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Art. I.—CURRENCY, COMMERCE, AND DEBTS OF THE UNITED STATES.

STATEMENT OF THE CAUSES OF THE PANIC AND REVULSION OF 1857—CAUSES OF THE SAME AS STATED BY THE PRESIDENT IN HIS MESSAGE—MEASURES OF RELIEF RECOMMENDED BY THE PRESIDENT—INQUIRY INTO THE SOUNDNESS OF THE PRESIDENT'S VIEWS—DOMESTIC COMMERCE, CREDIT SYSTEM, AND DEBTS OF THE PEOPLE OF THE UNITED STATES—ADVANTAGES OF PAPER MONEY—COMPARISON OF THE AMOUNT OF CIRCULATING MONEY OF DIFFERENT STATES AND COUNTRIES—EXPENDITURES FOR RAILROADS IN THE UNITED STATES AND IN OTHER COUNTRIES—WAR IN EUROPE—EFFECT OF THE WAR—BUILDING RAILROADS—CAPACITIES OF GREAT BRITAIN TO MANUFACTURE FOR THE WORLD AND TO SUPPLANT THE MANUFACTURES OF OTHER COUNTRIES—CAUSES OF CHEAP LABOR IN EUROPE—TABLES OF THE COMMERCE OF GREAT BRITAIN AND THE UNITED STATES AT DIFFERENT PERIODS—BALANCE OF TRADE AGAINST THE UNITED STATES—EXPORTS OF SPECIE—FALLING OFF IN THE REVENUE OF THE UNITED STATES—COMMENTS ON THE REMEDIES RECOMMENDED BY THE PRESIDENT—REMEDIES ADOPTED IN ENGLAND, FRANCE, PENNSYLVANIA, AND NEW YORK—OTHER REMEDIES SUGGESTED.

THE CURRENCY, COMMERCE, AND DEBTS OF THE UNITED STATES.

IN an article upon "The Panic and Financial Crisis of 1857," written by the author of this present paper, in October, 1857, and published in the *Merchants' Magazine* in December, 1857, (vol. xxxvii., pp. 659-668,) it was stated that the causes of the panic and revulsion were numerous, consisting—

*First*, of excessive imports, the accumulation of large foreign debts, and the exportation of large amounts of specie, to pay the balances of trade against us and the interest on our foreign debts.

*Secondly*, the immense amount invested in railroads during the last ten years, a large proportion of which has been borrowed at excessive rates of interest, and drawn from other classes of business.

*Thirdly*, extensive speculations in stocks, and the extravagance introduced and fostered by reason of fancied wealth, arising from railroads and speculations in stocks.

*Fourthly*, the large amount of loans made upon the pledge of stocks.

and bonds as security, payable on demand, which are denominated call loans.

*Fifthly*, the rapid communication and concentration in all the cities and large villages of the United States, by means of the electric-telegraph, of bad news—such as the failure or embarrassment of banks, merchants, and manufacturers.

*Sixthly*, the fears and evils resulting from the unwise provisions of the new constitutions of New York and Michigan, prohibiting the Legislatures of those States from legalizing temporary suspensions of specie payments by the banks.

To which I now add, that the panic was greatly increased by the general distrust of the management of all corporations, by reason of their prodigality and favoritism—the fraudulent issues of railroad stocks in several instances—the defalcations and embezzlements of the funds of several banks and other corporations by the treasurers, cashiers, and other officers thereof—the frequent cases of officers of corporations resorting to fraudulent devices to raise or depress their respective stocks, for purposes of speculation—and the numerous cases in which corporate funds were used by officers thereof for private speculation, at the hazard and eventual loss of the corporation.

The President of the United States, in his annual Message to Congress, December, 1857, remarked upon the panic and revulsion, and attributed their occurrence, and all their unfortunate and evil consequences, to our *system of paper currency and bank credits*. He said:—

“In the midst of unsurpassed plenty in all the productions of agriculture, and in all the elements of national wealth, we find our manufactures suspended, our public works retarded, our private enterprises of different kinds abandoned, and thousands of useful laborers thrown out of employment and reduced to want.” This is truly a frightful picture of the condition of the country, showing a deplorable state of things, and yet it is not over-wrought.

The President states that the revenues of the government have been greatly reduced, that a loan is necessary; and proceeds thus—“It is our duty to inquire what has produced such unfortunate results, and whether this recurrence can be prevented? In all former revulsions the blame might have been fairly attributed to a variety of co-operating causes; but not so upon the present occasion. It is apparent that our existing misfortunes have proceeded solely from our extravagant and vicious system of paper currency and bank credits, exciting the people to wild speculations and gambling in stocks. These revulsions must continue to recur at successive intervals, so long as the amount of the paper currency and bank loans and discounts of the country shall be left to the discretion of fourteen hundred irresponsible banking institutions, which, from the law of their nature, will consult the interest of their stockholders rather than the public welfare.”

After speaking of the power of the government to coin money, and the power granted by the States to banks to issue paper money, he says—“Exercising the sovereign power of providing a *paper currency instead of coin* for the country, the first duty which these banks owe to the public is to keep in their vaults a sufficient amount of gold and silver to insure the convertibility of their notes into coin at all times and under all circumstances. No bank ought ever to be chartered without such re-

restrictions on its business as to secure this result. All other restrictions are comparatively vain. This is the only true touchstone, the only efficient regulator of a paper currency. The only one which can guard the public against over-issues and bank suspensions."

Again he says, "In a recent report made by the Treasury Department on the condition of the banks throughout the United States, according to returns dated nearest to January, 1857, the aggregate amount of actual specie in their vaults was \$58,349,838, their circulation \$214,778,822, and their deposits \$230,351,352. Thus it appears that these banks, in the aggregate, have considerably less than one dollar in seven of gold and silver compared with their circulation and deposits. It was palpable, therefore, that the very first pressure must drive them to suspension, and deprive the people of a convertible currency, with all its disastrous consequences. It is truly wonderful that they should have so long continued to preserve their credit, when the demand for the payment of one-seventh of their immediate liabilities would have driven them into insolvency. And such is the condition of the banks, notwithstanding that \$400,000,000 of gold from California have flowed in upon us within the last eight years, and the tide still continues to flow. Indeed, such has been the extravagance of bank credits, that the banks now hold a considerable less amount of specie, either in proportion to their capital or to their circulation and deposits combined, than they did before the discovery of gold in California. In the year 1848, the specie was equal, within a small fraction, to one dollar in five of their circulation and deposits; in 1857, it was not equal to one dollar to seven-and-a-half of their circulation and deposits."

He proceeds as follows, "From this statement it is easy to account for our financial history for the last forty years. It has been a history of extravagant expansions in the business of the country, followed by ruinous contractions. At successive intervals the best and most enterprising men have been tempted to their ruin by excessive bank loans of mere paper credit, exciting them to extravagant importations of foreign goods, wild speculations, and ruinous and demoralizing stock gambling. When the crisis arrives, as arrive it must, the banks can extend no relief to the people. In a vain struggle to redeem their liabilities in specie, they are compelled to contract their loans and their issues; and at last, in the hour of distress, when their assistance is most needed, they, and their debtors together, sink into insolvency."

"It is this paper system of extravagant expansion, raising the nominal price of every article far beyond its real value when compared with the cost of similar articles in countries whose circulation is wisely regulated, which has prevented us from competing in our own markets with foreign manufacturers, has produced extravagant importations, and has counteracted the effect of the large incidental protection afforded to our domestic manufactures by the present revenue tariff. But for this, the branches of our manufactures composed of raw materials, the production of our own country—such as cotton, iron, and woolen fabrics—would not only have acquired almost exclusive possession of the home market, but would have created for themselves a foreign market throughout the world."

These extracts, and the whole tenor of the Message, show that the President attributes the panic and revulsion of 1857, and all the financial difficulties and embarrassments of the country during the last forty years, to paper currency and bank credits. No portions of these embarrassments

and evils are attributed to a want of a proper tariff of duties on foreign imports or to any cause, other than the banks.

The President considers paper money and bank credits as the causes—

1st. Of all the expansions and contractions of the currency and of credits in our country.

2d. Of all the extravagant speculations in goods, lands, city lots, and stocks.

3d. Of the high prices of labor, and of both domestic and foreign products.

4th. Of the excessive imports of foreign goods and products, and the large exports of specie.

5th and last. Of the depression and slow growth of domestic manufactures, of cotton, wool, and iron.

The President regards it as inexpedient to revise the tariff at the present time, and recommends no measures of relief to be adopted by Congress, except a bankrupt law, to be applied to banks; and suggests that the States take measures to increase the denominations of bank notes, first to \$20 and afterwards to \$50; second, to require the banks at all times to keep on hand at least one dollar of gold and silver for every three dollars of their circulation and deposits; third, to provide by a self-executing provision, which nothing can arrest, that the moment a bank suspends it shall go into liquidation; and fourth and last, to provide for a weekly publication, by each bank, of a statement of its condition.

Let us examine the President's views in detail, and, with respect for the high source whence they emanate, inquire into their correctness.

First, as to the conclusions that all the expansions and contractions of the currency and of credit, and all the extravagant speculations in goods, real estate, and stocks, are justly chargeable to the banks, to paper money, and bank credits.

#### DOMESTIC COMMERCE AND DEBTS.

The productions of the United States, for each of the years 1856 and 1857, probably exceeded in value \$1,800,000,000; at least three-fourths of which was sold on an average twice, making the commerce in domestic products about \$2,800,000,000 annually.

The imports of foreign goods, in 1853, was over \$310,000,000, and in 1857, over \$348,000,000; which were sold on an average more than twice, making the sales equal to about \$800,000,000; thus swelling the domestic commerce of the country to about \$3,600,000,000 annually.

The sales of real estate, stocks, bonds, mortgages, and other property, including slaves, and the business of railroads, canals, and the coasting trade, and other business transactions, may be estimated as high as one-tenth the domestic commerce, or \$350,000,000. This shows that the business transactions of the country, exclusive of its foreign commerce, amount to nearly \$4,000,000,000 annually, three-fourths of which is done on credit, and not one-third part of it is ever paid by actually counting out and paying over money, either paper or coin.

All business men in cities and large villages deposit their moneys and funds in banks and with brokers, or bankers, and make their large payments by means of checks, which are usually paid by means of a transfer of the credit from the drawer to the payee of the check, without counting out the money.

A large amount of the business of the country consists of barter, or the exchange of one product for another, and large amounts of goods and property are sold and paid for in checks, drafts, promissory notes, bonds, mortgages, stocks of railroads and other corporations, bonds issued by States, cities, counties, and corporations—all of which pass from hand to hand, frequently through many hands, before they are paid, and answer the purposes of a circulating currency.

Capital employed by private bankers and brokers, per report of the Secretary of Treasury, United States, of 1856 .....	\$118,000,000
Debts of railroad corporations, per report Secretary of Treasury, of 1857.....	417,000,000
Bonds of United States, of the several States, of cities, counties, and navigation companies of United States, per report of the Secretary of Treasury.....	337,000,000
Deposited with private bankers and brokers as much in proportion to their capital and deposits, perhaps, as with banks, estimated at Loans and discounts of do., estimated at.....	80,000,000 150,000,000
Deposits in savings banks of Massachusetts in January, 1857.....	33,015,000
"    "    "    New York in January, 1857.....	41,699,000
"    "    "    Connecticut, 1856 .....	10,845,000
"    "    "    Rhode Island.....	4,834,000
"    "    "    Vermont, September, 1856 .....	892,000
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Total in savings banks for five States.....	\$91,285,000
The deposits in savings banks of New Jersey, Pennsylvania, and other States, would swell the amount to over.....	100,000,000

These deposits are mostly loaned on bonds and mortgages, on the security of State and other stocks, and on personal security.

The goods, products, etc., sold, (including cash and barter sales,) are on a credit of three months or more on an average, so that the outstanding debts for goods, products, stocks, bonds, notes, and other personal estate sold, amount generally to about one-fourth part as much as the sales of a year—equal, at any time during the year 1857, to \$900,000,000.

The sales of lands on credit by the Illinois Central Railroad Company, to September, 1857, amounted to \$14,387,000. The mortgages on real estate in Chicago have been estimated at over \$50,000,000, and probably do exceed \$30,000,000. Inasmuch as real estate is generally sold on long time, from one to ten years, averaging as much as two years or more, the debt of the people of the United States, for lands purchased on credit, is probably more than half as much as for goods, estimated at \$500,000,000; and for moneys loaned, exclusive of loans and discounts of banks and bankers, \$100,000,000.

DEBTS AND CREDITS OF BANKS.

Circulation of banks of issue in the United States, January, 1857, per report of the Secretary of the Treasury .....	\$214,778,000
Deposits.....	230,351,000
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Total circulation and deposits.....	\$445,129,000
Loans and discounts .....	684,456,000
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Aggregate.....	\$1,129,585,000

## RECAPITULATION OF THE OTHER DEBTS OF THE COUNTRY.

1. Railroad bonds and other debts.....	\$417,000,000
2. Bonds of the United States, of the several States, cities, counties, &c., as per report of the Secretary of the Treasury .....	337,000,000
3. Deposits with private bankers and brokers.....	80,000,000
4. Loans and discounts of " " " .....	150,000,000
5. Deposits in savings banks over.....	100,000,000
6. Loans of savings banks estimated 'at.....	80,000,000
7. Domestic debts for goods, stocks, and products.....	900,000,000
8. Debts for real estate and slaves sold.....	500,000,000
9. Debts for moneys loaned by individuals other than bankers and brokers.....	100,000,000
Total of the nine classes.....	\$2,664,000,000
10. Foreign mercantile debt.....	136,000,000
Total .....	\$2,800,000,000
Bank debts and credits brought forward.....	1,129,000,000
Total debts and credits estimated at.....	\$3,929,000,000

These statements and estimates are mostly based on record evidence, and cannot be very far from the truth. They show the immense magnitude of the credit system in the United States, and the prodigious amount of debts and credits in proportion to the whole capital and property of the people. The credit system was never expanded to such an extent in any other country.

Receiving deposits to loan, and loaning them out, constitute a part of the credit system, but not a necessary part of the business of banks of issue. In times of embarrassment and panic, the debts, embarrassments, and troubles of the banks, are greatly increased by their deposits, which are usually loaned out beyond their reach, and unavailable to pay the depositor. If the banks had not adopted the system of paying interest on deposits, their deposits would probably have been \$150,000,000 less in amount.

Private bankers, brokers, merchants, and lawyers, also, in many cases, as well as savings-banks, receive deposits of moneys to loan, and pay low rates of interest on them; and if the greatest part of the \$230,000,000 deposited in banks had not been so deposited, it would have been loaned by the depositors themselves, or their private bankers or agents, and the debts, loans, and discounts of the banks, would have been between \$300,000,000 and \$400,000,000 less in amount.

Making these deductions the whole amount of debts and credits, incident to the business of issuing and loaning bank notes in the United States, is less than \$800,000,000, and comprises only about one-fifth part of the whole debts arising from the credit system. The evils of which the President complains are incident to the credit system, and are not produced by the banks alone—in fact, only a small part of them arise from paper money. Embarrassments, panics, and revulsions arise from the credit system, from debts, no matter how or for what they may be contracted, or what may be the currency of the country. It makes no difference whether debts are contracted for moneys loaned of banks, or of individuals, or for goods, bonds, stocks, agricultural products, or other property purchased on credit—except that foreign debts must often be paid by an exportation of coin, and hence occasion more embarrassment than domestic debts.

The remarks and conclusions of the President concerning the banks are, in my judgment, clearly erroneous, and calculated to mislead the public. Will it be said that merchants and business men buy and sell on credit goods and products to the amount of thousands of millions of dollars annually, because we have banks and paper money? Will it be argued that the gambling speculations in railroad and other stocks, (which have been mostly on credit,) have been caused by paper money or bank credits? Or that the speculations in city lots in Chicago, in the cities of the Upper Mississippi, and in many other cities, have been caused by paper money or bank credits? Have the sales of lands on long credits by the Illinois Central Railroad Company, to the amount of over \$14,000,000, been caused by paper money or bank credits?

Credit sales are generally at higher prices than cash sales; and when men can borrow money at legal rates of interest they find it for their interest to do so, and to pay cash for their purchases, rather than to buy on credit. Bank loans, therefore, generally diminish credit sales to the amount of such loans, and do not increase the debts of a community or country any more than individual loans do.

There are some particulars in which paper money is more useful, as well as more convenient, than coin. Bank notes are more easily and safely carried from place to place, more quickly and conveniently counted out and paid over, and really more useful as a currency in times of financial embarrassment, panic, and distress. At such periods, there is a strong disposition in the public to hoard, to hide away, to conceal, and often to bury gold and silver coin and bullion, and to refuse to pay their debts with it, or to loan it, or use it in any other mode, for fear they may need it more at some future period. They often refuse to loan it for fear of losing it. But there is no such disposition to hoard up or conceal paper money. On the contrary, at such periods nearly all the community feel that there may be some doubts of the security of paper money, and hence if they have any, they feel anxious to pay it out as soon as possible, to pay their debts if they have any, and to buy what they need, and to loan it on reasonable security, if they have no other use for it. Hence, at such periods, nearly all the coin seems to disappear suddenly, while all the paper money, that has any credit at all, circulates with uncommon rapidity, promotes business, and encourages sales, and the payment of debts. And hence, merchants and business men who have goods and property to sell, and debts to collect, are greatly benefited at such periods by bank notes, whose ultimate redemption is secured by State stocks, even though they may not be immediately convertible into coin.

There is very little wealth accumulated in any new country, and the people, generally, are comparatively poor and involved in debt, often as deep as their credit and circumstances will permit. Though the people of Illinois and Wisconsin are involved in debt, yet they have been greatly aided during the late panic and revulsion by their inconvertible bank notes, which have circulated freely for business purposes; and embarrassed, as great numbers of them are, they have suffered much less than the merchants and business men of the old and rich city of Hamburg, where the only circulating money is coin.

There is no doubt that the issue of \$215,000,000 of bank notes in the United States has tended to stimulate business and speculation in some respects, but to a less extent than the sale on credit, annually, of over

\$300,000,000 of imported goods, from two to three times—and not a fifth part as much as all the credit business of the country.

Let us compare the circulating money of different States and countries, in order to test the accuracy of the President's views in relation to paper money and bank credits.

The amount of bank notes in circulation in 1857, to each person of the population in the undermentioned States and countries, were as follows, as near as the sum and population can be ascertained—calling the population of the United States 28,000,000, and that of Great Britain 22,000,000:—

	Bank notes to each person.		Bank notes to each person.
In Great Britain.....about	\$7 50	In Illinois.....about	\$4 25
Ireland.....	5 00	Wisconsin.....	2 75
United States.....	7 60	Michigan.....	1 10
Massachusetts.....each	} 23 00	Maryland and Virginia, (in- cluding slaves,).....	8 00
Connecticut.....		South Carolina & Louisiana, (including slaves,).....	*15 00
Rhode Island.....	33 00	Kentucky, (including slaves,)	12 50
New York.....	10 00		
Pennsylvania.....	7 00		
Ohio and Indiana.....	4 00		

The amount of coin in circulation in Great Britain is supposed to be equal to about \$3 to each person, and about the same in the United States; making the whole amount of paper money and coin in circulation in Great Britain \$10½ to each person, and about the same in the United States, taking the average of all the States. The circulation of France is less, being only about \$8 to each person; not over \$5 to each person in Prussia and the German States—and not over \$4 in Austria, and \$3 in Russia.

Where have speculations in goods, stocks, and lands been the greatest, and the embarrassments, revulsion, and panic, the most severe? Certainly not in those States and countries where there was the greatest relative amount of paper money. The greatest amount of speculation in goods and stocks was in New York; and the greatest in lands and city lots has been in Illinois. The debts created by the purchase of lands and city lots in Illinois may be estimated at from \$60,000,000 to \$80,000,000, and those in Wisconsin, Iowa, and Minnesota to \$40,000,000; but it is obvious that these sales of such immense amounts were not caused by paper money nor bank credits—but by railroads and western emigration. There was no great speculating spirit in Massachusetts, Rhode Island, and Connecticut, where paper money and bank credits most abound, nor any at all in South Carolina and Kentucky, and very little in Louisiana, where the relative amount of paper money was from thirty to fifty per cent greater than it was in New York, and more than three times as great as it was in Illinois.

Great Britain, with its great wealth and stable currency of moderate amount, suffered much more severely from the revulsion and panic, than the States of South Carolina, Kentucky, and Louisiana, with a paper currency, relatively, exclusive of slaves, about twice as large. The debts and liabilities of merchants, manufacturers, business men, and banks that suspended or failed in Great Britain during the months of October, November, and December, 1857, were estimated in British journals at £50,000,000 ster-

\* And over \$30 for each free inhabitant.

ing. The comparatively trifling circulation of the banks of Michigan did not save them from suspension and severe losses. Two of the largest private bankers in the city of Detroit also failed.

*Thirdly. The President charges paper money and bank credits with being the causes of the high prices of labor and of both domestic and foreign products.*

After a very careful examination of the production of the mints and mines of precious metals, and the quantity used in the arts, I prepared the estimate published in "*Essays on the Progress of Nations*," that the amount of coin and bullion in use in Europe and America in 1840 was \$1,200,000,000. The amount was about the same in 1849—equal to about \$4 to each person. There was then in the United States, coin to the amount of about \$80,000,000, or nearly \$4 to each person.

Gold from the mines of California and other States, coined at the mints of the United States from June 30th, 1849, to June 30th, 1857, as per report of the Secretary of the Treasury.....	\$382,000,000
Taken directly to England from San Francisco, uncoined, perhaps two-and-a-half millions, annually.....	20,000,000
Production of the gold and silver mines of Russia, Europe, Mexico, and South America, during same period, about.....	400,000,000
Production of the mines of Australia, about.....	450,000,000
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Total production in eight years.....	\$1,252,000,000

About the year 1833, Mr. McCulloch estimated the amount annually used in the arts in Europe and America at £3,650,000 sterling, over and above the quantity derived from the fusion of old plate.

Mr. Jacob estimated it, annually, from 1810 to 1830, at £5,612,000 over and above the amount of old metal used. Mr. McCulloch's estimate is equal to \$17,600,000, annually, and that of Mr. Jacob's to over \$24,000,000. There is no reason to believe that Mr. McCulloch's estimate is too high; and considering the increase of population, luxury, and extravagance in Europe and America during the last twenty-five years, we may reasonably estimate the quantity of new gold and silver used in the arts, as having nearly doubled—and as having been equal, annually, since 1849, to about \$35,000,000, that is—

In Great Britain.....about	\$12,000,000
France.....	8,000,000
Other countries of Europe.....	8,000,000
The United States.....	5,000,000
And in other countries of America.....	2,000,000
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Total during the eight years, (\$35,000,000 yearly).....	\$280,000,000
Exports of gold & silver to Asia, during the same period, estimated at	122,000,000
Leaving an increase of coin and bullion in Europe and America of..	850,000,000
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Total produced by the mines.....	\$1,252,000,000

These estimates cannot be very far from the truth, and yet they show an increase of coin and bullion in Europe and America, equal to 70 per cent during the last eight years since the discovery of the mines of California and Australia—while the increase of population has not exceeded 9 per cent. My impression is that I have under-estimated the amount used in the arts; but be that as it may, there can be no doubt that the quantity of coin in Europe and America was from 60 to 70 per cent greater in 1857 than it was in 1849.

The population of Europe and America in 1840, was about 286,000,000, and in 1849 about 310,000,000; coin and bullion in use about \$1,200,000,000, or less than \$4 to each person, on an average, in 1849. Increase by means of paper money—that is, the amount of bank notes over and above specie in the banks in 1849, as shown in my Essays, of about \$313,000,000, equal to an increase of the currency, by means of paper money, of \$1 to each person, making an average circulation of coin and bank notes in Europe and America of less than \$5 to each person.

There was very little change in the amount of bank notes in circulation in Europe between the years 1840, 1849, and 1857.

The amount of bank notes in circulation in the United States in 1849 amounted to about .....	\$132,000,000
And in December, 1856, to nearly.....	215,000,000
Increase, about .....	83,000,000
Less the increase of specie in the banks of.....	13,000,000
Showing a real increase of the general circulation by means of an increase of bank notes, of about.....	70,000,000
Coin and bullion in use in Europe and America in 1849, brought forward.....	1,200,000,000
Increase by means of bank notes.....	313,000,000
Increase of coin from 1849 to 1857.....	850,000,000

Total circulation in 1857. .... \$2,433,000,000

for about 338,000,000 of inhabitants—equal to \$7 20 to each person.

These facts show that there has been a general increase of the circulating money of the commercial world during the eight years, (from 1849 to 1857,) of about 50 per cent. Are not these causes sufficient to account for a general rise of the prices of labor and of products in America as well as in Europe?

The specie in the United States in 1849, was very carefully estimated in my Essays from the exports and imports of coin and bullion at.....	\$80,000,000
Of which there were in the banks nearly.....	46,000,000
Leaving in circulation..... about	\$34,000,000
Bank notes in circulation.....	132,000,000

Total circulation..... \$166,000,000

(Including the amount in the vaults of the government) for about 22,600,000 inhabitants—equal to about \$7 33 to each person, white and black.

American gold coined from 1849 to 1857, as heretofore stated.....	\$382,000,000
Excess of exports of coin and bullion over the imports, during the same period.....	272,000,000

Left in the United States.....	\$110,000,000
Used in the arts, five millions, annually.....	40,000,000

Total increase of coin in the United States.....	\$70,000,000
Increase of currency by means of bank notes brought forward....	70,000,000
Circulation in 1849, as above stated.....	166,000,000

Total circulation in 1857..... \$306,000,000

for a population of about 28,000,000—equal to nearly \$11 to each person.

These facts show that the relative increase of the circulating money of the United States has been in a slight degree, and only in a slight degree, greater than the average increase in Europe and America.

The average amount of circulating money in Great Britain, since the resumption of specie payments in 1819, has been from \$10 to \$12 for each person; that of Ireland, about \$7; France, \$8; and Holland, \$9.

As the internal commerce of our country increases (by reason of railroads and internal navigation) a larger amount of currency is necessary to do the business. There is not, however, any reason to doubt that the increase of bank paper from 1849 to 1857, was greater than the wants, the business, and the interests of the country required; and that such increase had a slight tendency to increase prices of labor and products—as stated by the President—but probably not a fifth part as much influence as is charged by him.

The prices of labor and products depend not upon the amount of money in circulation only, or principally, but mostly upon the relative demand and supply of labor and products in the market. In these days of railroads, steam navigation, free intercourse, and free trade, when emigration from the old to the new worlds is counted by hundreds of thousands, annually, the prices of labor and products, also, to a great extent, are governed by the demand and supply of Great Britain, France, and Germany, as well as in the United States, and are not much affected by the local paper currency of the country. The currency of Rhode Island, Massachusetts, and Connecticut, is at least three times as great as that of the Northwestern States, and yet by reason of the influence of demand and supply, the prices of labor are higher in the latter than in the former States. The prices of cotton, tobacco, rice, and sugar in the United States, are constantly governed by the markets of the commercial world—by the relative demand and supply in Europe as well as in America, and such is the case also with wheat and flour, much of the time.

#### EXPENDITURES FOR RAILROADS.

The immense amounts of labor and capital employed in making railroads in Europe, as well as in the United States and Canada, during the last ten years, have also had an effect to raise the prices of labor and the products of industry. In my article on the Panic and Financial Crisis, published in this Magazine in December, 1857, I estimated the cost of railroads in the United States at \$850,000,000, consisting of \$450,000,000 paid on stock, and \$400,000,000 debt. The report of the Secretary of the Treasury on the finances made since that time, gives later and more complete information than I had access to, and shows that my statements and estimates, large as they appeared to be, were yet too small. His report shows that the railroads of the United States had on the 30th of June last cost about \$909,000,000, consisting of about \$491,500,000 paid on stock, and over \$417,000,000 of loans and other debts. These expenditures amounted to about \$100,000,000, annually, from 1853 to 1857, and averaged about \$60,000,000, annually, during the next previous four years, making about \$640,000,000 in eight years.

Immense expenditures have also been made for railroads in other countries, which may be stated and estimated (mostly from official reports) in millions of dollars, as follows:—

	Prior to July 1st, 1849.	July 1st, 1849, to July 1st, 1857.
Great Britain and Ireland.....	\$1,000,000,000	\$500,000,000
France.....	230,000,000	350,000,000
Prussia.....	100,000,000	60,000,000
Canada and British North America.....	.....	100,000,000
Germany, Austria, and Hungary.....	200,000,000	175,000,000
Other countries of the old and new world.....	75,000,000	175,000,000
	<hr/>	<hr/>
United States.....	\$1,605,000,000	\$1,360,000,000
	270,000,000	640,000,000
	<hr/>	<hr/>
Total.....	\$1,875,000,000	\$2,000,000,000

Such a prodigious absorption of capital and labor in public improvements never occurred before in any age of the world. Both capital and labor were drawn from agriculture, mining, and other branches of industry. In addition to this, the war between Russia and Turkey broke out in the fall of 1853, in which England and France soon afterwards joined, and the same was prosecuted with wonderful vigor and violence for over two years. This war employed great numbers of men to manufacture and supply arms, military and naval stores, munitions of war, and clothing, as well as soldiers and sailors. It created a great demand for provisions, ships, vessels, military and naval supplies, and for large loans; and diverted labor from agriculture and all other channels of industry, and absorbed large amounts of money and capital.

The war and the building of railroads diverted labor and capital from the ordinary pursuits of industry, to such an extent, as to raise the rates of interest, to raise the prices of nearly all the products of industry, to increase the wages of labor, and to increase the expenses of living, nearly 50 per cent.

There were, therefore, four great principal causes for the increased price of labor and products, which may be ranked in the order of their influence, as follows:—

1st. The great increase of gold in the commercial world, produced by the mines of California and Australia.

2d. The excessively large amount of capital and labor employed in building railroads.

3d. The Russian war.

4th. The general expansion of the credit system; and lastly, may be reckoned as having some influence, the increase of paper money in the United States.

This last cause probably did not have more than one-tenth part as much effect upon prices in the United States as the other four combined.

The importation and sale on credit of large quantities of foreign goods, have tended to expand the credit system quite as much as paper money has. There have been five times as much paper money in Massachusetts, Rhode Island, and Connecticut, as in the Northwestern States, and yet the prices of labor and merchandise have been higher in the latter than in the former States.

4th. The President considers excessive bank loans of paper currency as the exciting causes of extravagant importations of foreign goods; and 5th. That they have prevented the growth in our country of domestic manufactures of cotton, wool, and iron.

It is well known that the dry goods imported into the United States

are mostly sent by the manufacturers to their agents, and to commission merchants in this country, for sale; and that only a small part of them is ordered by American merchants.

There is no natural limit to the demand for articles of taste and ornament, but the limited ability of the people to pay for them—and hence the temptation to overtrade, as long as purchases can be made on credit, or the means of payment can be obtained.

Great Britain has a small territory and a superabundant population, wanting employment, and hence the wages of labor are cheap. She has been manufacturing extensively during nearly a century past, and has great numbers of experienced and skilled workmen. Her citizens invented and first used the steam-engine, and the greatest part of the machinery for carding, spinning, and weaving cloths of all kinds, and for rolling iron, and used such machines for years before they were introduced into other countries. The increase of the industry of the people of Great Britain, produced by these inventions and machinery, is probably equal to the industry of fifty millions of inhabitants working mostly by hand, and with the instruments in use a century since. These causes, with her immense mineral resources, fine climate, insular situation, and advantages for navigation and commerce, enabled her, and still enables her, to undersell all the nations of the earth in their own markets in many articles and products—whereby she has enjoyed a monopoly to a great extent, accumulated great wealth, a prodigious amount of machinery, manufacturing and mining capital; and is capable of extending her mining and manufacturing operations to an almost indefinite extent, as fast as she can find markets for her products. She can supply and glut the markets of every other country with many classes of goods, and supplant their domestic manufactures, except when the latter are protected by duties on imports. France and Germany have many of the same advantages over the United States.

On the contrary, the United States, having an immensely large, new, and sparsely settled territory, land is cheap, and the temptation is great to go into the wilderness and improve a new farm, rather than to work for others. Hence, laborers are comparatively few, and wages high. There is comparatively little accumulated wealth and surplus capital to carry on business upon a large scale, as it is done in England. Our country is also deeply involved in debt, as is heretofore shown; rates of interest are high, and the difficulties of manufacturing in competition with the manufactures of Great Britain, France, and Germany, are very great. It is impossible for the manufactures of a new country, like the United States, to grow up under such circumstances, without the fostering protection of the government. Hence, our markets are, to a very great extent, supplied with foreign goods. Such are the causes of the extravagant importations of foreign goods, and the depression and slow growth of manufactures in the United States. Paper money and bank credits have had very little influence in the matter.

Immediately after the Revolutionary War, (from 1784 to 1789,) the importations of foreign goods were much more extravagant and excessive, in proportion to our ability to pay, than they have been during the last ten years; and yet, at that time, we had but one incorporated bank, of moderate capital, and scarcely any circulating money except gold and silver.

Again; as our country is deficient in capital, banks, when properly managed, furnish additional credit and facilities, as substitutes for capital, to carry on business. Hence, nearly all the manufactures of cotton and wool in the United States have been carried on in the Eastern States, where the circulation of bank notes is five times as great as it is in the Northwestern States. This would not and could not be the case, if the positions and charges of the President against the banks were correct.

The circulating money of Great Britain, including coin and bank notes, as heretofore shown, has been from ten to twelve dollars to each person during the last forty years—exceeding that of the United States the most of the time—while that of Austria, Italy, and Spain, is only about \$4; that of Russia not over \$3; and the circulation of Turkey still less. An increase of coin and bullion has the same effect upon prices, and upon manufacturing and commerce, as an increase of paper money does; and if the position of the President were philosophically true and correct as to the United States, it would be true also as to Great Britain and France; neither of which could manufacture advantageously on account of the redundancy of money, and the consequent high prices of labor and of the products of industry; and hence, manufacturing could be carried on most advantageously in Russia, Austria, Turkey, Italy, and Spain, where the amount of circulating money is very small. The truth is directly opposite to the rule stated by the President. Manufactures and commerce require from three to four times as much money and circulating capital to carry them on advantageously as agriculture does; and hence manufactures flourish most where there is the greatest amount of money and circulating capital—and commerce is mostly dependent upon manufactures to supply its materials.

Labor is cheap in Great Britain, France, and Germany, because the fields of employment are all filled, and laborers are superabundant. Labor is not cheap in Great Britain because there is no paper money in circulation, or because the amount of money is small, for such is not the case. Great Britain is enabled to manufacture cheaper than any other nation—

1st. Because laborers are superabundant, and labor comparatively cheap.

2d. Because she has been manufacturing extensively for nearly a century, and has a great number of experienced and skilled laborers, as well as scientific mechanics, artists, and superintendents, and an immense amount of machinery.

3d. Because she has accumulated great wealth, and has a large amount of circulating capital and money; rates of interest are generally low, and her manufacturers can sell their products on long credits, when deemed advisable.

4th. Because her climate is fine, her mineral resources apparently inexhaustible, and her insular situation, numerous navigable rivers, harbors, gulfs, and bays, greatly facilitate both foreign and domestic commerce.

5th. Her numerous and populous colonies and dependencies furnish extensive and steady markets for her manufacturing and mining industry, and give employment to her mercantile fleet.

6th. Her great political power and immense wealth (being the creditor to a large amount of nearly all the nations of the earth) serve to keep them dependent upon her, to overawe them, and to keep open the markets

of the world to her industry. All these particulars give her advantages over other nations.

The population of the United States is about the same as that of Great Britain and Ireland. Let us compare their commerce at different periods, to show their relative increase.

STATEMENT OF THE VALUE OF THE EXPORTS OF THE PRODUCTS AND MANUFACTURES OF GREAT BRITAIN AND IRELAND (EXCLUSIVE OF COIN AND BULLION) DURING THE UNDERMENTIONED YEARS, IN MILLIONS OF POUNDS STERLING, ALSO IN MILLIONS OF DOLLARS, AND THE NUMBER OF DOLLARS TO EACH PERSON.

Years.	Sterling money. £35.6 millions.	Federal money. \$172. millions.	Amount to each person. \$8.2
1820 .....	37.7 "	188.2 "	7.7
1840 .....	51.4 "	248.5 "	9.2
1849 .....	63.6 "	307.4 "	11.4
1855 .....	95.7 "	462.5 "	16.8
1856 .....	115.8 "	559.7 "	20.
1857 .....	122.1 "	590.7 "	21.5

STATEMENT OF THE VALUE OF THE EXPORTS OF THE PRODUCTS AND MANUFACTURES OF THE UNITED STATES (EXCLUSIVE OF COIN AND BULLION) DURING THE UNDERMENTIONED FISCAL YEARS, THE AMOUNT OF EXPORTS TO EACH PERSON, AND THE EXCESS OF EXPORTS OVER IMPORTS OF COIN AND BULLION, OR VICE VERSA, DURING THE SAME YEARS.

Years.	Exports. \$51.7 millions.	To each person. \$5.30	Excess of coin and bullion.
1820 .....	58.5 "	4.50	\$6. millions imported.
1840 .....	111.7 "	6.50	.46 " "
1849 .....	131.7 "	5.60	1.2 " "
1855 .....	192.7 "	6.80	52.6 " exported.
1856 .....	266.4 "	9.30	41.5 " "
1857 .....	278.9 "	9.60	56.7 " "

These tables show that the exports of Great Britain are more than twice as great, in proportion to the population, as those of the United States, and have increased more rapidly since 1820 than the exports of the United States have. The last table shows the exports of gold and silver from the United States during the last three years have exceeded the imports of coin and bullion about \$150,800,000.

STATEMENT OF THE IMPORTS OF COIN AND BULLION INTO GREAT BRITAIN DURING THE UNDERMENTIONED YEARS.

	From U. States.	Australia.	Mexico, South America, and other countries.
1854 .....	£8.6 millions.	£9.4 millions.	£5.9 millions.
1855 .....	6.4 "	10.9 "	5. "
1856 .....	8.6 "	10.2 "	6.8 "
Total in 1854 .....	£23.9 millions, equal to \$115.6 millions.		
1855 .....	22.3 "	"	107.8 "
1856 .....	25.6 "	"	123.7 "

What is it that expels the gold of California from the United States, and draws nearly all the gold of California and Australia to Great Britain? If paper money and bank credits expel the gold from the United States, what draws it to England? and why do not the large amounts of paper money and bank credits drive it from England also? If bank notes and bank credits cause excessive importations of foreign goods into the United States, and prevented the growth of manufactures, as charged by the President, why have not similar causes produced similar effects in Great Britain?

IMPORTS OF NEW YORK AND OF THE UNITED STATES FOR THE QUARTER ENDING SEPTEMBER  
30TH, 1857.

	New York.	United States.
Specie.....	\$1,408,000	\$2,140,000
Other free goods.....	6,280,000	17,000,000
Dutiable goods.....	64,912,000	88,860,000
<b>Total.....</b>	<b>\$72,600,000</b>	<b>\$108,000,000</b>

EXPORTS OF NEW YORK AND OF THE UNITED STATES FOR THE QUARTER ENDING SEPTEMBER  
30TH, 1857.

	New York.	United States.
Specie.....	\$10,890,000	\$15,650,000
Domestic products.....	12,780,000	40,000,000
Foreign products.....	3,430,000	5,180,000
<b>Total.....</b>	<b>\$26,700,000</b>	<b>\$60,880,000</b>
Imports, exclusive of specie, during the quarter, about.....		\$105,860,000
Exports, exclusive of specie.....		45,160,000
Showing a balance of trade of.....		\$60,700,000

against the country in three months, and an increase of foreign debt of over \$47,000,000, after exporting \$13,500,000 specie over and above the specie imported.

Is it strange that bankers, capitalists, and business men should become alarmed at such a state of things? that confidence should be shaken, loans and discounts withheld, the circulation of the banks contracted? and that stocks should fall, a panic seize the community, and a severe revulsion ensue? Can any one doubt that the excessive importations of foreign goods, and the large exports of specie, operated as causes more potent than all others in producing the panic and revulsion of 1857? The panic and revulsion checked imports.

STATEMENT OF THE FOREIGN GOODS AND PRODUCTS, EXCLUSIVE OF SPECIE, IMPORTED INTO  
NEW YORK IN EIGHT MONTHS OF TWO CONSECUTIVE YEARS, ENDING—

	Feb. 28, 1858.	Feb. 28, 1857.
July 1st to September 30th.....	\$71,316,000	\$64,518,000
October 1st to December 31st.....	30,837,000	39,646,000
January and February.....	16,765,000	41,621,000
<b>Total.....</b>	<b>\$118,918,000</b>	<b>\$145,785,000</b>
Specie during same time.....	8,092,000	3,141,000

Of the \$8,092,000 specie imported, as above stated, \$5,537,000 was imported during the panic, in the months of October and November; but when the panic became severe in England, the importation of specie nearly ceased, (about the middle of November,) and its rapid export again commenced, and amounted in December to \$7,535,000; in January, 1858, to \$4,746,000; and in February to \$3,747,000.

EXPORTS OF SPECIE FROM NEW YORK.

	1857-8.	1856-7.
Six months—July 1st to December 31st.....	\$21,961,000	\$22,001,000
January and February.....	8,493,000	3,140,000
<b>Total in eight months.....</b>	<b>\$30,454,000</b>	<b>\$25,141,000</b>

CUSTOMS COLLECTED AT NEW YORK.

	1857-8.	1856-7.
July 1st to September 30th .....	\$13,184,000	\$14,388,000
October 1st to December 31st.....	3,162,000	8,548,000
January and February.....	3,705,000	9,654,000
<b>Total.....</b>	<b>\$20,051,000</b>	<b>\$32,590,000</b>

Here is a falling off in the customs at New York of over \$11,300,000 in five months.

The whole revenue of the United States during the last fiscal year, ending June 30th, from customs, public lands, and all other sources, were less than \$69,000,000. The embarrassments of the country are so great that there will be very few public lands sold during the year. The falling off of imports is mostly in dry goods and railroad iron. There has been but little falling off in free goods.

In the present embarrassed condition of the country, the people are struggling to live cheap and to pay their debts. They are wearing out their old clothes, dispensing with matters of taste and ornament, and will not consume more than one-third as many imported goods for six months to come as they did during the same period last year. Very little railroad iron will be imported, and very few public lands sold; and the indications are that the revenue of the government will be thirty millions of dollars less during the present fiscal year than they were during the last.

REMEDIES SUGGESTED BY THE PRESIDENT.

1st. To increase the denominations of bank notes—first to \$20, and afterwards to \$50.

Such a change would have very little influence, if it could be brought about. The effect of paper money depends principally on the aggregate amount in circulation, and not on the denominations of the notes. Some small notes of one, two, three, and five dollars each, are very convenient to the community, to send by mail to pay for newspapers, periodicals, books, and other small articles which may be transmitted by mail. Hence the people are disinclined to dispense with small notes.

2d. To require each bank to keep at all times on hand at least one dollar of gold and silver for every three dollars of their circulation and deposits.

This would have much greater influence than the first recommendation named. It would have a tendency to put an end to the pernicious system of paying interest on bank deposits, and particularly on such as may be withdrawn at pleasure.

3d. To wind up every bank immediately on its suspending specie payments, and to provide a national bankrupt law for that purpose.

This remedy, proposed by the President, is a very violent and radical one, and one which requires very grave consideration. In my judgment, it could be productive of no other than pernicious influences and disastrous results. England does not apply her bankrupt laws to her incorporated banks.

4th. To require a weekly publication by each bank of a statement of its condition.

This might be very useful to the people in keeping them properly ad-

vised, and tend to discredit weak and ill-managed institutions, which are not worthy of confidence.

Let us return to the third remedy suggested. This is entirely a new invention, of which the President is probably entitled to the sole credit. It is contrary to the uniform practice of all nations, which have authorized the issue of paper money, during the last two centuries and a half. There is no State or country, in which bank notes have been issued, in which suspensions of specie payments have not occurred, and been sanctioned by law. There have been many suspensions of specie payments by the banks generally in the United States, some of which continued for years. Long suspensions should never be sanctioned.

The Bank of England suspended specie payments from 1797 to 1821, but this long suspension of over twenty-three years led to great delusion upon the subject of banking—to a gradual expansion and depreciation of the circulation, and to a consequent rise in prices. Long suspensions are not necessary nor useful to a country; but short suspensions of a few months are often both necessary and useful in times of severe revulsion and panic, when an adverse balance of trade induces large exports of specie, and the panic induces many people to hoard and hide away specie—to withdraw specie from the banks, as well as from circulation, to hoard it up.

The partial failure of the crops of Great Britain and Ireland in 1846 and 1847, induced large imports of grain, flour, and provisions; great speculation in these articles; and large exports of specie, which produced alarm, a panic, severe money pressure, and a prostration of credit. In consequence of this state of things a deputation of London bankers, on the 23d of October, 1847, waited on Lord John Russell (then Prime Minister) to represent the embarrassments caused by the money pressure, and to induce the government to grant relief by a suspension of the Bank Charter Act of 1844. The Minister laid their representations before the cabinet, and the result was, that the suspension requested was granted by the cabinet on the 25th of October.

A similar occurrence took place in England during the financial pressure in November last, (1857,) Lord Palmerston and Sir E. C. Lewis, Chancellor of the Exchequer, on behalf of the government, authorized the Bank of England to extend its issues, as necessity might require, irrespective of the Bank Charter Act of 1844, and sanctioned a suspension of specie payments. This measure abated the commercial panic and restored confidence.

The Emperor of France adopted similar measures in relation to the Bank of France, which saved that country from the severe revulsion and panic which swept over Germany, Austria, and Prussia, and was so terribly severe in Hamburg, where there were no bank notes to supply the place of specie, which generally disappears at such periods.

Soon after the general suspension of specie payments by the banks in the United States in October last, the Legislature of Pennsylvania was convened, and sanctioned by law the suspension of specie payments by the banks of that State for a limited period, (one year, I think,) and limited the dividends during such suspension to a rate not exceeding six per cent per annum.

In the State of New York the banks all suspended, but were relieved from the pernicious influence of the constitutional prohibition, and the necessity of going into liquidation, by the rational construction put upon

the statute in relation to the appointment of receivers by the judges of the Supreme Court of the First and Second Districts.

That decision saved the city and State of New York, and, in fact, the whole Union, from the disastrous effects which must have resulted from driving all the banks of the city and State into liquidation.

Revolutions in trade, and panics, will, and do, occur in all countries where business is done on credit, no matter what the currency may be. Financial pressures, revulsions, and panics, are incident to the credit system—to overtrading, and the accumulation of debts, resulting from purchases on credit, and to a decline in the prices of goods and property. They are neither caused nor aggravated by a well-regulated banking system, and the issue of bank notes properly secured. On the contrary, their severity is moderated by a paper currency well secured by government stocks, and the community are greatly relieved by temporary suspensions of specie payment, which promote and render more active the circulation of bank notes so secured, which circulate upon the credit of such securities.

The custom of banks paying interest on deposits which may be checked out at any time, has a pernicious tendency. It tempts the banks to keep such deposits all loaned out, and subjects them to the hazard of being called on for payment suddenly, and thus drained of their specie in times of pressure and panic, when they cannot be collected. In times of embarrassment and panic, the banks whose notes are secured by stocks, are in greater danger of runs on account of their deposits, (for which no security is given,) than on account of their circulation, which is secured. Runs have been more common on savings banks and on private brokers, than on banks of issue; and the first bank failure of much importance was that of the Ohio Life Insurance and Trust Company—a large loan and deposit bank which issued no notes.

The chief object of banks of issue is to furnish a safe currency to the community—a safe place of deposit being only an incident to their principal business and object. Inasmuch as deposits generally consist of bank notes, and not specie, it is just that the banks should pay out upon the checks of depositors such notes as they receive, so long as they remain as current as when deposited; and hence, in my opinion, it is not expedient to forfeit a bank charter, or compel it to go into liquidation, because it refuse to pay deposits in coin. In fact, it is not just, either to the billholders, to the community, or to the stockholders, to pay paper deposits in specie in times of financial pressure and panic—whereby, many sound and well-conducted banks have been ruined, and their usefulness as financial agents, to furnish the community with a safe paper currency, has been destroyed. Our banks of issue should be assimilated to the issue department of the Bank of England, and should not be allowed to pay interest on deposits. When capitalists have moneys to loan, let them make the loans themselves or employ brokers, lawyers, or other agents to do so, and run the hazards themselves, and not tempt banks of issue to incur the hazard of ruin, for the prospect of a little profit, by loaning deposits on which they pay interest.

