.....do.....	179,600
Leather.....do.....	3,363,900
Wool.....do.....	3,344,200
Bark, ground.....do.....	3,064,600
Boards, plank, &c.....feet.....	4,551,100
Drugs and medicines.....pounds.....	48,400
Dry goods.....do.....	1,465,200
Dyestuffs.....do.....	377,800
Earthenware.....do.....	215,800
Glassware.....do.....	425,500
Hardware and cutlery.....do.....	589,800
Bagging.....do.....	46,300
Tobacco, manufactured.....do.....	1,500
Whiskey.....gallons.....	632,362
Coal, mineral.....tons.....	3,104
Copper.....pounds.....	156,100
Iron, pigs.....do.....	2,479,900
Iron castings.....do.....	156,100
Iron blooms and anchovies.....do.....	1,335,900
Iron, bar and sheet.....do.....	9,071,700
Nails and spikes.....do.....	1,759,100
Machinery.....do.....	71,600
Steel.....do.....	9,400
Bacon.....do.....	11,693,500
Beef and pork.....barrels.....	4,543
Butter.....pounds.....	1,917,700
Cheese.....do.....	8,000
Corn-meal.....barrels.....	6,220
Flour.....do.....	315,257
Lard and lard oil.....pounds.....	3,817,200
Soda ashes.....do.....	131,000
Tallow.....do.....	292,200
Furniture.....do.....	638,000
Oil (except lard oil).....gallons.....	1,862
Paper.....pounds.....	891,100
Rags.....do.....	811,800
Straw paper.....do.....	986,700
Live stock.....do.....	7,594,700
Passengers, miles travelled.....	4,264,463

Comparative statement of upward tolls on the Susquehanna and Tide-water canals.

Articles.	1849.	1850.	1851.
Ale barrels			
Ashes, soda and other pounds	292,687	1,189,017	15,237
Boats cleared number	4,676	4,613	5,210
Bacon, pork, beef pounds	662,261	1,117,541	695,070
Bone dust, guano do	564,146	765,265	894,428
Bricks do	1,245,595	1,478,669	936,548
Burr-blocks, cement, mill-stones do	1,927,245	6,738,287	187,642
Clay, German and fire do	1,328,767	1,437,938	966,212
Cotton pounds	290,125	92,396	132,936
Cheese do			37,295
Coffee do			2,122,062
Fish barrels	23,270	23,193	22,367
Grindstones pounds	185,879	170,945	219,500
Glass do			182,236
Hides pounds			1,368,293
Iron do	12,050,837	4,658,855	1,283,130
Iron ore do	264,420		
Iron castings do	1,009,498	1,072,053	1,854,261
Leather do			22,322
Marble do	562,045	618,487	656,070
Merchandise not specified do	29,701,790	30,835,069	31,944,140
Nails kegs	4,779	5,865	5,415
Passengers number	109	89	132
Plaster tons	10,694	9,286	8,103
Salt bushels	173,050	138,214	129,278
Soapstone pounds	806,155	1,448,255	1,310,400
Sand do	569,290	421,061	563,483
Sundries do	1,016,229	1,133,393	1,098,226
Tar, rosin, pitch barrels	2,528	3,535	3,658
Wheat bushels	19,545	461	8,277

Comparative statement of downward tolls on the Susquehanna and Tide-water canals.

Articles.	1849.	1850.	1851
Agricultural products not specified.....pounds..	620,003	332,242	1,307,017
Bacon and beef.....do...	259,632	11,711	2,312,093
Bark.....cords..	3,304	2,654	3,026
Boats.....number..	6,173	6,169	6,861
Bricks, fire and common.....do...	1,128,193	307,950	485,695
Butter, cheese, lard, and tallow.....pounds..	382,803	388,512	783,789
Coal, anthracite.....tons..	107,638	109,611	129,276
Coal, bituminous.....do...	20,640	17,679	20,673
Charcoal.....pounds..	1,005,000	30,000	.....
Corn and other grain.....bushels..	508,897	109,691	591,105
Flour.....barrels..	86,458	108,227	142,362
Ice.....pounds..	.....	.....	526,400
Iron, bar and railroad, and nails.....tons..	3,212	6,334	4,128
Iron, bloom, tons, 2,464.....pounds..	2,095	2,188	1,984
Iron ore.....tons..	2,188	357	1,135
Iron, pig and cast.....do...	25,409	17,839	17,860
Leather.....pounds..	1,260,689	868,325	891,811
Lime.....bushels..	183,970	290,167	349,281
Limestone.....perches..	9,258	9,300	5,548
Liquors, domestic.....barrels..	24,050	18,265	17,312
Live stock.....pounds..	54,375	15,200	19,000
Locust treenails.....do...	59,750	246,180	280,000
Lumber, sawed.....sup. feet..	52,344,215	62,686,416	77,182,255
Lumber, maple, cherry, and walnut.....do...	270,478	395,225	217,618
Merchandise and manufactures not specified.....	571,916	1,104,740	1,539,971
Poles, hoop.....number..	320,700	326,307	516,790
Passengers.....do...	1,377	2,009	818
Rags.....pounds..	212,479	278,633	318,133
Seeds, flax, grass, &c.....bushels..	16,427	8,259	14,004
Shingles.....number..	9,049,585	8,850,636	8,775,615
Slate, roofing.....tons..	646	945	604
Staves.....number..	898,600	952,270	755,030
Sumac, shaved and ground bark.....pounds..	472,374	184,322	305,742
Timber.....cubic feet..	89,417	24,076	24,070
Tobacco.....pounds..	66,356	49,134	633,366
Wheat.....bushels..	840,575	1,131,767	1,032,450
Wood.....cords..	1,436	3,218	3,573
Wool.....pounds..	121,683	55,484	27,810