RECAPITULATION OF REMEDIES RECOMMENDED, AND OTHER REMEDIES SUGGESTED, AS TO THE CURRENCY.

1st. That government stocks in good credit should be deposited with some government officer, by each bank, in pledge to redeem its notes.

2d. That such officer should keep the bank plates, have all the notes struck off, countersigned, registered in his office, and delivered to the banks.

3d. That every bank should keep specie in its vaults or in the vaults of some large city bank subject to draft at sight, equal in amount to one-third of its circulation and deposits.

4th. That the president, cashier, teller, and all other officers employed in a bank should be prohibited from making loans to themselves, borrowing at the bank, or using or employing any of its funds for individual speculation or profit.

5th. That every bank of issue be prohibited from paying interest on deposits.

6th. That each bank be required to publish, monthly, a statement of its condition at the opening, on the morning of the first day of the month.

7th. That embezzlements of the funds of banks, and all willful violations of the law by the directors or any of the officers of a bank, be declared crimes, and punished as such, by confinement in the State Prison, in flagrant cases.

8th. That power be vested in the Governor of each State, to allow a general suspension of specie payments by the banks of the State, for a period not exceeding three months, whenever he shall deem it expedient.

9th. That no bank be allowed to make any dividend during its suspension of specie payments on its notes, and for three months thereafter.

10th. That no bank forfeit its charter because it refuses to pay its deposits in specie—and that depositors be left to the same remedies which merchants and other business men have against their debtors.

The first and second of these remedies have been in use in New York and some other States nearly twenty years. The third and sixth are substantially the same as the recommendations of the President. The fourth is a necessary precaution to protect the interests of the stockholders as well as the rights of creditors of banks. The fifth has been much agitated of late, and nearly all the banks of the city of New York have resolved to adopt it. The business of receiving deposits and paying interest on them to loan out, should be left to savings banks, and private banks and brokers, and should not be done by banks of issue. The adoption of the fifth and tenth remedies suggested, would assimilate our banks of issue much more nearly to the issue department of the Bank of England, which is separated from the deposit department of that institution; the seventh is necessary to protect the stockholders, as well as the creditors of banks, against the frauds and embezzlements of their officers; the eighth is a remedy which has been often exercised by the cabinet of Great Britain and the monarch of France, and has always had a salutary influence in allaying excitement and panic, restoring confidence, and aiding in furnishing a currency by which debts can be paid, and the industry and business of the country can be continued and carried on.

Nothing, however, in the writer's opinion, can cure the financial evils and embarrassments stated by the President, and under which the country is suffering, but a revision of the tariff, and the adoption of such rates of duties as will reduce the amount of imports of foreign manufactures, and encourage and foster the manufactures and other products of our own country.

## ART. II.—THE ADMEASUREMENT OF SHIPPING.

## NUMBER I.

DISTINCT and appropriate tests for the appreciation of every description of property have long been established; they are termed weights and measures, and are among the fixed institutions of all commercial nations. Without systems of mensuration, the extension, surface, solidity, and weight of commodities could not be ascertained and compared; and before they were established by civil society, only the most vague ideas of commercial wares could have prevailed. Moreover, every system of mensuration must be founded on a suitable and well-defined unit, which may be denominated the standard. The arts, commerce, and science could not exist in the absence of such standards of measurement as have been found necessary for their cultivation; these are but six in number, as there are but six kinds of measures, viz.:—those of length, area, contents, weight, angles, and time. By these systems of estimation we regulate our ideas of things, and form correct notions of the corresponding attributes of products and manufactures, and hence their value and utility. They also enable us to define and compare all articles of traffic, thus constituting the very foundation of commerce. But to be highly useful, all measures must be accurate, and capable of uniform application, and also be justly applied. Some of the most beautiful truths of science have been invoked to regulate our systems of measurement, and establish order in the affairs of trade.

It requires no argument to show that shipping can form no exception to the general rule applied to all other commodities subject to commercial transactions, that it must be *measured* to be correctly appreciated, for how otherwise shall we obtain an idea of comparative magnitude, burden, value, or usefulness? For a knowledge of these qualities we must necessarily compare vessels by some system of measurement, the unit of which we can duly appreciate. The admeasurement may be by capacity or burden, or both conjoined, and the unit may be bushel, barrel, bale or butt, cubic feet, cord, or chaldron, thousand of herring, lath, or lumber, or the ton of measure or weight in common use. It has been found convenient to rate vessels by all of these standards, and many others, according to the trade in which they may be engaged. This practice answers very well the purpose of the shipper, especially since the system of tonnage enforced by the government is not capable of yielding uniform results; but for the general purposes of ship-building and commerce, some suitable and well-defined unit and system of admeasurement is wanted, as the "ton," by which shipping may be built, bought, sold, and chartered; by which taxes, tolls, and customs may be collected; and by which *burden* may be known and registered. The application of this system must be uniform, the rules of mensuration scientific, and such as will obtain the *true* tonnage of every vessel.

It may seem most strange to the public that the United States should have no system of ship admeasurement worthy of the name, at this age of the world; yet we propose to show that such is the fact. The one in use denominated *TONNAGE*, is an imported article, and has been renounced in the country of its origin for more than a quarter of a century. Its adap-

tation was made by unskillful men to the shipping of the times of Oliver Cromwell, and however well calculated to reflect credit upon its projectors, we beg to hold that it does no honor to the superior science and wisdom of the present age.

The necessity for revising the tonnage laws of the United States may be stated very briefly in the proposition, that the progress of MARINE ARCHITECTURE is now embarrassed through want of protection under a just and uniform system of admeasurement—one that will apply equally well to every description of vessel—to every type of model—to every manner of construction—to every mode of propulsion; placing shipping of whatever kind on an equitable footing, so that the problems to be solved by ship-builders shall be legitimate, viz.:—*the best style of model, the most profitable degree of burden, and the most economical mode of propulsion for vessels.* All these desirable results are notoriously discouraged by the working of the present system, which scarcely gives the true burden of shipping in a single instance.

The departure from the truth often amounts to several hundreds of tons in large ships. The consequences of inaccurate, partial, and false admeasurement are seen in false proportions, false models, and false valuation of shipping. By setting a brand of false burden on vessels, the freedom of construction, which can alone secure an adaptation to their uses, is destroyed. Who can reckon the damage to commercial interests arising from the practice of building vessels as we *would not* build them, were the liberty of design unrestricted? Yet it must be enormous. The single salutary influence of truthful tonnage, when it shall be exerted, will permit freedom to give as great an impetus to the art of ship-building in future, as the discovery of gold in California did in the past, and which well might have wrought a revolution in modeling.

The fundamental object of shipping is burden—portage, and has been the same in all ages of the world. Whether we consider the purposes of arks, balsas, canoes, dromones, galleas, hulks, junks, or ships, they will be found identical. To convey ideas of their capabilities there have been adopted but two modes, viz.:—by numbering the vessels, and by measuring the cargo carried on a voyage; the former method was employed by the ancients, and the latter is used by the moderns. Enumeration of vessels would serve well enough, perhaps, for appreciating the power of savage or barbarous fleets, but it will be seen that the great diversity in size and occupation of vessels now used constitutes their correct admeasurement one of the important necessities of modern commerce. When the inland and coasting trade of Europe formed the principal employment for shipping, and navigation laws were not yet enacted, nor commerce burthened with tolls and customs, the rude vessels of that day were navigated in fleets, and were of a convenient size for estimating by enumeration, in the same manner as the camels of a caravan. Exact ideas of their aggregate burden were neither sought nor obtained by any method. The progress of commerce and civilization has vastly changed circumstances since those primitive periods, and accuracy, uniformity, and fitness characterizes almost all our modes of admeasurement and systems of estimation.

The primitive descriptions of shipping were long ships, (for expedition,) round ships, (for burden,) tall ships, and great ships. The Roman classification was extremely simple, viz.:—the *naves longae*, or ships of war;

the *naves onerariæ*, or ships of burden; and the *naves libernæ*, or ships built for great velocity. It is probable that even such vague distinctions as these conveyed tolerably definite ideas of size and form, the vessels being built of approved dimensions for special uses, and, with few exceptions, neither enlarged nor diminished for considerable periods of time. When the dimensions had become greatly increased, vessels were described by the number of rowers, or banks of oars employed in propulsion. The ship-builders of Japan are not now permitted to deviate from an uniform rule in model, size, rig, and interior arrangement in the construction of junks, and this was most likely the case with many nations of antiquity.

The establishment of customs on shipping and merchandise *in transitu* was perhaps the first cause of governments instituting the admeasurement of shipping; but before the adoption of any rules for this purpose, the tolls were levied in the following crude manner prescribed by King Ethelred, of England, in 979.

1. "That a small vessel arriving at the port of London was to pay one half-penny for toll.
2. "If a greater one, bearing sails, one penny.
3. "For a keel or hulk, being a long and large capacious sort of vessel, fourpence.
4. "Out of a ship laden with wood, one piece for toll.
5. "A boat with fish, one half-penny, and a bigger boat, one penny, &c."

Such were among the minor customs, so called in history, and such the system of their collection—after the lapse of nearly 900 years very little inferior to our own in the accuracy of its basis.

The great customs on merchandise were established by Edward I., of England, in the famous charter granted to foreign merchants in 1302. In this document a system of customs was promulgated, defining the duties on goods exported and imported. With other regulations, it was decreed that a custom of two shillings should be paid on the importation of every *ton* of wine. The word *ton* is derived from the French, (*tun* from the Saxon,) and means a large quantity; it was used to designate the greatest *weight* of wine measure. The wine trade was not equaled in extent by any other traffic, and was therefore made to bear the brunt of impost taxation. This spirit had been a staple product of the South of Europe for centuries previous; its measurement had been perfected and was known to all nations, hence the propriety of levying the customs to be paid by the "ton;" wholesale quantities being generally estimated by "tons" or "butts." There can be little doubt that the wine-carrying vessels trading between France and England were the first to be rated in burden by the number of "tons" which they transported, just as our fishing and other vessels are now estimated by the barrel, and our grain vessels by the bushel. Edward's charter, may, therefore, be said to have originated the term "tonnage" as now applied to merchandise to express ideas of quantity, and to shipping to denote burden. The Spanish vessels of a later period were sometimes described as of the "portage" of so many "butts," and there is reason to believe that the Genoese and Venetian shipping also adopted the ton or butt of wine for a unit of admeasurement, since these vessels were numerous and largely employed in the wine trade.

About the period of this grant, the necessity for recognizing some unit

of burden for vessels must have become important, because the mariner's compass had been discovered and was then generally adopted in navigation, and the application of sail power to the exclusion of oars for propulsion was coming into universal use, causing shipping to be improved in size and model, and therefore warranting mariners in venturing alone on their voyages. Merchant vessels sailed no longer in fleets, except in time of war, or through piratical seas, for mutual protection. Modern navigation, ship-building, and commerce became fairly established from this epoch, and the term "tonnage," to denote the burden of shipping, soon after prevailed with nearly all the commercial nations of Europe.

There was a certain degree of propriety in taking the *ton* of wine for the unit of burden; the density of this spirit lies about midway between the weightier and the lighter goods that were subject to water-carriage five or six centuries ago, and its measure could therefore represent their average weight and bulk. Wine was also a sort of royal or favorite commodity, and the extent of its transportation very great; its measure was, moreover, one of both bulk and weight, so that whether the space of the hold or the cargo displacement of the hull, were the object of inquiry and survey, the result would be the same in terms. This was a most important consideration, and whether adopted by accident or design, or the intuitions of common sense, its advantages should not be lost sight of in selecting a standard of admeasurement.

In 1379 the first "tonnage" duty was levied on shipping. The British government ordained that "a duty of eightpence *per ton*, for the guard of the seas, be paid by all foreign vessels and foreign fishing ships within the admiralty of the north." A duty of sixpence per ton, per week, per three weeks, or three months, was also levied on all domestic shipping employed in various and corresponding trades. Vessels trading to the Baltic and the north seas paid sixpence "for every *last* of grain carried." In Prussia the *last* of grain is the unit of ship-admeasurement now, as doubtless it was then—grain being the staple of trade in the Baltic just as wine was in the south seas of Europe. From the date of this enactment, shipping continued to be mentioned invariably by tonnage to express terms of burden; the king's levies of shipping, to be furnished by cities and merchants for the wars, were made for vessels above a certain specified *tonnage*; and in complaints against piracy and seizure, with demands for restitution, the term was used to describe the capacity of the vessels in question. About 1417, the Spaniards offered Henry V., of England, "two Carracks for sale," one of which is described as of a capacity equal to 1,400, and the other to 1,000 "butts." The butt, also a wine measure, was equal to half a ton; consequently the former vessel was 700, and the latter 500 tons burden. "Carracks" were the largest vessels then used.

It has been thought by some well-informed writers, that doubt must always exist as to the exact size of the shipping of this period, owing to the difficulty of ascertaining the burden that was then deemed equivalent to a "ton" or "butt." We have shown that the cargo, a package of it being unity, measured the ship—the weight or measurement of the one being equal to the burden of the other, and that the tons and butts spoken of were tons and butts of wine which a vessel could carry; what were the bulk and weight of these measures we will also endeavor to show.

An act of the British Parliament made in 1483, established "a butt of Malmsey [wine] to contain one hundred and twenty-six gallons; every

ton of wine to contain two hundred and fifty-two gallons, &c.," and, it is added, "according to the *old assize and measure* of the same vessels used in this realm"—or since the reign of William the Conqueror.

As early as the year 1257, Henry III. caused it to be declared that "eight pounds should be a gallon of wine measure, &c.;" and these measures and weights were subsequently confirmed from time to time, until Henry VII. altered the old English or Saxon weight of a pound, containing twelve ounces, (raised from thirty-two grains of wheat,) and introduced the Troy pound, which was, however, only three-fourths of an ounce heavier than the old Saxon pound. This ancient weight contained 5,400 grains; the Troy weight contains 5,760; and the imperial pound, avoirdupois, 7,000 grains. The latter is now used in England and the United States for weighing all heavy and bulky articles, and 2,240 of it make one ton, (gross weight.)

From the foregoing it will appear that prior to the sixteenth century, a ton of wine weighed 2,016 pounds, being equal to about 1,555 pounds avoirdupois. A gallon now contains ten pounds avoirdupois, and measures  $277\frac{27}{100}$  cubic inches; the Saxon gallon measured 174, and the Troy gallon of Henry VIII.  $182\frac{52}{100}$  cubic inches. The bulk of a ton of wine was, therefore,  $25\frac{2}{3}$  cubic feet, exclusive of the cask which contained it, which might add a foot or two to the bulk as it would be reckoned for stowage; a ton of wine would contain now  $35\frac{35}{100}$  cubic feet, or 224 gallons, weighing in the aggregate 2,240 pound; so that the "ton" first applied to the admeasurement of shipping, to express burden, was less in bulk and weight by about 28 per cent than our present avoirdupois ton, which is often applied to the estimation of dead-weight cargoes by merchants, but never to the Custom House survey of shipping by surveyors. It is to be noted that, although we have a sort of a system of ship-admeasurement, yet Congress has never fixed any standard or unit of such admeasurement. The *ton* of shipping in the United States is not comparable with any standard of weight or measure used to appreciate other commodities than vessels, as it ought to be; it is a nondescript of the fancy, quite indeterminate.

The shipping of the period in question was, therefore, 28 per cent less in burden, by avoirdupois tons, than vessels of the present day which carry in dead-weight cargoes only the same number of tons that they register; hence, the Spanish Carracks offered to Henry V. would only carry, respectively, 504 and 360 tons, and would class with our brigs and schooners. The apparent magnitude of ancient shipping is considerably diminished by these investigations.

The first act which commanded the admeasurement of vessels of any description was passed by the Parliament of England in 1421, and directed as follows:—"That whereas there is a custom payable to the king of two pence per chaldron on all coals sold to people not franchised in the port of Newcastle-upon-Tyne; and whereas the keels [or lighters] which carry the coals from the land to the ships in that port ought to be of the just portage of twenty (20) chaldrons, according to which burden the custom aforesaid is paid; yet many now making their keels to hold twenty-two or twenty-three (22 or 23) chaldrons, the king is thereby defrauded of his due. Wherefore, it is now enacted that all keels be measured by commissioners, to be appointed by the king, and to be marked of what portage they be, under pain of forfeiting all the said keels which shall be found not marked."

It may be assumed that prior to this enactment government surveyors of shipping were unknown—that when ship-builders departed from fixed dimensions and model, the corresponding burden of which had been ascertained and verified by lading cargo, there were no rules in use for computing the capacity of the new craft, but that in every such case the mode consisted in putting cargo on board. The tons or chaldrons carried, of course, determined the burden.

Mathematical calculations were not successfully applied to naval architecture in England until the middle of the seventeenth century; the quantity of cargo proved the capacity of the ship, and, as in the case of the keels, it sometimes reciprocated the service by measuring the contents of cargo transported.

From 1421 until 1694 there were no further enactments, nor was the law then passed extended to any other class of shipping; at the latter date, however, it was found that, in consequence of "divers new frauds, deceits, and abuses," the method of admeasurement to be applied by the commissioners required to be distinctly defined and prescribed by law. It was accordingly enacted that "the said admeasurement [of the Newcastle keels] shall be by a dead-weight of lead or iron, or otherwise, as shall seem meet to the said commissioners, allowing three-and-fifty-hundred weight [53 cwt.] to every chaldron of coals," etc., "and cause the said keels and boats so measured to be marked and nailed on each side of the stem and stern and midships thereof," etc., "provided that no such keel or boat shall be admeasured, marked, or nailed to carry more than ten (10) such chaldrons at any one time."

The marking was done by driving nails in the outside of the vessel at the load-water line; the burden was registered at some suitable locality, perhaps on the beam at the main-hatch, where in plain figures it was visible to all. The practice of cutting the tonnage of a vessel in figures upon the hatch beam is even now pursued by nations in the North of Europe, and it was probably borrowed from the English coal keels.

This act had at first only a limited jurisdiction, but in 1773 it was extended to the vessels used in lading coals at all the ports of Great Britain, and so amended as to require them to be "admeasured by a dead-weight of lead or iron, allowing twenty-hundred-weight avoirdupois to the ton, and marked and nailed as aforesaid, to denote what quantity of coals each will carry up to the mark so set thereon." Instead of measuring coals by the chaldron they were thenceforth to be estimated by the "ton;" this is now the practice in England and the United States.

The method of making this admeasurement consisted in simply loading the vessel to be measured with lead or iron weights, to the extent (in case of the largest vessels) of ten chaldrons, which is equal to twenty-six-and-a-half tons; and then marking by the nails the draught of water when so loaded. After such measurement it is plain a vessel could be used, as the keels were, as a *hydrostatic balance*, by which to weigh every cargo of coals it should subsequently carry, when immersed to the marked line of the nails, securing the lading of the exact weight and quantity without the possibility of fraud, provided that the hold was kept free from water and spurious weights.

Such a measure was one of pure displacement; dimensions and model exercised no bias whatever on the results, as no measures were taken nor computations made; but the buoyancy between the light and loaded lines

of flotation was ascertained by standard weights, the most correct possible mode of determining it. These vessels are still subject to this peculiar mode of admeasurement, and as there can be no inducement to select bad dimensions or defective models, in view of their uses, the result is that many of them are remarkable for the judicious union of sailing and carrying qualities.

The shipping in the coal trade having been partially provided with an admeasurement system, the vessels employed in the spirit trade next arrested the attention of Parliament in 1720, when it was found that a large smuggling business was carried on by reason of the diminutiveness of the crafts permitted to be engaged in it. It was therefore enacted that no spirits should be imported in vessels of "thirty tons burthen and under;" and to prevent disputes concerning tonnage, it was further enacted that the following rule should be observed:—"Take the length of the keel within board, (so much as she treads on the ground,) and the breadth within board by the midship beam, from plank to plank, and half the breadth for the depth, then multiply the length by the breadth, and that product by the half-breadth, and divide the result by 94, the quotient will give the true tonnage."

Here is the original of the tonnage rules of most commercial nations, none of whom, with the exception of Great Britain, have visibly improved upon it during a period of one hundred and thirty-eight years. This rule, however, was of very limited use in England, as it extended only to the insignificant shipping employed in the spirit trade. The measurements were all to be taken internally, notwithstanding the design was to obtain the tonnage according to displacement; but perhaps the most singular feature of the rule consisted in substituting the *half-breadth* for the depth, and hence, assuming that vessels were, and always would be, built invariably by these proportions. That the depth of vessels—those engaged in the spirit trade, at least—was equal in measurement to the internal half-breadth, in those days, there is ample proof; there are still in England coasting crafts of these proportions, scarcely differing from the like shipping in use when the rule in question was framed.

The absurdity of taking a half of one dimension for another, equally accessible to the surveyor, without regard to the fact of their being equal, would seem to be too great to have escaped the attention of subsequent legislators, not only in England, but in other countries where this rule was subsequently substantially copied—yet such is the case. It is still more singular, however, that this absurd feature should have been thought particularly applicable to ships of more decks than one, and entirely unsuited to those of but one deck, by nearly all the nations that have legislated on the subject, especially in view of the fact, that to vessels of one deck only it was originally applied.

The tonnage sought to be established by the measurement of the spirit vessels was a dead-weight tonnage, and the intention of the law was to ascertain the weight of the actual cargoes which they carried; of course the crude method prescribed was of the most ineligible character. Still, it may be said, that the coal tonnage and spirit admeasurement, extended to a comparatively small portion of the British shipping, but these systems comprised the entire law upon the subject until 1773, when Parliament found it expedient, in order to prevent the "disputes" that were continually arising on various occasions regarding the actual tonnage of

vessels, to establish "one certain rule for this purpose," which should prevail throughout the kingdom. The vessels engaged in the white-herring fishery and in carrying coals, were alone exempted from its provisions. This famous act enunciated the "old rule" of tonnage, so called, and was as follows:—"The length shall be taken on a straight line along the rabbet of the keel of the ship, from the back of the main stern-post to a perpendicular line from the forepart of the main stem under the bowsprit, from which subtracting three-fifths of the breadth, the remainder shall be esteemed the just length of the keel to find the tonnage; and the breadth shall be taken from the outside of the outside plank in the broadest place in the ship, be it either above or below the main wales, exclusive of all manner of doubling planks that may be wrought upon the sides of the ship, then multiplying the length of the keel by the breadth so taken, and that product by half the breadth, and dividing the whole by ninety-four, (94,) the quotient shall be deemed the true contents of the tonnage."

If a ship had to be measured afloat, the length was taken at the load-line from the back of the post to the front of the stem, "subtracting therefrom three inches for every foot of the load draught of water for the rake abaft, and three-fifths of the ship's breadth for the rake forward, the remainder being the length of the keel for tonnage."

In its prominent features this general law is strikingly similar to its immediate predecessor, the main difference being that in one case the measurements are internal, but in the other, external. The rule was framed from vessels in which the external half-breadths were found equal to their respective depths, and whose actual dead-weight cargoes corresponded with the tonnage obtained by application of the rule; the divisor, 94, is altogether arbitrary, and is taken solely for the purpose of dividing the product of the three dimensions so as to obtain a quotient equal to the tonnage found to be carried by vessels from which the rule was deduced. It does not mean that there are 94 cubic feet to the ton, ship measurement, as may appear, for the object of the law was to ascertain the solidity of the lading displacement, and its weight in avoirdupois tons. It could not be otherwise, for the object in framing the rule was to prevent "disputes" regarding dead-weight tonnage, the only kind of tonnage hitherto known to be applied to shipping; and the inconvenience of measuring every ship of the kingdom, and the foreign shipping, entering British ports, by dead-weights of iron or lead, as in the case of the colliers, could have alone induced the government to adopt an approximate rule. This view of the subject is confirmed by the fact that coal vessels were excluded from the operation of this law, no doubt for the reason that exact measurement of tonnage was adjudged more important in their case.

The above rule for tonnage has exercised a greater and more detrimental influence on the proportions and models of shipping than any other known cause recorded in the history of ship-building. The sources of this extraordinary bias lay in excluding from the formula both the actual and absolute *depth* and the *form* of the vessel, neither of which could have the least influence whatever, however material it might be, on the register tonnage, which is always to be taken for the true burden, whether it be true or false.

In 1819, after steam vessels had been introduced, the old law came to

be considered unsuitable for ascertaining their *true* tonnage; a special additional act was therefore passed to meet the requirements of this novel class of shipping. It was established, that for the purpose of admeasuring a steamer, "the length of the engine-room shall be deducted from the length of the keel for tonnage;" the remainder being deemed the just length of the keel to find the tonnage under this modification, it is plain that the engine-room might be made to occupy *two-thirds* of the length of a steamer, or indeed almost any proportion, thereby effecting an immense saving in all the expenses of voyages which should be incurred per tonnage.

In 1821 the mischievous influence of the old law in producing shipping of an inferior description, and virtually prohibiting the construction of the finer-formed models, began to be seriously felt, and the government was induced to appoint a commission of inquiry on the subject. A report was made, but no legislative action taken thereon, the various acts of the "old law" being meanwhile consolidated into one. At length, in the year 1833, a second commission was appointed, "to consider the best mode of measuring the tonnage of ships." In their report the commissioners recommended a measurement of the "internal capacity, including all those parts of a vessel which, being under cover of permanent decks, are available for stowage." The following rules, constructed on this principle, were established in 1836, and denominated "new measurement."

"Divide the length of the upper deck, between the afterpart of the stem and the forepart of the stern-post, into six equal parts.

"*Depths.*—At the foremost, the middle, and aftermost of these points of division, measure in feet and decimals the depths from the under side of the upper deck to the ceiling at the timber strake.

"In the case of a break in the upper deck, the depths are to be measured from a line stretched in a continuation of the deck.

"*Breadths.*—Divide each of these three depths into five equal parts, and measure the inside breadths at the following points, viz. :—at one-fifth and at four-fifths from the upper deck of the foremost and aftermost depths, and at two-fifths and four-fifths of the midship depth.

"*Length.*—At half the midship depth measure the length of the vessel from the afterpart of the stem to the forepart of the stern-post.

"Then to thrice the midship depth add the foremost and the aftermost depths, for *the sum of the depths.*

"Add together the upper and lower breadths at the foremost division, three times the upper breadth and the lower breadth at the after division, and the upper and twice the lower breadth at the after division, for *the sum of the breadths.*

"Then multiply the sum of the depths by the sum of the breadths, and this product by the length, and divide the final product by 3.500, which will give the number of tons for register.

"If the vessel have a poop or half-deck, or a brake in the upper deck, measure the inside mean length, breadth, and height of such part thereof as may be included within the bulk-head; multiply these three measurements together, and, dividing the product by 92.4, the quotient will be the number of tons to be added to the result as above found.

"In order to ascertain the tonnage of open vessels, the depths are to be measured from the upper edge of the upper strake."

The above rule is for the measurement of empty vessels; a second rule was made for the tonning of loaded vessels, which it is not necessary to

repeat here. For ascertaining the tonnage of steam-vessels, the cubical (tonnage) contents of the engine-room was to be deducted from the total measurement found as for a sailing ship; the divisor 92.4 being used to convert cubic feet into tons. The above rules differed essentially from the "old," and all former measurements, in principle, being a tonnage of internal cubical *space* instead of external load displacement by dead-weight; the divisor was taken such as would not materially increase nor diminish the number of tons which it had been usual to assign as the burden of ships if measured by the old rule.

After some experience of its operations, this new rule was found to be uncertain, and incorrect in its general results; being, also, greatly open to evasion, and giving a tonnage to the larger class of vessels considerably beyond their relative proportionate capacity, it soon became nearly as obnoxious as the old law, which it was designed, but scarcely succeeded, to supersede. It was, however, despite its imperfections, superior to the old rule, and encouraged the improvement of British ship-building in an important degree. The main cause of its failure may be ascribed to paucity of measurements, there being only *ten* whereby to obtain the correct mensuration of so large and irregular a space as the interior of the hull of a ship, viz., the length, three depths, and six breadths. That the cubature of a ship's hold could by possibility be accurately obtained by means of so few measurements is, in the nature of the case, preposterous; especially since it was well known where those measurements would be taken, at which places the vessel would be contracted, while she would be enlarged between them, &c. The object of so few measurements was avowedly stated to be the employment of "the smallest number necessary to give the figure of the hull, while affording results sufficiently exact, by an easy arithmetical process," &c.; thus, merely to shorten the survey of tonnage, and lighten the labors of officials having few other duties to perform, the law was framed to sacrifice accuracy, equity, and popular satisfaction.

In 1849, the Lords Commissioners of the Admiralty appointed a third commission to inquire into the defects of measuring ships, and to frame a more perfect rule, in the event of the confirmation of the faults expressed of the rule then in force. In their report, the Commissioners condemned the existing law, and recommended a highly scientific system of external mensuration. Their plan, however, did not meet with approbation by the great body of the shipping community. Its basis—that of external measurement—was deemed ineligible, since the opinions of commercial men preponderated in favor of founding tonnage upon internal space, rather than displacement—upon the interior capacity for stowage, instead of dead-weight burden, having changed from the views which we have shown were originally entertained on this subject, as perhaps the features of cargoes have also been modified. The new law was based on this principle, and shipowners were unwilling to yield it up; accordingly, the plan proposed by the commission was rejected by the government.

The reform of tonnage in England being thus brought into abeyance, a member and honorary secretary of the commission, G. MOORSOM, Esq., was induced to engage in a further disquisition of the subject, with a view to enunciating a rule that would be scientific, and free from objections on the score of eligibility. In accordance with the asseverations of influential British shipowners, that the profits of a vessel are, for the most part, "directly dependent on the quantity of space for the stowage of cargo

and accommodation of passengers," Mr. Moorsom proceeded to investigate and determine the most feasible mode of correctly obtaining the internal cubature of shipping, and so signally succeeded with his task as to construct a system of admeasurement quite perfect in design, and entirely satisfactory to the shipping interests and government of Great Britain. His plan was submitted to Parliament, with the approval of influential authorities among merchants, ship-builders, and scientific men, and after due deliberation adopted. It went into operation on May 1st, 1855. As a just reward for Mr. Moorsom's industry, intelligence, and tact, he was placed in Her Majesty's Customs, London, to supervise and direct the introduction and operation of the new system. This third general law of tonnage enacted in Great Britain will now be considered at length.

The object in framing it was to establish an easy practical mode of admeasurement, that would give a fair and just proportionate amount of tonnage to vessels of all descriptions; that should not encourage the building of objectionable models; and that would produce, as nearly as possible, the same results, in terms of tonnage, as was obtained by the "old rule," commonly denominated "builders' measurement," and would also equalize, as nearly as possible, the tonnage chargeable on British and foreign ships. The rule is the simplest that is compatible with a tolerable degree of accuracy; the variety of measurements are the fewest found absolutely necessary to insure correctness, and thus prevent evasions and the construction of badly-formed vessels; whilst the uniformity of the system renders it as intelligible to the common understanding as any of the imperfect rules that it has superseded.

The plan is based on the *internal capacity* of vessels, because the general body of shipowners in England consider this the more eligible foundation whereon to raise an estimate of a ship's earnings, and hence the most proper basis for levying dues and charges by the government. The first object, therefore, was to attain a practically correct mensuration of this space, in cubic feet; the number thus arrived at, by geometrical means, is divided by one hundred, (100,) to obtain an expression for tonnage. The admeasurement so ascertained is simply a *cubical tonnage*, or true expression of the internal space covered by substantial decks, in which every ton of tonnage represents one hundred cubic feet of space; so that, if by this process one vessel measures 500 tons, and another measures 1,000 tons, we know to a certainty that the latter vessel has double the cubical capacity of the former, and we have thereby, not only a clear knowledge of the *comparative* magnitudes of the two vessels, but of the *real* cubical capacity of each.

The divisor, 100, was adopted mainly to cause the rule to give the same tonnage, on the whole, to the shipping of England, as if the vessels were measured under the "old law;" but besides the advantage of leaving undisturbed all existing contracts, and preserving in unbroken continuity the official index of the increase and decrease of British shipping, the divisor "100" is in other respects, also, a very eligible factor for commercial conveniences.

#### RULE NO. I.

##### *For Admeasurement when the Hold is Clear.*

The length of the vessel is to be taken by a straight line on the upper side of the tonnage deck, (in vessels having three decks, the middle deck

is to be the tonnage deck; in all other cases the upper deck is to be the tonnage deck,) from the inside of the inner plank (average thickness) at the side of the stem, to the inside of the mid-ship stern-timber or plank there, (average thickness,) as the case may be, deducting from this length what is due to the rake of the bow in the thickness of the deck, and what is due to the rake of the stern-timber in the thickness of the deck and one-third of the round of the beam, (this is to get the length at the medium height of deck;) the length so taken is to be divided into a number of equal parts in the different classes of vessels as follows; that is to say:—

1st.	In vessels under 50 feet long, into.....	4 equal parts.
2d.	“ of 50 and under 120 feet long, into.....	6 “
3d.	“ 120 “ 180 “ “ .....	8 “
4th.	“ 180 “ 225 “ “ .....	10 “
5th.	“ 225 and upwards, into ... ..	12 “

and in each case the transverse area of the vessel at each point of division is to be found in the following manner; that is to say, set down from the under side of the deck one-third of the round of the beam, (in the case of a break in the deck, this distance is to be set down from a line stretched in continuation of the deck,) and divide the depth between this point and the flat of the floor (deducting the average thickness of the ceiling) at the inside of the timber-strake, into four equal parts, provided the depth at the middle division of the length should not exceed sixteen feet; then measure, in feet and decimals, the inside breadths (to the average thickness of the ceiling between the respective points of measurement) at the three points of division, and also at the upper and lower points of the depth, and (numbering them from above) multiply the second and fourth by 4, and the third by 2, and to the sum of these products add the first and fifth breadths. This quantity, multiplied by one-third of the common interval between the breadths, is the transverse area at the respective point of longitudinal division; but if the middle depth, as aforesaid, should exceed sixteen feet, the transverse areas, in that case, are to be found as follows; that is to say, divide the depth as aforesaid into six equal parts instead of four, as aforesaid, and measure the breadths as aforesaid at the five points of division, and also at the upper and lower points of the depth, and (numbering them from above) multiply the second, fourth, and sixth by 4, and the third and fifth by 2, and to the sum of these products add the first and seventh breadths. This quantity, multiplied by one-third of the common interval between the breadths, is the area, as before, at the respective point of division. The transverse area at each of the points of division of the length being thus ascertained, the cubical contents, or true internal capacity under the deck, and thence the register tonnage, are to be found from them in the several classes as follows; that is to say:—

1st. In the case of the length being divided into *four* equal parts as aforesaid, the transverse areas at the extreme ends (which, except in the cases hereinafter described, are equal to 0—zero) being numbered 1 and 5, and the intermediate areas at the three points of division being numbered successively 2, 3, 4, multiply the second and fourth by 4, and the third by 2, and to the sum of these products add the first and fifth areas. This quantity, multiplied by one-third of the common interval between the areas, is the cubical content, or true internal capacity; which, being

divided by 100, gives the register tonnage of the vessel under the tonnage deck.

2d. In the case of the length being divided into *six* equal parts as aforesaid, the areas at the extreme ends (which, except in cases hereinafter described, are equal to 0) being numbered 1 and 7, and the intermediate areas at the five points of division being numbered successively 2, 3, 4, 5, 6, multiply the second, fourth, and sixth by 4, and the third and fifth by 2, and to the sum of these products add the first and seventh areas. This quantity, multiplied by one-third of the common interval between the areas, is the cubical content; which, divided by 100, gives the register tonnage of the vessel under the tonnage deck.

3d. In the case of the length being divided into *eight* equal parts as aforesaid, the areas of the extreme ends (which, except in the cases hereinafter described, are equal to 0) being numbered 1 and 9, and the intermediate areas at the seven points of division being numbered successively 2, 3, 4, 5, 6, 7, 8, multiply the second, fourth, sixth, and eighth by 4, and the third, fifth, and seventh by 2, and to the sum of these products add the first and ninth areas. This quantity, multiplied by one-third of the common interval between the areas, is the cubical content; which, divided by 100, gives the register tonnage of the vessel under the tonnage deck.

4th. In the case of the length being divided into *ten* equal parts as aforesaid, the areas at the extreme ends (which, except in the cases hereinafter described, are equal to 0) being numbered 1 and 11, and the intermediate areas at the nine points of division being numbered successively 2, 3, 4, 5, 6, 7, 8, 9, 10, multiply the second, fourth, sixth, eighth, and tenth by 4, and the third, fifth, seventh, and ninth by 2, and to the sum of these products add the first and eleventh areas. This quantity, multiplied by one-third of the common interval between the areas, is the cubical content; which, divided by 100, gives the register tonnage under the tonnage deck.

5th. In the case of the length being divided into *twelve* equal parts as aforesaid, the areas at the extreme ends (which, except as hereinafter described, are equal to 0) being numbered 1 and 13, and the intermediate areas at the eleven points of division being numbered successively 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, multiply the second, fourth, sixth, eighth, tenth, and twelfth by 4, and the third, fifth, seventh, ninth, and eleventh by 2, and to the sum of these products add the first and thirteenth areas. This quantity, multiplied by one-third of the common interval between the areas, is the cubical content; which, divided by 100, gives the register tonnage of the vessel under the tonnage deck.

In order to ascertain the tonnage of open vessels, the upper edge of the upper strake is to form the boundary line of measurement, the depths being taken from an athwartship-line extended from upper edge to upper edge of said strake at each division of the length.

Provided, always, in the several areas hereinbefore described, that in those vessels in which the areas at the extreme ends of the deck are not equal to 0—zero, (as may be the case in some barges and other craft terminated at their ends by transverse areas,) such areas be calculated in the manner above described for the intermediate areas, and added in the process (being the first and last areas) as above described in each case.

If the vessel has a break in the deck, or a poop or round-house, or a closed-in fore-castle, or any other closed-in space, measure its internal

mean length at the middle of its height, and divide it into two equal parts; measure, likewise, three inside breadths, (also at the middle of its height,) namely, one at each end and one at the middle of the length (the foremost breadth, in the case of the fore-castle, being the breadth of the stem;) then, to the sum of the end breadths, add four times the middle breadth, and multiply the whole sum by one-third of the common interval between them, which gives a mean horizontal area of the space; this multiplied by its height, is the cubical content, which, divided by 100, gives the tonnage due to the said space, which is to be added to the former result (except in the case of the fore-castle hereinafter described) for the register tonnage of the vessel.

Provided, always, that, if the tonnage due to the fore-castle, as above ascertained, shall not amount to the one-twentieth part of the tonnage under the tonnage deck, such tonnage shall not be added to the original result, nor be deemed as forming any part of the register tonnage of the vessel; but if the tonnage due to the fore-castle, as aforesaid, shall exceed in amount the one-twentieth part of the tonnage under the tonnage deck, such excess shall be added to the original result for the register tonnage of the vessel.

And if the vessel has a third deck, (or what is commonly called a spar-deck,) measure the inside length, from plank, at the middle of the height between it and the tonnage-deck, and divide the length so taken into the same number of equal parts as there are divisions in the length of the tonnage deck, measure also the inside breadths (at the middle of the height, as aforesaid,) at each of the points of division, also the breadth at the stern and the breadth of the stem; and numbering them successively 1, 2, 3, &c., (No. 1 being that of the stem,) multiply the 2d, 4th, 6th, &c., including all the even-numbered breadths by 4, and the 3d, 5th, 7th, &c., including all the odd-numbered breadths (except the first and last) by 2; to the sum of these products add the first and last breadths; this quantity, multiplied by one-third of the common interval between the breadths, is the mean horizontal area of the space between decks, which, multiplied by the height between the two decks, gives the cubical content; and this divided by 100, is the tonnage due to the space between decks, which is to be added to the above result for the register tonnage of the vessel.

#### *Admeasurement of Steam Vessels.*

In the admeasurement for tonnage of any ship or vessel propelled by steam, by each of the several rules hereinbefore described, the total tonnage is to be ascertained as for sailing vessels, and the tonnage due to the cubical contents of the engine-room is to be deducted from the total tonnage of the vessel as aforesaid, and the remainder is to be deemed the true register tonnage of the ship or vessel; the tonnage due to the cubical contents of the engine-room is to be determined in the following manner—that is to say, measure the inside length of the engine-room between the foremost and aftermost bulkheads, or limits of its length, and having found the transverse areas at these limits to the height of upper deck, and also the area at the middle point between them, in the same manner as hereinbefore described for ascertaining the other area, then to the sum of the two end areas add four times the middle one, and multiply the whole sum by one-third of the common interval between them, which is the

cubical content; and which, divided by 100, gives the tonnage due to the engine-room.

## APPROXIMATE RULE, NUMBER II.

*To determine a Ship's Tonnage with Cargo on Board.*

RULE.—The length is to be measured on the upper deck, from the outside of the outer plank at the stem to the aft side of the stern-post, deducting therefrom the distance of the aft side of the post from the rabbet, where the counter plank crosses the rabbet; measure also the greatest breadth to the outside of the outer planking or wales; and then, having first marked on the outside of the ship the height of the upper deck at the ship's side, girt the vessel at the greatest breadth in a direction perpendicular to the keel, from the height marked on the outside of the ship, as aforesaid, on the one side, to the same height marked on the other side by passing a chain under the keel; to half the girt thus taken and half the main breadth, square the sum and multiply the result by the length of the vessel taken as aforesaid, and the product by the factor .0018 (eighteen ten-thousandths) in the case of vessels built of wood, and by .0021 (twenty-one ten-thousandths) in the case of vessels built of iron, for the register tonnage respectively under the upper deck.

If the vessel has a break in the deck, or a poop, or a round-house, or closed-in fore-castle, or any other covered-in space, they are to be measured as severally described for such spaces in Rule No. 1, and be subject to the same provisions and limitations (if any) as therein prescribed for those spaces, the tonnage due to the same is to be added to the above result for the whole register tonnage of the vessel.

This approximate rule is purposely framed to increase the tonnage of vessels measured by it above the results of Rule No. 1, in order to induce shipowners to have their vessels measured by the correct rule, and when the hold is clear; the increase described is about 3 or 4 per cent.

In remarking upon the utility of the above system of admeasurement, for offering a criterion of the *magnitude* and comparative *capacities* of vessels, our language must be qualified to refer only to sailing vessels, for it will be perceived that in the case of a steam contrasted with a sailing vessel, the relation of magnitude will not hold, for the reason that the steamer has suffered a reduction of the space of the engine-room from the total tonnage as found for a sailing ship.

A steam vessel may, therefore, have the same register tonnage as a sail vessel, but actually exceed her in dimensions equivalent to *two-thirds* of the latter's tonnage! Nor will the equable relation of tonnage to magnitude hold as between steam vessels themselves, for the proportion of engine-room to the entire internal capacity, in the many descriptions of steam vessels, is very capricious, and may vary 50 per cent.

Applied to steam vessels, then, the new law secures no certain knowledge whatever regarding relative magnitudes, but only the space tonnage exclusive of engine-room; we think this a prominent defect in the system, even allowing the propriety, which we do not, of thus excluding the engine-room from customs; the fault could be corrected by registering the entire tonnage of steam vessels in the same manner as for sail vessels, and in addition, noting the deduction to be made for engine-room. Our next article will exhibit the tonnage systems of the United States and other nations, and their influence on the qualities of shipping.

W. W. B.

## Art. III.—COMMERCE AND NAVIGATION OF THE UNITED STATES.

## NUMBER II.

THE foreign commerce of the United States during the last fiscal year, as viewed through the instructive statistics of the official reports, presents a favorable aspect as compared with several previous years. We here-with continue from our March number (pages 310-319) of this volume, the detailed accounts of the commerce and navigation of the United States during the fiscal year 1857, and our compilations of summary statements of the same for a series of years. We now present—1. The indirect import trade; 2. Exports of domestic produce, in American and foreign vessels, to each country, and the dominions of each power; 3. A summary view of the several classes of domestic produce, etc., exported during eleven years; 4. Exports of foreign merchandise to each country, classified as to duties and the vessels conveying them; 5. A similar statement of the imports of foreign merchandise; 6. Clearances of vessels in foreign commerce, their number, tonnage, and crews; 7. Navigation to and from principal countries; 8. Nationality of foreign vessels trading with the United States; 9. Entrances of vessels in foreign commerce.

## INDIRECT TRADE.

From the "summary statement exhibiting the value of the 'indirect (import) trade' of the United States during the year ending June 30th, 1857," we compile the following:—

Imports from	Value.	Imports from	Value.
Prussia.....	\$7,682,735	Belgium.....	\$374,140
Saxony.....	4,438,915	France.....	7,223,250
Bavaria.....	1,076,997	England.....	418,098
Hesse.....	521,859	Scotland.....	82,501
Saxe Coburg Gotha.....	8,787	Ireland.....	89,450
Saxe Meiningen.....	33,973	Hamburg.....	62,511
Saxe Weimar Eisenach....	620	Bremen.....	5,345
Frankfort on the Maine....	868,213	Holland.....	30,894
Wurttemberg.....	211,579	Dutch East Indies.....	33,955
Baden.....	813,957	British East Indies.....	104,485
Hanover.....	25,953	Russia.....	109,981
Brunswick.....	4,843	Denmark.....	3,610
Oldenburg.....	1,709	Spain.....	56,150
Nassau.....	2,330	Sardinia.....	9,679
States not specified.....	163,516	Two Sicilies.....	74,514
Zoll Verein.....	15,855,986	Turkey.....	97,719
Switzerland.....	6,822,634	Countries not named.....	451,766
Austria.....	384,999		
Total indirect import trade in year ending June 30th, 1857.....		\$32,291,667	

This trade was conducted via the ports of countries, etc., as follows:—

England... \$12,630,726	Hamburg... \$2,415,387	Holland..... \$270,550
France... 7,558,364	Belgium... 1,722,479	Austria..... 21,224
Bremen... 7,183,483	N. Granada.. 414,217	Pl's unknown. 75,237

## DOMESTIC EXPORTS—ARTICLES PRODUCED IN THE UNITED STATES.

It is an interesting feature in the subsequent statement of the several classes of domestic exports that, notwithstanding the falling off in the known export of grain, etc., during the fiscal year 1857, the value of the total products of agriculture sold abroad is nearly equal to that of the great exports of this class in 1856, and that the sums from cotton and tobacco were larger than ever before.

VALUE OF DOMESTIC EXPORTS TO EACH COUNTRY.

Whither exported.	In American vessels.	In foreign vessels.	Total to each country.	Total to dominions of each power.
Russia on the Baltic and N. Seas	\$3,970,993	\$385,843	\$4,356,836	\$4,474,842
Russia on the Black Sea.....	69,174	.....	69,174	
Asiatic Russia.....	.....	20,057	20,057	
Russian possessions in N. Am..	3,354	25,421	28,775	30,788
Prussia.....	18,835	11,953	30,788	
Sweden and Norway.....	793,027	580,379	1,373,306	1,449,711
Swedish West Indies.....	76,405	.....	76,405	
Denmark.....	74,200	160,329	234,529	1,653,547
Danish West Indies.....	1,328,232	90,786	1,419,018	
Hamburg.....	606,995	2,592,803	3,199,798	3,199,798
Bremen.....	2,346,401	8,735,706	11,082,107	
Holland.....	2,439,206	1,491,427	3,930,633	4,819,234
Dutch West Indies.....	348,170	21,347	369,517	
Dutch Guana.....	312,182	31,546	343,728	4,819,234
Dutch East Indies.....	118,562	6,794	125,356	
Belgium.....	3,187,432	506,196	3,693,628	3,693,628
England.....	114,870,149	59,657,872	174,528,021	
Scotland.....	2,793,287	1,878,550	4,671,837	214,742,658
Ireland.....	2,828,287	622,327	3,450,614	
Gibraltar.....	484,228	80,086	564,314	214,742,658
Malta.....	228,799	59,686	288,485	
Canada.....	4,539,086	8,485,622	13,024,708	214,742,658
Oth. British N. Am. possessions.	1,745,717	5,165,688	6,911,405	
British West Indies.....	4,068,029	964,026	5,032,055	38,170,227
British Honduras.....	241,934	183,445	425,379	
British Guiana.....	749,048	254,928	1,003,976	38,170,227
British possessions in Africa...	607,688	72,147	679,835	
British Australia.....	2,951,976	345,155	3,297,131	21,996,175
British East Indies.....	864,898	.....	864,898	
France on the Atlantic.....	33,489,454	1,870,974	35,360,428	38,170,227
France on the Mediterranean..	1,688,911	169,101	1,858,012	
French N. American possessions	46,331	91,230	137,561	38,170,227
French West Indies.....	649,334	80,445	729,779	
French Guiana.....	84,447	.....	84,447	21,996,175
Spain on the Atlantic.....	1,906,665	1,055,432	2,962,097	
Spain on the Mediterranean...	705,544	7,010,363	7,715,907	21,996,175
Canary Islands.....	80,068	8,959	89,027	
Philippine Islands.....	66,133	.....	66,133	1,797,341
Cuba.....	9,167,115	212,467	9,379,582	
Porto Rico.....	1,586,110	197,319	1,783,429	1,797,341
Portugal.....	1,097,515	521,542	1,619,057	
Madeira.....	27,873	24,331	52,204	1,797,341
Cape de Verd Islands	46,508	16,600	63,108	
Azores.....	36,319	26,653	62,972	3,057,901
Sardinia.....	2,459,563	598,338	3,057,901	
Tuscany.....	337,400	.....	337,400	3,057,901
Two Sicilies.....	890,875	203,076	1,093,951	
Austria.....	1,121,088	9,129	1,130,217	2,173,065
Austrian possessions in Italy..	1,037,231	5,617	1,042,848	
Turkey in Europe.....	187,975	.....	187,975	527,481
Turkey in Asia.....	339,506	.....	339,506	
Egypt.....	28,163	.....	28,163	28,163
Other ports in Africa.....	2,250,860	57,305	2,308,165	
Hayti.....	2,027,933	188,214	2,216,147	2,216,147
San Domingo.....	24,940	17,343	42,283	
Mexico.....	2,229,822	787,818	3,017,640	3,017,640
Central Republic.....	116,299	.....	116,299	
New Granada.....	1,741,628	28,581	1,770,209	1,770,209
Venezuela.....	1,308,510	51,638	1,360,148	
Brazil.....	5,151,450	116,716	5,268,166	5,268,166

Whither exported.	In American vessels.	In foreign vessels.	Total to each country.	Total to dominions of each power.
Uruguay, or Cisplatine Republic	\$921,140	\$55,230	\$976,370	\$976,370
B. Ayres, or Argentine Republic	1,139,491	62,885	1,202,376	1,202,376
Chili.....	2,368,729	104,499	2,473,228	2,473,228
Peru.....	420,510	29,223	449,733	449,733
Equador.....	34,546	.....	34,546	34,546
Sandwich Islands.....	785,512	17,572	803,084	803,084
Other islands in the Pacific....	31,160	41,827	72,987	72,987
China.....	1,941,107	78,793	2,019,900	2,019,900
Whale fisheries.....	496,258	.....	496,258	496,258
Uncertain places.....	29,509	.....	29,509	29,509
<b>Total, year end'g June 30, 1857</b>	<b>232,815,826</b>	<b>106,169,239</b>	<b>338,985,065</b>	<b>338,985,065</b>
" " 1856	220,291,143	90,295,187	310,586,330	310,586,330
" " 1855	182,885,249	63,823,304	246,708,553	246,708,553
" " <sup>a</sup> 1854	176,109,273	75,947,533	253,390,870	253,390,870
" " 1853	142,810,026	70,607,671	213,417,697	213,417,697
" " 1852	127,340,547	65,028,437	192,368,984	192,368,984
" " 1851	137,934,539	58,755,179	196,689,718	196,689,718
" " 1850	89,616,742	47,330,170	136,946,912	136,946,912
" " 1849	91,363,308	41,303,647	132,666,955	132,666,955
" " 1848	95,544,217	37,359,904	132,904,121	132,904,121
" " 1847	97,841,272	52,796,192	150,637,464	150,637,464
" " 1846	78,634,410	23,507,483	102,141,893	102,141,893
" " 1845	75,483,123	23,816,653	99,299,776	99,299,776
" " 1844	69,706,375	30,008,804	99,715,179	99,715,179

<sup>a</sup> The total of the year 1853-4 includes \$1,343,064, being the value of the domestic exports from San Francisco during the year, which was not received in time to allow of the separation of its items.

VALUE OF EACH CLASS OF DOMESTIC EXPORTS FOR ELEVEN YEARS.

The following statement exhibits a summary view of the several classes of domestic produce, &c., of the United States, exported during eleven years, each ending on the 30th June:—

Years.	Product of			
	The sea.	The forest.	Agriculture.	Tobacco.
1847.....	\$3,468,033	\$5,996,073	\$68,450,383	\$7,242,086
1848.....	1,980,963	7,059,084	37,781,446	7,551,122
1849.....	2,547,654	5,917,994	38,858,204	5,804,207
1850.....	2,824,818	7,442,503	26,547,158	9,951,023
1851.....	3,294,691	7,847,022	24,369,210	9,219,251
1852.....	2,282,342	7,864,220	26,378,872	10,031,233
1853.....	3,279,413	7,915,259	33,463,573	11,319,319
1854.....	3,064,069	11,761,185	67,104,592	10,016,046
1855.....	3,516,894	12,603,837	42,567,476	14,712,468
1856.....	3,356,797	10,694,184	77,686,455	12,221,843
1857.....	3,739,644	14,699,711	75,722,096	20,260,772

  

Years.	Product of		Raw produce.	Specie and bullion.
	Cotton.	Manufactures.		
1847.....	\$53,415,848	\$10,351,364	\$2,102,838	\$2,620
1848.....	61,998,294	12,774,480	1,058,320	2,700,412
1849.....	66,396,967	11,249,877	935,178	956,874
1850.....	71,984,616	15,196,451	953,664	2,045,679
1851.....	112,315,317	20,136,967	1,437,893	18,069,580
1852.....	87,965,732	18,862,931	1,545,767	37,437,837
1853.....	109,456,404	22,599,930	1,835,264	23,548,535
1854.....	93,596,220	26,849,411	2,764,781	38,234,566
1855.....	88,143,844	28,833,299	2,373,317	53,957,418
1856.....	128,382,351	30,970,992	3,125,429	44,148,279
1857.....	131,575,859	30,805,126	2,103,105	60,078,352

FOREIGN EXPORTS—ARTICLES PRODUCED IN FOREIGN COUNTRIES.

VALUE OF FOREIGN MERCHANDISE EXPORTED IN FISCAL YEAR 1856-7.

Whither exported.	Free of duty.	Paying duties.	Total.	In American vessels.	In foreign vessels.
Russia on Baltic & N. Seas	.....	\$171,465	\$171,465	\$152,659	\$18,806
Asiatic Russia	\$400	25,812	26,212	.....	26,212
Russian N. Am. possess'n	.....	57,362	57,361	2,866	54,496
Prussia	.....	14,311	14,311	.....	14,311
Sweden and Norway	.....	27,120	27,120	2,488	24,632
Swedish West Indies	3,431	97	3,528	3,528	.....
Danish West Indies	63,324	34,353	97,677	85,205	12,472
Hamburg	67,526	586,891	654,417	80,839	573,578
Bremen	99,121	262,767	361,888	83,963	277,925
Other German ports	67	188	255	255	.....
Holland	.....	127,244	127,244	81,574	45,670
Dutch West Indies	717	16,062	16,779	14,786	1,993
Dutch Guiana	105	5,999	6,104	6,104	.....
Dutch East Indies	79,159	29,000	108,159	64,961	43,198
Belgium	1,611,348	339,350	1,950,698	1,609,672	341,026
England	1,189,913	1,972,218	3,162,131	1,661,873	1,500,258
Scotland	.....	32,181	32,181	11,935	20,246
Ireland	.....	1,000	1,000	.....	1,000
Gibraltar	26,204	26,861	53,065	50,060	3,005
Malta	12,821	18,171	30,992	26,268	4,724
Canada	1,031,244	2,518,943	3,550,187	2,826,816	723,371
Oth. Brit. N. Am. possess.	294,673	481,509	776,182	189,382	586,800
British West Indies	25,146	27,717	52,863	39,132	13,731
British Honduras	7,053	27,920	34,973	27,322	7,651
British Guiana	1,129	4,489	5,618	5,059	559
British possess'ns in Africa	79	7,831	7,910	7,484	426
British Australia	2,500	141,053	143,553	106,308	37,245
British East Indies	54,012	59,027	113,039	111,000	2,039
France on Atlantic	370,792	561,731	932,523	581,122	350,401
France on Mediterranean	56,932	31,092	88,024	82,849	5,175
French N. Am. possess..	12,031	21,181	33,212	8,480	24,732
French West Indies	490	874	1,364	562	802
French Guiana	.....	1,000	1,000	1,000	.....
Spain on Atlantic	.....	13,882	13,882	13,882	.....
Spain on Mediterranean	6,475	4,736	11,211	3,112	8,099
Canary Islands	608	307	915	585	330
Philippine Islands	166,766	4,713	171,479	151,336	20,143
Cuba	5,288,732	255,129	5,543,861	5,541,204	2,657
Porto Rico	116,632	35,413	152,045	146,556	5,489
Portugal	10,199	6,189	16,388	2,762	13,626
Madeira	684	.....	684	.....	684
Cape de Verd Islands	388	1,007	1,395	920	475
Azores	11,762	5,989	17,751	6,873	10,878
Sardinia	58,648	18,919	77,567	53,426	24,141
Two Sicilies	45,492	13,477	58,969	32,392	26,577
Austria	140,516	112,211	252,727	221,386	31,341
Austrian pos'ns in Italy	25,614	4,275	29,889	2,000	27,889
Turkey in Europe	6,616	773	7,389	7,389	.....
Turkey in Asia	50,109	20,667	70,776	70,776	.....
Other ports in Africa	66,585	109,996	176,581	176,581	.....
Hayti	6,469	313,048	319,517	294,366	25,151
San Domingo	971	1,095	2,066	1,358	708
Mexico	10,752	586,814	597,566	380,938	216,620
Central Republic	430	20,292	20,722	13,579	7,143
New Granada	39,906	227,574	267,480	252,469	15,011
Venezuela	2,833	64,597	67,430	61,121	6,309
Brazil	130,839	146,202	277,041	262,661	14,380
Uruguay, or Cispl. Rep.	8,997	20,805	29,802	29,169	633
B. Ayres, or Arg. Rep..	43,910	67,521	111,431	107,781	3,650

Whither exported.	Free of duty.	Paying duties.	Total.	In American vessels.	In foreign vessels.
Chili.....	\$22,494	\$411,463	\$433,957	\$352,002	\$81,955
Peru.....	1,450	56,749	58,199	26,151	32,048
Equador.....	.....	2,630	2,630	2,630	.....
Sandwich Islands.....	3,384	140,965	144,349	144,349	.....
China.....	2,100,163	275,067	2,375,230	2,099,128	276,102
Other ports in Asia.....	.....	642	642	642	.....
Whale fisheries.....	5,329	16,681	21,010	12,955	8,055
Total.....	13,383,970	10,591,647	23,975,617	18,399,031	5,576,586

Thus classified as to warehousing—

From warehouse.....	5,195,960	5,195,960	3,965,837	1,230,123
Not from warehouse.	13,383,970	5,395,687	18,779,657	4,346,463

And thus as to duties—

Paying duties.....	10,591,647	7,505,275	3,086,372
Free of duty.....	13,383,970	10,893,756	2,490,214

From the foregoing table we collect the subjoined statistics of the value of the aggregate exports of foreign merchandise to those powers having more than one dominion:—

Russia and possessions....	\$255,039	Spain and possessions....	\$5,893,393
Sweden ".....	30,648	Portugal ".....	36,218
Holland ".....	258,286	Austria ".....	282,616
Great Britain ".....	7,963,694	Turkey ".....	178,165
France ".....	1,056,128		

The succeeding table shows the value of the foreign merchandise exported in each fiscal year (ending June 30) from 1844 to 1857, inclusive:

Fiscal years.	Free of duty.	Paying duty.	Total.	In American vessels.	In foreign vessels.
1856-57.	\$13,383,970	\$10,591,647	\$23,975,617	\$18,399,031	\$5,576,586
1855-56.	4,741,810	11,636,768	16,378,578	12,004,619	4,373,959
1854-55.	8,806,475	19,641,818	28,448,293	20,365,313	8,082,980
1853-54 <sup>a</sup>	6,842,342	17,406,172	23,748,514	15,221,993	8,526,521
1852-53.	6,887,879	11,170,581	17,558,460	12,218,776	5,339,684
1851-52.	7,774,457	9,514,925	17,289,382	12,136,390	5,152,992
1850-51.	13,145,326	8,552,967	21,698,293	14,522,150	7,176,143
1849-50.	7,575,447	7,376,361	14,951,808	9,998,299	4,953,509
1848-49.	6,463,589	6,625,276	13,088,865	9,169,815	3,919,050
1847-48.	14,551,511	6,576,499	21,128,010	14,113,714	7,014,296
1846-47 <sup>b</sup>	3,657,251	4,353,907	8,011,158	5,975,138	2,036,020
1845-46 <sup>c</sup>	5,824,046	5,522,577	11,346,623	7,915,765	3,430,858
1844-45 <sup>d</sup>	10,175,099	5,171,731	15,346,830	11,459,319	3,887,511
1843-44 <sup>e</sup>	7,522,359	3,962,508	11,484,867	8,744,154	2,740,713

<sup>a</sup> The total of the year 1853-54 actually is \$24,850,194, or \$1,101,680 more than above stated. This \$1,101,680 is the value of the exports of foreign merchandise from San Francisco during that year, and which was received after the rest of the tables were completed, and too late to permit the separation of its items for the report of that year.

<sup>b, c, d, e.</sup> The Treasury statements for the years 1843-46, and that of 1846-47, to November 30th, 1846, present returns of the merchandise exported separated into the classes of "paying duties, ad valorem" and "paying specific duties;" from which we have aggregated the above totals of the dutiable merchandise. The separate items are—

	Ad valorem.	Specific.	Total.
1846-47.....	\$3,310,797	\$1,043,110	\$4,353,907
1845-46.....	2,702,251	2,820,326	5,522,577
1844-45.....	2,107,292	3,064,439	5,171,731
1843-44.....	1,706,206	2,256,302	3,962,508

FOREIGN IMPORTS—ARTICLES PRODUCED IN FOREIGN COUNTRIES.

VALUE OF FOREIGN MERCHANDISE IMPORTED DURING THE YEAR.

Whence Imported.	Free of duty.	Paying duty.	TOTAL.	In American vessels.	In foreign vessels.
Russia on Bal. & N. Seas	\$55,830	\$1,379,564	\$1,435,394	\$1,214,777	\$220,617
Russia on Black Sea...	.....	43,626	43,626	.....	43,626
N. Am. Russian poss...	15	40,385	40,400	16,234	24,166
Prussia .....	.....	66,127	66,127	66,127	.....
Sweden and Norway..	232	744,580	744,812	450,730	294,082
Swedish West Indies..	2,065	10,017	12,082	12,082	.....
Denmark.....	.....	3,809	3,809	.....	3,809
Danish West Indies..	46,696	234,863	281,559	207,893	73,666
Hamburg.....	46,323	4,601,085	4,647,413	251,653	4,395,760
Bremen.....	133,120	10,540,403	10,723,523	5,414,951	5,308,572
Other German ports..	.....	248	248	.....	248
Holland.....	221,384	2,248,378	2,469,762	1,435,614	1,034,148
Dutch West Indies...	7,302	510,952	518,254	480,376	37,878
Dutch Guiana.....	1,400	373,061	374,461	303,166	71,295
Dutch East Indies.....	830,829	466,570	1,287,399	1,287,399	.....
Belgium.....	49,635	5,010,676	5,060,311	3,906,092	1,154,219
England.....	5,761,012	117,712,517	123,473,529	81,818,923	41,654,606
Scotland.....	53,070	7,163,041	7,216,111	1,427,118	5,788,993
Ireland.....	4,318	109,135	113,453	82,299	31,154
Gibraltar.....	2,166	41,792	43,958	35,283	8,675
Malta.....	4,424	110,053	114,477	84,760	29,717
Canada.....	17,600,737	691,097	18,291,834	9,422,726	8,869,108
Oth. Brit. N. Am. poss.	3,695,815	186,647	3,882,462	649,605	3,182,857
British West Indies..	427,809	2,225,889	2,653,698	1,924,446	729,252
British Honduras....	56,957	378,073	435,030	390,072	44,958
British Guiana.....	1,482	816,871	818,353	695,844	122,509
British poss. in Africa.	11,026	687,249	698,275	681,568	16,707
British Australia....	34,241	31,391	65,632	42,232	24,400
British East Indies...	424,408	10,341,806	10,766,214	10,357,413	408,801
France on the Atlantic	2,032,409	42,686,364	44,718,773	30,005,477	14,713,296
France on Medit'anean	51,387	3,022,667	3,074,054	2,517,502	556,552
French N. Am. poss...	205	94,844	95,049	.....	95,049
French West Indies..	51,675	8,014	59,689	59,460	229
French Guiana.....	30,411	22,882	53,293	53,293	.....
Spain on the Atlantic.	3,692	689,290	692,982	605,299	87,683
Spain on Medit'anean.	26,307	2,023,727	2,050,034	1,815,106	734,928
Canary Islands.....	.....	44,065	44,065	36,808	7,257
Philippine Islands...	63,217	3,590,546	3,653,763	3,360,425	293,338
Cuba.....	1,025,190	44,217,911	45,243,101	43,059,585	2,183,516
Porto Rico.....	10,423	5,738,172	5,748,600	4,393,701	854,899
Portugal.....	6,948	415,888	422,836	99,385	323,451
Madeira.....	8	34,106	34,114	.....	34,114
Cape de Verd Islands.	14,534	11,271	25,805	11,255	14,550
Azores.....	33,654	17,205	50,859	48,466	2,393
Sardinia.....	754	216,533	217,287	78,975	138,312
Tuscany.....	76,229	1,673,773	1,750,002	1,273,497	481,505
Papal States.....	60	54,612	54,672	60	54,612
Two Sicilies.....	51,942	1,524,011	1,575,953	1,167,330	408,623
Austria.....	22,693	373,869	396,562	141,028	255,534
Austrian poss. in Italy	.....	25,803	25,803	22,677	3,026
Ionian Republic.....	.....	11,179	11,179	11,179	.....
Greece.....	.....	36,533	36,533	.....	36,533
Turkey in Europe....	245	7,160	7,405	7,396	9
Turkey in Asia.....	2,590	721,855	724,445	677,983	46,462
Egypt.....	400	105,758	106,158	.....	106,158
Other ports in Africa..	161,935	1,359,730	1,521,665	1,502,197	19,468
Hayti.....	1,550,634	739,608	2,290,242	2,182,750	107,492
San Domingo.....	1,609	108,265	109,874	44,375	75,499

Whence Imported.	Free of duty.	Paying duty.	TOTAL.	In American vessels.	In foreign vessels.
Mexico.....	\$4,021,291	\$964,566	\$5,985,857	\$3,701,317	\$2,284,540
Central Republic....	114,637	176,423	288,060	213,882	74,178
New Granada.....	413,932	2,054,237	2,468,169	2,423,515	44,654
Venezuela.....	1,128,550	2,731,968	3,860,518	3,149,744	710,774
Brazil.....	18,030,733	3,429,995	21,460,733	19,320,149	2,140,584
Uruguay, or Cisp. Rep.	.....	368,297	368,297	314,560	53,737
B. Ayres, or Arg. Rep.	11,048	2,773,425	2,784,473	2,725,169	59,304
Chili.....	1,365,457	2,376,982	3,742,439	3,096,733	645,706
Peru.....	107,126	101,621	208,747	177,802	30,945
Equador.....	15,750	53	15,803	15,803	.....
Sandwich Islands....	67,200	137,216	204,416	190,415	14,001
China.....	5,628,895	2,728,037	8,356,932	7,865,080	491,852
Other ports in Asia...	.....	5,660	5,660	.....	5,060
Whale Fisheries.....	86,225	20,960	107,186	96,561	10,625
Pacific Isl'ds exc. S. Is.	.....	748	748	748	.....

Total in 1856-7....	66,729,306	294,160,835	360,890,141	259,116,170	101,773,971
Total in 1855-6....	56,955,706	257,685,236	314,639,942	249,972,512	64,667,430
Total in 1854-5....	40,090,336	221,378,184	261,468,520	202,234,900	59,233,620
Total in 1853-4a....	32,519,034	268,975,060	301,494,094	215,376,273	86,117,821
Total in 1852-3....	31,333,534	236,595,113	267,978,647	191,688,325	76,290,322
Total in 1851-2b....	29,692,934	178,603,921	208,296,855	155,258,467	53,038,388
Total in 1850-1....	25,106,587	191,118,345	216,224,932	163,650,543	52,574,389
Total in 1849-50....	22,710,382	155,427,936	178,138,318	139,657,043	38,481,275
Total in 1848-9....	22,377,665	125,479,774	147,857,439	120,382,152	27,475,287
Total in 1847-8....	22,716,603	132,232,325	154,948,928	123,647,232	26,351,696
Total in 1846-7c....	41,772,636	104,773,002	146,545,638	113,141,357	33,404,281
Total in 1845-6d....	24,767,739	96,924,058	121,691,797	106,008,173	15,683,624
Total in 1844-5e....	22,147,340	95,106,724	117,254,064	102,438,481	14,816,083
Total in 1843-4f....	24,766,881	83,668,154	108,435,035	94,174,673	14,260,362

(a.) The true total of imports for the year 1853-4, actually is \$304,562,381, or \$3,068,287 more than stated in the table. This additional item consists of the value of the imports at San Francisco during the year, the account of which was not received by the Treasury Department in time to be included in its detailed report for the year.

(b.) The true total of imports for the year 1851-2 is \$212,945,442, which is \$4,648,587 more than stated in the table. This sum consists of the aggregate value of imports into San Francisco, but the species of merchandise and other accounts of it were not returned by the collector.

(c, d, e, f.) The returns for the years 1843-6, and for that of 1846-7 to November 30th, 1846, present statements of the imports separated into the classes of "paying duties *ad valorem*," and "paying specific duties," from which we have compiled the above totals of the imports paying duty. The separate items are—

1846-7.....	.....ad valorem,	\$91,055,958	specific,	\$13,717,044	total,	\$104,773,002
1845-6.....	"	60,660,453	"	36,263,605	"	96,924,058
1844-5.....	"	60,191,862	"	34,914,862	"	95,106,724
1843-4.....	"	52,315,291	"	31,352,863	"	83,668,154

From the table of foreign imports in the year ending June 30th, 1857, we compile the annexed aggregates of the value of imports from those powers having two or more dominions:—

Russia and possessions...	\$1,519,420	France and possessions...	\$48,000,858
Sweden ".....	756,894	Spain ".....	57,432,545
Denmark ".....	285,368	Portugal ".....	533,714
Holland ".....	4,649,876	Austria ".....	422,365
Great Britain ".....	168,523,026	Turkey ".....	731,850

CLEARANCES OF VESSELS IN FOREIGN COMMERCE.

Vessels.	Number.	Tonnage.	Men.	Boys.
American.....	11,134	4,580,651	154,290	863
Foreign.....	10,969	2,490,170	119,867	1,212
Total year ending June 30, 1857..	22,103	7,070,821	274,157	2,075
“ “ 1856..	21,778	7,000,473	271,380	2,040
“ “ 1855..	19,490	6,179,301	244,716	1,639
“ “ 1854..	19,073	6,019,194	239,645	1,993
“ “ 1853..	21,681	6,065,579	286,008	3,095
“ “ 1852..	19,325	5,278,165	211,465	3,290
“ “ 1851..	19,986	5,130,054	203,299	5,356
“ “ 1850..	18,195	4,361,002	189,774	6,097
“ “ 1849..	20,313	4,429,483	198,928	6,126
“ “ 1848..	17,329	3,865,439	170,715	7,256
“ “ 1847..	14,370	3,378,998	162,554	3,238
“ “ 1846..	14,221	3,189,206	162,536	2,492
“ “ 1845..	13,780	2,984,252	155,451	3,182
“ “ 1844..	13,843	2,917,738	154,375	4,072

NAVIGATION TO AND FROM PRINCIPAL COUNTRIES IN FISCAL YEAR 1856-7.

Countries.	CLEARED.			ENTERED.		
	Vessels.	Tonnage.	Men.	Vessels.	Tonnage.	Men.
Canada.....	8,796	2,238,234	104,666	8,990	2,345,515	107,811
Oth. Brit. N. Am...	4,625	781,230	32,570	4,101	521,352	23,483
British West Indies	775	131,331	5,857	660	109,824	4,946
Cuba.....	1,906	604,534	22,024	2,381	746,245	27,203
Porto Rico.....	234	41,183	1,703	392	70,184	2,967
Hayti.....	248	40,097	1,742	355	60,558	2,572
Mexico.....	260	50,072	2,521	216	37,846	2,090
Central Republic...	39	35,281	1,597	42	38,042	1,791
New Granada.....	156	126,552	5,797	172	138,606	6,621
Venezuela.....	91	19,786	827	130	28,329	1,178
Brazil.....	291	87,898	3,126	425	126,452	4,524
Uruguay.....	72	24,439	810	10	2,530	107
Buenos Ayres....	77	28,235	901	52	16,872	606
Chili.....	87	53,233	1,555	48	21,579	886
Peru.....	75	74,985	1,874	124	124,608	3,136
Sandwich Islands..	43	17,133	535	46	16,929	820
England.....	1,276	1,299,975	35,864	1,427	1,391,935	38,188
Scotland.....	110	83,404	2,868	131	100,169	3,510
Ireland.....	96	46,096	1,363	29	19,285	573
Hamburg.....	71	53,717	1,943	85	63,423	2,281
Bremen.....	174	119,389	4,516	215	145,831	5,354
Holland.....	98	51,489	1,466	61	30,867	994
Belgium.....	64	55,017	1,704	67	53,685	1,641
France on Atlantic..	307	249,275	7,658	278	229,183	7,397
France on Med'n...	87	34,368	1,200	76	38,794	1,142
Spain on Atlantic..	106	38,686	1,276	76	38,315	1,116
Spain on Med'n...	276	88,692	3,491	164	56,926	1,978
Portugal.....	100	31,410	1,061	43	12,218	436
Sardinia.....	43	21,879	686	34	17,766	543
British East Indies.	96	69,712	2,002	143	113,784	3,230
China.....	98	69,029	1,899	76	64,029	1,915
Australia.....	84	52,318	1,536	15	4,874	203
Whale Fisheries...	193	57,983	4,762	166	48,747	4,250

NATIONALITY OF FOREIGN VESSELS TRADING WITH THE UNITED STATES.

From the statement exhibiting the national character of the foreign vessels which entered into and cleared from the United States for foreign countries during the year ending June 30th, 1857, we present the annexed summary:—

## FOREIGN VESSELS.

National character.	ENTERED.			CLEARED.		
	Number.	Tons.	Men.	Number.	Tons.	Men.
Austrian.....	3	1,331	45	3	1,317	34
Belgian.....	9	12,337	560	9	13,824	652
Brazilian.....	3	777	38	2	524	24
Bremen.....	197	115,760	3,604	216	124,641	3,931
British.....	10,046	2,070,926	101,130	9,932	2,068,116	103,196
Chilian.....	12	3,976	170	14	5,162	221
Danish.....	37	9,887	397	38	10,613	420
Dominican.....	1	305	14	1	304	10
Dutch.....	34	10,875	404	33	9,983	372
Equadorian.....	1	210	9	1	266	10
French.....	81	29,397	1,737	81	32,284	1,956
Hamburg.....	89	62,021	2,300	92	63,398	2,333
Hanoverian.....	7	2,376	88	6	1,164	52
Lubec.....	2	541	21	2	557	22
Mecklenburg.....	7	2,662	87	7	2,797	91
Mexican.....	68	3,195	625	73	8,210	633
New Granadian.....	5	975	48	6	1,563	59
Oldenburg.....	31	13,187	436	30	13,584	414
Papal.....	1	444	16	1	444	13
Peruvian.....	7	3,805	117	5	1,321	70
Portuguese.....	26	4,885	239	31	6,960	310
Prussian.....	11	4,931	167	17	8,626	255
Russian.....	5	1,511	95	3	1,340	69
Sandwich Islands...	7	879	63	7	392	64
Sardinian.....	21	8,454	343	21	7,860	324
Sicilian.....	19	5,748	266	26	7,321	379
Spanish.....	233	66,828	3,022	248	73,272	3,185
Swedish.....	53	19,234	670	56	20,866	679
Tuscan.....	1	676	22	1	1,191	19
Venezuelan.....	7	1,763	64	7	1,700	70
Total.....	11,024	2,464,946	116,797	10,969	2,490,170	119,867

From the foregoing table we have omitted the statements of boys in the crews, viz.:—Entered, British, 1,233; Bremen, 2; French, 2; Sardinia, 1; Spanish, 1; Swedish, 1; total, 1,240. Cleared, British, 1,206; Bremen, 3; French, 2; Spanish, 1; total, 1,212.

## ENTRANCES OF VESSELS IN FOREIGN COMMERCE.

Vessels.	Number.	Tonnage.	Men.	Boys.
American.....	11,304	4,721,370	161,062	833
Foreign.....	11,024	2,464,946	116,797	1,240
Total year ending June 30, 1857..	22,328	7,186,316	277,859	2,073
“ “ 1856..	21,682	6,872,253	267,173	1,964
“ “ 1855..	19,327	5,945,339	237,142	1,473
“ “ 1854..	19,103	5,884,339	236,170	1,938
“ “ 1853..	21,677	6,281,943	266,144	2,375
“ “ 1852..	19,571	5,292,880	213,826	2,341
“ “ 1851..	19,710	4,993,440	204,267	4,987
“ “ 1850..	18,512	4,348,639	190,255	5,915
“ “ 1849..	20,200	4,368,836	192,751	5,980
“ “ 1848..	17,274	3,798,673	169,120	6,996
“ “ 1847..	14,229	3,321,705	160,469	3,420
“ “ 1846..	13,818	3,110,853	160,158	2,364
“ “ 1845..	13,723	2,946,049	154,335	3,262
“ “ 1844..	13,725	2,894,430	153,407	4,425

Art. IV.—COMMERCIAL AND INDUSTRIAL CITIES OF THE UNITED STATES.

NUMBER LIII.

DETROIT, MICHIGAN.

PROGRESS IN POPULATION—BUSINESS AND CITY IMPROVEMENTS—VALUATION AND CITY TAXES—EXPORTS OF LEADING ARTICLES IN 1857, QUANTITY AND VALUE—AMOUNTS OF EXPORTS BY RAILROAD AND BY THE LAKE—CUSTOM-HOUSE STATEMENTS OF EXPORTS—IMPORTS—FOREIGN IMPORTS, CUSTOM-HOUSE STATEMENTS—EFFECTS OF THE RECIPROCITY TREATY—IMPORTS, FREE OF DUTY, AND DUTIABLE—DUTIES COLLECTED—ARRIVALS AND CLEARANCES OF VESSELS—VESSELS BELONGING TO THE DISTRICT—OPENING OF NAVIGATION FOR TWENTY YEARS—TRADE IN GRAIN, PROVISIONS, AND OTHER ARTICLES—TRAFFIC BY RAILROADS.

The present article we have compiled from the "Statement of the Trade and Commerce of Detroit for 1857, prepared by M. D. HAMILTON, Secretary of the Board of Trade," first published in the *Advertiser* of that city, and reprinted in a pamphlet, with additions. We have necessarily condensed that detailed report, but have collected most of its important statements in this article; and such others as are now omitted, we shall present hereafter. Our last lengthy account concerning Detroit was published in the *Merchants' Magazine* of November, 1856, (vol. xxxv., pp. 554-571,) in which we presented its statistics to the commencement of 1856.

POPULATION, ETC.—Detroit was permanently organized into a trading port in the year 1701, when it contained comparatively few white inhabitants. In 1805, it was almost entirely destroyed by fire. A few houses outside its organized limits remained, and two of them are still standing in thickly settled portions of the city. Its population in that year is stated to have been 256, and at subsequent dates as follows:—

1820.....	1,442	1837.....	9,763	1850.....	21,057
1830.....	2,222	1840.....	9,102	1853.....	34,436
1834.....	4,973	1845.....	10,948	1854.....	40,373

The estimate in the report for 1855 is 51,000; and for 1856, 59,000. During the last year, 1857, two new wards were added containing each not far from 4,000 inhabitants. The increase in population, aside from these wards, according to the school census was about 3,000, making the aggregate population, (according to the report,) within the city's limits at the close of 1857, 70,000.

BUSINESS AND CITY IMPROVEMENTS.—The following table, compiled from the annual assessment reports of the Secretary of the Board of Water Commissioners, shows a steady and healthy increase in population and general business:—

	1855.	1856.	1857.		1855.	1856.	1857.
Number of families...	6,328	6,713	8,032	Private schools.....	24	17	22
Stores .....	335	383	420	Churches.....	27	30	30
Groceries.....	260	247	280	Iron machine shops...	10	11	10
Taverns .....	49	52	56	Iron foundries.....	7	8	11
Offices.....	175	236	255	Breweries .....	17	20	23
Mechanic shops.....	343	399	421	Bakeries.....	21	27	28
Stationary steam engines	46	50	69	Fire engine-houses...	9	9	13
Forwarding houses...	24	26	29	Flour mills.....	3	4	5
Public schools.....	25	25	35	Saw mills.....	6	6	9

A note accompanying the statement for 1855, which was given on page 556 of vol. xxxv. of the *Merchant's Magazine*, mentions that "this number more properly represents the number of housekeepers than the number of families. Families boarding (a considerable number) are not set down;"

and we infer that the same remark is applicable to the statements for 1856 and 1857.

The report of last season, (1857,) shows that at the time the assessment was made, in April, May, and June, there were in construction within the city limits, 58 brick dwelling-houses, 151 wood dwelling-houses, 37 brick stores, 5 brick mechanic shops, 3 wood mechanic shops, 2 brick breweries, and one brick pumping-house, at a total cost of \$507,600. There were also under construction at the same time, the United States Marine Hospital, at a cost of \$80,000; United States Court-house and Post-office, \$100,000; fire engine-houses and a public school-house, \$45,000; new hydraulic engine and new reservoir, \$75,000; and the city were expending for paving streets, \$50,000; for public sewers, \$15,000; making a total expenditure for permanent improvements in the city of \$872,600. In the year 1856, the cost to the city for the two items of street paving and sewerage alone was \$120,000.

During 1857 there were laid in the city 2,037 feet of iron water pipe, and three miles and 5,191 feet of wooden logs. The total amount of iron pipe now laid and in use in the city is 36 miles and 2,239 feet. The total amount of wooden logs now in use is 12 miles and 2,868 feet, making a total of almost forty-nine miles of water distribution pipe now in use. The embankment of the new water-works reservoir is raised to within three-and-a-half feet of the grade, and only requires about one month's labor to complete it. Both basins are now in use. The works are constructed on a much larger scale than is required to supply the present population, and probably adequate for at least three times the present number of consumers.

All the principal business streets in the city are well and substantially paved, and the sum of \$50,000 will hereafter be spent annually in paving; a larger expense being prohibited by the charter.

VALUATION AND CITY TAXES.—The following table exhibits the valuation and the aggregate city tax for each of the last five years:—

	1853.	1854.	1855.	1856.
Valuation.....	\$10,741,657 00	\$12,524,095 00	\$12,864,733 00	\$13,757,583 00
Aggregate tax.	102,579 05	122,598 92	166,564 77	164,542 84

The statement of the valuation in 1857 was \$14,746,000. The aggregate tax for 1857 was \$167,881 41.

EXPORTS.—The following statement, compiled from the table in the report, shows the quantity and estimated value of the leading articles of export for the year 1857:—

	Quantity.	Value.		Quantity.	Value.		
Ashes.....	casks	3,407	\$102,210	Leather.....	rolls	3,133	\$125,320
Apples.....	bbls.	9,496	9,496	Lumber....	thousand	15,022	180,264
Ale & beer.	packages	4,709	14,124	Lath.....		6,354	9,531
Beef.....	bbls.	5,279	52,790	Oats.....	bush.	221,988	88,715
Butter.....	lbs.	281,300	42,195	Pork.....	bbls.	11,272	225,440
Copper.....	lbs.	5,376,000	1,619,800	Potatoes....	bush.	44,573	22,286
Corn.....	bush.	259,629	129,814	Staves.....	thousand	8,500	297,500
Clov'r & grass-se'd.	bu.	10,786	17,222	Tallow.....	bbls.	4,372	131,160
Cranberries...	bush.	3,568	14,272	Wheat.....	bush.	519,476	519,476
Flour.....	bbls.	479,160	2,395,800	Wool.....	lbs.	3,661,790	1,464,716
Fish.....		8,254	57,778	Cattle.....	head	26,792	1,339,600
Fish.....	half bbls.	15,871	63,484	Live hogs....	No.	141,859	1,418,590
Hides and skins..	No.	59,161	165,650	Dressed hogs.....		12,529	125,290
Hay.....	bales	1,377	3,440	Sheep.....	head	26,758	43,516
Lard..	barrels & kegs	8,286	316,920				
Total value.....							\$10,996,399

The three following tables exhibit the exports from the port of Detroit for the year 1857, by lake and by Great Western Railway, as compiled from the forwarders' shipping books:—

ARTICLES EXPORTED BOTH BY RAILROAD AND BY THE LAKE.

		Gt. Western		Gt. Western	
		Railroad.	Lake.	Railroad.	Lake.
Ashes.....	casks	1,141	2,266	Lard.....	tc. 2,462
Apples.....	bbls.	154	9,342	Leather.....	rolls 1,822
Beef.....		3,283	1,759	Miscellaneous...	pkgs. 5,013
".....	tierces	158		".....	tons ... 1,255
Butter.....	kegs	278	2,417	Malt.....	bags 23
".....	bbls.	13	66	Nails.....	kegs 135
Beans.....	bags	44	812	Oats.....	bush. 55,883
".....	bbls.		67	Pork.....	bbls. 6,983
Broom-corn....	bales	1,664	84	".....	tc. 161
Buffalo robes....		15	65	Potatoes.....	bags 650
Corn.....	bush.	157,179	102,450	Provisions.....	bbls. 944
Corn-meal.....	bags	330	4,941	Rags.....	bales 252
".....	bbls.	11	1,667	Salt.....	bbls. ... 7,964
Clov'r & grass seed.	bags	3,095	1,074	".....	bags 60
".....	bbls.	91		Shorts.....	
Dried fruit... packages		17	259	Sheep pelts....	bdls. 1,020
Deer-skins.....	bdls.	584	245	Tobacco & snuff.	pkgs. 923
".....	No.	118		Tallow.....	bbls. 3,641
Deer, dead.....		29	136	".....	tc. 91
Flour.....	bbls.	175,760	303,400	Wheat.....	bush. ... 396,031
Fish.....		388	7,866	".....	bags 7,263
".....	half bbls.		15,871	".....	bbls. 2,682
Furs.....	packages	372	215	Wool.....	lbs. 702,400
Grease.....	bbls.	657	31	Whisky.....	bbls. 30
Hides and skins... No.		31,078	15,075	Water & stone lime...	
".....	bdls.	628	680	Cattle.....	head 26,480
".....	casks	81	30	Hogs, live.....	No. 141,359
Highwines.....		325	400	".....	dressed ... 12,148
Hay.....	bales	73	1,304	Horses.....	
Lard.....	bbls.	4,062	47	Sheep, live.....	26,402
".....	kegs	351	133	".....	dressed.....

ARTICLES EXPORTED ONLY BY GREAT WESTERN RAILWAY.

Agricultural implements.	pkgs.	1,490	Hemp.....	bales	35
Bacon.....	boxes	2,827	Hams.....	casks	215
".....	pieces	1,714	".....	bbls.	205
Cranberries.....	bbls.	11	".....	tc. 675	
".....	bags	36	".....	hhds.	50
Cotton.....	bales	147	Matches.....	pkgs.	225
Cut meat.....	pieces	1,962	Side meat.....	hhds.	110
Game.....	pkgs.	232			

ARTICLES EXPORTED ONLY BY THE LAKE.

Ale and beer.....	bbls.	4,709	Hops.....	bales	27
Barley.....	bush.	100	Hoops.....	bdls.	199
Buckwheat flour.....	bags	109	Lumber.....	feet	15,022,200
".....	bbls.	27	Lath.....	pes.	6,355,000
Brick.....	No.	66,787	Oil.....	bbls.	218
Cider.....	bbls.	280	Onions.....	bbls.	1,079
Cedar posts.....	No.	150	".....	bags	105
Coal.....	tons	310	Plaster.....	bbls.	114
Cement.....	bbls.	170	Pickles.....		54
Eggs.....		223	Railroad iron.....	bars	526
Empty barrels.....	No.	6,069	Sourkroust.....	bbls.	217
Elm bark.....	pkgs.	65	Shingles.....	M.	900
Grind-stones.....	No.	539	Staves.....		8,500
Hams.....		553	Varnish.....	bbls.	32
Horns.....	pkgs.	186	Vinegar.....		188

**CUSTOM-HOUSE STATEMENTS OF EXPORTS.**—The statistics of exports obtained at the custom-house differ considerably from those published in the report. The former presents the “exports in vessels from the port of Detroit during the season of navigation of 1857,” classified thus—shipped coastwise; shipped to foreign ports; and aggregate value. This statement of shipments by vessels, of course, does not include the amounts taken eastward by the Great Western Railway; neither does it include much of the stuff shipped by vessels to ports on Lakes Huron and Michigan, which, although in the district of Detroit, and the vessels not being obliged to report at the custom-house, are none the less shipments from the port. The widest difference between the two statements occurs in the items of wheat and wool—the figures in the custom-house statement being largely in excess of those published in the report. The discrepancy as to wheat is not accounted for, and the custom-house statement appears to be certainly erroneous, as the reported receipts for the year are shown to be only about one-half the shipments. The discrepancy as to wool probably resulted from the officers counting as bales some of the returns of wool made in pounds. The other items are mostly smaller than those given in the report, for the reasons previously mentioned. The summary of the custom-house statement is as follows: shipped to American ports, \$9,035,726 67; shipped to foreign ports, \$473,010; total exports by vessel, \$9,508,736 67. However, the values of most of the articles are estimated, and are not actual values. The following is an exhibit of the *actual* value of such exports of American produce and manufactures as were returned to the custom-house during the year, the same being included in the preceding statement:—

Vessels.	1st quarter, end. March 31.	2d quarter, end. June 30.	3d quarter, end. Sept. 30.	4th quarter, end. Dec. 31.	Total year 1857.
American.....	\$24,599½	\$16,062	\$30,425	\$851,082	\$922,168½
Foreign.....	982,942	114,196	558,055	564,226	2,219,419
Total value of exports returned to custom-house.....					\$3,141,587½

**IMPORTS.**—The annexed table enumerates the quantities of a few principal articles imported during 1855 and 1857. The editors of the *Advertiser* remark that they are unable to present a detailed statement of imports, but hope to be able to do so hereafter:—

	1855.	1857.		1855.	1857.
Coal.....tons	49,136	39,845	Salt.....bbls.	79,138	38,736
Pig iron .....	1,961	545	Salt.....bags	69,400	78,522
Crude plaster ...	3,000	2,500	Lumber.....feet	6,889,456	4,495,300
Plaster.....bbls.	10,500	8,450	Lath.....pcs.	2,142,700	2,457,100
Calcined plaster...	.....	100	Shingles.....M.	2,743	2,433
Water lime .....	13,484	6,869			

**FOREIGN IMPORTS—CUSTOM-HOUSE STATEMENT.**—The following statement shows the value of goods, wares, and merchandise, [from foreign countries—Canada, etc.] *free of duty*, imported into the district of Detroit, in each quarter, during the last nine years:—

Years.	1st quarter, ending March 31.	2d quarter, ending June 30.	3d quarter, ending Sept. 30.	4th quarter, ending Dec. 31.	Total year.
1849.....	\$21,722 60	\$25,588 23	\$14,049 72	\$25,401 01	\$86,761 56
1850.....	17,272 80	33,808 20	17,235 69	24,422 00	92,738 69
1851.....	12,914 00	19,338 02	13,783 00	21,411 25	66,446 27
1852.....	18,586 00	18,541 47	18,969 37	28,903 75	85,000 57
1853.....	15,200 50	26,271 87	21,358 80	24,028 95	86,860 12
1854.....	21,952 68	91,351 01	26,210 00	18,099 00	154,612 69
1855.....	31,096 00	109,617 97	87,678 29	144,376 94	372,669 20
1856.....	69,369 40	156,987 33	126,605 45	177,171 37	530,133 55
1857.....	102,589 25	183,708 32	227,165 00	92,895 00	606,357 57

The reciprocity treaty, it will be remembered, went into effect in the spring of 1855, and it will be seen by glancing over the tables that the imports, free of duty, from that time forward have, as a consequence, been largely increased. The imports free of duty in 1857, notwithstanding the terrible financial crisis which the country experienced, and the consequent check upon business, amounted to \$76,224 02 more than the free imports of 1856.

In order to show more fully the effects which the reciprocity treaty has had upon this trade, we give below a table showing the free imports in each month of 1857, the goods free under the reciprocity treaty, and those previously free, in separate items:—

IMPORTS FREE OF DUTY INTO DISTRICT OF DETROIT IN 1857.

	Under reci- procity treaty.	Otherwise free.		Under reci- procity treaty.	Otherwise free.
January.....	\$15,232 00	\$6,741	July.....	\$29,354 00	\$10,371
February.....	10,123 50	14,262	August.....	85,622 00	7,318
March.....	30,408 75	25,827	September....	82,498 00	12,002
April.....	23,502 80	22,683	October.....	22,931 00	15,805
May.....	50,458 00	30,017	November.....	13,198 00	15,498
June.....	38,028 52	19,019	December.....	16,715 00	8,748

Which affords the following summary:—

Imports of goods free under reciprocity treaty .....	\$418,066 57
Imports of goods free previous to treaty .....	188,291 00

Total imports of free goods in 1857 .....

\$606,357 57

IMPORTS OF DUTIABLE GOODS INTO DISTRICT OF DETROIT IN 1857.

January.....	\$8,570 00	July.....	\$312,373 81
February.....	7,167 44	August.....	11,822 47
March.....	5,336 56	September.....	10,160 31
April.....	3,517 00	October.....	11,460 88
May.....	39,612 36	November.....	7,191 53
June.....	103,918 11	December.....	12,903 60

Total imports of dutiable goods in 1857.....

\$533,434 07

TOTAL FOREIGN IMPORTS.—The following table shows, in a condensed form, the value of free and dutiable goods imported into the district of Detroit for the years 1854, 1855, and 1857:—

	1854.	1855.	1857.
Value of free goods imported.....	\$88,103 00	\$375,592 00	\$606,357 57
Value of dutiable goods imported ....	58,477 52	388,642 18	533,434 07
Total.....	\$146,580 52	\$764,234 18	\$1,139,791 64

TOTAL DUTIES COLLECTED IN EACH CALENDAR YEAR, 1848-57.

1848.....	\$8,055 71	1852.....	\$30,154 38	1856.....	\$137,542 84
1849.....	8,852 91	1853.....	25,747 10	1857.....	22,910 37
1850.....	23,533 19	1854.....	11,861 31		
1851.....	25,345 81	1855.....	116,508 05	1848-57 ...	\$390,511 67

It will be seen that the amount of duties collected in 1857 were very much smaller than in the two previous years, but the amount left in bonded warehouse on the 1st of January, 1858, was \$786,408 09, and the duties on the same were \$212,719 42. The amount in bonded warehouse is very much larger than ever before, which fact, like many others, is attributed to the money panic which 1857 has to answer for. The duties collected in 1855 and 1856, reach a larger sum than in any other

years, and the two years together show a sum nearly double the amount collected in all the other eight years. In 1855 and 1856 the duties were largely increased by the importations of railroad iron, which was used on the Detroit and Milwaukee Railroad, the Detroit and Toledo Branch of the Michigan Southern, and on the Michigan Central Railroad, the duties being paid at that port. In 1857, there was no importations of railroad iron, which, with the difference in the amount of goods withdrawn from bonded warehouse, readily accounts for the decrease in the duties collected.