Value of produce received via canals on the Hudson, and at New Orleans via Mississippi, with United States exports and imports.

Years.	New York canals, at tide-water.	At New Orleans.	Total.
1840.....	\$23,213,572	.....	.....
1842.....	22,751,013	\$45,716,045	\$68,467,508
1845.....	45,452,321	57,199,122	102,651,443
1848.....	50,883,907	70,779,151	130,663,058
1850.....	55,480,941	96,897,873	152,378,814
1851.....	53,927,508	106,924,083	160,851,591
1852.....	66,893,102	108,051,708	174,944,810

INTERNAL TRADE OF THE UNITED STATES.

Under this title an estimate will be formed of the aggregate value of the lake and river commerce of 1851, and also an estimate of the value of the entire coasting, canal and railway commerce of the United States for 1852. It will readily be perceived that all our commerce, which is not composed of transactions with foreign countries, properly comes under the head of "internal" or "domestic" commerce, as it is a trade or system of exchanges which exists among ourselves, and through which we are enabled to consume so large a share of our own productions.

It is very probable, especially in domestic trade, that the same merchandise or produce may enter into the computation of the aggregate for the whole country several different times; but the fact that it is obliged to pay a commercial tribute at every point where it is handled, sold, or exchanged, in the shape of commissions, storage, cartage, coo- perage, insurance, etc., renders it as appropriately a portion of the commerce of the place where its value is enhanced by these expenses, as though they occurred each time in foreign countries. Thus, a computation of the value of the entire commerce of the world would show the value of the imports and exports at each and every port of all countries; and yet such a computation would scarcely give any definite idea of the true "money value" or "quantity" of the property entering into *one* exchange; or, in other words, the proportion of the aggregate productions of the world which are exchanged or put into a market previous to consumption. In these estimates, therefore, the gross value of the domestic trade will be considered, and if the results arrived at be correct, they should nearly correspond with the aggregate business transacted by all the commercial houses in the country.

It has been shown that the domestic or coastwise trade of the lakes in 1851 was valued at \$314,473,458. As it is usual for prices of all agricultural produce to fluctuate, it is important to know the quantity as well as value composing the commerce, in order to decide upon the actual increase or decrease of production. The returns of the district of "Buffalo creek" show the *tons* of property composing the imports and exports at that port; and as the commerce of that district is a very fair representation of the character of the whole lake commerce, the tonnage, the value per ton, of the commerce of that port will be used as a basis in ascertaining the tons of the lake commerce. In this way, the average value of exports and imports is ascertained to be \$79 19 per ton, which into \$314,473,458, as above, gives 3,971,126 tons as the gross imports and exports at all the lake ports. The licensed American tonnage engaged in this trade was 215,975 measured tons, which into 3,971,126 tons, gives a fraction over eighteen gross tons per ton measurement, or eighteen tons, as it may be called for convenience, received and discharged per ton licensed. Applying this rule to the tonnage of the Mississippi and its tributaries, with an addition of twenty-five per cent. in consideration that the river tonnage is employed the whole year, instead of eight to nine months as on the lakes, will show an approximation to the gross tons of the river commerce. Mr. CORWIN'S report on the "Steam-marine of the Interior"

states the river tonnage at 135,560 measured tons, which multiplied by twenty-four, gives 3,253,440 tons. Adding one-fourth, 813,360 tons, to this amount for flat and keel-boat transportation, and the aggregate is 4,066,800 gross tons. The average value per ton of such property received at New Orleans during the year ending August 31, 1852, was \$83 58, which is assumed as a fair representative value of the whole trade. The gross value of the river commerce in 1851 was \$339,502,744; and the total of lake and river, according to these estimates, \$653,976,202.