ARRIVALS AND CLEARANCES.—Statement showing the number of arrivals and clearances of steam and sail vessels at the port of Detroit for the year 1857:—

	Arrivals.	Clearances.
American vessels coastwise.....	2,626	2,632
American vessels from foreign ports.....	374	....
American vessels to foreign ports.....	....	615
Foreign vessels.....	279	843
Total in 1857.....	3,279	3,590
Total in 1855.....	2,288	2,382

VESSELS BELONGING TO THE DISTRICT.—The report before us contains a statement showing the names of the steam and sail vessels enrolled and licensed in the district of Detroit on the 20th January, 1857, with the denomination and tonnage of each. The list includes only such as are in service and fit for service. Its summary is as follows:—

	No.	Tons & 95ths.	Vess'ls und. 20 tons	No.	Tons & 95ths
Steamers.....	62	26,205 54		29	423 38
Propellers.....	23	4,180 59			
Barks.....	4	1,213 35	Total.....	301	52,991 50
Brigs.....	13	3,193 44	Total in 1855..	299	50,867 13
Schooners.....	125	15,188 31			
Scow schooners...	27	1,567 79	Increase ...	2	2,123 37
Scows.....	18	1,018 80			

OPENING OF NAVIGATION FOR TWENTY YEARS.—The following table gives the dates of the first opening of navigation at the port of Detroit during the last twenty years:—

- 1839—March 12; steamboat Erie, Capt. A. Edwards, left for Toledo.
- 1840—March 8; steamboat Star arrived from Cleveland.
- 1841—April 18; steamboat Gen. Wayne arrived from Buffalo.
- 1842—March 3; steamboat Gen. Scott, Capt. Davis, left Buffalo.
- 1843—April 13; steamboat Fairport left Detroit for Cleveland.
- 1844—March 11; steamboat Red Jacket left Detroit for Fort Gratiot.
- 1845—January 4; steamboat United States arrived from Buffalo.
- 1846—March 14; steamboat John Owen arrived from Cleveland.
- 1847—March 30; steamboat United States arrived from Cleveland.
- 1848—March 22; propeller Manhattan cleared for Buffalo.
- 1849—March 21; steamer John Owen cleared for Cleveland.
- 1850—March 25; steamer Southerner arrived from Buffalo.
- 1851—March 19; steamer Hollister arrived from Toledo.
- 1852—March 22; steamer Arrow cleared for Toledo.
- 1853—March 14; steamer Bay City arrived from Sandusky.
- 1854—March 21; steamer May Queen arrived from Cleveland.
- 1855—April 2; steamer Arrow cleared for Toledo.
- 1856—April 15; steamer May Queen cleared for Cleveland, and Arrow for Toledo.
- 1857—March 24; steamer Ocean cleared for Cleveland.
- 1858—March 17; steamer Dart cleared for Toledo, returning March 18.

TRADE IN FLOUR, GRAIN, PROVISIONS, &C.—The following figures show

the sales during 1857 of flour and grain in the market of Detroit, as reported:—Flour, 190,640 bbls.; wheat, 250,820 bush.; corn, 233,170 bush.; oats, 110,200 bush. These sales of flour are exclusive of city trade, and the sales of grain are exclusive of the sales in the streets from teams. The succeeding table exhibits the receipts and shipments of the same articles:—

Receipts.	Flour, bbls.	Wheat, bush.	Corn, bush.	Oats, bush.
By Michigan Central Railroad.....	374,786	465,255	381,839	170,039
By Detroit and Milwaukee Railroad	83,408	177,395	587	5,525
By Mich. South'n & North'n Ind. R. R.	23,998	8,224	64,793	21,600
By Teams.....	unknown.	45,000	unknown.	25,000
Total of above .....	482,192	695,874	447,219	222,164
Total exports.....	479,160	519,476	259,619	221,988
Known excess receipts .....	3,032	176,398	187,600	176

A considerable amount of flour and grain, particularly wheat, is received by vessels, as well as by teams, of which there is no account. The manufacture of flour in the city during 1857 is estimated at 40,000 bbls., (requiring 180,000 bush. wheat,) the greater portion of which was used in the home trade, and this is but little more than the known excess of receipts of wheat.

Exports of flour and grain in 1854, 1855, and 1857:—

	1854. Total.	1855. Total.	1857.		Total.
			By Lake.	By Great West'n Railroad.	
Flour.....bbls.	337,143	640,393	303,400	175,760	479,160
Wheat.....bush.	897,159	737,880	491,932	27,544	519,476
Corn.....	587,489	629,805	102,450	157,179	259,629
Oats.....	228,450	80,791	166,105	55,883	221,988

The total consumption in 1857 of barley in the city was about 110,000 bush., making 121,000 bush. of malt, of which about one-sixth was exported. The only reported receipt of rye was 125 bush. by Detroit and Milwaukee Railroad. Of grass and clover-seed, the exports in 1857 were very light, being only 4,169 bags and 91 bbls. against 13,821 bags and 505 bbls. for 1855. These exports for 1857 were equal to 10,786 bush., while the receipts by railroad were only 8,627 bush., leaving over 2,000 bush. of the exports and the home trade to be supplied from the receipts by teams and from Canada. Detroit is not a large market for live stock, packing not being carried on to any extent. The following table shows the receipts of live stock in 1857, and the exports for three years:—

	Receipts in 1857 and sources.				Exports.		
	By M. C. R. R.	M. S. & N. I. R. R.	D. & M. R. R.	Total.	1854.	1855.	1857.
Cattle....head	33,765	2,139	39	35,943	7,372	16,268	26,792
Sheep....No.	10,066	2,886	100	13,052	3,364	4,935	86,758
Hogs.....	144,529	6,516	432	151,477	15,411	122,030	141,859

From the above it is deduced that there were slaughtered in the city in 1857, 8,151 cattle and 9,618 hogs, besides a large number which were driven into the city on foot. Of pork, the total receipts by railroad for 1857 were 17,508 bbls., and the exports were 11,246 bbls. and 161 tierces, leaving over 6,000 bbls., besides the quantity packed in the city, for home consumption.

RAILROADS LEADING FROM DETROIT, THEIR TRAFFIC, ETC.—The Michigan Central, the pioneer railroad of the State, is one of the most completely

equipped lines in the Union; and connected with it (being owned by the company) are three splendid steamers. The principal statistics of this line for four years are—

	Earnings in 1857.	1854.....	Total earnings.	Passengers carried.
Passengers.....	\$1,444,526 78	1855.....	\$1,943,814 13	451,687
Freight & miscellaneous	1,218,944 58	1856.....	2,650,235 37	545,032
		1857.....	3,128,154 10	591,664
Total....	\$2,666,471 36		2,666,471 36	528,598

In January, 1857, the trains of the Detroit and Milwaukee Railroad were running to Owosso, 80 miles from Detroit; during the year the road was opened to Lowell, 58 miles beyond; and it is expected that the road will be completed in July, 1858, to Grand Haven, on Lake Michigan, 185 miles from Detroit. The earnings of this road in 1853 were \$68,865 14; in 1854, \$78,342 27; 1855, \$107,622 17; 1856, \$213,897 12; and in 1857, \$265,626 12. The Michigan Southern and Northern Indiana Railroad now has a total length, including branches, of 416 miles. Distance, by this route, from Detroit to Chicago, 288 miles. The total earnings of this road in 1854 were \$2,158,311 91; in 1855, \$2,595,630 22; and in 1856, \$2,714,848 38. The earnings for the first three months of 1857 (only these obtained) were, from passengers and mail, \$263,037 38; freight and miscellaneous, \$183,467 37; total, \$446,504 85. The Great Western Railway, of Canada, extends from Niagara Falls to Windsor, opposite Detroit, 229 miles; and its western terminus is to all purposes in Detroit, passengers, baggage, and freight, being taken across the river by large ferry-boats constantly plying. Its principal statistics for four years are—

	1854.	1855.	1856.	1857.
Pass'r traffic rec'ts..	\$961,499 50	\$1,505,576 07	\$1,836,468 80½	\$1,674,500 40½
Freight & live st'k do.	270,046 76	754,917 19	1,150,587 40½	852,211 51½
Total earnings....	\$1,231,546 27	\$2,260,493 26	\$2,987,056 21	\$2,526,711 91½
Passengers car'd. No.	432,006	649,960	859,050½	802,001½
Freight..... tons	69,672	174,563	229,492	191,709

## JOURNAL OF MERCANTILE LAW.

### ACTION TO RECOVER BALANCE FOR GOODS DELIVERED.

United States Circuit Court, September, 1857. Before Judge Nelson. The New England Screw Co. vs. Charles Bliven, *et al.* Charles Bliven, *et al.*, vs. the New England Screw Co.

NELSON, C. J.—The first of these actions is to recover a balance due the plaintiffs for goods delivered on orders for screws, the amount of which, excepting a small item, is not seriously in dispute. On looking into the facts we are satisfied that the whole of the amount claimed is due, and that the plaintiff is entitled to a judgment for \$1,990 01, with interest from the 27th of September, 1853.

There is, also, a suit by these defendants against the company to recover damages for breach of contract in not fulfilling orders for screws, as agreed. The evidence in the case is full to show the usage of the company in filling the orders of their customers, and that it was known to these parties; and, also, that their dealings with the company from its commencement had been in conformity with it. The usage was, on receiving orders from their customers, to

file them away and fill them up in turn, in proportion to other orders on hand to be filled up at the same time. The company had from five to six hundred customers with standing orders to be filled as fast as practicable, or as the capacity to manufacture screws would permit. For some time the gimblet or sharp-pointed screws, as they were called, were manufactured at no other establishment, and the demand for the article seems to have been very great. For aught that appears in the case the parties here were dealt with upon the same footing as other customers of the company. Many of the orders were not filled in six months or a year, and some never in full. The course of the usage necessarily left the apportionment of the screws as manufactured upon the orders on hand to the discretion of the company, and if otherwise it would be an endless undertaking to ascertain with any degree of certainty whether the apportionment had been *pro rata* in the filling up of some five or six hundred orders; and, without such an inquiry it would be impossible to ascertain whether injustice had been done to the defendants or not.

An effort has been made to take the order given on the 15th of October, 1852, out of the usage on the ground that it was accepted absolutely to be filled on the 15th of March and 15th of April following. But, on looking into the evidence on the subject, and to the circumstances under which the order was given and accepted, we are satisfied that it forms no exception to the general usage, and was accepted subject to it.

These parties seem to have been fairly dealt with, the same as all other customers, and unless they can establish some right superior to *that* arising out of the usage on filling their orders, they have no well-founded ground of complaint—no such right in my judgment, has been established, and we are, therefore, satisfied that judgment should be rendered against them in the suit wherein the company are defendants.

## COMMERCIAL CHRONICLE AND REVIEW.

REVIVAL OF TRADE AND REMOVAL OF THE RELICS OF PAST REVULSIONS—BUSINESS IN THE SOUTH AND SOUTHWEST—COUNTRY CREDITS AND WANT OF PUNCTUALITY IN PAYMENTS—TOO MUCH FORBEARANCE WITH DEBTORS NO HELP TO POPULARITY, AND DANGEROUS TO SUCCEED—THE MONEY MARKET—STOCK SPECULATIONS AND WANT OF OUTSIDE EXCITEMENT—THE CAUSE AND PROBABLE SUPPLY OF FOREIGN EXCHANGE—THE ISSUE OF TREASURY NOTES—THE TAX UPON RAILROADS TO BENEFIT THE CANALS—THE GOLD MOVEMENT—THE BANK MOVEMENT—IMPORTS AND REVENUE AT PHILADELPHIA AND BOSTON—IMPORTS AND EXPORTS AT NEW YORK FOR MARCH—SHIPMENTS OF PRODUCE AND THE INCOMING CROPS, ETC.

The season has been unusually propitious, the winter having been mild and the spring early, with warm settled weather, thus opening the channels of internal communication several weeks in advance of last year. This has aided the work of recuperation, and trade in nearly all branches of business has continued to revive. There are, of course, many hinderances, relics of past disaster, in the way of returning prosperity, but the old wrecks are fast disappearing, and, with all their sad histories, will soon be forgotten. The demand from the South and Southwest, for both dry goods and general merchandise, came a little later than usual, but has been quite active, while the collections from that quarter have been far better than could have been anticipated. The rapid advance in cotton, from the extraordinary depression which took place at the opening of the year, has, no doubt, aided very much in this generous settlement of old debts, which has been in striking contrast with the indifference to obligations

which has characterized some portions of the North. Collections from the West are still made with very great difficulty. Many who hold large amounts of produce refuse to sell on account of the low rates current, and are waiting for "something to turn up," without any effort to extricate themselves from their embarrassments. Some Western merchants who have succeeded in obtaining funds, instead of remitting to the seaboard where their debts had been some time overdue, have expended them in facilitating fresh purchases of the jobbers in the large cities or towns near them; while others have come on to the East, either to Philadelphia, New York, or Boston, and passing by those whom they owe, have invested their money in a fresh stock of goods, without regard to old indebtedness. There are many honorable exceptions to each of these classes; a few merchants have acted up to a proper sense of their duty, and have strained every nerve to maintain their honor untarnished; but they form exceptions whose bright character throws the mass of less scrupulous debtors into a deeper shade. Unless something can be done to improve the system of credits now in vogue, the jobbing trade can never be prosperous. There is no reason why the country merchant should not meet his payments as promptly to the day as any city dealer. There is too much slackness in this respect, and, until it is remedied, there can be no reliance upon that class of customers. Many country merchants do not make their own collections promptly from a mistaken notion that long forbearance is necessary to popularity. Nothing can be farther from the truth. There are many customers who will accept all the indulgence they can obtain, but this indulgence does not increase their regard for those who grant it. Besides, the merchant who is prompt with his customers increases his own credit, and is thus enabled to buy his goods to better advantage, and to compete successfully with his more forbearing neighbor, whose best customers he will win for himself. A merchant should be cautious and patient in the disposal of his goods, and attentive to the wants of his customers, but he will never gain anything by unreasonable long suffering in the matter of collections. We look for an increased circulation of money at the West before this issue reaches our distant readers, and in May and June the merchants may do much to redeem their credit at the East, where it has been so much shaken.

We hinted in our last that money was likely to remain abundant at low rates of interest, and this has been fully realized. Capital has been easily obtained at 4 a 5 per cent upon the sixty days' acceptances of city bankers, and 5 a 6 per cent for other short prime business paper, while any well-secured note could be discounted either at the banks or note-brokers at 6 a 7 per cent. Large amounts have been invested upon bond and mortgage, and the facilities for obtaining money upon real estate securities have been greatly increased.

Stock speculations have not found as much favor with the public as was anticipated. Among the first signs of returning prosperity, after the late revulsion, was an active movement in stocks. This was sustained for several weeks, but finally gave way to depression from which the market has not permanently rallied. Great efforts have been made to stimulate speculation, and spasmodic improvements have followed, but none has been long sustained. Some who have been watching the market attentively assert that the religious movements of the day—the most remarkable which have taken place for many years—have diverted the public mind from stock speculations, and made it impossible to create the

excitement necessary to success. This opinion has been advocated in some of the daily papers, and there is, to say the least, some plausibility in the argument. Be this, however, as it may, it is certain that outsiders have manifested the most provoking indifference to the invitations of the speculators, and have refused to be charmed into the circle which was formerly so crowded with eager aspirants.

Foreign exchange has fluctuated more than usual, but the shipments of specie have been unusually light. We have looked for lower rates than the average of the past month, but as often as prices have gone down the demand has been sufficient to bring about an advance. There must be a large supply of exchange still to be made, and, unless the fall importations are larger than expected, we cannot see what there is to keep the rates above the specie point. In the article of cotton alone there must still be large additional shipments. We have exported a little over one-and-a-half million bales, and must ship about one million more during the season. The average is now nearly sixty dollars per bale, and this would make an addition to our exchange, from that item alone, of sixty million dollars.

The falling off in the importations has left the revenues of the government considerably below the necessary expenses, to say nothing of the war in Utah now in prospect. Congress authorized the issue of twenty million dollars in treasury notes, at not exceeding six per cent interest. The first five millions (nearly six millions it is said) were issued at three per cent interest. Proposals were then invited for five millions more, and these were placed at an average of about four-and-a-half per cent. Proposals are now invited for five millions more, which, it is supposed, will be taken at something below the average of the last.

The measure of taxing the railroads of New York to furnish revenue for the canals owned by the State, to which we adverted in our last, we are happy to learn has been abandoned by those whose advocacy was essential to its success. The money will probably be borrowed to finish the widening of the canals, and raised for payment by a tax upon the general assessments of the people.

The yield of gold in California does not diminish, and nearly three million dollars per month is brought forward to New York on freight or in the hands of passengers. The following will show the business at the New York Assay-office during the month of March:—

DEPOSITS AT THE ASSAY-OFFICE, NEW YORK, IN THE MONTH OF MARCH, 1858.

	Gold.	Silver.	Total deposits.
Foreign coin .....	\$9,000 00	\$112,000 00	\$121,000 00
Foreign bullion .....	24,000 00	90,000 00	114,000 00
Domestic bullion .....	2,842,000 00	38,000 00	2,880,000 00
<b>Total deposits.....</b>	<b>\$2,875,000 00</b>	<b>\$240,000 00</b>	<b>\$3,115,000 00</b>
Deposits payable in bars .....			\$1,865,000 00
Deposits payable in coin .....			1,250,000 00
Gold bars stamped .....			1,353,371 29
Transmitted to United States Mint, Philadelphia, for coinage.....			233,202 37

Of the domestic gold bullion noticed above, \$245,000 were deposited in California Branch Mint bars, which, for the sake of uniformity, are sent in to the New York Assay-office for re-melting. The stamp of the office has also a higher market value than any other indorsement in the country. The following will show the business and coinage at the Philadelphia Mint for the month of March:—

GOLD BULLION DEPOSITED.	
Gold from California .....	value \$251,612
Gold from other sources.....	15,897
Total gold deposits .....	\$267,510
SILVER BULLION DEPOSITED.	
Silver, including purchases.....	\$119,000
Spanish and Mexican fractions of a dollar received in exchange for new cents.....	11,000
Total silver deposits.....	\$130,000
COPPER.	
Cents (O. S.) received in exchange for new cents.....	\$4,425
Total deposits .....	\$401,935

The coinage executed was :—

GOLD.		
Denomination.	No. of pieces.	Value.
Double eagles .....	10,935	\$218,700
Half eagles.....	3,560	17,800
Quarter eagles.....	5,689	14,222
Total.....	20,184	250,722
SILVER.		
Half dollars.....	614,000	\$257,000
Quarter dollars.....	476,000	119,000
Total.....	990,000	\$376,000
COPPER.		
Cents .....	1,800,000	\$18,000
RECAPITULATION.		
Gold coinage.....	20,184	\$250,722
Silver coinage.....	990,000	376,000
Copper coinage.....	1,800,000	18,000
Total .....	2,810,184	\$644,722

The business at the New Orleans Branch Mint has been small in gold, but there was more activity in silver.

Statement of the deposits and coinage at the Branch of the Mint of the United States, at New Orleans, during March, 1858 :—

GOLD DEPOSITS.	
California gold.....	\$68,149 44
Gold from other sources.....	8,614 11
Total gold deposited.....	\$76,763 55
SILVER DEPOSITS.	
Silver parted from California gold.....	\$451 86
Silver from other sources.....	399,372 32
Total silver deposited.....	\$399,824 18
Total value of gold and silver deposits.....	\$476,587 73
GOLD COINAGE.	
Double eagles—1,000 pieces.....	\$20,000 00
SILVER COINAGE.	
Half dollars—1,300,000 pieces.....	\$650,000 00
Total value of gold and silver coinage.....	\$670,000 00

The bank movement shows a further general expansion. At New York the

weekly summary of loans has now reached the average of 1857, and it becomes a question of how much farther the expansion may safely be carried. It is true, that with the present vast amount of specie, (now larger than ever before known,) an advance of forty millions might safely be made, as far as immediate results are concerned; but there can be no question that this would be followed by a steady drain of gold, and a consequent contraction. The community have not recovered from the panic of last fall sufficiently to look kindly upon any such contraction, and the alarm at any pressure which it might create would very likely be followed by the suspension of many houses whose extended paper is now soon to mature. It would, therefore, seem to be the higher wisdom to keep very near the present limit, and allow the deposits, which are now higher than ever before known, to accumulate, without any attempt to use a greater portion of them. If the banks could bring themselves to pursue this conservative course, we might pass through the summer with a quiet market, and no unhealthy reaction. We annex a comparative summary:—

## WEEKLY AVERAGE OF THE NEW YORK CITY BANKS.

Date.	Capital.	Loans and discounts.	Specie.	Circulation.	Deposits.
Jan. 9, 1858.....	\$65,067,708	\$98,792,757	\$29,176,838	\$6,615,464	\$79,841,362
16.....	65,067,708	99,473,762	30,211,266	6,349,325	81,790,328
23.....	65,067,708	101,172,642	30,829,151	6,336,042	82,598,342
30.....	65,067,708	102,180,089	31,273,023	6,369,678	83,997,081
Feb. 6.....	66,108,135	103,602,932	30,652,947	6,873,931	86,000,488
13.....	66,108,135	103,783,336	30,226,275	6,607,271	84,229,492
20.....	66,108,135	103,706,734	31,416,076	6,542,618	86,773,222
27.....	66,108,135	103,769,127	31,658,694	6,530,759	87,386,361
March 6.....	66,108,135	105,021,863	32,739,731	6,854,624	90,382,446
13.....	66,108,135	105,293,631	32,961,076	6,755,958	90,063,432
20.....	66,108,135	107,440,350	31,902,656	6,823,852	91,238,505
27.....	66,108,135	109,095,412	30,929,472	6,892,231	90,644,098
April 3.....	66,108,135	110,588,344	31,530,000	7,232,332	93,589,149
10.....	66,108,135	110,847,616	32,036,436	7,245,809	93,566,100
17.....	66,108,135	111,344,891	33,196,449	7,190,170	95,448,456

Same time last year:—

Apr. 18.....	59,573,330	114,398,174	12,061,372	8,770,828	96,461,417
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The Philadelphia bank statement shows a farther expansion in every item, although the increase is moderate, and the movement more uniform than at New York:—

## WEEKLY AVERAGE OF THE PHILADELPHIA BANKS.

Date.	Capital.	Loans	Specie.	Circulation.	Deposits.
Jan. 11, '58	\$11,300,065	\$21,302,374	\$3,770,701	\$1,011,033	\$11,465,263
Jan. 18...	11,300,065	21,068,652	4,018,295	1,046,545	11,512,765
Jan. 25...	11,300,065	20,730,958	4,243,966	1,062,192	11,547,697
Feb. 1...	11,300,065	20,423,704	4,465,693	1,096,462	12,195,126
Feb. 8...	11,300,065	20,359,226	4,668,085	1,293,046	11,904,519
Feb. 15...	11,300,065	20,071,474	4,888,983	1,559,218	11,889,342
Feb. 22...	11,300,065	20,161,260	4,924,906	1,686,689	12,014,605
Mar. 1...	11,300,065	20,251,066	4,903,936	1,808,734	11,830,532
Mar. 8...	11,300,165	20,471,161	5,147,615	1,916,352	12,253,282
Mar. 15...	11,300,165	20,522,936	5,448,514	2,077,967	12,691,547
Mar. 22...	11,300,715	20,796,957	5,433,358	2,140,463	12,413,191
Mar. 29...	11,300,715	21,020,198	5,661,782	2,296,444	13,201,599
Apr. 5...	11,300,915	21,657,152	5,937,595	2,647,399	13,422,318
Apr. 12...	11,300,915	21,656,023	6,133,000	2,675,193	13,784,656
Apr. 19...	11,300,915	21,776,667	6,382,485	2,484,150	14,632,175

At Boston the movement has been in the same direction, and it is evident

that a portion of the specie which was hoarded at the time of the panic has been once more drawn out of its hiding-places, and placed in its former channels.

## WEEKLY AVERAGE OF THE BOSTON BANKS.

	March 22.	March 29.	April 5.	April 12.	April 19.
Capital.....	\$31,960,000	\$31,960,000	\$31,960,000	\$31,960,000	\$32,475,450
Loans & discounts..	51,999,000	51,632,500	51,918,900	52,042,500	51,752,500
Specie.....	7,735,500	7,805,500	8,259,500	8,505,000	9,007,000
Due from other banks	6,057,700	5,925,500	6,386,000	6,590,000	7,259,400
Due to other banks.	5,934,000	5,304,600	6,576,900	6,987,000	6,110,000
Deposits.....	19,179,000	18,895,000	20,136,400	20,635,000	20,657,500
Circulation.....	5,163,500	5,159,600	5,477,500	5,853,000	6,224,500

The specie at New Orleans shows but little change, and the tendency has not been toward any considerable increase, notwithstanding the large amounts of exchange upon New York and London, which have been sold during the month. The volume of loans shows a steady increase:—

## WEEKLY AVERAGE OF THE NEW ORLEANS BANKS.

	March 13.	March 20.	March 27.	April 3.	April 10.
Specie .....	\$10,978,759	\$10,897,866	\$10,947,636	\$10,848,605	\$10,962,570
Circulation.....	6,299,957	6,654,434	7,068,240	7,572,094	7,692,634
Deposits.....	15,421,499	15,765,084	15,792,554	15,453,850	15,658,182
Short loans.....	15,888,347	15,937,924	16,157,998	16,641,554	16,481,249
Exchange.....	8,220,000	8,776,621	8,880,798	9,147,709	9,321,352
Due distant banks...	1,847,623	1,172,552	1,271,084	1,664,614	1,410,349
Long and short loans	18,910,607	18,987,570	19,290,889	19,774,547	20,000,000

There must be an active movement with both the Western and Southern banks during the next few months. The volume of domestic exchange at New York has already exhibited a comparative increase, preparatory to the general activity.

The following is a statement of the business of the Philadelphia Custom-house, for the last month, as compared with the same month in the last year:—

	1857.	1858.		
Value of merchandise in warehouse 1st of February.....	\$935,947	\$1,651,827		
Received in warehouse from foreign ports.....	226,189	140,435		
Received in warehouse from other districts.....	30,581	45,410		
Withdrawn from warehouse for consumption.....	180,603	354,172		
Withdrawn from warehouse for transportation.....	5,806	25,996		
Withdrawn from warehouse for export .....	3,263	2,322		
Value of merchandise in warehouse last of month.....	1,033,045	1,455,182		
Entered for consumption from foreign ports.....	668,325	763,580		
Free merchandise entered.....	284,681	320,000		
<b>DUTIES RECEIVED.</b>	<b>1855.</b>	<b>1856.</b>	<b>1857.</b>	<b>1858.</b>
March .....	\$840,917	\$673,002	\$233,801	\$215,311
Previous two months.....	617,794	279,054	771,009	282,665
	\$958,711	\$952,756	\$1,024,810	\$497,976
Revenue collected in Boston for the month ending March 31st, 1857....			\$621,075	70
Collected for the month of March, 1858.....			469,510	82
Decrease.....			\$151,564	88

The imports of foreign merchandise have increased, particularly in articles other than dry goods; but the comparative total is still far behind the record of the previous two years. The total foreign imports at the port of New York in the month of March were \$9,405,802 less than for March, 1857; \$8,527,256 less than for March, 1856; but \$1,556,645 more than for March, 1855. It will be seen that the entries for warehousing are very small, while the withdrawals from warehouse for consumption have very largely increased:—

FOREIGN IMPORTS AT NEW YORK IN MARCH.

	1855.	1856.	1857.	1858.
Entered for consumption.	\$6,765,687	\$15,781,297	\$12,350,457	\$7,245,526
Entered for warehousing.	1,865,633	2,222,655	5,384,835	1,812,230
Free goods.....	1,458,578	2,141,661	2,338,379	2,394,743
Specie and bullion.....	83,159	111,345	1,061,833	277,203
Total entered at the port...	\$10,173,057	\$20,256,958	\$21,135,504	\$11,729,702
Withdrawn fr'm wareh'se..	2,718,093	1,852,396	2,639,223	4,444,415

The foreign imports at New York for the first quarter of the current year, (three months, ending March 31st,) are \$36,622,264 less than for the same period of 1857, \$22,826,841 less than for the same period of 1856, and \$6,155,902 less than for the corresponding three months of 1855 :—

FOREIGN IMPORTS AT NEW YORK FOR THREE MONTHS FROM JANUARY 1ST.

	1855.	1856.	1857.	1858.
Entered for consumption...	\$23,451,214	\$40,859,557	\$46,159,430	\$17,255,799
Entered for warehousing...	7,357,681	5,334,168	10,898,097	5,052,301
Free goods .....	4,150,673	5,439,624	5,637,141	5,909,530
Specie and bullion.....	240,798	237,956	2,972,060	826,834
Total entered at the port...	\$35,200,366	\$51,871,305	\$65,666,728	\$29,044,464
Withdrawn from warehouse	7,339,298	6,245,071	7,814,674	13,682,712

This leaves the total receipts of foreign produce, merchandise, and specie, at New York, since the beginning of the fiscal year, (that is, for nine months, ending March, 31,) \$32,188,302 less than for the corresponding period of the previous year; \$3,050,948 less than for nine months ending March 31st. 1856; and \$16,974,703 in excess of the total for nine months ending March 31st, 1855 :—

FOREIGN IMPORTS AT NEW YORK FOR NINE MONTHS ENDING MARCH 31ST.

	1855.	1856.	1857.	1858.
Six months end. Jan. 1....	\$86,558,097	\$89,912,809	\$105,254,740	\$109,688,702
January.....	12,945,827	15,578,064	19,006,732	8,105,719
February.....	12,081,482	16,036,283	25,524,492	9,209,043
March.....	10,173,057	20,256,958	21,135,504	11,729,702
Total for nine months..	\$121,758,463	\$141,784,114	\$170,921,468	\$138,733,166

Notwithstanding the falling off in the imports during the last four or five months, the receipts during the first four months of the current fiscal year were so great that the total for the year will make a very respectable aggregate. The decrease has been comparatively less in March than in January and February, and the difference will be still less (probably) during the remainder of the fiscal year. We annex a comparative statement of the receipts for duties at the port of New York during the last nine months :—

RECEIVED FOR DUTIES AT THE PORT OF NEW YORK.

	1855.	1856.	1857.	1858.
Six mos. end. Jan. 1.	\$18,358,927 32	\$20,087,362 28	\$22,973,124 43	\$16,345,553 57
January.....	2,560,038 32	3,683,654 85	4,537,378 43	1,641,474 59
February.....	2,665,164 94	3,576,919 14	5,117,249 85	2,033,784 86
March.....	2,363,084 95	4,382,107 47	3,752,184 98	2,213,452 15
Total nine months.	\$25,947,215 53	\$31,730,043 74	\$36,384,937 69	\$22,264,265 17

Included in the above are treasury notes to the amount of \$70,932 97 in January, \$604,381 93 in February, and \$710,216 96 in March—making a total of \$1,385,531 86 of treasury notes received for duties at this port since the first

issue, about the middle of January. The imports of foreign dry goods at the port of New York for the month of March, are \$3,600,170 less than for the same period of last year, \$5,145,689 less than for March, 1856, and only \$690,235 less than the very small total received in the same period of 1855. The withdrawals from warehouse are twice as large as for the same period of either of the previous two years, while the entries for warehousing have been very light. We annex a comparative summary:—

## IMPORTS OF FOREIGN DRY GOODS AT THE PORT OF NEW YORK FOR THE MONTH OF MARCH.

	ENTERED FOR CONSUMPTION.			
	1855.	1856.	1857.	1858.
Manufactures of wool.....	\$788,338	\$2,654,973	\$1,668,033	\$1,070,923
Manufactures of cotton.....	585,058	1,529,208	1,738,760	881,079
Manufactures of silk.....	1,737,371	3,997,377	2,631,033	2,028,145
Manufactures of flax.....	390,839	962,509	692,556	361,387
Miscellaneous dry goods....	559,462	1,039,287	911,578	352,779
<b>Total.....</b>	<b>\$4,061,068</b>	<b>\$10,183,354</b>	<b>\$7,641,960</b>	<b>\$4,694,313</b>

	WITHDRAWN FROM WAREHOUSE FOR CONSUMPTION.			
	1855.	1856.	1857.	1858.
Manufactures of wool.....	\$316,914	\$191,788	\$245,496	\$552,770
Manufactures of cotton.....	533,450	431,076	407,219	779,075
Manufactures of silk.....	431,141	269,847	308,531	550,331
Manufactures of flax....	258,724	195,485	207,037	301,285
Miscellaneous dry goods....	158,034	56,559	124,412	228,655
<b>Total.....</b>	<b>\$1,698,264</b>	<b>\$1,144,755</b>	<b>\$1,292,695</b>	<b>\$2,412,116</b>
Add consumption entries....	4,061,068	10,183,354	7,641,960	4,694,313
<b>Total thrown on market..</b>	<b>\$5,759,332</b>	<b>\$11,328,109</b>	<b>\$8,934,655</b>	<b>\$7,106,429</b>

	ENTERED FOR WAREHOUSING.			
	1855.	1856.	1857.	1858.
Manufactures of wool... ..	\$115,803	\$94,238	\$459,542	\$209,859
Manufactures of cotton.....	65,704	44,073	238,158	254,105
Manufactures of silk.....	357,728	221,219	499,715	133,528
Manufactures of flax.....	89,327	59,277	185,881	137,774
Miscellaneous dry goods....	138,930	62,323	93,709	89,216
<b>Total.....</b>	<b>\$767,492</b>	<b>\$481,130</b>	<b>\$1,477,005</b>	<b>\$825,482</b>
Add consumption entries....	4,061,068	10,183,354	7,641,960	4,694,313
<b>Total entered at the port</b>	<b>\$4,828,560</b>	<b>\$10,664,484</b>	<b>\$9,118,965</b>	<b>\$5,518,795</b>

The total receipts of foreign dry goods at the port of New York since the 1st of January, are \$18,068,911 less than for the same time last year, \$14,822,718 less than for the corresponding three months of 1856, and \$2,413,574 less than for the same period of 1855. It will be seen that the total for the last quarter is less than half the amount received during the corresponding period of either of the previous two years:—

## IMPORTS OF FOREIGN DRY GOODS AT THE PORT OF NEW YORK FOR THREE MONTHS FROM JANUARY 1ST.

	ENTERED FOR CONSUMPTION.			
	1855.	1856.	1857.	1858.
Manufactures of wool.....	\$3,037,222	\$6,253,084	\$5,957,801	\$2,450,086
Manufactures of cotton.....	2,606,035	5,754,030	7,317,607	2,392,849
Manufactures of silk.....	4,398,403	9,534,346	9,802,850	4,197,493
Manufactures of flax.....	1,384,582	2,626,426	2,553,602	903,725
Miscellaneous dry goods....	1,482,401	2,340,758	2,708,490	866,402
<b>Total.....</b>	<b>\$12,908,643</b>	<b>\$26,508,654</b>	<b>\$28,340,350</b>	<b>\$10,810,555</b>

WITHDRAWN FROM WAREHOUSE FOR CONSUMPTION.

	1855.	1856.	1857.	1858.
Manufactures of wool.....	\$811,718	\$558,382	\$641,948	\$1,464,336
Manufactures of cotton.....	1,506,369	1,266,177	1,540,957	2,238,947
Manufactures of silk.....	1,169,408	823,140	900,667	1,889,397
Manufactures of flax.....	560,848	562,382	543,017	1,020,478
Miscellaneous dry goods.....	373,441	166,468	278,092	618,273
<b>Total withdrawn.....</b>	<b>\$4,211,784</b>	<b>\$3,376,549</b>	<b>\$3,904,681</b>	<b>\$7,231,431</b>
Add consumption entries....	12,908,643	26,508,654	28,340,350	10,810,555
<b>Total thrown on market..</b>	<b>\$17,120,427</b>	<b>\$29,885,203</b>	<b>\$32,245,031</b>	<b>\$18,041,986</b>

ENTERED FOR WAREHOUSING.

	1855.	1856.	1857.	1858.
Manufactures of wool.....	\$624,484	\$438,324	\$840,504	\$640,756
Manufactures of cotton.....	820,750	725,635	1,012,296	1,170,681
Manufactures of silk.....	1,141,482	649,251	1,067,628	686,794
Manufactures of flax.....	477,532	297,656	527,874	379,310
Miscellaneous dry goods.....	383,824	146,339	223,400	255,045
<b>Total.....</b>	<b>\$3,448,072</b>	<b>\$2,257,205</b>	<b>\$3,671,702</b>	<b>\$3,132,586</b>
Add consumption entries....	12,908,643	26,508,654	28,340,350	10,810,555
<b>Total entered at port....</b>	<b>\$16,356,715</b>	<b>\$28,765,859</b>	<b>\$32,012,052</b>	<b>\$13,943,141</b>

We look for larger comparative receipts during the ensuing month, although it is hardly probable that the gain will be as rapid as many seem to anticipate. The total receipts of foreign dry goods for the nine months of the current fiscal year, are \$58,690,558, against \$78,894,428 for the same period of the preceding year, and \$68,184,032 for the nine months ending April 1st, 1856.

Turning now to the exports, we find the total shipped from New York to foreign ports, during the month of March, exclusive of specie, \$3,835,031 less than for March of last year, \$3,522,384 less than for March, 1856, and \$1,161,075 less than for March, 1855 :—

EXPORTS FROM NEW YORK TO FOREIGN PORTS FOR THE MONTH OF MARCH.

	1855.	1856.	1857.	1858.
Domestic produce.....	\$4,807,833	\$8,044,122	\$7,904,481	\$4,503,371
Foreign merchandise (free)...	941,212	190,842	483,330	27,590
Foreign m'rch'ndise (dutiable)	592,890	468,280	628,080	649,899
Specie and bullion.....	2,298,697	2,584,396	2,174,965	836,194
<b>Total exports.....</b>	<b>\$8,640,632</b>	<b>\$11,287,640</b>	<b>\$11,190,856</b>	<b>\$6,017,054</b>
<b>Total exclusive of specie</b>	<b>6,341,935</b>	<b>8,703,244</b>	<b>9,615,891</b>	<b>5,180,860</b>

The shipments of specie have also decreased, the total for March being unusually light. The exports at the port since January 1st, exclusive of specie, are \$5,794,671 less than for the corresponding quarter of 1857, \$3,776,807 less than for the same period of 1856, and \$2,758,367 less than for the same period of 1855 :—

EXPORTS FROM NEW YORK TO FOREIGN PORTS FOR THREE MONTHS FROM JAN. 1.

	1855.	1856.	1857.	1858.
Domestic produce.....	\$12,958,884	\$18,710,798	\$17,847,525	\$12,421,547
Foreign merchandise (free)....	2,211,529	285,422	810,956	355,577
Foreign merchandise (dutiable).	1,632,130	824,463	1,180,366	1,267,052
Specie and bullion.....	4,578,803	2,893,573	5,314,637	9,328,725
<b>Total exports.....</b>	<b>\$21,381,346</b>	<b>\$23,714,256</b>	<b>\$25,153,484</b>	<b>\$23,372,901</b>
<b>Total, exclusive of specie.</b>	<b>16,802,543</b>	<b>19,820,683</b>	<b>19,838,847</b>	<b>14,044,176</b>

This leaves the exports for the nine months of the fiscal year, exclusive of specie, \$14,688,731 less than for the corresponding period of the previous year, \$10,989,795 less than for the nine months ending March 31st, 1856, and only \$2,051,327 in excess of the total for the nine months ending March 31, 1855 :—

## EXPORTS, EXCLUSIVE OF SPECIE, FOR NINE MONTHS ENDING MARCH 31ST.

	1855.	1856.	1857.	1858.
Six months ending Jan. 1 ..	\$29,892,747	\$39,915,729	\$48,596,501	\$34,702,441
January .....	5,895,517	5,511,230	4,884,170	4,689,739
February .....	4,565,091	5,606,209	5,938,786	4,173,577
March .....	6,341,935	8,703,255	9,015,891	5,180,860
Total nine months.....	\$46,695,290	\$59,736,412	\$63,435,348	\$48,746,617
Specie for same time.....	25,562,342	14,444,518	27,265,043	31,290,837
Total exports, 9 months	\$72,257,632	\$74,180,930	\$90,700,391	\$80,037,454

We shall not record larger exports in the month of April. The re-shipments of foreign goods have been less, owing to the small stock here, and we look for a diminished export of domestic produce, for the same reason. The decreased prices of most articles of export will also tend to reduce the official total, as the same quantities will make a less aggregate value. During the summer, and especially toward the close of the next season, we may expect a very animated business in the export trade. We annex a statement of the shipments from New York of some of the leading articles of domestic produce since the opening of the year:—

	1857.	1858.		1857.	1858.
Ashes—pots, bbls...	4,542	3,680	Naval stores—		
pearls .....	1,332	437	Tar .....	4,440	2,037
Beeswax, lbs. ....	61,660	68,945	Pitch .....	860	1,028
Breadstuffs—			Oils—whale, galls..	6,628	31,575
Wheat flour, bbls.	279,413	368,582	sperm.....	256,083	161,383
Rye flour.....	1,228	1,903	lard.....	9,354	10,874
Corn meal .....	14,666	19,384	linseed .....	20,345	18,678
Wheat, bush .....	782,410	349,934	Provisions—		
Rye.....	80,442	.....	Pork, bbls.....	16,958	28,201
Corn.....	1,324,719	1,062,627	Beef.....	10,929	31,674
Candles, mold, boxes	19,951	20,283	Cut meats, lbs....	15,442,401	12,217,013
sperm.....	1,791	3,981	Butter.....	182,215	415,431
Coal, tons.....	3,013	5,390	Cheese .....	483,907	1,437,239
Cotton, bales.....	68,973	44,736	Lard.....	9,888,536	4,085,838
Hay, bales.....	7,674	6,335	Rice, tcs.....	10,590	11,321
Hops.....	893	573	Tallow, lbs.....	825,830	176,939
Naval stores—			Tobacco—crude, pkg	8,363	17,454
Crude turp., bbls..	23,734	25,090	manuf., lbs.	896,867	1,422,874
Spts. turpentine..	7,511	14,005	Whalebone, lbs....	461,332	94,269
Rosin.....	77,727	94,156			

The shipments of breadstuffs are nearly even, although the loss in grain is not quite compensated for by the gain in flour and meal. In meat provisions the change is very important, the gain in pork and beef being very great, while there is a large decrease in lard and bacon. The latest advices from the English grain districts were thought to be a little less encouraging—the weather being cold and unfavorable to the growing wheat. Enough is not yet known, however, to produce any serious effect upon the market. The most hazardous experiment upon this subject has been tried in France. When it is remembered that for two years, previous to the last, the crops of cereals in that empire were short of the necessary consumption of the people, the propriety of selling off the entire surplus of the last year, as has now been done, (the French markets having been almost drained to supply the English,) may well be questioned. The whole question of price in France will now turn upon the maturing crop, for there is no accumulation left to meet any current deficit. In this country the new crop is most promising. Not only is the surface sown much larger than usual, but the appearance of the grain is unusually fine. If we have no blight or drought before harvest, our granaries will groan the next fall beneath their accumulated burdens.

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**JOURNAL OF BANKING, CURRENCY, AND FINANCE.**


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**BANKS OF MASSACHUSETTS.**

A rare and valuable document has been sent us, emanating from the office of the Secretary of State of Massachusetts, made in compliance with an order offered in the House of Representatives by Hon. AMASA WALKER, a member of that body. It is "House Document, No. 52."

From this is shown the condition of all the banks in the State, as they appeared in the returns made for the weeks ending July 4 and October 31, 1857, with all the *variations* in loans, deposits, circulation, and specie between those two periods; together with the proportion, per cent, of specie to circulation, and also of circulation and deposits to specie; together with the general condition of the banks on the 4th of January of the present year.

As may be at once perceived, it is a very elaborate document, requiring for its completion something like a thousand arithmetical calculations. Its value consists essentially in this, that it shows at a glance how each and all of the banks were situated just before the late financial tornado came on; how much and how suddenly they had to contract; and what the aggregate withdrawal of the circulation was, within a few weeks.

The facts thus shown are very significant and instructive. They explain why it was that such sudden and terrible disaster fell upon every department of business, and why the people in neither country nor city could meet their engagements.

It appears that, from the 4th of July to the 31st of October, a term of about four months, the country banks curtailed their loans to the amount of \$4,453,917; the Boston banks, \$3,753,809; total, \$8,207,726.

But most of these and the following contractions took place, it must be recollected, in about *six weeks*, viz., from the 1st of September to the ever-memorable 14th of October, when the general suspension of the Massachusetts banks occurred.

The deposits decreased as follows:—

In country banks .....	\$1,418,027, equal to.....	20.08 per cent.
In Boston banks.....	3,888,469, equal to.....	21. " "
Total decrease.....	\$5,306,496, average decrease.	20.75 " "

The circulation varied thus—

Of country banks .....	\$5,274,363, equal to.....	32.25 per cent.
Of Boston banks.....	1,375,211, equal to.....	18.72 " "
Total withdrawal .....	\$6,649,574, average contract'n	28.06 " "

The amount of specie in the banks at the two periods varied but slightly:—

Decrease in country banks.....	\$106,991
Decrease in Boston banks.....	503,860
Total decrease .....	\$610,851

This fact is very suggestive, because, in the meantime, these same banks reduced their—

Circulation.....	\$6,649,574
Deposits.....	5,306,496
Total.....	\$11,956,070
And yet paid out in specie only.....	610,851
Difference.....	\$11,345,219

That is, they *redeemed* over six-and-a-half millions of circulation, and *paid off* over five millions of deposits, in all over eleven millions of dollars, and parted with but about \$600,000 of specie! In other words, they discharged all this amount of obligations with less than six cents on the dollar of specie!

This was done by *withdrawing*, as we have seen, over six-and-a-half millions of circulation, and by *contracting* their loans for the balance. The customers of the banks, then, in these few weeks, had to pay in the above sum of \$11,345,219, which was withdrawn from the previous credit of these banks.

What effect such a tremendous contraction of bank credits must have had on all other credits, is easily imagined; what effect it did have, the terrible events of last September and October abundantly demonstrated.

Table No. 5, which shows the proportion of specie to circulation, and of specie to circulation and deposits, is by far the most interesting.

From this we learn, very clearly, why the banks were compelled to make such a severe contraction; and why, notwithstanding such a contraction, they were themselves compelled at last to suspend specie payments. The banks owed for circulation and deposits, on the 4th of July last, \$23,416,373; they had in specie only \$1,112,818—equal to \$21 04 of debts due on demand to one dollar in specie. The Boston banks had in liabilities, \$25,858,675; specie, \$3,504,546—equal to \$7 19 of debts to one dollar of specie; average of all the banks in the State, \$10 47 of immediate liabilities to one dollar of specie.

On a currency having such a foundation, or basis, rested all the commercial, manufacturing, and other industrial interests of Massachusetts. Such was its condition when called to encounter the memorable revulsion of 1857.

But even these facts do not fully exhibit the perilous condition of this currency.

Had all the banks in Massachusetts been graduated on a uniform scale—that is, had they held an equal proportion of specie to circulation and deposits—there would have been mutual confidence; but such was not the case—there was a great disparity between them. That this weakened the general system is too obvious to require proof.

The following examples illustrate this fact:—

	Circulation to \$1 in specie.	Circulation and deposits to \$1 in specie.
Boylston Bank, Boston.....	\$8.63	\$22.70
Boston Bank, Boston.....	1.12	4.77
Granite Bank, Boston.....	4.52	18.74
Massachusetts Bank, Boston.....	.77	5.41
Commercial Bank, Salem.....	17.60	32.69
Quinsigamond Bank, Worcester.....	6.82	10.39
Lowell Bank, Lowell.....	33.58	42.96
Randolph Bank.....	6.36	11.67
Merchants' Bank, New Bedford.....	35.78	58.15

The whole table showing the condition of the 173 banks of the Commonwealth presents the same striking variations, proving that there has hitherto been no

law, or usage, establishing any proportion between the specie of a bank and its indebtedness, although the safety of the people, as to having an *unfluctuating currency*, depends wholly on that fact.

This is seen in the contractions which took place in the individual banks, ranging, in general, according to the proportion which their specie bore to their immediate indebtedness. For example: the Boylston, which had \$22 70 to \$1 of specie, withdrew 26 per cent of its circulation; while the Boston Bank, which had only \$4 77 of immediate liabilities to \$1 in specie, extended its circulation 31 per cent. So the Granite Bank contracted 33 per cent, while the Massachusetts extended its circulation 31 per cent.

The facts in regard to the country banks in this respect, are still more striking. The Mahawie Bank, (Great Barrington,) whose proportion of immediate liabilities was \$29 06 to \$1 of specie, contracted its circulation over 49 per cent. The Pittsfield Bank, which had \$420,717 in circulation against \$9,229 in specie, withdrew, in the time referred to, \$265,964, or 63 per cent of the whole! The basis of its large circulation was only two cents and two mills on the dollar.

But we must not go further into particulars. The whole document is eloquent with facts of the most impressive kind. It ought to be in the hands of every bank officer, and of every person engaged in the study of our mixed-currency system. From a careful study of facts like these, the whole philosophy of our monetary system may be deduced; and without the examination and contemplation of such facts, no one can ever arrive at any just conclusions in regard to the nature and uses of a complex monetary system like that of the United States; for, although differing in degrees as to stability, the general character of all our State currencies is essentially the same.

#### EXPORTS OF GOLD FROM THE UNITED KINGDOM IN 1857.

We compile the following statement of the exports of gold and silver from the United Kingdom to various countries during the year 1857, (1st of January to 31st December,) from the official accounts issued by the British Board of Trade, and furnished to us in the *Belfast Mercantile Journal* :—

	Gold.	Silver.		Gold.	Silver.
Hanse Towns...	£348,534	£587,352	Gibraltar ....	£419,245	£6,069
Belgium.....	325,147	8,005	Malta .....	29,203	.....
France .....	10,863,818	324,511	United States	843,130	15,980
P'rtug'l & Mad'ira	244,283	6,822	Brit. N. Am...	51,648	776
Spain & Canaries	46,941	3,801			
				£13,265,949	£953,316
Danish West Indies, (St. Thomas.) .....				226,892	149,071
Spanish West Indies, (Cuba and Porto Rico,).....				175,207	.....
Brazil.....				958,014	54,901
Egypt, (in transit to India and China,).....				305,996	17,295,432
British possessions in South Africa.....				118,097	.....
Mauritius... ..				55,541	.....
Other countries.....				49,804	52,751
Total exports.....				£15,061,500	£18,505,468
Total gold and silver.....					33,566,908

The imports of the precious metals were not registered until the 1st of November, 1857, so that they are incomplete for the year. The total amount of gold imported from that date to the end of the year 1857 was £5,212,317, and of silver £1,977,305, making the total imported in the two months £7,189,622.

## SAVINGS BANKS IN THE STATE OF NEW YORK.

In accordance with the provisions of section 2 of chapter 136 of the laws of 1857, the Superintendent of the Banking Department of the State of New York, JAMES M. COOK, presented to the Legislature, February 15th, 1858, a report of the condition of the savings banks in the State. The document comprises 50 pages, of which 12 are occupied by the Superintendent's remarks upon the nature and operations of the system of savings banks, and his suggestions (in pursuance of the law) for amendments to improve the system. The condition of each institution for savings, 54 in all, on the first of January, 1858, is separately given in a detailed tabular statement, and in uniform style.

The total resources of these institutions on the 1st of January, 1858, were—

Bonds and mortgages.....		\$20,234,586
Estimated value of mortgaged premises .....	\$48,668,888	
Stock investments, amount invested.....		17,349,300
Par value of stocks .....	17,818,700	
Estimated value of same .....	17,029,242	
Stocks upon which money has been loaned, par value..	1,582,227	
Amount loaned thereon.....		1,123,961
Amount loaned upon personal securities.....		21,046
Amount invested in real estate .....		947,165
Cash on deposit in banks.....		3,287,441
Cash on hand not deposited in banks.....		854,770
Amount loaned or deposited, not included under either of the above heads .....		50,462
Miscellaneous resources.....		17,190
Add for cents .....		70
<b>Total resources, January 1, 1858 .....</b>		<b>\$43,885,991</b>

Their liabilities and excess of assets at the same date were :—

Amount due depositors.....	\$41,422,672	
Miscellaneous liabilities.....	25,651	
		<b>\$41,448,323</b>
<b>Excess of assets over liabilities .....</b>		<b>2,437,623</b>
Add for cents.....		45
<b>Total liabilities and excess of assets.....</b>		<b>\$43,885,991</b>

In the following table we present the other principal statistics as given in the report before us for the year 1857, and with these we combine the corresponding returns for 1856, from the tables published in the *Merchants' Magazine* of June, 1857, (vol. xxxvi., pp. 721-2) :—

	1856.	1857.
Number of open accounts at close of year.....	204,375	203,804
Average sum at credit of each depositor at close of year	\$204 03	\$203 24
Total amount deposited during the year .....	22,363,855 69	24,830,443 00
Total amount withdrawn " " " .....	18,369,063 02	26,541,682 00
Amount received for interest.....	2,277,180 81	2,643,615 00
Amount placed to credit of depositors during year....	1,768,174 75	2,070,851 00

The Superintendent states that the general condition of the savings banks of the State "is sound and satisfactory to him as shown by their respective statements. It will be observed how strong the public confidence still remains with them, by seeing that the monetary crisis of the year 1857 only reduced their deposits \$1,711,239. No greater evidence of the public faith in their management and the integrity and capacity of their respective trustees could be given." Hav-

ing previously remarked at length upon the propriety and necessity of several amendments to the existing laws, in order to increase the security of depositors in these banks, he recapitulates the substance of them, and suggests to the Legislature that the following provisions should be enacted :—

1st. The passage of an act making the investments of savings banks uniform throughout the State.

2d. The passage of an act preventing any bank of discount and deposit, located in any city or village in this State, from representing itself by sign, device, advertisement, or otherwise, as a savings bank, when a chartered savings bank is actually transacting its business in such city or village.

3d. To prevent, by legal enactment, all savings banks in this State from making any loan upon personal security alone.

4th. Give by legislative enactment the power for a majority of the trustees of every savings bank, to remove any trustee who shall have absented himself from three successive regular meetings of the board, unless such board are satisfied that such absence arises from sickness or absence from the city, town, or village where such bank is located.

In concluding his report, the Superintendent suggests to the Legislature—

—“That it should scrutinize with great care, all applications for the chartering of new savings banks. They are sufficiently numerous at present for the accommodation of the public. An examination of their condition in detail, as presented in the tables of the report, will show that competition for these deposits by dividing them, adds no strength to their ultimate security. It requires a reasonable amount of deposits to pay the necessary expenses of the institution.

“A savings bank to be successful, and consequently useful, requires the concentration of population found only in our cities or very large villages, and even in those localities, it will be wise to ascertain if an additional one is really wanted, before another charter is granted. Except in such localities they are comparatively useless, not to say dangerous, their expenses being liable to trench upon their deposits.”

In the opinion of the Superintendent, nothing will tend to decrease the usefulness and safety of institutions for savings more than an indiscriminate granting of charters for them.

#### FINANCIAL ACCOUNTS OF THE STATES OF THE UNION.

OHIO, WISCONSIN, IOWA, LOUISIANA.

We continue from the *Merchants' Magazine* of April, 1858, (vol. xxxviii., pp. 463-471,) and previous volumes, the publication of our abstracts of the financial accounts of the several States. The number for May, 1857, (vol. xxxvi. pp. 531-547,) contains a list of references to our former articles of this character :—

#### OHIO.

Governor S. P. CHASE, in his message of January, 1858, to the General Assembly of Ohio, gives a lengthy account of the defalcations in the treasury in 1855-6, as well as of the current finances and debt of the State. From it we condense the subjoined synopsis. The defalcation is thus summed up—

Deposited by treasurer with failed banks and bankers.....	\$204,686 66
Retained by him under claims for exchange.....	18,457 10
Amount unlawfully abstracted.....	579,911 00
	<hr/>
Making an aggregate of.....	\$803,004 76

Which shows—instead of an available balance in the treasury on November 15, 1855, applicable to the disbursements of 1855-6, of \$703,570 08, as was re-

ported—a real deficit of \$99,433 96. But debts also existed, which are added to the foregoing aggregate in the following statement to show the actual condition of the treasury :—

Deposited with failed banks, etc., retained for exchange, and abstracted	\$803,004 76
Amount retained as exchange paid for interest, January, 1856.....	2,725 54
Amount of debts of 1855, unpaid.....	639,665 75

Total balance against treasury.....	\$1,445,396 05
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Of the sum due the treasury from revenues due in 1855, but not then paid, payments were made in 1855-6 by banks for taxes to the amount of \$126,598 59. On account of the deposit with Dayton Bank payments were made to the amount of \$15,000.

The aggregate receipts of 1855-6, including the above sums, were..	\$8,588,258 81
The aggregate disbursements, as shown by the Auditor's drafts, including \$519,665 75 paid on account of debts of 1854-5, were..	8,712,206 82

The excess of disbursements above receipts .....	\$123,852 51
To which add the deficit of cash means, Nov. 15, 1855.....	99,434 16
And exchange retained by Breslin, Jan. 1, 1856.....	2,725 54

Making an aggregate of.....	\$226,012 21
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Which had to be provided from other sources than revenues, and was probably in part provided through temporary loans by Treasurer Gibson.

The aggregate receipts of 1856-7, were.....	\$8,189,155 14
The aggregate disbursements as shown by Auditor's drafts redeemed	8,041,738 75

Excess of receipts above drafts redeemed.....	\$147,422 09
The amount unprovided for from revenue, Nov. 15, 1856, was as seen above.....	226,012 21
Deduct from this last amount the excess of receipts.....	147,422 09

And there remained, Nov. 15, 1857, still unprovided for.....	\$78,590 12
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To this should be added the excess of warrants issued above warrants redeemed, of which \$121,185 88 were paid by the State banks and branches under the temporary arrangement.....	127,667 45
---	------------

And the amount due Seneca County Bank for bonds converted by the Trust Company.....	100,000 00
---	------------

And in the event of judicial decision affirming the canal contracts, for the difference between actual cost and contract price of repairing sections 2, 5, 6, 7, and 8, the further sum of.....	45,557 48
---	-----------

Leaving a balance unprovided for, on Nov. 15, 1857.....	\$351,825 00
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From the foregoing, it appears that the expenses of 1855-6 and 1856-7, were met from the revenue of those years, without the aid of any balance from the year 1854-5; and that an actual deficit of cash means at the close of that year of \$99,433 96, was supplied; and debts contracted in 1854-5, to the amount of \$519,665 75, were paid with no means derived from that year, except \$141,598 59, from bank taxes and the Dayton Bank deposit. If there had been no defalcation, the means in the treasury would have been ample to pay the debts of 1855, and meet all other demands. If there had been no debts, the defalcation would not have sensibly embarrassed the operations of the treasury. Funds to supply, in part, the drain of these debts and the deficit created by the defalcation, were obtained through temporary arrangements, to the amount of about \$350,000, and at the close of 1857, these funds had been already reimbursed, in great part, out of the current revenue.

The following table shows the State debt, January 1, 1858 :—

	Foreign debt	Amount outstanding.	Annual interest.
Five per cent stock, payable in New York city..		\$1,025,000 00	\$51,250 00
Six per cent stock, payable in New York city at the pleasure of the State, after December 31.	1860 .....	6,413,525 27	334,799 52
	1870 .....	2,183,531 93	131,011 91
	1875 .....	1,600,000 00	96,000 00
	1886 .....	2,400,000 00	144,000 00
Total foreign debt.....		\$13,621,817 20	\$807,061 43
Total domestic debt payable at Columbus..		217,260 37	16,523 10
Total foreign and domestic State debt....		\$13,899,067 57	\$823,534 88
Total irreducible " "		2,501,027 76	141,402 27
Grand total " "		\$16,402,095 35	\$964,956 80

Governor Chase states that "the principal of the State debt was reduced during the past year, 1857, by the payment of \$109,207 00, derived chiefly from the premium of the loan of \$2,400,000 negotiated to discharge the amount which became payable after 1856. Of the remaining debt, the sum of \$6,413,535 27 will become payable at the pleasure of the State at any time after the 31st of December, 1860. The terms of this contract exclude the idea of obligation to pay at that time, but it will doubtless be the pleasure of the State to pay a very large part, if not the whole of this debt, as soon as the right to pay shall accrue. The proceeds of all public property which may be sold should be exclusively devoted to this purpose, and provisions should be made, if a moderate additional levy will effect the object, of a sufficient sum to discharge at least one-third of the amount."

The "irreducible debt" above mentioned is composed of the proceeds of lands granted by Congress for educational purposes, etc., which have been paid to the State under pledge that six per cent thereon shall be annually paid to the objects of the grants.

WISCONSIN.

The financial exhibit in the message of Gov. RANDALL, January, 1858, goes back to the commencement of the State government, and shows how the expenses have exceeded the income year by year, and how successive State officers have attempted to cover up the annual deficits by estimates which have never been realized.

The gradual increase of the expenditures of the State is thus exhibited—

	1849.	1851.	1853.	1855.	1857.
Expenditures....	\$70,085	\$101,885	\$160,407	\$273,067	\$442,756

The Secretary of State estimates a deficiency at the end of the current year, 1858, of \$70,345 66, which does not include the deficiency in the accounts of ex-Treasurer Janssen, amounting to \$35,257 84, which there is no probability of realizing—add this, and the deficiency in the treasury for the current year will be \$105,604 50.

IOWA.

Gov. JAMES W. GRIMES, in his message of January 12, 1858, presented a summary of the State finances, from which we condense the following :—

Amount in the treasury, Oct. 31, 1856 .....	\$11,254 91
Receipts during fiscal year 1856-7.....	281,234 42
<hr/>	
Aggregate resources for the year.....	\$242,489 33
Amount paid out during the year .....	228,806 23
<hr/>	
Balance in treasury at the end of year.....	\$18,683 10
Arrears from the several county treasurers.....	62,401 94
Due from the counties on assessment of 1857 .....	418,709 59
Taxes for 1858, as estimated by Auditor of State.....	500,000 00
Taxes for 1859 .....	575,000 00
<hr/>	
Total resources to Jan., 1860, (next General Assembly).....	\$1,569,794 62
Estimated expenses during same period.....	\$523,412 90
Outstanding Auditor's warrants.....	155,003 56
<hr/>	
	678,416 46
<hr/>	
Estimated excess of resources to January, 1860.....	\$891,378 16

Since these estimates are on the basis of the present rate of taxation, which may not be available, the Governor suggests a loan, at 6 per cent, to the amount allowed by the constitution upon the bonds of the State, believing that they can be negotiated at par. On the subject of the five per cent fund from the sale of public lands, provided in the act admitting Iowa into the Union, and the subsequent action of the United States government in issuing military land warrants, the Governor recommends a suit in the Court of Claims to recover the percentage (estimated at \$1,000,000) which he considers to be due to the State. He recommends a revision of the revenue law, by which counties, instead of the official bonds of the county treasurers, will be holden to the State, there being \$62,401 94 in hopeless arrears from this source.

## LOUISIANA.

From the annual report of S. F. MARKS it appears that the receipts into the State Treasury for the year ending December 31, 1857, were as follows:—

General fund.....	\$1,112,533 02	Free School Accum. fund..	\$19,095 00
Current school fund.....	357,799 09	Redemp. State debt fund..	13,458 00
Internal impr'm't tax fund	121,019 96	Seminary Fund .....	4,080 00
Internal impr'm't fund ...	38,538 22	Free School Fund.....	15,870 00
Levee and drainage fund..	625,633 88	And on road and levy fee.	10,971 30
Free School Fund.....	61,163 34	<hr/>	
Making the total receipts.....			\$2,381,257 34
Balance on 1st January, 1857 .....			902,414 71
<hr/>			
Total resources of the year 1857.....			\$3,283,672 05
Total expenditures during the year.....			2,225,613 29
<hr/>			
Balance in treasury, 1st January, 1858.....			\$1,058,058 76

distributed among the various funds enumerated.

The total receipts into the treasury of taxes from all the parishes in the State for the year 1857, amounted to \$1,249,011 55; of which amount the parish of Orleans paid \$458,431 66, or 36 per cent of all the taxes of the State. The parishes next in order in amount of taxes paid are Rapids, \$44,974 72; St. Mary's, \$42,750 00; Iberville, \$40,991 64; St. Landry, \$39,073 20; Concordia, \$35,158 71; Tensas, \$34,797; East Baton Rouge, \$30,578; Ascension, \$30,305, etc. The Auditor remarks that as the law now stands, the collection of taxes "shall begin on the first of August in each year." But he proposes that the

collectors should have the whole year to effect their collections. The expenses to the State for criminal prosecutions amount to \$50,000 for the year. The Auditor remarks:—"Although the State by the law is made to pay all of these expenses, and expected to reap the benefit of the fines and forfeitures which might accrue in the different parishes, yet not one dollar has been paid into the State treasury from that source since the passage of the law."

The public debt is composed of the following items:—Bonds for property banks, \$6,124,311 10; bonds for municipality No. 2, \$198,240 00; bonds generally, \$3,767,000 00; debts to trust funds, \$511,223 83; total, \$10,600,779 93.

VALUATION OF PROPERTY IN IOWA.

We publish below a summary exhibit of the taxable property in Iowa from 1851 to 1857, inclusive; and of the returns for the principal counties in 1857:—

1851.....	\$28,464,550	1855.....	\$106,895,390
1852.....	38,427,304	1856.....	164,394,413
1853.....	49,540,376	1857.....	210,044,533
1854.....	72,827,204		

Aggregate value of town lots as estimated in the State in 1857, \$29,443,884; value of personal property, \$45,439,564 66; total State tax, \$420,089 07.

Returns for the principal counties—

COUNTIES.	Town lots.	Personal property.	Aggregate valuation.	Val. of land per acre.	State tax —total.
Dubuque.....	\$5,144,495	\$4,113,360	\$21,597,651	\$18 96	\$32,906 81
Lee.....	.....	2,712,208	12,132,788	.....	24,265 58
Scott.....	2,922,278	2,091,688	8,685,813	13 14	17,371 63
Muscatine.....	1,814,690	1,590,718	7,659,640	16 00	15,319 79
Des Moines.....	2,464,375	1,744,950	7,597,738	12 07	15,195 48

In the statement showing the indebtedness of the different counties to the State, Dubuque County is the only one "balanced." Des Moines owes \$3,569; Lee, \$5,054 60; Muscatine, \$732 59; and Scott, \$1,169 36.

PRODUCTION OF GOLD IN AUSTRALIA.

According to the Melbourne *Argus* of January 18th, 1858, the amount of gold dust received by escort from the several gold fields of Australia during the year 1857 was 148,125 ounces. As compared with 1856, during which year 138,823 ounces were received—there is an increase of about 9,300 ounces in favor of 1857. The yield from the southern gold fields steadily increased during the year 1857, while for the northern fields there was rather a falling off. The following are the amounts received by each escort quarterly during the year 1857:—

	First quarter.	Second quarter.	Third quarter.	Fourth quarter.	Total year.
Western... ounces	21,197	19,224	19,936	27,399	87,756
Southern.....	3,630	6,799	7,734	12,724	30,887
Northern.....	9,271	5,255	8,258	5,699	29,483

The first escort for the year was a very low one. The quantities from all the gold fields were greatly below the respective weekly and fortnightly averages—in many instances not amounting to more than one-half. The extraordinary falling off in the returns is undoubtedly owing in a great measure to the recent reductions made by gold buyers in their buying prices.

## BRITISH BANKRUPTCY STATISTICS.

From data which we find in the *Belfast Mercantile Journal*, we arrange the following statements :—

The statistics of bankruptcy for the last eight years show the following number of failures in each year :—

1850.....	836	1852.....	843	1854....	1,264	1856....	1,205
1851.....	874	1853.....	746	1855....	1,409	1857....	1,481

The bankruptcies annulled in the same period were :—

1850.....	26	1852.....	32	1854....	65	1856....	54
1851.....	40	1853.....	41	1855....	59	1857....	83

## THE BANK OF FRANCE.

Our readers are aware that the operations of the Bank of France are most extensive and important, and that they have exercised a very great influence during the last few years. In the *Merchants' Magazine* of August, 1857, (vol. xxxvii., pp. 215-6,) we published the new law of 1857 for its continuance and additional privileges, to some of which we refer in the present notice. The condition of the bank in February of the present year, 1858, was as follows :—

LIABILITIES.		ASSETS.	
Capital.....	182,500,000	Specie on hand.....	282,800,000
Circulation.....	578,500,000	Loans.....	474,900,000
Treasury deposits.....	78,600,000	“ on railway securities..	62,700,000
Private “.....	146,000,000	Advances to the State.....	93,000,000
Reserve fund.....	26,000,000	Miscellaneous.....	141,773,000
Miscellaneous.....	18,159,000		
Total, francs.....	1,029,759,000	Total, francs.....	1,055,173,000

Although the circulation of the bank at the above date was quite extended, yet it was 50,000,000 francs less than it was two years since.

We now present an account of the operations of the bank during 1857, derived from the annual report recently made by its new governor, the Count DE GERMINY, who succeeded D'ARGOUT. A considerably portion of the accompanying remarks consists of our condensation and rearrangement of a careful review of the report in the *Boston Advertiser*, and which we have adopted as a statement of its important features and suggestions. The report shows that the transactions of the bank during 1857 were greater than in any former year, and contains many other interesting statements. It should be remembered that the whole of the banking system of France is centered in this one establishment, and hence any increase in the commercial and financial operations of the country must also increase the operations of the Bank of France. The total amount of its operations in 1857 were 6,065,000,000 francs against 5,809,000,000 francs in 1856. The line of discounts ranged from ninety-five to one hundred and twenty millions of francs, and it is therefore evident that the bills discounted were in general upon short time, and also for small sums. On the 31st of October last 67,000 bills were collected in Paris which averaged very nearly \$250 each, so that a large part of the assistance afforded by the bank must at that time have been given to the small trade of the metropolis. The losses in 1857 through bad debts upon the enormous amount of discounts above mentioned is stated in the

report to have been only about fifty-five thousand dollars, reduced, by recovering outstanding debts, to something less than thirty-five thousand.

The new privileges of the bank have allowed it to raise the rate of discount without affecting (as formerly) the dates of bills. This modification in France, as in England, is considered to be a salutary one during commercial revulsions. The rates of discount were changed under the new law nine times in the year.

During the two years 1856 and 1857 the bank purchased large amounts of bullion to sustain specie payments. This course was forced upon the bank by the legal prohibition against raising the rate of discount above six per cent, (which was removed by the new law of 1857.) and by the extended circulation of the bank, which compelled a constant attention to the stock of specie; and the managers spared no pains or expense to keep this fund from diminution. During 1856 and 1857 the bank made purchases of specie and bullion, and paid premiums therefor as follows:—

In 1856, purchases .....	563,900,000 francs;	premiums 7,394,400 francs.
1857 " .....	568,633,000 "	4,678,100 "
Aggregate " .....	1,132,533,000 "	12,072,500 "

Nearly the whole of this enormous amount of treasure was drawn from the English market, a fact which sufficiently accounts for the attention with which English financiers observed the movements in France. Among the movements which preceded the general revulsion in the fall of 1857 none was more remarkable than the constant drain of specie which this bank kept up against the Bank of England, and which, in the natural course of trade, was thus felt more or less through the whole commercial world. The relations of France to the rest of continental Europe, and the immense investment of French capital which had been made in railroads and other important enterprises in Germany and elsewhere, kept the balance constantly unfavorable to France, and occasioned an immense exportation of specie. To relieve itself the Bank of France resorted to the practice of buying gold, and thus keeping up its stock of bullion by artificial means, to an extent seldom if ever before witnessed in the history of banking. The bank was forced by legal restrictions to keep its rate of interest one or two per cent lower than the rates which prevailed elsewhere. In consequence of this, and the other causes already named, the most which it could effect by the extraordinary efforts described, was to keep its stock of bullion at the same level, while it could not retain a single franc of the enormous mass of gold which it drew in.

This process of purchasing bullion by time bills, generally, if not always, leads to a sacrifice, as is shown in the report. At the present time, the position of the Bank of France, so far as the amount of specie is concerned, is just what it was two years ago, so that this great expenditure in premiums, and the flow of bullion which it artificially produced, have left no trace in the present condition of the bank.

Yet, the result of the business of the last two years was favorable to the stockholders. The immense circulation which was kept up, amounting to more than three times the capital, enabled the bank to pay these large premiums for the gold, which it was constantly buying to pay out again, and to keep its business lucrative.

At the same time, it is obvious that such a system of conducting an institution, which controls the financial destinies of an entire nation, is far from safe. The transactions of the bank during these two years furnish a suggestive commentary upon the folly of attempting to fix arbitrary rules or limits upon the course of trade.

The removal of the restrictions upon the rate of discount, and the adoption of the policy of suffering the bank to follow the laws of commerce, instead of attempting to contravene them, will undoubtedly produce a feeling of security and stability which has heretofore been impossible. These changes, introduced by the new law of 1857, enabled the bank to weather the recent financial storm, which for a time threatened more dangerous results in France than anywhere else. The present accumulation of the precious metals is observable in France and other parts of the continent, as well as in England, which will obviate a recurrence of the loss hitherto sustained by the Bank of France in its forced purchases of bullion.

#### PAPER CURRENCY OF THE THREE GREAT COMMERCIAL NATIONS.

According to the statement of the Chancellor of the Exchequer, in Parliament, the bank note circulation of Great Britain in the hands of the public on the 1st day of January, 1858, was as follows:—

Issued by the Bank of England.....	\$92,814,736
“ “ “ Joint Stock Banks.....	89,525,000
	<hr/>
“ “ “ Bank of France.....	\$182,339,736
“ “ “ Banks of the United States	107,992,874
	185,951,553

The amount of gold and silver coin and bullion held by the Bank of England and the Joint Stock Banks was \$57,620,962; by the Bank of France, \$45,997,740; and by the banks of the United States, \$83,853,270.

#### NEW BANK LAW OF MASSACHUSETTS.

The following law, in relation to banks, has been passed by the Legislature of Massachusetts, 1858. By its provisions, the banks of that State are required to keep on hand, in specie, fifteen per cent of their aggregate liability for circulation and deposits, instead of its being left to the discretion of the banks; and they are also restricted in the amount of circulation to one hundred per cent of their respective capitals, in lieu of one hundred and twenty-five per cent as heretofore allowed by law:—

##### AN ACT TO INCREASE THE AMOUNT OF SPECIE IN THE COMMONWEALTH.

SECTION 1. Every bank within this Commonwealth shall be required to keep an amount of specie equal to fifteen per cent of its aggregate liability for circulation and deposits; and whenever, by the weekly or monthly returns, required by the three hundred and seventh chapter of the acts of the year eighteen hundred and fifty-four, the weekly average amount of specie in any bank in Boston is less than fifteen per cent of the aggregate liability of said bank for circulation and deposits, or any bank in South Boston, redeeming its bills at any other bank, the monthly average amount of specie is less than fifteen per cent of the aggregate liability of said bank for circulation and deposits; it shall be unlawful for any such bank to make new loans or discounts until the amount of specie in said bank shall

be restored to the proportion of fifteen per cent of its aggregate liability for circulation and deposits; *provided*, that banks out of Boston, in the monthly returns required by the three hundred and seventh chapter of the acts of the year eighteen hundred and fifty-four, shall return the monthly average amount of balances in other banks not bearing interest, which may be applied to the redemption of their bills, and the same shall be considered and deemed equivalent to specie for the purposes of this act.

SEC. 2. The amount of bills issued by any bank, shall not at any one time, exceed the amount of the capital stock of said bank. So much of the eighth section of the thirty-sixth chapter of the revised statutes, as relates to the amount of bills which any bank may issue, and all other acts or parts of acts inconsistent with this section, are hereby repealed.

SEC. 3. This act shall take effect from and after the first day of June next.

## STATISTICS OF TRADE AND COMMERCE.

### COMMERCE OF THE SANDWICH ISLANDS.

We have compiled the following account of the commerce of the Hawaiian Kingdom, or the Sandwich Islands,\* from the "Custom-house statistics for 1857, prepared by W. GOODALE, Collector-General of Customs," and furnished to us in the *Pacific Commercial Advertiser*, of Honolulu, in its issue of January 29th, 1858.

In the three following tables we have a detailed statement of the several classes of imports at Honolulu in 1857:—

VALUE OF GOODS IMPORTED FROM			
United States, Atlantic side	\$265,833 44	Hamburg.....	\$5,331 99
"    Pacific    "	268,735 60	Society Islands....	15,444 13
Great Britain.....	198,350 00	Sea, &c.....	20,642 66
Vancouver's Island.....	4,270 99	China, (Hong Kong,).....	21,384 50
Australia.....	9,562 92	Japan.....	1,073 55
Bremen.....	62,204 42		
Total.....			\$873,134 20
IMPORTS FREE OF DUTY BY			
Returned cargoes.....	\$17,563 88	Rifle company.....	\$2,678 67
Whalers.....	11,001 96	H. M.'s Chamberlain.....	1,170 75
Missions.....	4,307 60	Fire department.....	536 00
Charitable societies.....	1,593 39	Diplomatic agents.....	351 00
Agriculturists.....	3,690 29		
Total.....			\$42,898 54
GOODS AND SPIRITS BONDED, FROM			
United States, Atlantic side	\$107,302 38	Sea.....	\$20,141 40
"    Pacific    "	26,261 84	Society Islands.....	2,657 78
Great Britain, &c.....	14,826 68	Bremen.....	5,467 58
China, (Hong Kong,).....	237 36	Hamburg.....	1,204 00
Total.....			\$178,099 02

\* In the *Merchants' Magazine* of July, 1857, (vol. xxxvii., pp. 99-103.) we presented a longer article of similar character to this, which contained the commercial statistics of Sandwich Islands for a series of years, with a list of numerous references to our previous statements. In the same number, pp. 117-120, we gave an account of the production of the sugar-cane in the islands. In February, 1858, pp. 163-175 of this volume, we published an elaborate article describing the ports of the islands; and page 213 of same number, a statement of the finances of the government. In April, 1858, page 457 of this volume, a notice of the marine telegraph at Honolulu.

Aggregate value of imports at Honolulu in 1857, \$1,094,126 76. The values imported at the other ports were—*free*, at Lahaina, \$1,120 68; at Hilo, \$3,140; at Kawaihae, \$1,517 05; at Kealakeakua, \$561 11; and *dutiable*, at Lahaina, \$19,855 44; at Hilo, \$790 87; at Koloa, \$52 50; aggregate at these ports, \$36,038 65. Making the total value of imports at the Sandwich Islands, \$1,130,165 41.

The quantities of spirits taken out of bond for consumption (the statements are in gallons) in 1857, were as follows:—

	Honolulu.	Lahaina.	Total.		Honolulu.	Lahaina.	Total.
Brandy.....	4,684	796	5,480	Port .....	1,122	14	1,136
Rum.....	290	21	311	Sherry .....	1,540	55	1,595
Gin .....	2,559	200	2,759	Madeira .....	177	..	177
Whisky .....	2,995	369	3,364	Ch. Cord'ls, &c.	351	40	391
Alcohol.....	521	...	521	Sundries.....	403	7	410

In the report before us we have a statement of the several vessels, 27 in all, arriving at Honolulu in 1857, whose cargoes were invoiced at over \$5,000 in value, from which we collect the annexed list of cargoes, valued at \$38,000 and upwards.

Date of entry.	Flag.	Vessel.	From.	In. val. cargo.
March 13, 1857....	American....	Roduga.....	Boston.....	\$81,592 07
July 6, .....	"	Yankee.....	San Francisco...	45,676 41
Aug. 10, .....	"	Harriet & Jessie..	Boston .....	121,994 86
" 18, .....	British .....	Kamehameha IV.	Liverpool .....	107,700 91
Sept. 24, .....	American....	Yankee .....	San Francisco...	39,752 33
Oct. 3, .....	"	John Gilpin, a....	Boston .....	82,121 56
" 5, .....	"	Fortuna.....	" .....	67,482 55
Nov. 4, .....	"	Gladiator.....	New Bedford...	38,742 15
" 16, .....	Bremen.....	Antilla.....	Bremen .....	54,564 81
" 25, .....	British.....	E. Barker.....	London.....	71,810 28

(a.) Foundered off Cape Horn, January 29th, 1858, and all hands, 45, saved.

The Custom-house receipts at each port in 1857, were as follows:—

Honolulu....	\$181,403 16	Hilo.....	\$83 71	Kealakeakua..	\$41 00
Lahaina.....	9,140 41	Kawaihae....	68 00	Koloa.....	40 75

Total Custom-house receipts..... \$140,777 08

The last quarter's returns for Hilo are not included.

The principal items of these receipts were—

	Honolulu.	Lahaina.
Import duties on goods.....	\$51,112 16	\$992 73
" " spirits.....	66,471 95	7,122 32
" " bonded goods.....	1,324 84	.....
Transit duties on " .....	790 01	18 33
" " spirits.....	499 89	125 70
Stamps.....	3,029 60	740 50
Storage.....	4,227 30	.....
Interest.....	1,274 99	.....

The aggregate exports from Honolulu, were as follows:—

Value of foreign goods exported .....	\$222,222 19
Value of domestic products exported.....	247,703 91
Value of domestic products furnished as supplies.....	175,600 00
Total value of exports.....	\$645,526 10

The latter two of the preceding summary statements are made up of the following details:—

Domestic products exported—

Produce of the whale fishery valued at Custom-house rates; whale oil, 40 cents per gallon; sperm oil, \$1 per gallon; whalebone, 25 cents per pound..... \$247,703 91

Domestic products furnished as supplies—

To 111 whalers, at an average of \$600 each..... \$66,600 00  
 To 70 merchantmen, at an average of \$200 each..... 14,000 00  
 To 10 national vessels, at an average of \$1,000 each..... 10,000 00  
 To all other ports, all vessels, cargoes, and supplies, estimated at .. 85,000 00  
 \$175,600 00  
 247,703 91

Total of domestic exports and supplies ..... \$423,303 91

The details of the articles, and quantities of each, composing the domestic exports from Honolulu in 1857, were:—

Sugar.....lbs.	700,556	Whalebone.....lbs.	21,997
Molasses.....gall.	27,087	Tobacco.....bales	87
Syrup.....	21,399	Kukui oil.....bbls.	28
Salt.....bbls.	1,550	Goat-skins.....	49,805
Hides.....	9,835	Ship-bread.....lbs.	10,900
Tallow.....casks	642	Horses.....	8
Pulu.....bales	2,882	Hay.....bales	285
Beef.....bbls.	1,462	Pork.....bbls.	30
Fungus.....bags	375	Arrow-root.....lbs.	16,511
Wool.....bales	253	Horns.....	3,055
Coffee.....lbs.	311,807	Flour.....bbls.	79
Whale oil.....gall.	53,332	Limes.....bxes.	20
Sperm oil.....	2,953		

Merchant vessels at inside port of Honolulu in 1857:—

	No.	Tons.		No.	Tons.
American.....	46	15,366	Hawaiian.....	9	868
Bremen.....	2	383	Oldenburg.....	1	220
Hamburg.....	2	240	New Granadian.....	1	200
British.....	8	2,096	Russo-American Co.....	1	600
Totals.....				70	19,973

Merchant vessels at other ports:—

	No.	Tons.		No.	Tons.
Honolulu, outside port..	3	American vessels.....	2,876	} Total.	}
" " " " " "	1	British vessels.....	3,314		
Lahaina, ports of.....	3	American vessels.....	2,342	} Total.	}
" " " " " "	1	Hawaiian vessel.....	145		
Hilo, " " " " " "	1	American vessel.....	156	} Total.	}
" " " " " "	1	Russo-American vessel..	596		
Koloa, " " " " " "	1	American vessel.....	146	} Total.	}
" " " " " "	1	Hawaiian vessel.....	145		
Total.....				12	6,817
Total at inside port of Honolulu.....				70	19,973

Total at all ports of Hawaiian Islands in 1857..... 82 26,817

Oil and bone transhipped at Honolulu and Lahaina:—

1857.	From	Bound to	Sperm oil, gallons.	Whale oil, gallons.	Whalebone, pounds.
Spring season..	Honolulu	United States	3,806	329,417	106,131
Fall " " "	"	"	87,453	1,414,639	795,888
" " " "	"	Bremen.....	2,358	59,287	49,978
" " " "	Lahaina.	United States	82,689	214,684	343,528
Totals.....			176,306	2,018,027	1,295,525

The total number of whaling vessels at the various ports of the Hawaiian Islands during 1857 was 387; and this number consisted as follows:—American vessels at Honolulu, inside port, 100, and outside port, 28; at Lahaina, 114; Hilo, 41; Kawaihae, 52; Kealakeakua, 10; Koloa, 19; aggregate, 364. French vessels at Honolulu, inside port, 3, and outside port, 3; at Lahaina, 8; Kawaihae, 1; aggregate, 15. The other vessels, 8 in number, viz.:—5 Hawaiian, 2 Bremen, and 1 Oldenburg, were only at the inside port of Honolulu. The whole number of national vessels at Honolulu in 1857 was twelve.

Table showing the direct trade of foreign vessels with the Hawaiian Islands from and to home ports:—

Nationality.	Entered.			Cleared.		
	Vessels.	Tonnage.	Value cargoes.	Vessels.	Tonnage.	Value cargoes.
American .....	40	17,405	\$708,420 70	32	12,578	\$1,098,024 26
British .....	6	1,420	208,581 07	5	1,259	6,999 58
Bremen .....	1	220	54,564 81	.	....	.....
Hamburg .....	1	120	6,835 99	.	....	.....
Russ. Am. Co....	1	600	99 50	1	596	426 89

Table showing the nationality and tonnage of shipping in the carrying trade of the Hawaiian Islands from and to other than home ports:—

American .....	9	1,914	\$23,247 92	14	6,313	\$93,137 62
British .....	3	1,114	332 90	2	709	3,303 08
Bremen .....	1	163	19,401 15	1	586	5,838 72
Hamburg .....	2	240	12,135 09	3	360	38,732 41
Oldenburg .....	1	220	12,536 25	.	....	.....
New Granadian..	1	200	21,621 86	1	200	.....
Hawaiian .....	9	868	11,237 87	10	866	13,085 77

#### CANAL TRADE OF OSWEGO.

In the *Merchants' Magazine* of April, 1858, (vol. xxxviii., pp. 475-6,) presented statistics of the Lake Commerce of Oswego, in continuation of our full account of that port, published in July, 1857, (vol. xxxvii., pp. 38-47.) We now give statements of the canal trade of Oswego during the years 1856 and 1857.

#### EXPORTS BY CANAL IN 1856 AND 1857.

Comparative statement of most of the articles shipped by canal at Oswego for two seasons:—

	1856.	1857.		1856.	1857.
Wheat..... bush.	5,994,209	2,728,429	Timber..cub.ft.	328,158	325,062
Corn.....	3,224,249	1,850,394	Lumber....ft.	75,767,297	92,459,461
Rye.....	308,651	55,805	Staves....No.	11,395,525	33,524,439
Barley.....	95,381	239,781	Shingles....	155,500	1,252,500
Oats.....	158,272	12,257	Furniture..lbs.	17,340	44,945
Flour.....bbls.	395,523	301,530	Leather.....	135,432	345,329
Beef.....	2,102	1,277	Hides.....	199,754	27,920
Pork.....	30,155	5,031	Wool.....	137,227	20,273
Bacon.....lbs.	4,085,642	508,501	Bran, &c.....	17,533,386	13,286,209
Lard, &c.....	1,147,128	59,753	Oil cake, &c...	7,573,664	4,931,630
Butter.....	42,956	7,900	Copper ore....	.....	1,134,698
Peas, etc... bush.	70,734	1,481	Iron & steel...	126,798	45,840
Dom'c spirits.gal.	4,725	34,000	bloom & bar..	342,537	25,516
Hops.....lbs.	29,913	41,656	Mineral coal...	1,472,500	160,000
Grass-seed, &c...	.....	31,095	St'ne, lime, & clay	300,637	6,204,570

IMPORTS BY CANAL IN 1856 AND 1857.

	1856.	1857.		1856.	1857.
Salt, foreign lbs.	5,305	17,385	Furniture... lbs.	1,131,320	153,249
“ domestic ..	195,103,300	142,050,372	Hops.....	19,629	1,351
Mineral coal...	97,942,394	131,138,025	Hides .....	72,897	64,618
St'ne, lime & clay	17,604,152	18,201,323	Leather .....	324,337	101,194
Gypsum.....	7,300,529	12,896,606	Coffee.....	3,820,377	1,028,693
Iron, pig.....	15,918,125	2,668,685	Molasses.....	5,068,503	2,241,381
“ bloom & bar	287,225	8,420	Sugar.....	21,577,177	7,557,687
“ railroad....	59,319,310	57,940,794	Oth. m'rch'dise.	40,145,664	17,917,877
“ and steel...	12,729,228	4,014,019	Cheese.....	19,027	93,414
Castings, &c...	10,812,578	5,520,878	Lard, &c.....	15,349	3,714
Nails, spik's, &c.	3,159,826	660,162	Fruit, dried...	183,776	68,839
Crockery, &c...	3,144,127	1,916,086	Sundries .....	9,104,685	5,783,993

Articles not specified in the above table of imports, are:—In 1856, bacon, 2,544 lbs.; wool, 73,000 lbs.; bran and ship-stuff, 50,000 lbs.; timber, 5,000 cubic feet. In 1857, cotton, 92,284 lbs.; wood, 20 cords.

AGGREGATE TONNAGE BY CANAL FOR FIVE YEARS.

Comparative statement of the tonnage of property cleared from, and received at Oswego by canal, for five seasons:—

	1853.	1854.	1855.	1856.	1857.
Cleared.....tons	495,553	334,498	352,560	491,761	317,636
Arrived.....	221,460	202,518	209,075	253,178	206,503
Total.....	717,013	536,986	561,635	744,939	524,139

EXPORTS FROM MANILLA TO THE UNITED STATES.

A recent number of the Philadelphia *Commercial List* contains the following table of exports to the United States on the Atlantic from January 1st to December 31st, in 1857 and 1856:—

	1857.	1856.		1857.	1856.
Hemp.....piculs	243,110	312,386	Pearl shell...piculs	747	806
Sugar.....	78,823	148,952	Almaciga.....	282	374
Japan wood.....	10,876	12,081	Indigo.....qtls.	5,626	3,777
Coffee.....	2,729	2,171	Leaf tobacco....	936	5,140
Hides.....	1,132	2,104	Cigars.....No.	4,930,000	4,067,000
Hide cuttings....	3,716	2,889	Grass cloth...pcs.	4,412	111,245

INSPECTIONS AND STOCKS OF TOBACCO AT PHILADELPHIA.

The following returns of the annual inspection of tobacco at the port of Philadelphia, during nine years, 1848–57, are continuous of similar returns previously published in the *Merchants' Magazine*, as for example, in vol. xxv., p. 91, and vol. xx., p. 217. The column headed “stock” shows the amount remaining in warehouse at the close of the year:—

	Inspection.	Stock.		Inspection.	Stock.
1849.....	4,451	1,517	1854.....	2,303	800
1850.....	3,745	1,900	1855.....	914	219
1851.....	3,740	1,336	1856.....	1,382	425
1852.....	4,344	2,005	1857.....	997	304
1853.....	2,262	1,294			

All of the tobacco inspected was from Kentucky, excepting that in 1849 200 hhds., and in 1855, 61 hhds., were from Virginia; and in 1856, 12 hhds. from Maryland.

## FISH AND OYSTER TRADE OF BALTIMORE.

We derive the following statements from the Baltimore Board of Trade's Report (January, 1858,) on the Trade and Commerce of that city, and of which we presented the principal statistics in the number for April, 1858, (pp. 417-437.) of the present volume:—

FISH.—The imports of mackerel during 1857 show a decrease, compared with 1856, of 5,000 barrels, and with 1855 of 24,000 barrels, whilst the receipts of Eastern herring increased 14,700 barrels compared with 1856, and 18,500 compared with 1855. Included in the receipts of herrings in 1857 are about 8,000 barrels "Long Branch," or alewives, as they are more commonly called. This heavy increase in the receipts of herrings made up the deficiency occasioned by the short catch of the Susquehanna, Potomac, and North Carolina fisheries.

## RECEIPTS OF FISH.

From	Mackerel. Bbbs.	Herrings. Bbbs.	Codfish. Casks.	Drums.	Qtls.
British Provinces . . . . .	4,319	11,142	3,331	1,371	1,000
Massachusetts . . . . .	20,685	12,800	....	....	....
Total, 1857 . . . . .	25,004	23,942	3,331	1,371	1,000
Total, 1856 . . . . .	30,263	9,163	6,062	5,189	5,855
Total, 1855 . . . . .	49,104	5,502	3,472	1,763	1,700

On the 1st of January, 1857, the market opened with a stock of 5,000 barrels mackerel, and owing to the comparatively light receipts, prices ruled high during most of the year; stock of mackerel December 31st estimated at only 1,000 barrels:—

## MACKEREL.

	Number 1.	Number 2.	Number 3.
January 1 . . . . .	\$10 50 a . . . .	\$7 50 a . . . .	\$6 62 a 7 75
February 1 . . . . .	.. a . . . .	8 00 a 10 00	7 00 a 8 00
March 1 . . . . .	11 00 a . . . .	8 50 a . . . .	7 75 a 8 00
April 1 . . . . .	11 00 a . . . .	9 00 a 10 00	8 25 a 9 00
May 1 . . . . .	12 00 a 23 00	11 50 a 13 00	9 50 a 10 50
June 1 . . . . .	14 00 a 24 00	12 00 a 12 50	10 00 a 11 00
July 1 . . . . .	14 00 a 24 00	11 50 a 14 00	10 50 a 11 50
August 1 . . . . .	14 50 a . . . .	12 50 a 13 50	9 25 a 9 75
September 1 . . . . .	17 00 a 18 00	13 50 a 14 00	9 75 a 10 00
October 1 . . . . .	14 50 a 17 00	12 50 a 13 00	9 50 a 10 00
November 1 . . . . .	13 00 a . . . .	11 00 a 11 50	9 25 a 9 50
December 1 . . . . .	10 50 a 14 00	10 00 a 10 00	6 50 a 9 00

*Shad and Herrings.*—The catch of both descriptions proved very small during 1857, the receipts from the Susquehanna, Potomac, and North Carolina fisheries only amounting to 3,795 barrels shad, 1,262 half-barrels shad, 8,664 barrels and 642 half-barrels herrings. The receipts of 1856 were 4,362 barrels shad and 16,000 barrels herrings. On the 20th March the first of the new catch from North Carolina, a few barrels only, were received, and sold at \$6 50 for herrings and \$12 for shad; receipts continuing light, prices ruled steady at \$11 50 a \$12 and \$6 a \$6 25 for shad and herrings, until the middle of May, when a further advance was obtained on Susquehanna and Potomac herrings, they selling as high as \$7 50 a \$8 per barrel. Early in June the season was over; the entire catch had reached market, and prices continued steady to the end.

THE OYSTER TRADE.—For some fifteen or twenty years past, Baltimore has been known as one of the largest markets in the Union for the supply of the interior cities with oysters; but the actual extent of the trade each year is as yet only imperfectly ascertained. The peculiar difficulties attending any effort to procure satisfactory data must account for the seeming neglect to make public its details. We have, however, taken considerable pains to learn the following facts:—

The season, commencing in September, 1856, and ending in May, 1857, was

one of unusual activity, and of the entire receipts the packers took 1,510,000 bushels, 150,000 bushels being taken for city consumption, making the receipts as follows:—

Packers, 1,510,000 bushels; taken for city consumption, 150,000.....	1,660,000
Which were disposed of thus—	
Put up "sealed" for shipment to California...bush.	200,000
"    "    "    St. Louis.....	150,000
"    "    "    Other cities.....	310,000
"    "    "    Foreign ports....	50,000
	710,000
Put up "raw" for Cincinnati and Chicago.....	400,000
"    "    Other cities .....	400,000
	800,000
Taken for city consumption.....	150,000
	1,660,000

There are eighteen houses engaged in the packing business, generally employing about 1,500 hands in shucking, filling, sealing, &c. At an average of 35 cents per bushel, the first cost to the packers of the quantity put up last season amounted to fully \$500,000. The whole amount of capital invested in this business is estimated at \$1,000,000. The oysters coming to Baltimore market are all obtained from the inlets and rivers of the Chesapeake south of the Patapsco, and it is calculated that the various branches of the trade give employment to some eight or ten thousand persons during the regular season.

THE COMMERCE OF MARSEILLES AND SOUTHERN FRANCE.

During the last five years the commerce of Marseilles has increased rapidly and very greatly. This has been owing, in a considerable degree, to the commercial energy of the government, though more to the extension of railroads, and to other causes. The number of vessels which entered in 1855 was 4,655, and the departures 3,056—being 2½ times as many entries, and 3¼ times as many departures, as at Havre in the same year, and nearly six times as many departures as at Bordeaux.

There were nearly 1,400 more foreign vessels entered the port of Marseilles in 1855 than in 1852, and the excess of foreign tonnage in 1855 over 1852 was 300,000 tons. There are fourteen regular lines of steamers running to ports of the Levant and Mediterranean, one line to England, and another to Hamburg—making in all over fifty steam packets. The ports accommodate about 4,000 vessels, and others are built, or are now building, to hold 2,000 more. The chief internal trade is on the Rhone, from whence come coals, wines, bottles, demijohns, cloths, &c. From Marseilles to the interior is sent cotton, rice, sugar, flour, and spices. Marseilles contains a large establishment for the manufacture of steam-engines, and one of the ten government tobacco manufactories. Marseilles is one of the entrepôts of France for the re-exportation of foreign goods. It is the only free port of the empire—no tonnage dues are levied.

Its commerce with Belgium, Holland, Denmark, Sweden, Prussia, and Norway is extensive. Immense importations are made from the Russian ports of the Black Sea. With Trieste and Venice, on the Adriatic; with Nice and Genoa; with Naples and Sicily; with Tuscany and the Roman States, its transactions are constant. With the Levant, Turkey, and Egypt, the trade is very great. With Spain and Portugal, the Brazils; with the East Indies and the West Indies; with China, Great Britain, the United States—in fact, Marseilles is trading with every part of the world.