None of the enrolled and licensed tonnage of the United States is engaged in foreign trade. It amounted in 1851 to 2,046,132 tons, 87,476 of which was engaged in the cod-fisheries, 50,539 tons in the mackerel fisheries, and 1,854,318 tons in the "coasting trade." The tonnage of the lakes and rivers is all included in the "coasting trade," as classified in the treasury returns. The treasury returns for 1852 show that the aggregate registered, enrolled, and licensed tonnage has been augmented since June 30, 1851, by amount ten per cent. If this increase of ten per cent. be added to 1,854,318 tons, an aggregate is arrived at for 1852, of 2,039,749 tons of shipping employed in our domestic "carrying trade" or "exchanges," besides considerable registered tonnage which frequently enters the coasting trade between the Atlantic ports and those on the Gulf and the Pacific. It should be remarked here that a large proportion of this tonnage is sail, and, therefore, incapable of as frequent trips as steam. An investigation, however, shows that there is very little difference in the carrying capacity per ton measurement; as the fuel and machinery of steamers take up so much room, and add so largely to the weight, that but a small proportion of freight is required to put a steamer in the "passage trade" in "running trim." Hence, the annual "carrying trade" of a large steamer is generally less per ton measurement than that of a sailing vessel. As some of this coasting tonnage is employed only in summer months, but the major portion of it during the whole year, the capacity per ton measurement will be assumed in this estimate at 20 gross tons. This forms an aggregate of property received and discharged, in the transaction of our domestic trade, of 40,794,980 tons; which estimated at the mean value (\$81 36) per ton of the lake and river commerce of 1851, would constitute a gross sum of \$3,319,039,372.

The canal commerce of the United States is prosecuted upon about 3,000 miles of canal, which, excluding the coal trade, cleared and landed an average of about 6,000 tons per mile. The New York State canals averaged, in clearances and landings, about 9,000 tons per mile, but this is above the average for all the canals. At 6,000 tons per mile, 3,000 miles give 18,000,000 tons, valued at \$66 the ton, and forming a gross sum of \$1,188,000,000.

There are also completed in this country, 13,315 miles of railway; but as 2,500 miles have been opened since January 1, 1852, only 10,815 miles can be considered as having participated in the trade of 1852. Several of the longest freight lines have received and delivered an aggregate amounting to an average of 2,000 tons per mile; but as many other lines do a comparatively light freighting business, the average assumed will be, 1,000 tons per mile, or a gross business of 10,815,000

tons, which, from the general character of railway freight, as being of a lighter and more costly character than water freight, may be valued at \$100 the ton: this would give an aggregate of gross railway commerce amounting to \$1,081,500,000.

This is undoubtedly a very unsatisfactory way of computing the value of our domestic trade, but, until better data can be arrived at, the fairness of this statement cannot be denied; and it is only put forth as the nearest approximation that can be made to accuracy, under our present system of internal trade returns, in the hope that the startling results here obtained may arouse those interested in this important trade to a full investigation of the subject by the collection of authentic data.

It has been customary heretofore, in making up these or similar estimates, to call the net money-value of property one-half the gross amount. Though this process may correctly denote the number of tons transported, it will by no means decide that the same property has not entered and re-entered, several times, into the general account, as it moved from point to point in search of a consumer. For convenience, however, the following tabular statements, showing the gross and net tons and value, are presented:

1851.	NET.		GROSS.	
	Tons.	Value.	Tons.	Value.
Lake commerce.....	1,985,563	\$157,236,729	3,971,126	\$314,473,458
River commerce.....	2,033,400	169,751,372	4,066,800	339,502,744
Aggregate.....	4,018,963	326,988,101	8,037,926	653,976,202

Estimate of 1852.	NET.		GROSS.	
	Tons.	Value.	Tons.	Value.
Coasting trade.....	20,397,490	\$1,659,519,686	40,794,980	\$3,319,039,372
Canal commerce.....	9,000,000	594,000,000	18,000,000	1,188,000,000
Railway commerce.....	5,407,500	540,750,000	10,815,000	1,081,500,000
Aggregate.....	34,804,990	2,794,269,686	69,609,980	5,588,539,372

The returns already made from some of the lake ports indicate an increase over 1851 of over twenty-five per cent. in value of trade, and twenty per cent. increase of tonnage.

This commerce and its necessities have occasioned the construction in the United States of nearly twenty thousand miles of magnetic telegraph, at a cost of little less than \$6,000,000.

Comment upon such facts as are here presented will readily suggest themselves to the minds of all intelligent men. It will be seen that our domestic commerce is of incalculable value to us, even as repre-

sented by the "coasting" trade; but when to this is added the value of our whale, cod, and mackerel fisheries, and our California trade, that is carried on in registered bottoms, its magnitude will be still more astonishing. The fact that our domestic exchanges amount, by sale and resale, and by the additional value gained by the labor bestowed in transportation, sale, &c., annually to over *five thousand million dollars*, as the sum upon which one commission or profit is paid, and that in this trade is employed actively and profitably over *two million tons* of shipping, which cost not less than one hundred and twenty million dollars, three thousand miles of canal, thirteen thousand miles of railway, and twenty thousand miles of telegraph, costing about four hundred and fifty million dollars, is one calculated not only to astonish, but to excite admiration of the energy, industry, and enterprise which, in so short a period, have achieved this high position.

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