## THE COFFEE TRADE OF RIO JANEIRO.

Coffee is the principal article of Brazilian production that is extensively exported; and for many years has been its most permanent staple. The United States is the best purchaser, as well as the largest consumer, of its exports of this article.

The annexed reliable tables of the exports of coffee from Rio Janeiro during each month of the last two calendar years are continuous of statements for 1854 and 1855, published on page 608, vol. xxxiv., of the *Merchants' Magazine*.

## TOTAL EXPORTS OF COFFEE FROM RIO JANEIRO.

Months.	1856.			1857.		
	United States.	Europe.	Elsewhere.	United States.	Europe.	Elsewhere.
January...bags	80,611	78,049	6,481	85,445	121,642	7,240
February.....	31,729	32,245	412	114,262	66,264	5,445
March.....	101,856	38,545	3,983	73,540	118,610	1,505
April.....	95,031	53,833	3,535	69,064	113,892	2,101
May.....	72,963	71,214	2,050	95,076	123,804	4,919
June.....	94,888	74,496	2,051	74,158	82,495	918
July.....	78,547	75,535	1,700	56,914	160,532	5,338
August.....	87,339	110,280	7,070	74,859	87,110	3,559
September....	96,566	84,949	3,208	101,262	110,031	9,831
October.....	138,694	82,461	4,679	93,705	82,839	256
November....	124,384	89,975	2,782	54,406	42,741	4,194
December.....	166,993	103,303	2,169	8,533	37,782	2,920
Total.....	1,169,131	889,885	40,120	901,374	1,147,742	48,226

## SHIPMENTS TO PRINCIPAL PORTS OF THE UNITED STATES.

	1856.		1857.		
	1856.	1857.	1856.	1857.	
Boston.....bags	5,001	4,986	Charleston.....bags	22,674	7,150
New York.....	362,248	245,312	Savannah.....	13,816	6,850
Philadelphia.....	91,985	112,370	Mobile.....	23,500	7,500
Baltimore.....	188,011	169,165	New Orleans.....	404,502	296,637
Hampton Roads....	41,306	19,401	Galveston.....	4,000	.....
Richmond.....	3,888	8,876	San Francisco.....	8,250	23,127
Total.....	1,169,131	889,885	Total.....	1,169,131	901,374

## LOSSES OF LIFE AND PROPERTY ON THE LAKES.

From a statement of lake disasters during the year 1857—carefully compiled by Capt. D. P. Dobbins, Secretary of the Board of Underwriters, from authentic sources, and published in the *Buffalo Express*, we prepare this summary:—

In 1857.	By steam vessels.	By sail vessels.	Total.
Loss on hulls.....	\$393,657	\$570,579	\$964,236
Loss on cargoes.....	84,495	339,214	423,709
Aggregate.....	\$478,152	\$909,793	\$1,387,945
Tonnage totally lost.....tons	4,781	10,658	15,439

The following is a comparison of total losses for two years:—

Total loss of property, 1857	\$1,387,945	Total loss of life, 1857.....	No. 490
“ “ “ 1856	3,126,744	“ “ “ 1856.....	407
Decrease.....	\$1,738,809	Increase.....	83

A summary of the tonnage and value of the vessels on the lakes in the fall of 1857 is stated thus:—Total tonnage, 388,868; total value, \$15,195,400.

## NAUTICAL INTELLIGENCE.

## LIGHTHOUSES ON FLORIDA REEF.

The Board of Underwriters of New York, by their widely-known and most efficient Secretary, ELLWOOD WALTER, Esq., have extensively published a notice to mariners, dated New York, March 29th, 1858, in which they call attention to—

1. The new lighthouse off Dry Bank on Florida Reef.
2. The change of Carysfort Reef light from a *fixed* to a *revolving* light.
3. The new lighthouse on Loggerhead Key, Dry Tortugas Group.

The full official notice of the last named, issued by order of the Lighthouse Board, was published in our April number, page 488, of this volume. In the Underwriters' notice we observe this further item—"it bears from Sand Key, W.  $\frac{1}{4}$  N., distant 60 miles.

We have not yet received an official notice concerning the completion of the lighthouse off Dry Bank, nor of the change of Carysfort Reef light. In a preliminary notice respecting these changes, issued at Philadelphia, October 19th, 1857, by order of the Lighthouse Board, signed by W. F. RAYNOLDS, Capt. Corps Topographical Engineers, it was stated that the Dry Bank lighthouse would exhibit its light for the first time on or about the 15th of March, 1858, and that the change in Carysfort Reef light would be simultaneous with that first exhibition; also, that due public notice would be given in advance of the exact time of these changes.\* From that notice we condense the following:—

## NEW LIGHTHOUSE OFF DRY BANK.

The new lighthouse near Coffin's Patches, off Dry Bank, on Florida Reef, is on Sombrero Shoal, near Sombrero Key. It is an open frame work of iron, built on iron piles. The roof of the keeper's dwelling is 47 feet above the water. From the top of the dwelling, and within the frame work, a cylinder 7 feet in diameter rises to the height of 82 feet. This is surmounted by the watch room and lantern, 12 feet in diameter, and 25 feet high. The whole structure will be 154 feet high, and will be painted red. The illuminating apparatus will be dioptric, of the first order of Fresnel, showing a *fixed white light*, and illuminating the

\* We are somewhat particular in referring to this matter, since it appears from the notice of the Board of Underwriters, and from our other information, that these changes were made without additional notice of the fact from the Lighthouse Board; and since we are informed by Mr. GEORGE W. BLUNT that—

—"three ships were recently reported as ashore on the Florida Reef, near this new lighthouse, on Sombrero Bay, which might be charged to the fact that the new light was fixed, the same as the Carysfort Reef light, 65 miles eastward, had been, but was changed to a revolving one on the night of the 15th March, when that of Sombrero Bay was lighted, and that the change had not been early and suitably notified, etc.;" also, "that the notice of 19th October, 1857, was duly circulated by the board, as usual, being sent to every commercial port in the world," and that he had "printed it with other changes, in January, for gratuitous distribution, as has been his custom for years."

We are well aware that this department of "Nautical Intelligence" is highly prized by a very considerable portion of the subscribers of HUNT'S MERCHANTS' MAGAZINE. These "Notices to Mariners," which we publish monthly, are not given in any other magazine in the United States, nor, that we are aware of, in the world. A considerable portion of them are printed in those newspapers which are chiefly devoted to commercial interests, and which, from their form, etc., are not available for preservation and reference.

They are furnished to us by the authorities at Washington as soon as issued, and we have for many years devoted a considerable space to them.

entire horizon. The focal plane will be 141 feet above the mean sea level, and the light should be seen under ordinary circumstances, from the deck of a vessel 15 feet above the water, a distance of 19 nautical miles. The position of the light as deduced by the coast survey is—latitude  $24^{\circ} 37' 36''$  north. Longitude  $81^{\circ} 06' 43''$  west of Greenwich.

Concerning this lighthouse, the notice of the Underwriters states—

“It is 65 miles from Carysfort, S. W. by W., variations  $5^{\circ}$  S. W.  $\frac{1}{2}$  W.; and 41 miles from Sand Key, E. N. E.  $\frac{3}{4}$  E., variations  $5^{\circ}$  E. N. E.  $\frac{1}{2}$  E.”

CHANGE OF CARYSFORT REEF LIGHT FROM A FIXED TO A REVOLVING LIGHT.

Simultaneously with the first exhibition of the light off Dry Bank, Carysfort Reef light, which is now fixed, will be changed to a revolving light of the first order of Fresnel, showing a bright flash once in every 30 seconds. Mariners are particularly cautioned not to mistake one of these lights for the other after the exhibition of the new light and the change of the Carysfort light from a fixed to a revolving light. The height of the focal plane at Carysfort Reef lighthouse is 106 feet above the mean level of the sea, and should be visible under ordinary circumstances of the atmosphere, from the deck of a vessel 15 feet above the water, about 18 nautical miles. The approximate position is—latitude  $25^{\circ} 13' 15''$  north. Longitude  $80^{\circ} 12' 44''$  west of Greenwich.

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VARIATION OF THE COMPASS, 1858.—NORTH AND BALTIC SEAS.

In the *Merchants' Magazine* of December, 1857, (vol. xxxvii., pp. 749-751,) we published two valuable tables, the first showing the variation of the compass in the British Islands and adjacent seas, and the second showing the variation in the Mediterranean, Black, and Red Seas. Both those tables were originally published in August, 1857, by order of the Lords Commissioners of the Admiralty of Great Britain, for the information of mariners and all others interested; and were republished by the Lighthouse Board of the Treasury Department of the United States. We now present from the same official sources the following statements respecting the variation of the compass in the North and Baltic Seas:—

This information is made public in order to apprise mariners of the decrease in the variation, which in the North Sea at present averages 7 minutes annually, and in the Baltic Sea about 5 minutes; as also to enable mariners and agents for the sale of charts to correct the numerous sailing directions and charts now in use, in which the variation is erroneously noted.

From the eastern coast of the British Isles to the Kattegat, the present general direction of the lines of equal variation is N. by E., and S. by W., (true,) ranging in amount from  $25^{\circ}$  to  $16^{\circ}$ ; and from the Kattegat to the Gulf of Finland, the lines of equal variation are nearly North and South, (true,) ranging from  $16^{\circ}$  to  $5^{\circ}$  westerly.

EASTERN COAST OF BRITISH ISLES.

|                                |                           |                          |                            |
|--------------------------------|---------------------------|--------------------------|----------------------------|
| Lerwick and Sumburg Head..     | $25^{\circ}$ W.           | Flamborough Head.....    | $22\frac{1}{2}^{\circ}$ W. |
| Pentland and Moray Firths...   | $25\frac{1}{2}^{\circ}$ “ | The Wash and Dudgeon.... | $22^{\circ}$ “             |
| Buchanness and Fifeness.....   | $24\frac{1}{2}^{\circ}$ “ | Leman and Ower, Yarmouth |                            |
| Holy and Farn Islands.....     | $24^{\circ}$ “            | and Orfordness.....      | $21\frac{1}{4}^{\circ}$ “  |
| Shields, Sunderl'd, & Hartlepl | $23\frac{1}{2}^{\circ}$ “ | River Thames.....        | $21\frac{1}{2}^{\circ}$ “  |

COASTS OF BELGIUM, NETHERLANDS, HANOVER, AND WESTERN SHORES OF DENMARK.

|                                 |                           |                              |                           |
|---------------------------------|---------------------------|------------------------------|---------------------------|
| Ostende.....                    | $26^{\circ}$ W.           | Helgoland Island.....        | $18^{\circ}$ W.           |
| Riv'r Schelde entranç's & Texel | $19\frac{1}{2}^{\circ}$ “ | Elbe River entrances, Cuxha- |                           |
| Ems Riv'r & Hontsholm'n light   | $18\frac{1}{2}^{\circ}$ “ | ven and Tønning.....         | $17\frac{1}{2}^{\circ}$ “ |

SOUTHWEST AND SOUTH COASTS OF NORWAY, AND THE SKAGERRAK.

|                            |                |                               |         |
|----------------------------|----------------|-------------------------------|---------|
| F'ns Fiord, to Bucke Fiord | 21½ to 20½° W. | Christiansand.....            | 18½° W. |
| Eggersund.....             | 20° "          | Christiania, Bohus Bay or the |         |
| Naze of Norway.....        | 19½° "         | Sleeve and Skaw light.....    | 17° "   |

KATTEGAT, LITTLE AND GREAT BELTS, AND THE SOUND.

|                              |         |                             |         |
|------------------------------|---------|-----------------------------|---------|
| Læsø Island.....             | 16½° W. | Great Belt and Lubeck.....  | 16½° W. |
| Gottenburg & Anholt Island.. | 16° "   | Copenhagen and the Sound... | 15½° "  |
| Little Belt and Kiel.....    | 16½° "  | Bornholm Island.....        | 14° "   |

COASTS OF SWEDEN.

|                               |         |                              |         |
|-------------------------------|---------|------------------------------|---------|
| Carlskrona.....               | 13½° W. | Soderarm & Understen lights. | 11½° W. |
| Oland Island and Nykoping..   | 13° "   | Gothland, south point.....   | 12° "   |
| Landsort light and Stockholm. | 12½° "  | Faro and Gottska Sando.....  | 11½° "  |

COASTS OF PRUSSIA.

|                    |         |                 |        |
|--------------------|---------|-----------------|--------|
| Rugen Island.....  | 14½° W. | Danzig.....     | 12° W. |
| Stettin.....       | 14½° "  | Konigsberg..... | 11° "  |
| Jershof light..... | 13° "   | Memel.....      | 10½° " |

COASTS OF COURTLAND AND LIVONIA.

|                               |        |                               |        |
|-------------------------------|--------|-------------------------------|--------|
| Entrance to Gulf of Riga..... | 9½° W. | West Coast of Osel & Dago Is. | 9½° W. |
| Riga.....                     | 8½° "  |                               |        |

GULF OF FINLAND.

|                              |        |                     |        |
|------------------------------|--------|---------------------|--------|
| Hango Head & Od'nsholm light | 8½° W. | Kronstat.....       | 5½° W. |
| Helsingfors and Revel.....   | 7½° "  | St. Petersburg..... | 4½° "  |
| Hogland Island.....          | 6½° "  |                     |        |

GULF OF BOTHNIA.

|                    |        |                               |        |
|--------------------|--------|-------------------------------|--------|
| Aland Islands..... | 11° W. | Tornea and Brahestad.....     | 8° W.  |
| Soderhamn.....     | 13° "  | Gadd, and Norr Skar lights... | 10½° " |
| Umea.....          | 10° "  | Wasa, Biorneborg, & Nystad..  | 10° "  |
| Biuro Head.....    | 10° "  |                               |        |

LIGHTS ON THE NORTH AND WEST COASTS OF FRANCE.

The Imperial Ministry for Public Works in France has given notice, that on and after the 1st day of February, 1858, the following lights will be exhibited:—

TWO HARBOR LIGHTS AT DIELETTE.

These two lights are placed one on the jetty head, the other at the end of the harbor above the road which leads from Dielette to Flamanville. When in line they lead into the harbor. The light on the jetty head is a fixed white light, at 23 English feet above the level of high water, and should be seen in clear weather at a distance of 5 miles. The light at the end of the harbor is a fixed red light, and stands at 169 yards to the southeast of the former. It is placed at a height of 75 feet above the level of high water, and should be visible 9 miles in clear weather. The light on the jetty head is in lat. 49° 33' 7" N.; long. 1° 51' 45" west of Greenwich.

LIGHT ON TRISTAN ISLE, FINISTERE.

This light is a fixed white light, placed at a height of 114 feet above the level of high water, and should be visible from the deck of a vessel in clear weather at a distance of 10 miles. The light tower has been recently erected on the islet of Tristan, in the bay of Douarnenez, at the entrance to the harbor of that name on the coast of Finistere. It is 32 feet from the ground, and stands in lat. 48° 6' 12" N.; long. 4° 21' 22" west of Greenwich.

LIGHT AT LANRIEC, FINISTERE.

This light is a fixed red light, placed at a height of 42 feet above the level of high water, and should be visible from the deck of a ship in clear weather at a

distance of nine miles. This light on the coast of Lanriec, to the eastward of the harbor of Concarneau, is intended to guide to the anchorage the vessel which may have passed the shoal of Men-Fall after having followed the direction of the existing lights of Concarneau, namely, that of the battery La Croix and that of the heights of Beuzec. It will only light an area of  $19^{\circ}$  free of danger, and the line of separation of light and darkness on the south side will pass about 90 yards to the north of the shoal Men-Fall. The light will be lost sight of before the vessel reaches the shore on which it stands. Lat.  $47^{\circ} 52' 3''$  N.; long.  $3^{\circ} 54' 45''$  west of Greenwich.

**DIRECTIONS.**—The mariner who wishes to enter the Little Roadstead of Concarneau by night should keep very exactly (especially when he has reached near to the Cochon shoal) on the line pointed out by the two fixed white lights of the battery La Croix and of Beuzec, until he sees Lanriec red light on the right, when he should steer for it. By order of the Lighthouse Board,

THORNTON A. JENKINS, Secretary.

WASHINGTON, February 23, 1858.

### NEW LIGHTHOUSE AT SWINEMUNDE, MOUTH OF THE ODER.

BALTIC SEA, PRUSSIA.

Official information has been received at this office, through the Department of State, that the Department of the Interior of Prussia has given notice of the exhibition on the 1st of December, 1857, of a first-order fixed light, from the tower recently erected on the eastern side of the harbor of Swinemunde, at the mouth of the river Oder, in the Baltic Sea, and that the light will be exhibited every night from sunset to sunrise. The tower is built of yellow brick; bears south (magnetic) distant 1.05 nautical mile from the harbor light on the east mole-head, and is in latitude  $53^{\circ} 54' 59''$  N.; longitude  $14^{\circ} 17' 38''$  east from Greenwich. The illuminating apparatus is catadioptric of the first order, fixed, of the system of Fresnel, illuminates  $270^{\circ}$  of the horizon, embracing the points of the compass from E. by S. northwardly around to S. by W., and placed at an elevation of 211 feet above the level of the sea. The light should be seen from the deck of a vessel fifteen feet above the water at a distance of 21 nautical miles in ordinary states of the atmosphere. This new first-class light is designed to mark the harbor of Swinemunde, and to guide navigators clear of the shoals of the coast in the vicinity of the mouth of the Oder. The tower and buildings adjoining, with the two beacons on the Streckelberg and Riesberg, make a prominent and reliable land-mark for the navigator in approaching the port of Swinemunde.

#### INSTRUCTIONS—FIXED AND SIGNAL BEACONS, HARBOR OF SWINEMUNDE.

The following instructions have been communicated also for the information of mariners:—For the better designation of the mouth of the harbor of Swinemunde, in cases in which storms or the heavy swell of the sea may prevent pilots from going out to approaching vessels, two stationary beacons were erected, as early as 1836, one on the eastern pier of the harbor, and the other on the eastern downs, (sand hills.) Subsequently the beacon on the eastern pier was converted into a complete signal beacon, and these beacons took the place of those signals which are specially designated in § 2, of the harbor police ordinances for the harbors and inner waters of Stettin and Swinemunde, of August 22, 1833, and are to be used in the following manner:—

1. When it is impossible for the pilot to go to sea, and yet the approaching vessels can enter the harbor, if their captains shall have made up their minds to attempt it, a red flag will be hoisted on the fixed and signal beacon on the eastern harbor pier.

2. In this case, the approaching captains must bring the new lighthouse to bear S. by E. by compass and steer on that course for it. They will then, at a distance of nearly one marine mile from the east pier-head, sight the outermost black and white striped buoy, (called a roads buoy,) and beyond it, covering each other, the two beacons visible in a S. S. easterly direction from this buoy, in the middle of the east pier and on the eastern downs, (sand hills.)

Keeping on in a S. S. easterly direction and with the two beacons still covering each other (in range) on this line, the vessels will enter into the harbor as far as the second lighter bridge of the eastern pier, four cables' length above the lantern beacon, and all along, at a distance of half a cable's length from the pier.

3. At this point, where the vessel must be kept off a little to the southward and the headway as little as possible, the pilot boat will be in attendance with a pilot.

4. In entering the harbor from sea, all the white buoys must be kept on the starboard side of the vessel.

5. In order to aid the captains in following the instructions conveyed in these directions, and particularly to guide them when the sea buoys shall have been carried away or have been removed owing to the lateness of the season, signals will be made with a red flag from the fixed and signal beacon on the eastern pier.

6. These signals must be followed in such a manner as to steer towards the side to which the flag may be pointed, and the captains are to hold on their course without deviation when the flag is raised horizontally.

7. Should there be no pilot boat at sea, and no red flag waving from the signal beacon, the captains must not attempt to enter the port, but continue at sea. By order of the Lighthouse Board,

THORNTON A. JENKINS, Secretary.

WASHINGTON, March 31, 1858.

#### NEW LIGHTHOUSE ON ROANOKE MARSHES, NORTH CAROLINA.

**FIXED LIGHT.**—A light will be exhibited for the first time on the evening of the 15th day of April next, from the lighthouse recently erected at Roanoke Marshes, North Carolina. The position of this structure is in 4 feet water, on the east side of the narrow channel connecting the Pamlico and Croatan sounds, about midway between these two sounds, and within 150 feet of the low-water mark of Jackson's or Caldwell's island. The structure is erected on iron piles; is built of wood, and is hexagonal in plan. The lantern is above the center, and the focal plane of the light is 34 feet above the water level. The building is painted white and the lantern red. The illuminating apparatus is catadioptric of the fourth order of the system of Fresnel, illuminating  $270^{\circ}$  of the horizon, and will show a fixed light of the natural color. The light should be visible in ordinary states of the atmosphere, from the decks of vessels navigating these waters, at a distance of 10 nautical miles. By order of the Lighthouse Board,

L. SITGREAVES, Capt. Top. Engineers.

BALTIMORE, Md., March 15, 1858.

#### KENOSHA AND RACINE (WIS.) AND POINT AUX BARQUES, (LAKE HURON.)

On the opening of navigation in the spring of 1858, the present fixed light at Kenosha, Wis., will be changed to a fixed light varied by flashes. The flashes will occur at intervals of one minute and thirty seconds. The illuminating apparatus is catadioptric, and of the fifth order of the system of Fresnel. The light should be seen from the deck of a vessel 15 feet above water, in ordinary states of the atmosphere, from 12 to 14 nautical miles.

At the same time the present revolving light at Racine, Wis., will be changed to a fixed light. The illuminating apparatus is catadioptric, of the fifth order of the system of Fresnel, and the light should be seen, under ordinary states of the atmosphere, from the deck of a vessel 15 feet above the water, from 10 to 12 nautical miles.

At the same time a fixed light varied by flashes will be exhibited from the new tower recently erected at Point aux Barques, on Lake Huron. The flashes will occur at intervals of two minutes, and should be seen, under ordinary states of the atmosphere, from the deck of a vessel 15 feet above the water, 19 nautical miles. The tower is yellow, and the light is exhibited from an elevation of 88 feet above the mean level of the lake. The illuminating apparatus is the third order catadioptric of the system of Fresnel.

By order of the Lighthouse Board,

W. F. SMITH, Lighthouse Engineer, 11th District.

## THE IMPROVED FRESNEL LIGHT.

An increased power of the Fresnel light is obtained (according to the *Washington Union*) by an arrangement which consists, first, in completely dispensing with the moveable central cylindrical lenses, these being replaced by a single revolving cylinder, composed of four annular lenses and four lenses of a fixed light introduced between them—the number of each varying according to the succession of flashes to be produced in the period of revolution. In arranging the revolving parts, a short time is sufficient for the action of the friction rollers, revolving on two parallel planes, to produce, by a succession of cuttings, a sufficiently deep groove to destroy the regularity of the rotatory movement. To obviate so great an inconvenience, the friction rollers are placed and fitted in such a manner, on an iron axis, with regulating screws, and traversing between two beveled surfaces, that when an indentation is made in one place, they can be adjusted to another part of the plates which is not so worn. An increase of the power of the flashes is obtained by means of lenses of vertical prisms placed in the prolongation of the central annular lenses, the divergent rays emerging from the catadioptric zone being brought into a straight line, and a coincidence of the three lenses is thus obtained. The whole of the prisms, lenses, and zones, are mounted with strength and simplicity, accurately ground, and polished to the correct curves, according to their respective positions, so as to properly develop the system. The glass of which they are composed is of the clearest crystal color, and free from any of those hues and other defects which so materially reduce the power of the light.

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 COMMERCIAL REGULATIONS.
 

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## COMMERCIAL REGULATIONS AT BALTIMORE.

We present statements of the commercial regulations at Baltimore, which were adopted by the Board of Trade of that city in June, 1857—to obtain where no express agreement to the contrary exists. We publish them in full from the Board's Annual Report of January, 1858, but have somewhat changed the typographical arrangement of the columns of figures showing the charges for commissions, storage, etc. :—

## COMMISSIONS ON GENERAL BUSINESS.

|                                                                                                                                                                               |            |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----|
| On selling flour and meal . . . . .                                                                                                                                           | per barrel | 12½ |
| On selling grain received by vessels . . . . .                                                                                                                                | per bushel | 1   |
| On do. received by railroad or steamboat, exclusive of expense of delivery . .                                                                                                |            | 2   |
| On sales of foreign merchandise . . . . .                                                                                                                                     | per cent   | 5   |
| On sales of domestic merchandise, not otherwise provided for . . . . .                                                                                                        |            | 2½  |
| On guaranty . . . . .                                                                                                                                                         |            | 2½  |
| On purchase and shipment of merchandise, on cost & charges with funds in bond                                                                                                 |            | 2½  |
| On collecting delayed and litigated accounts . . . . .                                                                                                                        |            | 5   |
| On effecting marine insurance, 2½ per cent on premium for domestic, and 5 per cent on foreign. No charge to be made for effecting insurance on property consigned or shipped. |            |     |
| On landing, re-shipping, or delivering goods from vessels in distress, on value of invoice . . . . .                                                                          | per cent   | 2½  |

|                                                                                                                          |    |
|--------------------------------------------------------------------------------------------------------------------------|----|
| On procuring or obtaining money on bottomry or respondentia bond on vessels                                              | 2½ |
| Landing and re-shipping, on specie and bullion.....                                                                      | ½  |
| Receiving and forwarding merchandise entered at Custom-house, on invoice value 1 per cent, and on expenses incurred..... | 2½ |

On consignments of merchandise withdrawn or re-shipped full commissions are to be charged, to the extent of advances or responsibilities incurred, and one-half commission on the residue of the value.

The risk of loss by robbery, fire, (unless insurance be ordered,) theft, popular tumult, and all other unavoidable occurrences, is in all cases to be borne by the owners of the goods, provided due diligence has been exercised in the care of them.

SHIPPING.

|                                                                                                                                |          |    |
|--------------------------------------------------------------------------------------------------------------------------------|----------|----|
| On purchase or sale of vessels .....                                                                                           | per cent | 2½ |
| On disbursements and outfit of vessels .....                                                                                   |          | 2½ |
| On procuring freight and passengers.....                                                                                       |          | 5  |
| On collecting freight.....                                                                                                     |          | 2½ |
| On collecting insurance losses of all kinds.....                                                                               |          | 2½ |
| Chartering vessels on amount of freight, actual or estimated, to be considered as due when the charter parties are signed..... |          | 2½ |

(No charter to be considered binding till a memorandum or one of the copies of the charter has been signed.)

|                                                                                              |  |    |
|----------------------------------------------------------------------------------------------|--|----|
| On giving bonds for vessels under attachment in litigated cases, on amount of liability..... |  | 2½ |
|----------------------------------------------------------------------------------------------|--|----|

The foregoing commissions are exclusive of auction duty, and commissions, brokerage, storage, and every other charge actually incurred.

FREIGHT AND FREIGHTING.

If a vessel is freighted by the ton, and no special agreement is made respecting the proportions at which each article shall be computed, the following shall be the standard of computation, viz :—

|                                                                                        |              |       |                                                                                  |            |
|----------------------------------------------------------------------------------------|--------------|-------|----------------------------------------------------------------------------------|------------|
| Pig and bar iron, lead, copper, coal, logwood, fustic, and other heavy dye-woods ..... | lbs. per ton | 2,240 | Kentucky tobacco... lbs.net p. ton                                               | 1,300      |
| Nicaragua and Braziletto wood ..                                                       |              | 2,000 | Maryland tobacco in hhds.....                                                    | 1,000      |
| Sugar & rice in casks .lbs.net p. ton                                                  |              | 2,240 | Flour..... bbls. of 196 lbs.net                                                  | 8          |
| Coffee in bags.....                                                                    |              | 1,830 | Beef, pork, and tallow..... bbls.                                                | 6          |
| Coffee in casks.....                                                                   |              | 1,600 | Naval stores and pickled fish....                                                | 7          |
| Cocoa in bags or bulk .....                                                            |              | 1,800 | Oil, wine, brandy, &c., estimating the full contents of cask, wine measure ..... | galls. 200 |
| Cocoa in casks .....                                                                   |              | 1,120 | Grain, peas, beans, &c., in bulk..bus.                                           | 40         |
| Pimento in bags.....                                                                   |              | 1,110 | Grain, peas, beans, &c., in casks...                                             | 22         |
| Pimento in casks .....                                                                 |              | 952   | Liverpool blown salt in bulk ....                                                | 40         |
| Ship-bread in bags.....                                                                |              | 800   | Liverpool ground salt .....                                                      | 34         |
| Ship-bread in casks.....                                                               |              | 700   | St. Ubes, Cape de Verds, &c ....                                                 | 31         |
| Dried hides.....                                                                       |              | 1,120 | West India salt in bulk.....                                                     | 30         |
| Green teas and China raw silks..                                                       |              | 900   | Sea coal in bulk.....                                                            | 30         |
| Bohea and other black tea.....                                                         |              | 1,120 | Plank, boards, timber, bale goods, packages, & boxes.... cubic feet              | 40         |
| Virginia tobacco in hhds.....                                                          |              | 1,500 |                                                                                  |            |

In estimating the contents in cubic feet, of various packages and goods, the following shall be the standard :—

|                                  |      |    |                                                |      |    |
|----------------------------------|------|----|------------------------------------------------|------|----|
| A flour barrel .....             | feet | 5  | A hhd. of Kentucky, Georgia, and Carolina..... | feet | 40 |
| A tierce of rice.....            |      | 15 | A hhd. of Maryland and Ohio .....              |      | 35 |
| A hhd. of flaxseed.....          |      | 12 | Five bushels of grain in bulk.....             |      | 5  |
| A hhd. of Virginia tobacco ..... |      | 45 |                                                |      |    |

In computing boxes of candles and soap, kegs of butter and lard, hams and bacon, and generally all similar articles, 200 lbs. net weight shall be considered equal to a barrel of 5 cubic feet.

All goods brought to this port on freight must be delivered on a wharf at the ex-

pense of the vessel bringing the same; a delivery, after due notice, on any good wharf at Fell's Point during business hours, is a delivery in the city and port of Baltimore. Hides and articles prohibited to be landed in the city at certain periods, may be landed where the public authorities may direct.

In all cases when vessels are obliged (by the quarantine regulations or city authorities) to discharge their cargo in the stream, the expense of delivering the same east of Jones' Falls will be borne by the carrier only. But when requested by the consignee to be delivered west of Jones' Falls, then the expense shall be equally borne by the carrier and consignee, (each one half.)

If a vessel is chartered for a voyage out and home, each shipper shall be entitled to his fair proportion of the whole homeward freight, pro rata, of the bulk or space occupied by each shipper on the outward voyage.

In all cases where a vessel is chartered or freighted for a voyage out and home, the freighter or charterer is bound to furnish sufficient cargo or ballast at the port of discharge of the outward cargo, to enable said vessel to return safely home, and the same from port to port, where the charter provides for more than one port; provided no agreement to the contrary is made by the parties.

## COMMISSIONS ON BANKING.

|                                                                                                                  |          |               |
|------------------------------------------------------------------------------------------------------------------|----------|---------------|
| On purchase of stocks, bonds, and all kinds of securities, including the drawing of bills for their payment..... | per cent | $\frac{1}{2}$ |
| On sales of stocks, bonds, and all kinds of securities, including remittances in bills and guaranty.....         |          | $\frac{1}{2}$ |
| On purchase or sale of specie and bullion.....                                                                   |          | $\frac{1}{4}$ |
| Remittances in bills of exchange.....                                                                            |          | $\frac{1}{4}$ |
| Remittances in bills of exchange, with guaranty.....                                                             |          | 1             |
| Drawing or indorsing bills of exchange.....                                                                      |          | 1             |
| Collecting dividends on stocks, bonds, or other securities.....                                                  |          | $\frac{1}{4}$ |
| Collecting interest on bonds and mortgages.....                                                                  |          | $\frac{1}{4}$ |
| Receiving and paying moneys on which no other commission is received.....                                        |          | $\frac{1}{2}$ |
| Procuring acceptance of bills of exchange, payable in foreign countries.....                                     |          | $\frac{1}{2}$ |
| On issuing letters of credit to travelers, exclusive of foreign bankers' charges.....                            |          | $\frac{1}{2}$ |

When bills of exchange are remitted for collection, and returned under protest for the non-acceptance or non-payment, the same commissions are to be charged as though they were duly accepted and paid.

## WEIGHTS AND TARES.

Sugar, copperas, alum, brimstone, shot, lead, iron, steel, hemp, dye-woods, and all other articles heretofore sold by the cwt. of 112 lbs., or ton of 2,240 lbs., shall in future be sold by the decimal hundred of 100 lbs., or ton of 2,000 lbs.

Tares shall be allowed as follows:—

- Sugar, in hhds. or trcs., 12 per cent; in bbls., 10 per cent; in boxes, 15 per cent; in linen bags, 3, and mats, 5 per cent; and in all other packages the actual tare.
- Coffee in linen, single gunny, and grass bags, 2 per cent; in flour bbls., 20 lbs. each; in all other packages the actual tare.
- Cocoa in bags, 2 per cent.
- Pepper in linen or single gunny bags, 2 per cent; in other packages the actual tare.
- Pimento in linen or single gunny bags, 3 per cent; in other packages the actual tare.
- Rice in trcs. and half-trcs., 10 per cent.
- Copperas in hhds. or bbls., actual tare.
- Teas, green, whole chests, 20 lbs.; and in all other packages Canton tare.
- Cassia in mats, 10 per cent; boxes and other packages the actual tare.
- Indigo in ceroon, in single hides, 11 per cent; in all other cases the actual tare.
- Ginger, 2 per cent; and cloves, 9 lbs. per bale.
- Alum, brimstone, nutmegs, mace, almonds, figs, cheese, soap, candles, chocolate, currants, prunes, starch, and all other articles not before mentioned, the actual tare.

For a sack of ground alum salt, 216 lbs. gross shall be considered as fair average weight.

No charge shall be made for casks, barrels, boxes, or other packages whatever.

Drafts as follows:—On all weights, even beam,  $\frac{1}{4}$  per cent to be allowed for draft.

STORAGE.

|                                                                                                       |     |                                                                     |     |
|-------------------------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------|-----|
| Hogsheads of sugar, tobacco, molasses, rum, oil, and pipes of wine, brandy, and gin... cts. per month | 25  | Bags of coffee, cocoa, pepper, and pimento . . . . . cts. per month | 2   |
| Hhds. coffee, copperas, codfish, and tallow . . . . .                                                 | 20  | Boxes of Cuba sugar . . . . .                                       | 3   |
| Tierces of sugar, rum, molasses, and half-pipes . . . . .                                             | 16  | Bales of cotton and hempen yarn, about 300 lbs. . . . .             | 12½ |
| Tierces rice, coffee, flaxseed, alum. . . . .                                                         | 12½ | Bales of India piece and other similar goods . . . . .              | 10  |
| Bbbs. of rum, whisky, sugar, fish, cheese, oil, and qr. casks wine . . . . .                          | 6   | Indigo in ceroons, 4 cts.; in cases. . . . .                        | 10  |
| Bbbs. of molasses . . . . .                                                                           | 8   | Tea in chests, 3 cts.; half-chests, 2 cts.; boxes. . . . .          | 1   |
| Bbbs. of flour and coffee, and other dry articles. . . . .                                            | 3   | Kegs of butter, tobacco, nails, and raisins. . . . .                | 3   |
| Boxes of fish, wine, oil, lemons, and oranges. . . . .                                                | 3   | Hides, dried. . . . .                                               | 1   |
| Boxes of soap, candles, cheese, tin, raisins, and drums of fish. . . . .                              | 1   | Hemp, per ton. . . . .                                              | 50  |
|                                                                                                       |     | Iron and lead, per ton. . . . .                                     | 20  |
|                                                                                                       |     | Crates of earthenware. . . . .                                      | 20  |
|                                                                                                       |     | Salt, per bushel. . . . .                                           | ¾   |

All goods stored to be subject to one month's storage if in store ten days—if less than ten days, half a month's storage.

The owners of goods to be at the expense of putting them in store and delivering them.

RATES OF CHARGES ADOPTED BY THE PROVISION TRADE, TO OBTAIN EXCEPT IN CASES OF SPECIAL AGREEMENT.

|                                                               |       |    |
|---------------------------------------------------------------|-------|----|
| Bacon or bulk meats, in hhds., on storage per month . . . . . | cents | 15 |
| Pickled meats, in hhds. . . . .                               |       | 20 |
| Pickled meats, in tierces. . . . .                            |       | 6  |
| Bacon, in tierces . . . . .                                   |       | 5  |
| Lard, pork, and beef, in barrels. . . . .                     |       | 4  |
| Lard, in tierces . . . . .                                    |       | 5  |
| Lard, in kegs. . . . .                                        |       | 2  |
| Bulk meats, in cellar, per 1,000 lbs. . . . .                 |       | 15 |

CHARGES.

|                                                                          |       |     |
|--------------------------------------------------------------------------|-------|-----|
| For receiving or delivering, per hhd . . . . .                           | cents | 5   |
| For receiving or delivering, per tierce. . . . .                         |       | 3   |
| For receiving or delivering, per barrel. . . . .                         |       | 2   |
| For receiving or delivering, per keg. . . . .                            |       | ½   |
| For receiving or delivering loose meat, per 1,000 lbs. . . . .           |       | 15  |
| For salting or resalting (salt extra) loose meat, per 1,000 lbs. . . . . |       | 37½ |
| For packing meat in slack casks, including cooperage. . . . .            |       | 25  |
| For packing meat in tight casks. . . . .                                 |       | 37½ |
| For weighing loose meat, per 1,000 lbs. . . . .                          |       | 15  |
| For weighing meat in casks. . . . .                                      |       | 7½  |
| For smoking shoulders or hams. . . . .                                   |       | 2½  |
| For smoking sides. . . . .                                               |       | 3½  |
| For joles or tongues. . . . .                                            |       | 2   |
| For inspecting and repacking beef and pork, per bbl. . . . .             |       | 50  |
| For inspecting bacon and bulk meat, per 1,000 lbs. . . . .               |       | 12½ |

} No extra charge for receiving or delivering. }

Scalage on bacon, ¼ per cent; on bulk meat, 1 per cent.

Tares on bacon and bulk meat, actual.

Pork and beef to be packed or repacked in accordance with existing city ordinances.

OF EXPORTS FROM THE BRITISH PROVINCES TO THE UNITED STATES.

We herewith publish a circular issued by the United States Consul-General for the British North American Provinces to the several United States Consular Agents within his jurisdiction. It is of importance to shippers, under the reciprocity treaty, to observe that shipments of a value exceeding \$100 must be

proved to be the growth of one of the Provinces included in that treaty by affidavit before a local magistrate, whose official status must be certified by the nearest Consular Agent. Or if himself satisfactorily informed on the subject, the Consul may himself directly certify the place of growth. For shipments of goods under that value, the collector will not absolutely require either affidavit or certificate:—

CONSULATE GENERAL OF THE UNITED STATES FOR THE BRITISH NORTH AMERICAN PROVINCES.

MONTREAL, February 25, 1858.

SIR:—In order to prevent detention at the frontier ports, you are directed to notify shippers of the following regulation of the Treasury Department of the United States:—

Invoices are required to be certified by consular officers in the following cases:—

1st. On dutiable goods, where the owner does not reside in the United States. —*Treasury Regulations of 1857, Articles 203, 204, 206, 207, 209, 281, 287, 706, and 707.*

2d. Where the manufacturer is part owner, notwithstanding another part owner resides in the United States, the invoice of goods must be accompanied by a consular certificate.—*Treasury Regulations of 1857, Art. 710.*

3d. Articles of the produce of the United States exported to the British North American Provinces, and brought back in the same condition as when exported, claiming to be entered free of duty, must be accompanied by a certificate of the collector of the former port from which the re-importation is made, of the identity of the goods, and of their unchanged condition, which certificate must be authenticated by a consular officer.—*Treasury Regulations of 1857, Articles 242, 246, 286, 293, 930, and 936.*

4th. Merchandise of the value of one hundred dollars and upwards claiming exemption from duty under the Reciprocity Act, the affidavit of the owner to the invoice; stating the place of the growth or production of the goods and their value, verified by a certificate of a consular officer, is required.

If there be no consular officer at the place of export, the oath to the certificate may be taken before a local magistrate, and the consular officer most convenient to the shipper is authorized to authenticate the same.—*Treasury Regulations of 1857, Articles 922, 923, and 924, and Treasury Circular of February 12, 1858, published herewith.*

Consular officers are also authorized to certify invoices without the oath of the owner, if they believe the place of production and value are correctly stated therein.—*Treasury Circular of February 12, 1858.*

Goods and merchandise passing from the United States into Canada free under the Reciprocity Act, and there undergoing any change by process of manufacture, cannot be re-imported into the United States free, but are dutiable.

In all such cases consular agents will certify the fact for the decision of the collectors.—*Treasury Regulations of 1857, Art. 930.*

The forms prescribed by the department are published herewith for the information of consular officers; also, a circular of the Secretary of the Treasury, modifying the provisions of article 922, sec. 3d, cap. 10, of the regulations under the revenue laws for 1857, and enforcing the same as modified.

WYMAN B. S. MOOR, U. S. Consul-General for B. N. A. Provinces.

We learn that for the convenience of shippers to the United States by the St. Lawrence and Champlain and Grand Turk Railways, consular offices have been opened under the direction of the Consul-General, at St. Lambert, Rouse's Point, Longueuil, and Coaticook. The Toronto *Globe*, in publishing the substance of this circular, and explaining its features, remarks upon its probable effect, as follows:—

“All wheat and flour shipped from Toronto for the other side of the lake, will have to be accompanied by an invoice of value, certified by the agent here, else the produce will be detained at Oswego, or to whatever port it is sent. The

shipments from ports East and West, will of course have to go through the same formula, and as there are no agents at such places as Port Credit and Oakville, it will cause a great deal of trouble to have the invoice sent here for authentication previous to sailing of the vessels—although provision is made for the taking of the affidavit as to its correctness, before a local magistrate.

“One good effect of the regulation will be to afford facilities for a complete registration of the shipments of produce from the country, and thus give a more correct idea of the value of our exports—a matter that has been grossly neglected by the customs department for years.”

Concerning the circular, etc., the Rochester *Union* remarks:—

“The effect of this order will be to materially diminish our Rochester trade with the Canadian ports, unless more consular agencies are established. There is no consul on the north shore of the lake, east of Toronto, but there are many ports with which we are in daily communication. The Canadian papers, in view of this circular, are bidding us a formal adieu, not expecting to meet our merchants again while this regulation is law. Unless the rule is rescinded or modified, as we trust it may be when fairly understood at Washington, the trade of this port will be materially diminished.”

#### MARITIME JURISDICTION AT THE SANDWICH ISLANDS.

Doubts having been expressed by several American shipmasters as to the right of the Hawaiian government to interfere with their ships or crews after a final clearance from the customs and departure beyond the territory of the kingdom, if they return within a marine league, with no purpose of doing business, a note on the subject was addressed to Hon. DAVID L. GREGG, U. S. Commissioner, in the belief that his opinion would be satisfactory to the parties interested. The commissioner returned the following reply, which is clear and explicit, and which we copy from the Pacific *Commercial Advertiser*, published at Honolulu:—

U. S. LEGATION, Honolulu, November 24, 1857.

DEAR SIR:—Your note of the 21st inst. was delivered to me last evening. In reply, I have the honor to observe that in my judgment there is but little doubt as to the rule which must govern in such cases as you mention.

It is unquestionably a well-settled principle of international law that “the maritime territory of every State extends to the ports, harbors, bays, mouths of rivers and adjacent parts of the sea enclosed by headlands belonging to the same State. The general usage of nations superadds to this extent of territorial jurisdiction a distance of a marine league, or as far as a cannon shot will reach from the shore along the coasts of the State. Within these limits its rights of property and of territorial jurisdiction are absolute and exclude those of every other nation.” (See Wheaton's *Elements of International Law*, page 233, 6th edition, and the authorities there cited.)

It seems to follow most clearly from the principle thus laid down—which is recognized by all respectable publicists—that the municipal authority of an independent State extends to the distance of a marine league from its shores. Upon the sea such authority is so far as full and direct as on *terra firma*.

The Supreme Court of the United States has held this doctrine to be sound.—7 Cranch, 116. It is even decided that a seizure beyond the limits of territorial jurisdiction, for breach of a municipal regulation, is warranted by the law of nations.—6 Cranch, 281. In the case of the *Marianna Flora* (11 Wheaton, 39) it was determined that foreign vessels offending within the territorial jurisdiction of the United States might be pursued and seized upon the ocean and brought into American ports for adjudication. There are also British decisions to the same effect. As a general rule, however, it may be asserted that the municipal laws of a nation do not extend in their operation beyond its territory, except as regards its own citizens.—9 Wheaton, 370. The case of a vessel *flagrante*

*delicto*, as a smuggler, seeking to evade capture or the execution of lawful process, would constitute an exception, justifying pursuit and seizure on any part of the high seas not within the maritime territory of another nation.

A Hawaiian custom-house clearance does not terminate the local jurisdiction over vessels remaining within the territorial limits of the Hawaiian kingdom. If they go to sea and return for any purpose whatever, within a marine league of the shore, they may be lawfully boarded by an officer to execute the mandate of a Court of Admiralty, or serve any of their officers or crews with civil or criminal process; if they resist, international law authorizes their pursuit, and the enforcement of the process anywhere within what publicists call *mare liberum*—the open sea—or the common maritime highway of the world.

Since the passage of the act of June 25, 1855, which repeals the old provision forbidding the Courts to entertain libels in admiralty, "without the previous written request of the representative of the nation whose subject or citizen is concerned, or whose vessel is sought to be attached," the Hawaiian admiralty jurisdiction has been governed by the same rules that prevail in the United States and Great Britain. In regard to civil and criminal proceedings generally, the only limitations as to the citizens or subjects of foreign States are such as may arise from treaty stipulations, or are prescribed by international law.

The Hawaiian Islands are fully recognized by the civilized world, as an independent nation, and they are entitled to enjoy all the rights, privileges, and immunities which pertain to that character.

Public armed vessels stand upon a different footing from those engaged in the whale fisheries or merchant service. The implied license under which they enter a friendly port, is to be construed as containing an exemption from the local jurisdiction.—7 Cranch, 116.

These are my views of the subject presented in your note, and on such a question, I do not suppose there can be any dispute among intelligent lawyers.

I remain, very truly, your obedient servant,

DAVID L. GREGG.

## JOURNAL OF INSURANCE.

### MARINE INSURANCE—AVERAGE AND ARBITRATION.

We condense from the Liverpool *Albion* of February 1st, 1858, the subjoined favorable notice of a book recently published in London. We present it only for the information of those interested in the important subjects of which it treats, without any personal knowledge of its merits. It is entitled "*Handbook of Average*, for the use of Merchants, Agents, Ship-owners, Masters, and others; with a chapter on Arbitration. By MANLEY HOPKINS, Average-adjuster."

A good elementary work upon Average, adapted for the use of those who have neither the time nor the inclination to study elaborate treatises on the subject, has long been a desideratum. These considerations have led Mr. Hopkins to submit to the commercial world his Handbook, which, within the compass of an ordinary octavo volume, gives a clear and practical view of the subject, and discusses some doubtful and anomalous practices, with a view to the attainment of a more exact and consistent rule. Twenty-three years study and exercise of his profession have fully qualified Mr. Hopkins to supply the long-felt want of such a book, and the experience thus acquired is imparted in a style that is neither too light to be instructive nor too technical to be readable. It is divided into seven parts, which treat respectively of general average, average connected with insurance, claims on goods and freight, total loss, proceedings in case of average, the constitution and rules of mutual insurance associations, and arbitration. In treating these various branches of his subject, the author has, as far as was possible, freed them from legal technicalities. At the same time, he founds his

observations on the laws by which mercantile transactions are guided; and stamps them with practical value by carrying the law of the subject down to the time of publication. The latest decisions of the courts of law are given in passing; and some very important judgments, recently delivered, are given in full in an appendix. There is, also, a very comprehensive and well-arranged index.

#### THE IMPORTANCE OF FIRE AND LIFE INSURANCE.

The following remarks on the importance of insurance are from the Boston *Herald*:—

We regret that people who depend upon their daily exertions for a living cannot be impressed with the idea that it requires but a very small amount of money annually to make themselves sure that a disaster by fire will not, at one sweep, render them penniless. When we hear of conflagrations which consume thousands upon thousands, we generally find that the wealthy are insured, yet the small stocks of dealers and the furniture in dwelling-houses which are also consumed, generally become a total loss to their owners.

No young man who owes for any portion of his stock, has a moral right to let that stock remain uninsured. He may risk his own property, but he has no right to expose that of others to hazard. Many of our merchants refuse to give credit to country traders who have their property uninsured, and it would be proper to apply this rule to city retail dealers also. The losses by fire, great as they sometimes are to wealthy people, cause by no means such suffering as accrues to the middling and poorer classes when they lose but a trifle compared with the former class. It is therefore important that the less wealthy classes should keep their property insured.

Some object to making insurance because, now and then, an individual of their acquaintance finds, after a loss by fire, that the office in which he insured was worthless, and he consequently gets no indemnification for his loss. But in most large places there are good, solvent, and reliable offices, which, having insured property, will pay a loss under their policy, whenever that loss occurs, promptly and without forcing the insured party into litigation to secure his rights. That there are companies which practice otherwise, is equally true, but a very little inquiry will demonstrate which they are, and such offices should be avoided.

It is not good policy to insure in any office which has the reputation of being dilatory in the payment of its losses, or which disputes the just claims of the insured whenever a loss occurs. Such offices generally charge a trifle less premium for insurance than those which meet their losses promptly and without annoying the insured. But it is cheaper and better to always resort to the best offices, even if the premium they charge should be one-quarter more than that charged on the same kind of risks by inferior offices.

We have known many mechanics, and particularly carpenters, who have been so thrown back, in early life, by the loss of their tools and stocks by fire, that they became discouraged and could never thereafter attain their former standing. We know that carpenters very frequently object to effecting insurance on their tools and stock, because the premiums are very high, because of the combustible character of the materials which they use. Still, until the carpenter gets sufficiently forehanded to be able to lose the contents of his shop without causing deprivations to his family or loss to his creditors, he ought not to let the extra premium deter him from insurance.

No man, who is not wealthy, can sleep soundly nor work to advantage, unless he is beyond the reach of a conflagration. He may be as careful of his own fires, as he will, but he has no security that the contiguous buildings will not take fire at any moment. He should therefore keep insured and then he will be embarrassed by no fears on this score.

As to marine insurance—that topic needs no remark from us, it being universal for merchants to insure unless they own sufficient tonnage to make it politic to become their own insurers.

But there is another branch of insurance which demands more attention than it has hitherto received—we mean life insurance. The class of individuals whose families depend upon their daily exertions, should insure their lives more frequently than they do. We are aware that they could not generally afford from their salaries sufficient annual sums to make the payments on a policy for as much as five thousand dollars. But they could, with a very little extra economy, pay the annual premium on a thousand dollar policy, or upon a policy for a few hundred dollars, which would be an invaluable aid to their families in case the head thereof was taken away. When a man in moderate circumstances has insured his property and his life he can work cheerfully, and not be troubled with apprehensions, and it is the duty as well as the interest of every man to resort to these means of protecting himself and his family from disasters which are otherwise very likely to overtake them.

#### DAMAGES AGAINST A FIRE INSURANCE COMPANY.

In the Supreme Court Circuit, held in the city of New York, January, 1858, the case of "Joseph Riply vs. The *Ætna* Insurance Company of Hartford, Conn.," was tried before Judge Clerke.

This was an action on a policy of insurance to recover a compensation in damages for the refusal of the defendants to pay the amount of the loss sustained by the Glendale Woolen Company by fire, which resulted in the destruction of their mills, stock, &c., on the 8th of April, 1849. The company was insured by the defendants, and the policy, after the fire, assigned to the plaintiff.

The case came up for trial about a year previous to its termination, and then went off on a technical objection by the counsel for the defendants.

When it was called on, in the first week of January, 1858, proof was made of the policy, and of the loss of the insured, which was computed at about \$20,000.

The defendants set up that they were not bound to pay the loss, because that on a previous survey, in accordance with the policy, two of the questions put to the agents and managers of the company were evasively answered. The questions and answers were as follows:—

QUESTION.—Is there a watchman in the mill during the night—is there also a good watch clock?

ANSWER.—There is a watchman, nights; no clock; bell is struck every hour from 8 P. M. till it rings for work in the morning.

QUESTION.—Is the mill left alone at any time after the watchman goes off duty in the morning till he returns to his charge in the evening?

ANSWER.—Only at meal times and on the Sabbath, and other days when the mill does not run.

The defendants insisting that the said questions and answers amounted to a warranty, and alleging that, in fact, there was not a watchman on the Sabbath from midnight after Saturday to the midnight following.

On the part of the plaintiff it was contended that these questions were not understood at the time by the persons under examination, and further that the company procured this insurance through the agents of the *Ætna* Company, and they well knew it was the constant practice of the Glendale Company to have a watchman in the mill from midnight on Saturday to the Monday morning. Evidence was given at great length to sustain this view of the case. The jury found a sealed verdict for the plaintiffs for \$18,937 50, being \$15,150 for loss of buildings, furniture, and machinery, and \$3,787 50 for loss on stock.

THE MASSACHUSETTS BOARD OF INSURANCE COMMISSIONERS.

The following are the several sections of an act, entitled "An Act for the better establishment of the Board of Insurance Commissioners," which was passed by the Legislature of Massachusetts at its last session, and approved March 27th, 1858 :—

SECTION 1. The Board of Insurance Commissioners shall hereafter consist of two commissioners, who shall receive an annual salary of fifteen hundred dollars each, payable in quarterly instalments, on the first days of January, April, July, and October, respectively, in lieu of the *per diem* compensation and clerk hire, authorized by the fourth section of the one hundred and twenty-fourth chapter of the acts of the year eighteen hundred and fifty-five.

SEC. 2. It shall be the duty of said Commissioners to visit and examine, whenever they shall deem it necessary, any insurance company, or loan fund association in this Commonwealth; and it shall be their duty so to do whenever they shall be requested, in writing, by five persons, each of whom is either a stockholder, or a creditor, or is in some way pecuniarily interested in said company or association; and it shall be the duty of said commissioners to calculate the existing value, on some day in every year, designated by them, of all outstanding policies of life insurance, in companies authorized to make insurance on lives in this Commonwealth; and such calculated values shall be included by the insurance commissioners in their annual report to the Legislature. All companies making insurance upon lives, or their agents, in this Commonwealth, shall furnish to the commissioners an attested statement, certified in the same manner in which their returns are now required to be certified, setting forth in form the number, date, and amount of each policy, and the age of the insured at the period of its date; in default whereof the said companies, or their agents, shall be liable in the same penalties as are imposed by law for neglect to make returns.

SEC. 3. All acts and parts of acts inconsistent with this act are hereby repealed.

POSTAL DEPARTMENT.

THE OVERLAND MAILS TO INDIA AND CHINA.

Commencing with January 1st, 1858, the mails for the East Indies and China, transmitted via Marseilles, will be dispatched from London as follows, viz.: those intended for the Bombay packets on the evenings of the 2d and 17th of each month; and those intended for the Calcutta packets (including the mails for Ceylon, Madras, and China,) on the evenings of the 9th and 25th of each month.

The Bombay packets will also carry letters for Calcutta and Madras, to be forwarded from Bombay by the inland posts; and it is expected that they will reach their destination some days in advance of the letters sent by the next Calcutta packet.

The packets from Southampton will continue to run in connection with the Calcutta line; and mails via Southampton for Calcutta, Ceylon, Madras, and China, will be made up in London, as at present, on the mornings of the 4th and 20th of each month. For Bombay, mails via Southampton will be forwarded by the above packets, as well as by the Australian packets, (the mails for which are made up in London on the morning of the 12th of each month,) as far as Egypt, where they will await the departure of the next packet for Bombay.

The following shows the several dates upon which the mails for India will be

dispatched from London both by the route of Marseilles and by that of Southampton :—

Date of dispatch from London via Marseilles is on the evenings of 2d, 9th, 17th, and 25th ; and via Southampton on the mornings of 4th, 12th, and 20th of each month.

When the 4th, 12th, or 20th of the month falls on a Sunday, the mails will be made up on the previous evening ; and when the 2d, 9th, 17th, or 25th of the month falls on a Sunday, the mails will be made up on the following evening.

The homeward mails will, in like manner, leave Calcutta and Madras four times a month, and at nearly equal intervals, being dispatched twice by packet to Suez, as at present, and twice via Bombay.

The mails from Bombay will leave that port on the 9th and 24th, and the portion brought via Marseilles will be due in London about the 4th and 19th of each month. The portion brought via Southampton will come from Alexandria by the first mail packet, Indian or Australian, leaving that port for Southampton after their arrival.

#### CITY POST-OFFICE AT WASHINGTON.

The Washington *Union* has published a description of the building erected in 1857 for the Post-office of that city, and to which the business of the office was transferred in January, 1858. According to the *Union's* account it is a model establishment, and is generally acknowledged to be the most complete, simple, and convenient *unity* of the sort in the United States. It was designed by Dr. Walter, the architect of the capitol extension and other public buildings at Washington, after suggestions of Col. Berrett, postmaster of the city. We condense the description :—

It occupies the northern side of the ground-floor of the General Post-office, and extends back into the court-yard. The entrance is from several doors on F street, well sheltered from any storm, and the vestibule is surrounded by "boxes," with windows for "delivery." On the right side are the windows for "carriers' delivery ;" in the center, those for "general delivery ;" and, on the left, those for "newspapers" and "ladies' letters." Between these, on the right and left of the "general delivery," are windows for the delivery of letters in boxes. There are nine hundred and ninety-six boxes for letters, one hundred and two of which can be opened with keys, and are thus accessible when the office may be closed.

The entire interior is in one room, although a range of columns stand between the "distributing" and the "mailing" departments. The "distributing" department is, of course, immediately behind the front windows, and in one corner is a division for the chief clerk, railed off by a light iron lattice, that those coming for registered letters need not interfere with the business of the office. Behind the "general delivery" window is one of the Providence letter-cases, in which, by a "square of the alphabet," each letter of the alphabet is repeated horizontally and perpendicularly twenty-four times. The rows of letters running horizontally, from left to right, represent the surname, and the perpendicular rows represent the Christian name—rendering it easy to ascertain, by a glance, if there are any letters for an inquirer. There are, also, sets of pigeon-holes for newspapers, for ladies' letters, and for advertised letters, with tables for the city carriers to assort their letters on. Square baskets receive the letters dropped in to be mailed, and there are complete arrangements for "stamps," &c. Single stamps will be sold on the outside by a dealer in stationery, who is to have a neatly-fitted-up stall.

The mailing department is some seventy feet by sixty-two, lighted by large sky-lights in the daytime, with numerous gas chandeliers for darker hours. The

ceiling, which is seventeen feet from the floor, is painted gaudily in fresco, and there are admirable arrangements for ventilation, while two large furnaces below supply any required degree of heat. A space is railed off at one end, where the mail-carriers will enter to deposit or take away letters and papers, and in a basement is a store-room for keeping empty bags. There are large tables for stamping, counting, and sorting letters, for doing up packages, making out and verifying way-bills, and the other office operations, with a new system for "bagging" the mail matter.

A frame-work, in movable sections, on legs like tables, forms a semi-circle of compartments, arranged at an angle, around the distributors. In each compartment a mail-bag is fixed by four hooks, and the clerks can thus toss packages into any one of about eighty bags without moving. As the "matter" is placed on a table behind them, the labor of "bagging" is thus greatly simplified, and can be quickly done.

There are safes for the safe-keeping of money and registered letters, and all the modern conveniences of the day. In short, nothing appears to have been overlooked that can contribute to the comfort of the public, and facilitate the arduous duties of the clerks.

BRITISH MAIL PACKET SERVICE.

The total expenses of the British Post-office packet service for the year 1858, are estimated at £988,488 against £965,064 for the last year. This sum embraces the following charges:—

|                                                                                                                          |          |
|--------------------------------------------------------------------------------------------------------------------------|----------|
| Liverpool and Halifax, Boston, and New York.....                                                                         | £172,840 |
| To and from the West Indies, etc., (Southampton Line).....                                                               | 240,000  |
| To Brazil and Buenos Ayres, (Southampton Line).....                                                                      | 30,000   |
| West coast of South America, (Panama, Callao, and Valparaiso).....                                                       | 25,000   |
| Dartmouth and Cape of Good Hope.....                                                                                     | 33,000   |
| West coast of Africa.....                                                                                                | 20,500   |
| Australia, (Southampton and Sydney, and branch via Marseilles).....                                                      | 185,500  |
| India, £139,414, and £20,000 for the additional mails to India by semi-monthly communication to Bombay and Calcutta..... | 159,414  |
| Peninsular and Gibraltar.....                                                                                            | 20,500   |
| Dover, Calais, and Ostend.....                                                                                           | 15,500   |
| Southampton and Jersey, etc.....                                                                                         | 4,000    |
| Holyhead and Kingstown.....                                                                                              | 25,000   |

POSTAGE BY THE PRUSSIAN CLOSED MAIL.

The Post-office Department of the United States has issued a notice (important to those having correspondence with Germany) calling attention to the fact that the provisions of the United States and Prussian postal convention require that the postage upon letters transmitted between the two countries shall be either fully prepaid or wholly unpaid. The combined single rates of postage between the United States and its territories and Prussia, including all the States belonging to the German-Austrian Postal Union, is thirty cents upon each letter or package not containing half an ounce in weight, of which prepayment in advance is optional in either country, but it is not allowable to pay less than the whole combined rate.

REGULATIONS FOR LETTERS AND DOCUMENTS FREE OF POSTAGE.

The Postmaster-General of the United States has directed that, it having become a too common practice for persons extensively engaged in sending out circulars and other documents, and matters relating solely to their own affairs and business, to put them enclosed in envelops addressed to postmasters, and some-

times even indorsing on them the words "P. O. Business," in order to have them pass free through the mails, and thus defraud the Department of its just revenues, postmasters should, in all such cases, require to be furnished with reasonable evidence that such packages and their contents relate exclusively, either to the private business of those to whom they are addressed, or to the business of their offices or of the Post-office Department, and if such evidence is not furnished should refuse to mail them.

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## RAILROAD, CANAL, AND STEAMBOAT STATISTICS.

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### SALE OF THE COLLINS LINE OF OCEAN MAIL STEAMERS.

The steamers *ADRIATIC*, *ATLANTIC*, and *BALTIC*, of the Collins Line, were sold on Thursday, the 1st of April, 1858, at their wharf at the foot of Canal-street, New York. The U. S. District Attorney gave notice before the auction commenced, that the General Government had a lien upon the steamers to the amount of \$115,500. A notice was read from the Board of Supervisors that the city had a claim of \$39,000, for the taxes of 1856-7, upon the company, and that the *Atlantic* was held for the amount. Capt. Briggs announced that the hands attached to the steamers had also a claim of \$3,000 against the company. A counter proclamation was made on behalf of the line, that all the claims of the United States Government had been duly satisfied, and that the tax claim of the city was unauthorized. A further announcement was then made, that Messrs. Clarkson, N. Potter, and J. N. Brown had a liability of the company of \$500,000, dated May 1, 1855, drawing interest from Nov. 1, 1857, also a mortgage dated Nov. 30, 1857, to secure the claim. The three steamers were purchased by Dudley B. Fuller, Esq., (as agent for other parties,) for \$50,000. The terms were 20 per cent on the spot, and the remainder on the next day.

What is to be the final disposition of these steamers has not yet been announced, but it appears to be probable, if not certain, that they cannot be kept in successful operation between New York and Liverpool without government subsidy. The amount which our government expends in maintaining American ocean mail steamers is much less than is paid by either Great Britain or France.

On p. 629 of this number of our Magazine we have given a statement of the amount which Great Britain pays annually to her lines of steamers for conveying the mails to her colonies and to foreign countries. The aggregate sum is about five-and-a-half millions of dollars a year. The Cunard line receives a much more generous subsidy than the Collins line hitherto enjoyed.

The French Government is establishing a system similar to that of Great Britain, with most liberal allowances for mail service.

In noticing this sale, we quote from the New York *Shipping List* the following judicious remarks, which are well worthy of the attention of Congress, and which, we believe, express the views of a large portion of the mercantile community:—

"In the discussions which have taken place with respect to the contract with the Collins line of steamers, we think that all the considerations have not been fairly weighed. The main argument recently adduced in favor of an abandon-

ment of the contract with that line, is that the whole ocean mail service ought to be abandoned, unless its receipts equal its expenses. But we cannot agree to the position that this is a question of merely dollars and cents, any more than we can assent to that reasoning which makes the whole question turn upon the supposed importance of having our mails carried in American vessels. The former argument may appeal forcibly to our love of economy, and the latter to our national pride, and it may be proper and becoming that we should duly acknowledge the force of each appeal, but still there are more important considerations, which ought to weigh in the determination of such questions.

"The principal inquiry, we think, ought to be—not whether, as a business transaction, a particular line will pay the government; nor whether without government support the service would fall into the hands of English or American capitalists; but whether the general interests of commerce are to be advanced by the aid which is sought. Although the fate of the Collins line may now be virtually settled, still we think it our duty to urge that more liberal views should be taken in determining the general policy to be in future adopted by Congress on this subject. We have no intention of inquiring into the necessity or advantages of any other lines, but we trust that all such circumstances may be allowed their full weight, when Congress is called upon to determine whether the Government aid shall be given or withheld, and that an important question like this may not be decided in a too narrow spirit of economy.

"If we are ever to adopt a system of ocean steam communication like that of the European commercial powers, the present is an occasion which calls for such assistance. If such a system is not to be adopted, we should be prepared with some further expedient for saving that which we are likely to lose by the superior activity of others."

RECEIPTS OF RAILROAD IRON AT CLEVELAND FOR NINE YEARS.

The following statement shows the amount of railroad iron received by Mr. A. N. GRAY, at Cleveland, Ohio, for a period of nine years:—

| Years.    | No. rails. | Tons.  | Miles. | R'ds. | Years.    | No. rails. | Tons.   | Miles. | R'ds. |
|-----------|------------|--------|--------|-------|-----------|------------|---------|--------|-------|
| 1849..... | 20,365     | 3,393  | 34     | 163   | 1854..... | 101,586    | 20,848  | 190    | 274   |
| 1850..... | 2,823      | 13,811 | 132    | 232   | 1855..... | 54,836     | 11,362  | 106    | 230   |
| 1851..... | 170,186    | 23,352 | 290    | 86    | 1856..... | 33,221     | 6,618   | 63     | 317   |
| 1852..... | 281,682    | 42,615 | 414    | 17    | 1857..... | 8,795      | 1,759   | 17     | 196   |
| 1853..... | 280,297    | 43,665 | 426    | 300   |           |            |         |        |       |
|           |            |        |        |       |           | 983,758    | 172,426 | 1,677  | 215   |

This iron was distributed to thirty different companies. Mr. Gray states that he received, July 31st, 1849, the first T rail which arrived in Cleveland. That rail was manufactured at the works of Sir John Guest & Co., Wales, and was purchased by the Hon. ALFRED KELLEY for the Cleveland, Columbus, and Cincinnati Railroad, of which he was president at the time. The receipts of railroad iron in that first year, (1849.) via the lakes, was 3,100 tons for the Cleveland, Columbus, and Cincinnati Railroad, and a small amount for the Columbus and Xenia Railroad, and the Little Miami Railroad. It will be readily seen by the preceding table that the receipts of railroad iron at Cleveland (and, in fact, the receipts of the same for the entire West) increased rapidly from 1849 to 1853, and there was a similarly wonderful decrease from 1853 to the close of 1857, when construction was stopped.

## ESTIMATED COST OF COMPLETING THE CANALS OF NEW YORK.

In response to a resolution of the House of Assembly of the Legislature of New York, the State Engineer, under date of March 24th, 1858, sent to the Assembly a statement of the amount of money necessary to complete the unfinished canals.

Of the work remaining to be done, about 82 $\frac{3}{4}$  per cent is under contract, and is included in 301 contracts—the largest portion of which is done. The estimates have been carefully made, and the Engineer believes that he has made ample allowance for land damages and contingencies. The report says:—

The estimates herewith submitted show the amount of money estimated to be required on the 1st of January last. The work done since that date amounts to about \$500,000, and is included in the amount of work under contract remaining to be done.

## I. ENLARGEMENT OF THE ERIE CANAL.

|                                                      |                |
|------------------------------------------------------|----------------|
| Work to be done on existing contracts .....          | \$1,403,183 28 |
| Work not under contract.....                         | 362,391 10     |
| Engineering and land damages.....                    | 550,000 00     |
| Add 20 per cent for contingencies .....              | 463,114 87     |
| Add percentage retained to December 31st, 1857 ..... | 643,042 00     |

---

\$3,421,731 25

## II. ENLARGEMENT OF THE OSWEGO CANAL.

|                                            |              |
|--------------------------------------------|--------------|
| Work to be done on existing contracts..... | \$448,027 37 |
| Engineering and damages.....               | 80,000 00    |
| Contingencies .....                        | 105,605 47   |
| Percentage retained.....                   | 80,404 91    |

---

\$714,637 75

## III. ENLARGEMENT OF THE CAYUGA AND SENECA CANAL.

|                              |              |
|------------------------------|--------------|
| Work under contract .....    | \$161,677 24 |
| Engineering and damages..... | 60,000 00    |
| Contingencies.....           | 44,335 44    |
| Percentage retained.....     | 58,323 76    |

---

\$324,336 44

## IV. BLACK RIVER CANAL.

|                                              |             |
|----------------------------------------------|-------------|
| Work to be done under existing contract..... | \$97,135 00 |
| Engineering and damages.....                 | 40,000 00   |
| Contingencies.....                           | 27,427 00   |
| Percentage retained.....                     | 19,210 50   |

---

\$183,772 50

## V. GENESEE VALLEY CANAL.

|                |             |
|----------------|-------------|
| Aggregate..... | \$95,350 20 |
|----------------|-------------|

## VI. ENLARGEMENT OF LOCKS ON CHAMPLAIN CANAL.

|                                   |             |
|-----------------------------------|-------------|
| Work under contract not done..... | \$24,480 00 |
| Not under contract.....           | 104,700 00  |
| Contingencies.....                | 31,836 00   |
| Percentage retained.....          | 25,533 00   |

---

\$216,649 00

Making as the total aggregate to complete all the canals, \$4,955,777 14. In this estimate the extension of the Genesee Valley Canal from Olean to Mill Grove Pond is not included. That work is estimated to cost \$88,333 70.

#### PERSONS EMPLOYED ON THE RAILWAYS OF THE UNITED KINGDOM.

A return of the number and description of the persons employed on the railways of the United Kingdom on the 30th day of June, 1857, published by order of the House of Commons, furnishes us with the following interesting particulars :—

The total number of persons, of all grades and capacities, employed on all the railways, open and not open, was 153,697, viz. :—in England and Wales, 116,634 ; in Scotland, 20,172 ; and in Ireland, 16,891.

The aggregate length of unopened railways at the period named was 3,193 miles, on which there were employed 44,037 persons.

The aggregate length of the railways then open throughout the United Kingdom was 8,942 miles, and their whole number of stations amounted to 3,121. On these open railways there were then employed 109,660 persons, (at the same period in the preceding year there were 102,117,) viz. :—221 secretaries and managers, 26 treasurers, 150 engineers, 398 superintendents, 198 store-keepers, 201 cashiers or accountants, 997 inspectors or time-keepers, 2,471 station-masters, 404 ticket collectors, 166 draughtsmen, 8,712 clerks, 1,325 foremen, 3,563 engine-drivers, 3,644 assistant drivers or firemen, 3,716 guards or brakemen, 21,337 artificers, 3,263 switchmen, 1,998 gate-keepers, 2,349 police or watchmen, 17,091 porters or messengers, 8,260 platelayers, 26,285 laborers, and 2,885 persons in miscellaneous ways.

#### DISEASES OF ENGINEERS AND FIREMEN ON RAILROADS.

The following paragraph which we derive from the *Washington Union* is credited to the *Minerve* of Paris :—

At a recent meeting of the Medical Academy of Paris, the subject of discussion was the diseases to which engineers and firemen on railroads are peculiarly liable. It was shown that the nervous system is injuriously affected by the inhalation of caloric gas, and that the effect is to deprive those who have so many lives confided to their care of the necessary presence of mind for such important trusts. The society recommended to all railroad directors the propriety of diminishing the labors of this class of officers by increasing their number.

#### SUGGESTIONS FOR ECONOMY IN WORKING LOCOMOTIVES.

In a communication read by Mr. D. K. Clark, before the London Institution of Civil Engineers, the author stated that all the feed water used for locomotive boilers should either be filtered or pure rain water, as hard water reduces the durability of the boiler tubes from nine to two and three years ; and, besides, hard water causes priming. He also stated that the link motion was a sufficient expansion gear, and that its merits are not sufficiently appreciated. With proper arrangements, the steam might be cut off at one-fifth the stroke. Mr. C. advocated the use of super-heated steam—the perfect protection of the cylinders, and the balancing of the side valves. The engine, he also asserted, should be perfectly balanced in all its parts. Six-wheeled locomotives, with central drivers, he thought best secured this end. With suggested improvements, the use of bituminous coal for coke, super-heated steam, protecting the cylinders, balancing the valves, using pure feed water, and heating it, and balancing the engine, he calculated that fifty per cent of expenses might be saved in working locomotives

The American *Railway Times*, of March 6th, 1858, contained a brief statement on the subject of incrustations in boilers, from which we extract the following :—

Innumerable plans have been proposed for the prevention of these incrustations, some of which have been patented ; but none of them have come into universal use. New plans are being continually proposed. From these circumstances it may be inferred that none heretofore known have been found entirely satisfactory. Recently, Mr. R. McCafferty, of Pennsylvania, has patented a new process for this purpose, which consists of introducing into a boiler of 100 horse power half a pound of black gum catechu. With this quantity the water becomes colored like pale brandy. This color is maintained by adding more gum, from time to time, during the week. He alleges that so long as the color is maintained no incrustation will form ; also, that boilers already incrustated will be rendered clean by its use, as the gum gradually decomposes it, and deposits it in a thin mud at the bottom, whence it can be readily blown out.

The *Times* then refers to the plan of Mr. CLARK, and states that “ the method patented by Mr. McCafferty is much simpler and cheaper, and, if found in practice to be effectual, will probably come into general use, if proper pains be taken to advertise the world of the fact.

## JOURNAL OF MINING, MANUFACTURES, AND ART.

### PRODUCTION AND MANUFACTURE OF IRON IN THE UNITED STATES.

The annexed article concerning the production and manufacture of iron in the United States, is of unusual value. It was originally published by the Philadelphia *North American*, February 16th, 1858. That journal informs us that this statement is the most thorough and reliable ever given to the public, and is much more accurately made up than the British statements sometimes given in their circulars :—

For the purpose of this statement we may distinguish three principal departments of the iron production, the first represented by the blast furnaces, using either anthracite, charcoal, raw or coked bituminous coal ; the second by the bloomeries or mountain forges, which turn ore or cast iron into blooms or malleable iron ; and the third by the rolling mills, which convert these into bar, rod, sheet, and nail plate iron. Beyond this point the manufacture ramifies into an infinite number of branches among all the mechanic arts.

Of these three kinds there are about 1,100 iron works in the United States, viz. :—121 anthracite furnaces, and 500 charcoal and coke, 300 forges, and 210 rolling mills.

The furnaces produced in 1856 about 787,958 tons of pig metal, from the various ores, to which must be added 6,500 tons produced from the ore by the bloomery forges. The entire production of iron in 1856 was nearly eight hundred thousand tons.

The annual change in the amount of iron produced is not so great, on the whole, as was once thought, or as is the case at the present chief centers of production. There were produced—

|              |      |         |
|--------------|------|---------|
| In 1854..... | tons | 713,366 |
| In 1855..... |      | 705,745 |
| In 1856..... |      | 782,958 |

Yet the local fluctuations are very great. The anthracite production during

these three years rapidly increased by the enlargement and better handling of old furnaces and the erection of new ones.

|                             |         |                             |         |
|-----------------------------|---------|-----------------------------|---------|
| In 1849 it was only....tons | 107,256 | In 1855 it was only....tons | 343,105 |
| In 1854 ".....              | 307,710 | In 1856 ".....              | 393,509 |

There was, of course, a proportionate decrease of the manufacture of charcoal iron. Where this has taken place will appear by the following table:—

PRODUCTION OF IRON BY ANTHRACITE FURNACES.

|                          | 1854.   | 1855.   | 1856.   |
|--------------------------|---------|---------|---------|
| In Pennsylvania.....     | 208,703 | 255,326 | 306,966 |
| Out of Pennsylvania..... | 99,000  | 87,779  | 86,543  |

CHARCOAL AND COKE FURNACES.

|                             |        |        |        |
|-----------------------------|--------|--------|--------|
| East Pennsylvania.....      | 62,724 | 60,596 | 51,775 |
| Northwest Pennsylvania..... | 78,927 | 59,358 | 59,587 |
| Southwest Pennsylvania..... | 11,052 | 18,217 | 29,400 |

CHARCOAL FURNACES.

|                                                            |         |         |         |
|------------------------------------------------------------|---------|---------|---------|
| East of the Hudson.....                                    | 30,420  | 30,926  | 27,837  |
| Northern and Western New York.....                         | 19,197  | 19,736  | 18,847  |
| Southern New York and New Jersey...                        | 13,435  | 7,901   | 5,683   |
| Maryland.....                                              | 35,658  | 36,309  | 30,998  |
| Northwestern Virginia.....                                 | 1,930   | 2,342   | 1,467   |
| Eastern and Middle Virginia.....                           | 5,880   | 6,926   | 5,730   |
| North and South Carolina.....                              | 1,820   | 1,830   | 1,966   |
| Georgia and Alabama.....                                   | 3,604   | 3,632   | 4,302   |
| Tennessee.....                                             | 38,596  | 30,000  | 30,000  |
| Missouri.....                                              | 5,213   | 6,000   | 13,201  |
| West Kentucky.....                                         | 5,000   | 5,000   | 5,000   |
| East Kentucky.....                                         | 22,830  | 15,580  | 21,160  |
| South Ohio (charcoal and coke).....                        | 56,081  | 47,182  | 69,605  |
| North Ohio (charcoal and coke).....                        | 8,289   | 6,025   | 7,901   |
| Illinois, Indiana, Michigan, Wisconsin, and Minnesota..... | 5,000   | 5,000   | 50,000  |
| Total tons.....                                            | 713,366 | 705,745 | 782,958 |

There are ten principal centers of the iron manufacture in the United States.

1. Northern New York, once including Vermont, and using the fine primitive ores of the Adirondac Mountains. Here are forty bloomeries and three anthracite furnaces.

2. The Highlands, a narrow belt extending through Berkshire, Massachusetts, into Southern Vermont, and through Northern New Jersey into Pennsylvania, containing forty-four charcoal and twenty-two anthracite furnaces and sixty forges, using hematite and magnetic ores.

3. Eastern Pennsylvania and Northeastern Maryland, with ninety-eight anthracite furnaces, one hundred and three charcoal furnaces, and one hundred and seventeen forges; none of which last, however, produce iron from the ore. This great iron region is itself divisible into distinct smaller areas, some of them using magnetic, some hematite, and some fossil ores.

4. Northwestern Virginia and Southwestern Pennsylvania is a distinct region on the Eastern outcrop of the lower coal measures, with forty-two charcoal furnaces, and two or three forges, and using carbonate of iron. It includes the Cambria iron works, which accounts for its apparent growth.

5. Northwestern Pennsylvania and Northeastern Ohio with sixty-six furnaces, using the ores of the Northwestern outcrop of the lower coal measures. The charcoal furnaces of this region are all going out, and the coke and raw bituminous furnaces are increasing in number, size, and efficiency. All the forging of this region is done by the rolling mills at Pittsburg.

6. The Hanging Rock, or Ironton region, crosses the Ohio River as a belt of

charcoal furnaces about fifteen miles wide and one hundred long ; forty-five in number on the Ohio side, and seventeen on the Kentucky side. Its ores are all from the lower coal measures, and at its northern end it is beginning to use stone coal for fuel.

7. The old manufacturing region of Middle and Eastern Virginia is a prolongation southward of the Eastern Pennsylvania with the same ores, but using charcoal exclusively as a fuel. East of the Blue Ridge are sixteen furnaces, only one of which remains in blast, and west of the Blue Ridge thirty. There are thirty-five forges.

8. Northeastern Tennessee and Northwestern North Carolina have nine furnaces and forty-one bloomery forges in a compact area. Along the base of the Cumberland Mountains, five furnaces and fourteen forges use the Dyestone fossil, upper Silurian ore. In the southwestern corner of North Carolina are five forges, and through the middle of the State runs a belt of five furnaces and twenty-seven forges. This whole country possesses incalculable resources for iron making, and must become at some distant day one of the great centers.

9. In Western Tennessee and Kentucky, around Clarksville and Eddyville, lies the principal, and, at present, only important iron region of the far West. It contains forty-five furnaces and some forges.

10. In Missouri a beginning has been made with seven furnaces, which must develop into a great iron making region around the Iron Mountain and Pilot Knob, when fed by coals from Western Missouri and Kansas.

The Lake Superior iron region has been opened as a mining region only within two or three years, though it is worked with great success at various points near the copper mines, in Michigan, and on the western shore in Minnesota. Most of the ore is shipped to Detroit and Cleveland, for the use of the rolling mills of the West. The total production of these ores was probably fifteen thousand tons in 1857. This will, at no distant day, be a principal iron making region.

Tabulating these regions on the scale of their importance, we have :—

|                                                                        | Tons.   |
|------------------------------------------------------------------------|---------|
| 1. E. Pennsylvania and Maryland charcoal, 87,773 ; anthracite, 341,928 | 428,701 |
| 2. Ironton Region, south Ohio.....                                     | 90,765  |
| 3. Highland Belt.....                                                  | 70,872  |
| 4. Pittsburg Region.....                                               | 69,488  |
| 5. Clarksville and Eddyville Region.....                               | 33,000  |
| 6. Adirondac Region.....                                               | 34,464  |
| 7. Monongahela Region.....                                             | 30,867  |
| 8. Missouri Region.....                                                | 13,201  |
| 9. East Tennessee and Carolina Region.....                             | 6,800   |
| 10. Virginia.....                                                      | 5,730   |
| Total.....                                                             | 782,958 |

Bloomery forges are small open blast furnaces, or very large smith fires closed in to hold a quarter of a ton of some rich ore, which when smelted is hooked out in the form of a ball of malleable iron and hammered round or flat under a tilt hammer. All the forges are adjuncts to the blast furnaces, treating their pig iron in the same manner as if it were so much ore, and preparing it for the rolling mill. It is a great geographical feature of the manufacture that the forges are to be found almost exclusively east of the Alleghany Mountains. The geological reason for which is, that here alone are found the magnetic, primary, or high per cent ores. Lake Superior and Missouri are the only Western forge regions. The West once had many forges for blooming pig iron, but these have all been abandoned, and that work is now done by the puddling furnaces, squeezers, and muck roll of the rolling mills. There is a third division of forges which use either trip or steam hammers for turning bloomed and rolled iron into various shapes for mechanical purposes—engine cranks and shafts, car axles, &c.

Rolling mills (commonly with nail factories attached) are divided into railroad and merchant mills. The principal railroad mills in the United States are given in the following table, with their make in 1856 :—

|                                         |        |                                          |         |
|-----------------------------------------|--------|------------------------------------------|---------|
| Bay State, Boston . . . . . tons        | 17,871 | Mt. Savage, Maryland . . . . . tons      | 7,159   |
| Rensselaer, Troy . . . . .              | 13,512 | Cambria, Pennsylvania . . . . .          | 7,533   |
| Trenton, New Jersey . . . . . about     | 13,000 | Brady's Bend, W. Pennsylvania            | 13,206  |
| Phœnix, Pennsylvania . . . . .          | 18,592 | Washington, Wheeling, Va. . . . .        | 2,355   |
| Pottsville, Pennsylvania . . . . .      | 3,021  | McNickle, Covington, Ky . . . . .        | 1,976   |
| Lackawanna, Pennsylvania . . . . .      | 11,338 | Railroad Mill, Cleveland, Ohio . . . . . | 1,800   |
| Rugg & Ready, Danville, Pa. . . . .     | 5,259  | Newburg Mill, Cleveland, Ohio . . . . .  | 900     |
| Montour, Danville, Pa. . . . .          | 17,538 | Wyandotte, near Detroit . . . . .        | 6,000   |
| Safe Harbor, Lancaster Co., Pa. . . . . | 7,347  |                                          |         |
| Total . . . . .                         |        |                                          | 147,507 |

The Fairmount, at Philadelphia, has been recently adapted to rolling railroad iron, and the Palo Alto, at Pottsville, rolled about one thousand tons in 1856. The Newburg mill commenced making rails late in 1857. Most of these mills are now stopped, and a number to be erected in the West, at Indianapolis, Chicago, St. Louis, &c., will be obliged to wait for better times. The western mills chiefly re-roll old rails. The extension of this business in the past four years can be seen from the following figures:—

|                     | Railroad iron made. | Imported. | Consumed. |
|---------------------|---------------------|-----------|-----------|
| 1853 . . . . . tons | 105,000             | 298,895   | 403,995   |
| 1854 . . . . .      | 121,000             | 288,266   | 409,866   |
| 1855 . . . . .      | 134,000             | 127,915   | 261,915   |
| 1856 . . . . .      | 147,507             | 155,995   | 303,502   |

**STARCH: HOW IT IS EXTRACTED GENERALLY, AND HOW FROM CORN.**

We published in the April number of this volume of the *Merchants' Magazine*, page 505, full and minute directions for extracting starch from the potato; and in former volumes have presented other articles relating to the manufacture of starch.

Starch is an important element of food with animals as with vegetables, and its ready convertibility, without change of composition, into suitable forms, such as dextrine and sugar, fits it exactly for carrying on those changes which occur in the juices of vegetables. It is stored up in the seeds, roots, and pith of plants, and by its decomposition affords the materials for the most essential vegetable products. However obtained, it always presents the same chemical characters; its physical peculiarities may, however, vary slightly. In its pure state, it is a fine, white powder, without taste or smell, and has a peculiar crispness when rubbed between the fingers. It is not soluble in cold water, and on this fact the manufacture, or rather, the extraction, of starch depends. The simplest method of preparing starch, and separating it from the gluten, and other constituents of wheat, is by washing dough in a linen bag, in a gentle stream of water. The usual process, however, whether potatoes, wheat, rice, or maize is treated, according to the *Scientific American*, a reliable authority, is as follows:—

The substance is crushed, left to steep in cold water, and occasionally agitated; or a quantity of the grain is conveyed, by appropriate machinery, under small jets of water, until all the starch grains are washed out; the water having the fine starch suspended (not dissolved) in it, they are left to settle, and then dried, when they crack into the little prismatic shapes so well known to all consumers of the article.

The crushing is a very inconvenient operation, especially with Indian corn; and Mr. Watt, of Belfast, Ireland, took out a patent in the United States, June 30th, 1857, for the manufacture of starch from Indian corn whole. The *Scientific American* considers that his process will be found to answer perfectly, and describes it thus:—

He first takes the ear of corn, and steeps it in water for a week, keeping the water at any temperature between 70° and 140° Fah., and changing the water several times. In this there will be a slight fermentation, and as soon as it has ceased, the corn is taken out and ground to a kind of powdery pulp, as it is quite soft from the steeping. Warm water of the above temperatures must be kept running through the mill-stones, and this will carry away the starch; the water is passed through the sieves, or other arrangement for catching the starch, and the whole is allowed to settle—the clear water being run off, and the starch dried and packed as in older processes.

#### COMPARATIVE VALUE OF WOOD AND COAL.

The annexed tables and accompanying remarks, from Overman's great work upon iron are of great value, in a practical point of view, both to the public generally and to iron mongers, as furnishing valuable data for judging of the relative value of different kinds of fuel.

The specific gravity of the different kinds of wood, is of the first importance. This is the proper criterion of their value, though wood is generally bought by measurement. Its specific gravity is directly in proportion to its amount of carbon, hydrogen, and oxygen. The following table shows the specific gravity of wood, water being the standard unit, and the relative value of the most common varieties:—

TABLE SHOWING THE VALUE OF WOOD.

| Kind of wood.        | Specific gravity of wood. | Pounds of wood in a cord, adp. | Per-centage of char-coal. | Specific gravity of the charcoal. | Pounds of charcoal in a bushel. | Bush. of charcoal from a cord of dry hick'ry wood | Relative value of dry wood. I. |
|----------------------|---------------------------|--------------------------------|---------------------------|-----------------------------------|---------------------------------|---------------------------------------------------|--------------------------------|
| White-ash.....       | .772                      | 3,450                          | 25.74                     | .547                              | 23.78                           | 31                                                | .77                            |
| White beech.....     | .724                      | 3,236                          | 19.62                     | .518                              | 27.26                           | 23                                                | .65                            |
| Butternut.....       | .567                      | 2,534                          | 20.79                     | .237                              | 12.47                           | 42                                                | .51                            |
| Red cedar.....       | .562                      | 2,525                          | 24.72                     | .238                              | 12.52                           | 50                                                | .56                            |
| Chestnut.....        | .522                      | 2,333                          | 25.29                     | .379                              | 19.94                           | 30                                                | .52                            |
| Dogwood.....         | .815                      | 3,543                          | 21.                       | .550                              | 29.94                           | 26                                                | .75                            |
| Shell-bark hickory.. | 1.000                     | 4,469                          | 26.22                     | .625                              | 32.89                           | 36                                                | 1.00                           |
| Hard-maple (sugar).. | .644                      | 2,878                          | 21.43                     | .431                              | 22.68                           | 27                                                | .60                            |
| Soft-maple.....      | .597                      | 2,668                          | 20.04                     | .370                              | 19.47                           | 28                                                | .54                            |
| Magnolia.....        | .605                      | 2,704                          | 21.59                     | .406                              | 21.36                           | 27                                                | .56                            |
| Chestnut-oak.....    | .885                      | 3,955                          | 22.75                     | .481                              | 25.31                           | 36                                                | .86                            |
| White-oak.....       | .855                      | 3,821                          | 21.62                     | .401                              | 21.10                           | 39                                                | .81                            |
| Black-oak.....       | .728                      | 3,254                          | 23.80                     | .387                              | 20.36                           | 38                                                | .71                            |
| Red-oak.....         | .728                      | 3,254                          | 22.43                     | .400                              | 21.05                           | 30                                                | .69                            |
| Yellow pine.....     | .551                      | 2,463                          | 23.75                     | .333                              | 17.52                           | 33                                                | .54                            |
| Jersey pine.....     | .478                      | 2,137                          | 24.88                     | .385                              | 20.26                           | 26                                                | .48                            |
| Pitch-pine.....      | .426                      | 1,904                          | 26.76                     | .298                              | 15.68                           | 33                                                | .43                            |
| White-pine.....      | .418                      | 1,868                          | 24.35                     | .293                              | 15.42                           | 30                                                | .42                            |
| Poplar, yellow.....  | .563                      | 2,516                          | 21.81                     | .383                              | 20.15                           | 27                                                | .52                            |
| Poplar, Lombardy..   | .397                      | 1,774                          | 25.                       | .245                              | 12.89                           | 34                                                | .40                            |
| Sycamore.....        | .535                      | 2,391                          | 23.60                     | .374                              | 19.68                           | 29                                                | .52                            |
| Black-walnut.....    | .681                      | 3,044                          | 22.56                     | .418                              | 22.                             | 31                                                | .65                            |

TABLE SHOWING THE VALUE OF COAL.

| Kind of coal.    | Specific gravity. | Pounds of coal in a bus. adp. | Kind of coal.    | Specific gravity. | Pounds of coal in a bus. adp. |
|------------------|-------------------|-------------------------------|------------------|-------------------|-------------------------------|
| Lehigh-coal..... | 1.494             | 78.61                         | Cannel coal....  | 1.240             | 65.25                         |
| Schuylkill.....  | 1.453             | 76.46                         | Liverpool.....   | 1.331             | 70.04                         |
| Susquehanna....  | 1.373             | 72.25                         | Richmond.....    | 1.246             | 65.56                         |
| Rhode Island...  | 1.438             | 75.67                         | La Salle coal... | 1.416             | 75.42                         |

The value of wood by measure, corresponds directly with its specific gravity after being dried in the kiln. Oak is, therefore, worth nearly as much again as pine for making charcoal.

This subject deserves the close attention of the iron master, for it is his business to select wood, and regulate its price according to quality. If a cord of hickory-wood is worth one dollar, white-oak is worth 77 cents, beach 65 cents, sugar-maple 60 cents, white-oak 81 cents, pine 54 cents, &c.

The comparative value of coal and wood may be gathered from the following table carefully prepared, and indicating the results of numerous experiments :—

|              |        |                                   |        |
|--------------|--------|-----------------------------------|--------|
| Coal at..... | \$5 25 | per ton, equals best wood at..... | \$2 28 |
| “ .....      | 5 50   | “ .....                           | 2 89   |
| “ .....      | 5 75   | “ .....                           | 2 50   |
| “ .....      | 6 00   | “ .....                           | 2 61   |
| “ .....      | 6 25   | “ .....                           | 2 75   |
| “ .....      | 6 50   | “ .....                           | 2 83   |
| “ .....      | 6 74   | “ .....                           | 2 94   |
| “ .....      | 7 00   | “ .....                           | 3 06   |

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**SEPARATING GOLD FROM FOREIGN SUBSTANCES.**

In the Senate of the United States, Jan. 13th, 1858, Hon. WM. H. SEWARD, presented a memorial (which was referred to the Committee on Finance) from EDWARD N. KENT, of the city of New York, the substance of which is thus stated :—

“That he (the memorialist) is the inventor of a useful apparatus for separating gold from foreign substances, the exclusive right to the use of which has been secured to him by letters patent. This invention is now in use for washing “sweep” at the United States Mint, the assay-office at New York, and at the branch mints at New Orleans and San Francisco. Evidence accompanying the memorial shows that the saving to the government, effected by the use of this invention at the mint, where silver is principally worked, is \$1,600 per annum, and at the assay-office, where gold is principally worked, \$7,000 per annum. At this rate, the saving to the government in fourteen years, at both establishments, would be \$120,400; and it is estimated that the saving at the branch mints at New Orleans and San Francisco will be as much more. For this great saving, effected by the use of his invention, the memorialist has received no compensation or reward whatever from the general government; and he prays that the sum of \$20,000 may be awarded to him for the perpetual use of his invention in all the minting establishments of the United States.”

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**THE FIRST AMERICAN PATENTS.**

The first patent right in the United States, of which there is any record, was issued on the 20th of April, 1796, to Thomas Bidwell, for “an improvement in forming yellow color;” and is signed by Washington, Jefferson, and Charles Lee. The next was dated February, 1803, and issued to Christian Jacob Hutter, for “a method of making brandy out of all kinds of grain or fruit, equal in flavor, taste, and color to the best imported French brandy.” The next patent was to Dr. Thornton, for an improved still. The next, also, is to Dr. Thornton, the head of the office, for “an improvement in the mode of impregnating spirits of all kinds; making and improving wines, and impregnating liquids with grass, including the preservation of milk.” Another of the Doctor’s patents was for “an improvement in ameliorating spirits and wine, and making them with or without the carbonic acid, gas, &c.”

## NEW MANUFACTURING ENTERPRISE NEAR CANNELTON, INDIANA.

In the *Merchants' Magazine* of March, 1854, (vol. xxx., pp. 322-327,) we published an article, entitled "The Mineral and other Resources of the West—Perry County, Indiana," by F. Y. CARLISLE, Esq., of Indiana; in which a particular account was given of Perry County, and of its largest town, Cannelton, and its condition and prospects as a manufacturing place. We are now informed by the *Cannelton Gazette*, that a colony of Swiss and German emigrants have purchased a large tract of land adjoining Cannelton, and are building up a manufacturing city. They have now running one cotton mill at full speed, with a capital of \$300,000. The *Gazette* claims that this movement has the certain elements of success, and that the great cotton manufacturing district is to be on the coal fields of the lower Ohio.

## STATISTICS OF AGRICULTURE, &amp;c.

## PORK-PACKING IN THE WESTERN STATES.

The annual statement of the Cincinnati *Price Current* on pork-packing in the Western States is very detailed and authentic; and for several years we have made an abstract of it for our pages. The returns for each season are from September to March, inclusive. As a general thing the packing of 1857-8 commenced a month later than previous seasons, and was continued later.

The result of the returns of 1857-8 is materially different from what had been generally expected; and consequently calculated to produce considerable effect upon the market. At many places there was a large increase in the packing, but at the smaller places the falling off was equal to that increase. The packing was more concentrated than usual, and hence the increase was generally at the larger places. The whole number of places reported is 196. From eight or ten places there are no returns, but these could not essentially change the result. The detailed statement of the *Price Current* also includes returns from some places not given in the statement for 1856-7, and thus slightly changing the totals for that season which we published in the *Merchants' Magazine* of June, 1857, vol. xxxvi., pp. 730. The totals of the hogs packed in each State, during the last and the previous season, are—

|                   | 1856-7. | 1857-8. |                | 1856-7.   | 1857-8.   |
|-------------------|---------|---------|----------------|-----------|-----------|
| Ohio.....         | 494,565 | 599,787 | Missouri.....  | 144,994   | 173,636   |
| Kentucky.....     | 353,272 | 366,510 | Iowa.....      | 102,698   | 86,603    |
| Indiana.....      | 320,468 | 423,956 | Wisconsin..... | 15,000    | 16,000    |
| Illinois.....     | 378,671 | 435,411 | Tennessee..... | 42,811    | 37,875    |
| Grand totals..... |         |         |                | 1,852,479 | 2,139,778 |

Showing an increase for the last season of 237,299 hogs, or an increase of fifteen-and-a-half per cent.

During the last season there was, generally, a larger quantity of pork cured by farmers than usual, and this was more extensively done in Missouri, Iowa, and Illinois, than elsewhere, owing to the unsatisfactory state of financial matters, and to the fact that all those farmers who held over their meat the previous two years made money by it.

Another fact should be mentioned. Owing to the unusual mild weather, great difficulty was experienced, and unusual care required in curing meat, particularly shoulders and hams, and a large quantity of them were spoiled. In Tennessee this was more general than elsewhere.

With reference to the weight, the *Price Current* endeavored to obtain the comparative averages from all the packing places, but failed to obtain them from sixty-four places. From one hundred and thirty-two places were obtained the average weights, this season and last; and the aggregate weights of an equal number of hogs at those places each season, stand as follows:—1857-8, 195,267,998 pounds; 1856-7, 187,393,240 pounds; increase of 1857-8, 8,874,758 pounds.

This is equal to about four-and-three-fourths per cent, or 101,211 hogs, and being added to the increase in number (previously stated, 287,299,) makes the total increase in number and weight equal to 388,510 hogs.

As regards the increase in lard, the *Price Current* does not give anything beyond an estimate, not having been furnished with information sufficient to form correct premises from which to draw any accurate deductions. But it considers that the increase is not over two pounds to the hog. At all those places where packing commenced early, the hogs were light, and larded badly; but at those places where the packing did not begin until the middle of December, which was generally the case, the yield of lard was good and the hogs were better.

With reference to the number of hogs forwarded east complete returns are given, excepting the report of the number sent from Detroit over the Great Western (Canada) Railway, viz. :—

|                                                                     | 1856-7. | 1857-8. |
|---------------------------------------------------------------------|---------|---------|
| Received at Buffalo by lake and railway.....                        | 258,899 | 243,674 |
| Exported by New York and Erie Railway from Dunkirk...               | 41,685  | 78,441  |
| Do. by Central Pennsylvania Railway from Pittsburg.....             | 52,603  | 53,211  |
| Do. by Baltimore and Ohio Railway from Wheeling and Moundville..... | 59,233  | 39,781  |
| Do. by Great Western Railway from Detroit. ....                     | 147,485 | .....   |
| Total of hogs forwarded.....                                        | 559,905 | .....   |

CONSUMPTION OF THE FORESTS OF THE UNITED STATES.

From an interesting paper on Michaux's standard work, entitled "The North American Sylva," (of which a valuable edition has recently been issued in Philadelphia,) in the *North American Review* of April, 1858, we extract the following timely remarks on the waste of wood in the United States:—

Forty or fifty years ago, great fears were entertained that the forests would become extinct in this country; but since the introduction of coal into common use, this popular fear has unfortunately abated. Unfortunately, we say; for although the domestic consumption of wood for fuel is no longer a patent fact to the eye of the most casual observer, yet the waste of wood is increasing rather than diminishing, as the railroads are gradually weaving their iron works amid the primeval forests of the North, South, and West, and that dragon, the locomotive, daily consumes in its insatiable jaws the growth of hundreds of acres. Year by year the pine forests of Maine, considered as an inexhaustible stock of masts, are gradually receding before the ax; with the snows of every winter the camp-fires are lighted nearer the head waters of the great rivers, and unless some active measures are taken by governments or individuals, the loss to the country will be incalculable.

## LOUISIANA SUGAR CROPS.

The annual statement of P. A. CHAMPONIER, after referring to the adverse circumstances attending cane culture during the last year or two, speaks of the present condition of the crop with hopeful anticipation. It says :—

“As to the coming crop I will venture no speculative suggestion. The number of acres planted may be less than last year, but the ratoons, which failed almost totally then, now give promise to more than supply the deficiency of plant-cane with an ordinary propitious season, and the absence of the unusual circumstances which have weighed so heavily on the sugar interest of this State for the last three years. I have a conviction that the energy of our planters will enable them to overcome any ordinary difficulties, and that the result will show that the depreciators of Louisiana, as a sugar-producing country, are very much in error.”

In giving a recapitulation of the products of the several parishes, it is found that 1,294 sugar-houses have given an aggregate production of 279,697 hogsheads of sugar, weighing 307,666,700 pounds, allowing 1,100 pounds to the hogshead. This includes 240,308 hogsheads made under the old process, and 39,389 refined, clarified, and cistern. Steam is used on 935 plantations, and horse-power on 359. The production of molasses has been in about the same proportion as in former seasons, if not more abundant; so that the entire crop of molasses is put down at 19,578,790 gallons, against 4,882,380 the year previous. The Louisiana sugar crop for the last ten years is as follows :—

|                        |         |                        |         |
|------------------------|---------|------------------------|---------|
| Crop of 1848.....hhds. | 220,000 | Crop of 1853.....hhds. | 449,324 |
| “ 1849.....            | 247,923 | “ 1854.....            | 346,635 |
| “ 1850.....            | 211,201 | “ 1855.....            | 231,427 |
| “ 1851.....            | 236,547 | “ 1856.....            | 73,976  |
| “ 1852.....            | 321,934 | “ 1857.....            | 279,697 |

In Texas planters have not made over 2,000 hogsheads, owing to long-continued dry weather, but they have succeeded in making a good planting for next crop.

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PRODUCTION OF COTTON IN AUSTRALIA.

From a lengthy article in the Sydney *Morning Herald*, we derive the following statements :—On the 29th of September, 1854, two little bales of Australian cotton were sold by auction at the rooms of Messrs. Mort & Co. They were the produce of the Moreton Bay district. There was a smart competition for them, as they were somewhat of a curiosity, but they were ultimately purchased by Messrs. Ebsworth & Co., by whom they were shipped to Europe and exhibited at Paris among the products of New South Wales. After the exhibition was over, they were forwarded, by direction of the Messrs. Ebsworth, to their London correspondents, with orders to have them manufactured and returned to the colony. There was some delay and difficulty in getting this order executed. It would have been easy enough to have 10,000 bales manufactured, but to make a special job of two bales was what the majority of the mills would not stoop to do. At length, however, a firm was found (Messrs. Tysoe and Sons, of Manchester,) which took in hand this little Australian consignment, and put their machinery in gear to work it up separately. On examining the cotton, it was thought that its very fine texture made it particularly suitable for being worked up into cotton thread, and into thread it was turned. The quantity was too small to allow of specimens of all the different varieties of thread being produced, but three qualities of different degrees of fineness were manufactured.

PRODUCTION OF WINE IN FRANCE.

From an authentic source we obtain the annexed statement of the exact production of wine in France during the seven years, 1848-54. Since 1854, no record of the production has appeared.

	Hectolitres.	Imperial gallons.		Hectolitres.	Imperial gallons.
1848...	51,622,152	1,342,172,000	1852...	28,460,601	740,000,000
1849...	35,555,213	924,480,000	1853....	22,661,717	589,186,000
1850...	44,417,558	1,162,642,000	1854....	10,789,869	280,540,000
1851...	39,429,229	1,025,154,000			

The hectolitre is reckoned at 26 imperial gallons.

For ten years, preceding the year 1851, when the vine disease began to appear, the average production of wine in France was 924,000,000 gallons annually, and of this the exports averaged but 33,294,889 gallons to all countries; and to Great Britain, the nearest neighbor, and a great wine-drinking country, the average exports of wines from France for at least fifty years, has been no more than 500,000 gallons annually. Since 1850 the exports of wine from France to all countries, have been—

In 1851..... galls.	50,149,078	In 1853.....galls.	44,130,438
In 1852.....	53,991,190	In 1854.....	28,808,912

From the foregoing tables it will readily be seen how very great has been the effect of the vine disease, which appeared in 1851-2.

PROPER APPLICATION OF FERTILIZERS.

The more intimately any manure is mixed with the soil, the greater will be its fertilizing effect. This is so well established and practically important as to make it desirable that every means should be adopted, especially with costly commercial manures, which will bring manure into more perfect contact with the soil. Foremost amongst means for this end stands, of course, the judicious use of manure in a liquid state, next to this is the method of compost heaps. The efficiency of such manures as guano, &c., might be increased, if for some time before they were employed they were mixed with a considerable portion of muck, loam, or other good soil, and moistened, or, in other words, made into a compost.

The *Country Gentleman* states that when this process of mixing into a compost cannot be done on account of want of time or help, it might be profitable to imitate the practice of a large farm in England, which is described thus:—

This practice consists in mixing guano intimately, with an equal bulk of salt in the hopper or otherwise, at the time of sowing it, after (or with the seed drill.) The employer of this method thinks it helps the act of distribution greatly, especially when the guano is previously pounded fine, and the rapid assumption of moisture by the salt must favor its solution and dissemination in the soil. It is a practice well-deserving of trial or adoption.

APPLE-TREES IN CONNECTICUT IN 1651-4.

There has lately been discovered in the Historical Society Library, at Hartford, Connecticut, a curious old document, the account-book of Henry Wolcott, one of the first settlers of that State. It was kept in short-hand, and contains among other things a record of the yield of his apple-orchard, at Windsor, for a few years after it first commenced bearing. In 1651, it bore 496 bushels; in

1652, 452 bushels; and in the two following years, 1,127 and 1,288 bushels, showing no tendency to the alternate bearing, which now marks all the orchards in that region. It is interesting to find among the names of the apples then cultivated, Summer Pippin, Holland Pippin, Pearmain, and Bellybond or Belle et bonne, varieties still popular with the fruit-growers of our own times.

## STATISTICS OF POPULATION, &c.

### INFLUENCE OF NATIVITY ON LIABILITY TO YELLOW FEVER.

We herewith publish a portion of a very valuable report, made in 1857 by Dr. E. BARTON, of New Orleans, to the president of the Mutual Life Insurance Company of New York. This portion is the answer to the question—"What is the relative mortality between natives and strangers, American and European?"

REPLY.—The answer to this must necessarily be two-fold, viz. :—1st. In relation to the acclimated; and 2d. The unacclimated. Of the first, the following table, with precise details of each nation and people, foreign and domestic, and from different latitudes, was made from the data furnished during the disastrous epidemic of 1853, this having been the most extensive and malignant yellow fever that ever occurred in New Orleans. This table was most carefully and laboriously compiled by myself, and is, I believe, the only one made that can furnish any reply to this most important question, and should be deemed a fair exponent of the general liabilities, as the greater should embrace the less.

TABLE SHOWING THE LIFE COST OF ACCLIMATION, OR LIABILITIES TO YELLOW FEVER, AS DERIVED FROM, OR INFLUENCED BY, NATIVITY—PER 1,000 OF THE POPULATION.

Class.	From.	Per 1,100.
1 & 2.	New Orleans and the State of Louisiana.....	3.58
3.	Southern Slave States: Arkansas, Mississippi, Alabama, Georgia, and South Carolina.....	13.22
4.	Northern Slave States: Virginia, Maryland, Tennessee, Kentucky, and of this class of States, the largest mortality existed among those coming from Tennessee and Kentucky.....	30.09
5.	Northern States: New York, Vermont, Massachusetts, Maine, Rhode Island, Connecticut, New Jersey, Pennsylvania, and Delaware...	32.83
6.	Northwestern States: Ohio, Indiana, Illinois, and Missouri.....	44.23
7.	British America.....	50.24
	General average in America.....	29.11
8.	West Indies, South America, and Mexico.....	6.14
9.	Great Britain.....	52.19
10.	Ireland.....	204.97
11.	North of Europe: Denmark, Sweden, and Russia.....	163.26
12.	Middle Europe: Russia and Germany.....	132.01
13.	Lower Western Europe: Holland and Belgium.....	328.94
14.	Mountainous Europe: Austria and Switzerland.....	220.08
15.	France.....	48.13
16.	Spain and Italy.....	22.06
	General average from European countries.....	146.45

The total liabilities, in passing through the acclimating process in New Orleans in 1853, was to their respective population, 60.56.

From this table it will appear—1st. That liabilities to yellow fever exist (in relation to America) pretty much in proportion to increase of latitude; and 2d, by their cold moisture, so diametrically opposite in its effects on the constitution to warm moisture; and above all, their personal habits of crowding into cheap and filthy dwellings, and the immigrants being of a low class, and the predominance of intemperance. The comparatively small mortality occurring in those from Great Britain arises from the fact of these immigrants being of a higher class of subjects.

## HOW MUCH THE UNITED STATES OWE TO IMMIGRATION.

At the first session (held in March, 1858,) of the "Section on Political Statistics" of the American Geographical and Statistical Society, New York, the chairman, S. P. DINSMORE, Esq., presented some information in regard to immigration into this country, which won the attention of the meeting. The following extracts from the paper are of general interest:—

In the State of Massachusetts, for instance, which is not politically remarkable for the supremacy of the foreign population, the tables will soon show a number of births of foreign parentage in excess of those of native parentage. In 1854, of 32,000 born in that State, 16,470 were of American parentage, while some 14,000 were of foreign parentage. But the percentage of the increase of births from foreign parentage was twice that from native parentage. Probably the census of 1860 will show, if not an excess, an equal number of inhabitants foreign born and of foreign parentage—as compared with the inhabitants of native parentage.

It is interesting to compare the results of population in this country, as now exhibited in our census tables, with the results which would have been had there been no foreign immigration.

In 1790 the population of the United States, including whites and free colored persons, was 3,231,930. Now the careful calculation of the tables shows that the annual increase of population by excess of births over deaths is 1.38 per cent (138 in 10,000) in this country—the largest increase of any country in the world, the like increase in England and Wales being 1.25, (125 in 10,000,) in France .44, in Russia .74, in Prussia 1.17, in Holland 1.23, in Belgium .61, in Portugal .72, in Saxony 1.08.

At this rate of increase of population, augmented by the excess of births over deaths alone, we find, availing ourselves of the elaborate tables of Louis Schode, Esq., that we should have had in this country in 1850, 7,555,423 inhabitants, instead of 19,987,573—a difference of 12,432,150. So that, while in the increase of population in this country since 1790 the elements of excess of births over deaths have given but 4,323,493 of population, the increase by and through immigration has given over twelve millions—the proportion being 1 of national increase to 3 of increase through importation of population.

If we may measure the value of inhabitants to a State by the worth of the monuments which industry leaves on the face of the earth, having meanwhile taken from the earth its daily food, we may reckon from these data that immigration has given to us three-fourths of the farm improvements, three-fourths of the cities and towns built, three-fourths of the miles of railroad constructed, throughout the length and breadth of the land.

And it will not be forgotten that the kind of population which immigration has brought us has been mainly of the proletary or productive class. It is the foreigners who have done the work. The natives, born on the soil, have considered themselves the class—*nati consumere fruges*—born to consume the fruits of the soil. Compute, for instance, the actual creating force of the New England and other native emigration to the West, and omit the consideration of its capacity in organizing labor, and I think we shall find that the average amount of real productive toil of each native born western man, after deducting from his time what the exigencies of horse-racing, whisky-drinking, attending agricultural fairs, and speculating in town lots have required of him—his actual productive toil has not exceeded six hours in each week. But the foreign emigrant has had no such license granted to him. The necessities of his daily life have required an aggregate of fifty hours' labor per week, spent in adorning and enriching the earth, and in raising from its bosom the fruits to supply the consumption of the people.

If we may compute the worth of each immigrant and descendant of immigrants, on the valuation of slave labor—that is, counting Caucasian blood as worth as much as Ethiopic blood, and assuming the value of each woman and child at

(\$400) four hundred dollars, the aggregate cash value of the immigration since 1790 and its fruits will be found to be \$4,972,860,000, nearly five thousand millions of dollars.

Another fact, which should not so long have escaped the attention and comment of commercial statistics, is the enormous amount of coin which has been brought to this country by foreign immigrants. [A letter was here read from John A. Kennedy, Esq., Superintendent at the Castle Garden Immigrant Depot, showing, by careful and systematized inquiry, extending over a period of seventeen months, that the amount of money, almost entirely in coin, brought on the average by each immigrant man, woman and child landing at this port, is (\$100) one hundred dollars.] Taking the total number of immigrants who have arrived in this country (about three millions) we may, without hesitation, set down two hundred millions of dollars (\$200,000,000) as the amount in coin which they have brought to our shores. That amount is with us now, hoarded and in circulation among the people. If it were not trespassing on the domain of the society's "Section on Finance," observed the speaker, it would be curious to calculate of what amount of paper currency so large a sum of specie might be made the basis at the rate, for instance, observed in New England banks, of twenty dollars in bank notes to one dollar in coin. Fortunately, however, for the business of the country—annually aggravated and periodically exploded by undue issues of bank paper and bank credits—fortunately, the great part of this coin remains hoarded or in circulation among the people, who wisely prefer to trust themselves rather than banks of issue.

It was the steady flow of this money, brought by foreign emigrants, as well as of money carried by native emigrants, into the Western States of the Union, at a rate, perhaps, of (\$100,000) one hundred dollars per day, which, in 1856, sustained the enormously inflated prices of everything in the West, when otherwise they must have fallen upon the fall of nearly one-half in the price of bread-stuffs, upon which alone the West relied to buy manufactures and pay debts.

#### MEASURES OF JAMAICA FOR OBTAINING IMMIGRANTS.

We published a paragraph on the encouragement for settlers in Jamaica, in the April number, page 388, of this volume. From the *Kingston Journal*, (one of its issues in March, 1858,) we derive the following statement in relation to measures taken for an increased supply of labor:—

The Governor and the Executive Committee are losing no time in carrying into execution the provisions of the act of last session for increasing the laboring population of the colony. The act authorizes the negotiation of a loan of one hundred and fifty thousand pounds to defray the expenses contingent upon the importation of immigrants, which sum will be provided for by a sinking fund to be provided. Until the necessary loan can be obtained, there is a balance of £50,000 out of the £100,000 which was raised on the faith of an export tax upon produce, which will be appropriated to the purposes of the new act. Upon the strength of this, instructions has been given the Agent-General of Immigration, who has notified, in accordance with the 9th clause of the act, that all proprietors and managers of estates who require immigrants must at once enter into the necessary arrangements with him. The places mentioned in the act where agencies will be established, are Madeira, the Azores, the Canaries, the Cape de Verde Islands, Europe, the United States, and the British Provinces of North America. It wisely provides for the introduction of a proportionate number of immigrants of both sexes, and enjoins that "in making any assignment of immigrants, it shall not be lawful for the immigration agent to separate husbands from wives, nor children under the age of fifteen years, from their parents or natural protectors."

The *Journal* complains that the total increase provided for will not exceed 10,000—a number by no means equal to the demand for labor. Ten times this number, it thinks, would not be too many.

POPULATION OF VICTORIA, AUSTRALIA.

We compile the following statement of the population of Victoria, on the 30th September, 1857, from a summary of the official return furnished in the Melbourne journals :—

	Males.	Females.	Total.
Population, March 29th, 1857, last census.....	264,334	146,432	410,766
Increase from March 29, 1857, by immigration over emigration.....	12,629	9,575	22,204
Increase, do., by births over death.....	2,175	3,190	5,365
Increase, do., by Chinese immigration .....	8,583	....	8,583
Total population, September 30, 1857 ....	287,721	159,197	446,918

MERCANTILE MISCELLANIES.

THE AUCTIONEER AND HIS SALES.

From a series of articles, entitled "Men and Things," recently contributed by "X. Y. Z." to the Boston *Transcript*, we select the following essay :—

THE AUCTIONEER.—What shall we say of Mr. Going, Going, Gone? This we may surely say—while he ever keeps going, may he never be gone! We could in no way dispense with his services. Without him how could we dispose of our goods and chattels when emergency or convenience requires, realizing, it is true, but half price, but more than we could obtain by any other known process? The auctioneer is the personification of cheapness. Like the physician and the lawyer, he lives by the misfortunes of his neighbors. He knocks, like death, "with equal foot" at the gates of the rich and the doors of the poor, and knocks off both one and the other without compunction or remorse, as the physician, hardened by his profession, lops off a limb, or cuts into the diseased body of his hapless victim. We cannot call the auctioneer a necessary evil; on the contrary, like the physician, he is a necessary good. He administers to our necessities, if we would sell, and enables us to buy cheap, if we would buy.

The mode of selling at auction differs in different countries. In some the highest price is named first and so downwards, until a buyer is found; while in another a candle is lighted, and bidders are limited to the time during which "the lamp holds out to burn." With us the lowest price is first named, and so on until the highest bidder becomes the successful purchaser. While the sale is going on the auctioneer becomes to us a most important and interesting personage. How intently do both buyer and seller hang upon his words, "Going, going at forty-five, who says fifty? It must go, gentlemen, at the low price of forty-five dollars, if you say no more! Who says fifty?" The owner is anxious, and the buyers become nervous. All parties watch the auctioneer, to see if the awful hammer is really coming down. It falls at last, and Mr. Blank is the fortunate man. The owner has made a sacrifice, but has realized more than he otherwise could have done, while Mr. Blank has drawn no great prize, because he has very likely bought something he had no need of or taste for, merely because it was selling at such a great bargain.

In old times, goods were sold at "public vendue." Then, as now, men and women made oftentimes dear purchases by being tempted to buy a thousand things they had no occasion for. The auctioneer, however, is not to blame for this. He does his duty faithfully to both parties. He "dwells" a reasonable time, and then "knocks down" the article to the highest bidder. In this knocking process he sometimes hits the seller a hard blow, and sometimes a severe knock on the head of the buyer; but that is not his concern, which is only to "knock down" the goods offered for sale. His ivory hammer descends, like the

rain, upon the evil and the just ; it is no respecter of persons, but falls, dealing impartial justice to all who are within its sound. From its decision there can be no appeal. The fatal word of one syllable is spoken, there is no longer time for repentance, the lamp has gone out and can never be re-lighted.

The hammer of the auctioneer tells many a sad story of ruined fortunes, blasted hopes, and of death, that scatters the much-loved and hard-earned property to the four winds. Each tap of the ivory bell consigns some cherished memento, to which affection has clung for many long years, into the hands of a stranger, to whom it comes divested of its charm and the hold it had upon the human heart, a mere object of curiosity, perhaps, or it may be to gratify a passion for display. The venerable mansion that has witnessed the loves and the hopes, the joys and the sorrows of more than one generation, passes under the hands of the auctioneer to entire strangers, to whom no room or chamber or fire-place is crowded with associations of happy childhood, youth, manhood, old age, sickness, birth, marriage, and death. The new owner sees only timber, bricks, and mortar, and forthwith commences the work of repair. The auctioneer's books tell a sad story of ruinous speculation, bankruptcy in trade, unfortunate investments, ships cast away, fraud, misfortune, and death. Here you may read in figures the history of human life, and moralize on its changes from wealth to poverty, from happiness to misery, from life and health to the loss of both one and the other.

How little of all this do we realize when, tempted by curiosity, we look in upon an auction sale. The wit of the auctioneer and the jokes of the company enliven and amuse us, while some precious heir-loom is struck off for some trifling sum. Could we know its history, we should be disposed to weep rather than laugh. It may be some portrait is offered for sale, destined after a short time to adorn the lumber room or garret of its new owner. It is the counterfeit presentment of one on whom once centered all the hopes and affections of relations and friends ; of some fair being perhaps who once united in herself all the beauty, grace, and loveliness of her sex, the idol of fond parents, the joy and delight of her husband, the devoted mother, or the much-loved sister. Of all this we know nothing and think nothing. How much is bid—once, twice, three times—going, going, and gone. Yes, she has long been gone, and the places that have known her can know her no more forever ; but in some heart, now also at rest, her memory once survived, a bright oasis in the dreary desert of life.

Our auctioneers have always been a most respectable and respected class of the community—upright and intelligent, they have been most useful agents in administering to the necessities of commerce and of domestic life, so full of vicissitude and change. The great change comes at last, sending our worldly and perishable goods to the public vendue, while it consigns our bodies to the dust, and our spirits to the keeping of Him who gave them.

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#### THE TEA-GARDENS OF SHANGHAI.

A special correspondent of the London *Times*, writing from Shanghai, 23d October, 1857, describing the manners and customs of the Chinese, writes of the tea-gardens of Shanghai thus :—

We bustle our way through the narrow streets. We pass the temples and the *yamuns*, unentered, for we have seen a hundred such before, and we reach the tea-gardens of Shanghai city. These are worth a visit, for they are the best I have seen in China. A Chinese garden is usually about 20 yards square, but these cover an area of ten acres. It is an irregular figure flanked by rows of shops, rudely analogous to those of the Palais Royal. The area is traversed in all directions by broad canals of stagnant water, all grown over with green, and crossed by zig-zag wooden bridges, of the willow pattern plate model, sadly out of repair, and destitute of paint. Where the water is not, there are lumps of artificial rock-work, and large pavilion-shaped tea-rooms, perhaps twenty in number. Here self-heating kettles of gigantic proportions are always hissing and bubbling ; and at the little tables the Chinese population are drinking tea, smoking, eating

almond hard-cake or pomegranates, playing dominoes, or arranging bargains. There are interstices also of vacant land, and these are occupied by jugglers and peep show-men. From the upper room of one of these tea-houses, we shall have a view of the whole scene, and A'lin will order us a cup of tea and some cakes for lunch. The jugglers and gymnasts below are doing much the same kind of tricks which their brethren of England and France perform. M. Houdin and Mr. Anderson would find their equals among these less-pretending wizards. I am told that these peep-shows which old men are looking into and laughing, and which young boys are not prevented from seeing, contain representations of the grossest obscenity.

Here is a ventriloquist, who, attracted by our European costumes at the case-ment, has come up to perform. "Give him a dollar, A'lin, and tell him to begin." That dirty, half-clad wanderer would make another fortune for Barnum. He unfolds his pack, and constructs out of some curtains a small closed room. Into this he retires, and immediately a little vaudeville is heard in progress inside. Half-a-dozen voices in rapid dialogue, sounds, and movements, and cries of animals, and the clatter of falling articles, tell the action of the plot. The company from the tea-tables, who had gathered round, wag their tails, with laughter, especially at the broadest sallies of humor, and at the most indecorous *denouements*. In truth, there is no difficulty, even to us, in comprehending what is supposed to be going on in that little room. The incidents are, indeed, somewhat of the broadest—not so bad as the scenes in our orthodox old English comedies, such as "The Custom of the Country," for instance, or "The Conscious Lovers;" but still they are very minutely descriptive of facts not proper to be described. The man's talent, however, would gain him full audience in Europe without the aid of grossness.

"Ho lai"—"fire there." Shall we light a cheroot and stroll about? Don't make too sure, Mr. Bull, that the gentleman in the mandarin cap, who is holding you by the button and grinning in your face, is saying anything complimentary about you. In a journey up the country a fat Frenchman, who had equipped himself in an old mandarin coat, a hugh pair of China boots, and a black wide-awake, was leaning upon a bamboo spear, while his boat was being drawn over one of those mud embankments, which serve the purpose of our locks. He also was very much flattered at the politeness of an old man who prostrated himself three times before him, and chin-chin-ed him. Unluckily an interpreter was present, who explained that this old man took our French friend for the devil, and was worshipping him in that capacity according to Chinese rites. In fact, the Frenchman in his antique disguise rather resembled a Chinese idol. But ask the French consul at Shanghai about this; he can tell the story better than I can.

#### THE INDORSEMENT OF GENERAL JACKSON WOULD RAISE MONEY.

An exchange relates this anecdote of Gen. JACKSON, which we give without vouching for its correctness, though it bears some evidence of authenticity, in its similarity to other anecdotes of the general. It illustrates the point that an established character for honesty is the surest and best foundation for credit:—

Some time in 1838 or 1839, a gentleman in Tennessee became involved and wanted money; he had property, and owed debts. His property was not available just then, and off he posted to Boston, backed by the names of several of the best men in Tennessee. Money was tight, and Boston bankers looked closely at the names. "Very good," said they, "but—but do you know General Jackson?" "Certainly." "Could you get his indorsement?" "Yes; but he is not worth one-tenth as much as either of these men whose names I offer you." "No matter; General Jackson has always protected himself and his paper, and we'll let you have the money on the strength of his name." In a few days the papers with his signature arrived. The moment these Boston bankers saw the tall A and long J of Andrew Jackson's signature, our Tennessean says he could have raised a hundred thousand dollars upon it without the slightest difficulty.

## FIND SOMETHING TO DO.

[FROM THE BOSTON HERALD.]

It is a law of our physical system that we must exert ourselves. It is no less an ethical law that our exertions should be for the benefit of mankind. Society obliges us to demand remuneration for these exertions in order that we may provide for our sustenance and support. But however wealthy a man may be, he is not exonerated from the necessity of exertion. If he takes no physical exertion, he will become paralytic. If no mental exercise, his powers will become enfeebled and finally demented. If his acts are not determined in reference to the good which he can achieve, he will become morally perverted.

Those, therefore, who talk of the necessity of killing time, may be sure that they are not living in accordance with the laws of nature, nor in obedience to nature's God. If they rightly apprehend their duty and destiny, time would always be too brief to satisfy them. Their moments would be sedulously devoted to self-improvement or the improvement of their fellows. They would never be idle from inclination. Consequently, they could feel no *ennui*, nor be driven into that drivelling and contemptible employment—the killing of time.

To the young, who are naturally active, but unsettled in their views, we would say:—Have something to do—something which is useful, honorable, and profitable—and do that something with all your energies. Recollect that your character depends upon your efficiency in executing whatever you undertake. Work not only invigorates the physical system, but, intelligently pursued, develops the mental. And when we perceive, as the result of our labors, that our own good and that of our fellows is promoted, then the moral perceptions become enlarged, and the whole system becomes harmonious with the laws of our being.

Thus developed, no one thinks of "killing time." The thought is impious. It can never exist but with a debased or vitiated development. When labor in some useful calling is sedulously pursued, the individual is capable of enjoying such relaxation as is proper to take. But where neither mind nor body is engaged in a regular occupation, the whole character becomes weakened and relaxation becomes a business. Then it is tedious, and finally disgusting. There are multitudes who have reached this point, and are approaching dementia. Their prowess, both of mind and body, are withering from disease. They must find something to do, and do it, if they would escape utter imbecility.

To those whose efforts are necessary in order to procure a livelihood, we need not speak of the obligation to work. But another class—those who can live without personal exertion—are under a still stronger obligation. Their talents, their wealth, their influence, have been derived from society. To that society they owe all they are, and all they can be. So long as there is a fellow-being who needs their aid, sympathy, or counsel, they have no right to withhold it. And such is the condition of human nature, that if they do withhold it, they, themselves, are, by the deadening of their sympathies, the greatest sufferers. They may not be conscious of this at first, but as they isolate themselves from the poor and oppressed, they become utterly selfish, and then, however great their possessions, hypochondriacal.

There is work enough for everybody, in every condition of life. It is always a necessity of every one's mental, moral, and physical system. Whoever attempts it must pay the penalty in some form. If idleness does not impoverish the purse, it does impoverish the soul; and when the soul is poor, the individual possessing it has reached the lowest depths of poverty. In this state, no external condition can afford any real comfort, for the mind is not in a condition to be comfortable. The consciousness of duties unperformed, of exertions denied, must destroy all the finer feelings of the soul, or if those feelings do not exist, then is the individual utterly degraded.

For the hypochondriacal, the weak, the dissatisfied, and the disconsolate, there is but one remedy—to work energetically and heartily for the promotion of the good of those who are nearest us. Such opportunities exist everywhere. They are designed by Providence to call into exercise our best powers. Such work is

ennobling, and however much we may help those who need it, we reflectively help ourselves more than we do them. Go to work, then, for yourself directly, if your condition demands it—if not, go to work for others—and we will guaranty that you will soon be relieved of the wretched occupation of “killing time.”

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#### THE OPIUM OF COMMERCE AND CONSUMPTION.

For some time past there has been a doubt, according to the editors of the San Francisco *Price Current & Shipping List*, as to the applicability of the regulation defining the purity of opium subject to entrance at the custom-house. Much of the opium imported from India is not intended for medical purposes, being designed for smoking. The opium of India contains little morphine—seldom as much as five per cent—and of this it is measurably deprived by the Chinese manufacturer of the article for smoking. It consequently falls short of the prescribed amount of morphine which the drug, for medical purposes, should contain, its active principle being narcotine. This fact led to a doubt whether it was admissible under the regulation referred to. Until recently it has not been considered contraband, but has been admitted on the same basis that tobacco or other merchandise than drugs would be. The editors of the *Price Current* learn, however, that within a short time the objection has been removed, and that the collector at San Francisco has concluded not to regard the Chinese article, imported for smoking purposes, as a drug. This removes the embarrassment into which importers, who had supplies in bond, were thrown, by the supposition that their imports were contraband, and effectually checks the speculation which sprung up among holders who had previously withdrawn their supplies.

The Turkey opium, which is principally used in medicine, contains some twenty per cent of morphine, and the English and German sometimes as high as 25 per cent. On the other hand, Bombay and other India opium seldom exceeds  $4\frac{1}{2}$  per cent, and occasionally is as low as three per cent. The latter constitutes the soporific used by the Celestials. It is usually imported in packages of ten taels, or ten-twelfths of a pound avoirdupois.

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#### THE TRADE IN CIRCASSIAN GIRLS.

The London *Post* thus speaks, in a recent number, of the traffic in Circassian girls in Turkey:—

“Perceiving that when the Russians shall have re-occupied the Caucasus, this traffic in white slaves will be over, the Circassian dealers have redoubled their efforts, ever since the commencement of the peace conferences, to introduce into Turkey the greatest possible number of women, while the opportunity of doing so lasted. They have been so successful that never, perhaps, at any former period, was white flesh so cheap as it is at this moment. There is an absolute glut in the market, and dealers are obliged to throw away their goods, owing to the extent of the supply, which, in many instances, has been brought by steam under the British flag. In former times, a ‘good middling’ Circassian girl was thought very cheap at £100, but at the present moment the same description of goods may be had for £5.”

## TAHITI: ITS POPULATION, AGRICULTURE, ETC.

By the French brig-of-war Alcibiade, which arrived at Honolulu, in February, 1858, late dates were there received from Tahiti. The *Polynesian* in summing up the news, says:—

Peace and prosperity seem to reign over the island and its dependencies. A census of the population of the islands, Tahiti, Moorea, and Tetiaroa, was taken on the 1st of September, 1857, and the result was:—Tahiti, 5,980; Moorea, 922; Tetiaroa, 54—total, 6,906. For the past year there were 111 deaths, 144 births, of which 85 were boys and 59 girls, and 50 marriages.

In September last, Tamatao, son of H. M. Queen Pomare, was crowned with great ceremony King of Raiatea and Taha.

The agricultural productions of the island are receiving the attention of the government. Premiums have been offered, viz.:—1,000 francs to every inhabitant who, from the day of the ordinance, shall clear and plant four hectares of land with either sugar-cane, coffee, or cotton; 6,000 francs to the first who shall manufacture in his own mill 25,000 pounds of sugar. Besides, premiums on exportation are allowed, viz.:—5 francs on 100 kilogrammes of sugar, and 20 per cent on the market price of cotton and coffee raised on the island. Different premiums, ranging from 100 to 500 francs, are to be given for various other agricultural products.

## TRADE IN OSTRICH FEATHERS.

The subjoined paragraph is credited, by the newspaper from which we derive it, to the *Annales du Commerce Exterieur*:—

Leghorn, after the decline of its commerce with the Levant, remained the great entrepot of ostrich feathers, and did business in that article to the amount of about 1,200,000 francs annually. But since the establishment of steam navigation, London has gradually become the principal center of that branch of trade, and Leghorn now only does business to about half the preceding amount; a part of the diminution is, however, owing to the decline which has taken place in prices. Seven-eighths of the ostrich feathers which Leghorn receives come from Egypt, and the rest from Tripoli and Aleppo. About three-fourths of the whole sent to Paris, and the remaining fourth to England. White feathers are worth from five to twenty times more than black ones. All feathers, white and black, are sold by weight, except, however, the very finest sorts, which are disposed of according to quality. The price of white feathers varies from 150 francs to 300 francs the Tuscan pound, (nearly 12 ounces,) and of black from 30 francs to 85 francs. The trade in ostrich feathers requires a good deal of experience, as it is easy to be deceived in the quality when they are not prepared. Four or five houses are engaged alone in the trade at Leghorn, and their profits are large. The dealers at Paris are beginning to obtain from London the ostrich feathers which the latter get from the Cape of Good Hope. They already procure from that city marabout and bird of paradise feathers which come from Calcutta, and vulture and heron feathers which come from Brazil.

## COMMERCIAL VALUE OF OLD PICTURES AND STATUES.

The *Giornale di Roma* of the 31st December, 1857, stated that the total value of old pictures and statues exported from the Roman States in the course of 1857, was 25,666 scudi, (the scudo is 5*l.* 35*c.*) The value of modern pictures and sculptures exported was 222,362 scudi, making a sum of 182,808 scudi in all. This, compared with the export of 1856, shows an increase of 117,746 scudi.

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 THE BOOK TRADE.
 

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- 1.—*Abridgment of the Debates of Congress from 1789 to 1856.* By THOMAS H. BENTON. Vol. six, 8vo., pp. 774. New York: D. Appleton & Co.

This work of the indefatigable author, whose death the nation has so lately been called upon to mourn, together with the "Thirty Years' View," by the same hand, will be of inestimable value to the American statesman and politician. It condenses, in a few volumes, at a reasonable price, the efforts of the great minds which have made such deep impressions on the people of this country and of the other nations of the civilized world. The present volume of the Abridgment commences about two years after the termination of the second war with Great Britain, which commenced in 1812, and closed in February, 1815. Although the agitating questions of embargo, non-intercourse, and war, had passed away, yet it will be seen by the reader, that many highly interesting and important questions were discussed in the four years this volume embraces. The National Bank, Missouri Compromise, and Revision of the Tariff, had, each of them, a conspicuous place in the halls of Congress during those years. We are glad to see that the seventh volume of the Abridgment of the Debates, to 1856, is in press. This is a work which every man should have in his library. Many have written the history of their own times, but the instances are exceedingly rare where the writers could say, with so much force as Col. Benton in this case, *pars magna fui*. He stood face to face with the distinguished statesmen who have honored our country and established for themselves an undying fame—Clay, Calhoun, Webster, Grundy, Hayne, John Quincy Adams, with a host of others, dead and living, of the men of gigantic intellect. Of Col. Benton's peculiar opinions we have nothing to say—we speak only of his works, and mention these circumstances to show how reliable they are, coming from one who was part and parcel of the matter which he has laid before the public.

- 2.—*Fowler's English Grammar.* The English Language in its Elements and Forms; with a History of its Origin and Development. Abridged from the Octavo Edition. Designed for General Use in Schools and Families. By WILLIAM C. FOWLER, late Professor of Rhetoric in Amherst College. 12mo., pp. 381. New York: Harper & Brothers.

This text-book is designed to convey a thorough knowledge of the principles and laws of the English language. In his preface, the author refers to the very favorable reception of his larger work, and states that, in order to make the present work a standard one, he obtained valuable assistance in making selections from the larger work, and in emendations and additions, from Prof. Francis A. March, of Lafayette College. He has also incorporated several sections from the work, entitled "Philological Studies," of Prof. Josiah W. Gibbs, LL.D., of Yale College. The author has for many years been eminent in his profession, and we consider that the work is worthy the attention of teachers, to whom it is particularly dedicated.

- 3.—*Life Thoughts.* gathered from the Extemporaneous Discourses of HENRY WARD BEECHER. 12mo., pp. 269. Boston: Phillips, Sampson & Co.

This little work—the note-book of a member of Mr. Beecher's own congregation—composed of extracts taken indiscriminately from among the many Sabbath sermons and Wednesday evening lectures of this very able divine, will be found eminently interesting, from the many crystalized truths and beautiful thoughts which the inspiration of the moment is wont to infuse into the discourses of this truly able man, which, with an occasional exception, have till now found no record, as well as from the laconic manner in which they are given, each striking thought being distinct and separate from the rest, and each, in turn, striking off some new flower or fruit from the tree of knowledge.

- 4.—*The Works of Tacitus.* The Oxford Translation, Revised, with Notes. Vol. I. The Annals. Vol. II. The History, Germany, Agricola, and Dialogue on Orators. 12mo., pp. 464, 496. New York: Harper & Brothers.

Bohn's Classical Library, from which this edition of Tacitus is reprinted by the Harpers, has attained a high celebrity, as comprising faithful translations of the principal Greek and Latin Classics. Each work is given without abridgment, contains valuable suggestive notes, and is rendered complete by a copious and accurate index. Of this series, Harper & Brothers have now brought out, uniform with the English originals, eighteen volumes, including those of Tacitus, and they will hereafter increase the list. These translations supply a necessity felt by the general reader, not acquainted with the ancient languages, who has a laudable desire to obtain a knowledge of the history which they have preserved. To all who are not familiar with Greek and Latin, a good translation of any classical work is very valuable. That of Tacitus, now referred to, appears to be as nearly literal as it can be, and at the same time preserves the compact style of this most eminent historian.

- 5.—*Elementary German Reader*, on the plan of Jacob's Greek Reader; with a Full Vocabulary. Composed, compiled, and arranged systematically by Rev. L. W. HEYDENREICH, Graduate of the University of France, and Professor of Languages in the Moravian Female Seminary at Bethlehem, Pa. 12mo., pp. 164. New York: D. Appleton & Co.

This book is divided into two parts; the first, entitled "Introductory Grammatical Exercises," embraces all the variable parts of speech, which are introduced in successive special chapters. In the second, the same principle is pursued as in the first, viz.:—to present a proper gradation from the simple to the more complicated and difficult. The author does not claim originality for his work, but trusts he has made a judicious arrangement of existing materials. His chief aim is to extend the study of the German language, but also had in view the design of furnishing "the schools of German districts with an elementary text-book for translation into English, and to disseminate the national language, the knowledge of which is so indispensable to our American German population, both to fit them for the business pursuits of life, as well as to enable them to fulfill the duties of good citizens." The work is accompanied by testimonials of its value from teachers and clergymen who speak German and who recommend it highly.

- 6.—*Poems.* By HOWARD H. CALDWELL. 12mo., pp. 134. Boston: Whittemore, Niles & Hall.

This is, we believe, the first collected issue of the poems of the author, who is a native and resident of South Carolina. There is considerable variety in the subjects of the poems. We have read with interest the "Ode written for the Celebration of the Battle of King's Mountain," which was held October 4, 1855, on the battle-field, when Hon. John S. Preston delivered the oration, and Hon. George Bancroft made an able address, vindicating the importance of this victory in the Revolutionary struggle. The versification of the poems is generally smooth and natural, and their sentiments, etc., indicates a cultivated taste.

- 7.—*Practical Mineralogy, Assaying, and Mining*; with a Description of the Useful Minerals, and Instructions for Assaying and Mining, according to the Simplest Methods. By FREDERICK OVERMAN, Mining Engineer, author of "Manufacture of Iron," and other works of Applied Sciences. Fourth Edition. 12mo., pp. 230. Philadelphia: Lindsay & Blackiston.

The fact that this treatise has reached its fourth edition, is indicative of its intrinsic worth. We commend it to all who are interested in the subjects to which it is devoted. Its valuable information is clearly expressed in popular language, so that all who choose may understand it.

- 8.—*Biographical Sketch of the late General Sir Henry Havelock, K. C. B.* By the Rev. Wm. Brock. 18vo., pp. 305. New York: Robert Carter & Brothers.

This work, though containing much that is entertaining respecting this Christian soldier who has been so actively engaged in India for the last thirty years, is but a prelude to the memoir which is expected from the pen of John Marshman, Esq., whose long residence in India, with his extensive knowledge of eastern affairs in connection with his own personal friendship and fellowship with the late Sir Henry Havelock, render him peculiarly adapted. The present work contains a narrative of his early life, training, etc., together with his own fragmentary memoranda covering a space of twenty-two years, from 1827 to 1849, together with a narrative of the memorable hundred days in which, with vastly inferior numbers, he successfully combatted the barbarous fanaticism of the Sepoys under Nana Sahib, and his victorious march and relief of his suffering and beleaguered brethren in Lucknow, whose heroic devotion have but few parallels in history. Altogether it is a very readable book, and gives the reader a very exalted opinion of the man whom Lord Hardinge designated as "every inch a soldier and every inch a Christian."

- 9.—*The United States Insurance Almanac for the Year 1858.* Vol. III. Edited by G. E. Currie. 8vo., pp. 156. New York: G. E. Currie.

The compiler of this contribution to business literature has for several years edited and published the U. S. *Insurance Gazette*, and that journal is the largest and best of its class in America. The Almanac contains the principal laws of the several States on Insurance, Statistics of Insurance Companies in America and Europe, several Legal Decisions on Insurance, &c., with other valuable statements, some of which have no connection with the special object of the work.

- 10.—*The Garden: A Pocket Manual of Practical Horticulture; or, How to Cultivate Vegetables, Fruits, Flowers, and Ornamental Trees and Shrubs.* With an Exposition of the Nature and Action of Sods and Manures, the Structure of Plants, and the Laws of Vegetable Life and Growth, etc. By the author of "How to Write," "How to Behave," etc. New York: Fowler & Wells.

This is a practical work, so clear and simple in style that everybody can understand it; convenient in form and size and low in price; while, at the same time, it is thorough and reliable.

- 11.—*History of the Express Companies: and the Origin of American Railroads.* Together with some Reminiscences of the latter days of the Mail Coach and Baggage Wagon Business in the United States. By A. L. Stimson.

We have received the first part of this work, (an octavo pamphlet of forty pages,) which promises to be a very valuable addition to the history and literature of business. The author justly considers that the facts concerning the express interest are well worthy of being put upon record, and we are gratified to see that this task is being accomplished. The first part narrates the origin of the first Package Express, commenced by W. F. Harnden, March 4th, 1839.

- 12.—*Adele: A Tale.* By JULIA KAVANAGH, author of "Nathalie," "Rachel Gray," etc., etc. Three Volumes in One. 12mo., pp. 574. New York: D. Appleton & Co.

The author of this work is one of the most excellent female writers of fiction of the present century, and, as such, her previous works will vouch for the character of this, her last production. We form some idea of its contents from the lines, quoted from Wordsworth, upon the title page: "She dwelt among the untrodden ways. . . . A maid, whom there were none to praise, and very few to love." The publishers have issued the volume in handsome style, uniform with their other works by the same author.

- 13.—*Sartaroe: A Tale of Norway.* By JAMES A. MATTLAND, author of "The Watchman," "The Wanderer," "The Lawyer's Story," &c., &c. 12mo., pp. 443. Philadelphia: T. B. Peterson & Brothers.

The chief incidents of this tale were suggested by the recollections of a tour on the western coast of Norway, undertaken by the author several years ago. An old and well known (in Norway) Norsk legend suggested the catastrophe upon which the plot hinges, and certain occurrences which transpired while the author was visiting Norway, provided a hero for the story, &c. The tale is pleasant, well written, and interesting. This work has attained unusual notoriety, from its being accompanied by a spurious recommendation of it, purporting to have been written by Washington Irving; who, however, did write a note favorable to it, and who permitted the author to dedicate it to him. This fact has, we believe, been quite injurious to it, and serves as a warning to others. At the same time it is but just to state, that both author and publishers have published their statements that *they* had been imposed upon by parties unknown.

- 14.—*Disturnell's International Railway and Steamship Guide for 1858.* 16mo., pp. 215. New York: Disturnell & Co.

This comprehensive manual for the traveler, gives, according to its title-page, "the railroad and steamboat routes, time, distances, fares, and connections throughout the United States and Canadas; also, the ocean steamship and packet arrangements, list of hotels, &c.; with a map, engraved on steel, of the United States and Canadas, showing all the finished canals and railroads." It differs from Dinsmore's monthly issues, in its omission of those time-tables that are subject to frequent changes, but gives the usual starting time of the through trains, with full statements of distances, fares, etc., with other permanent information. An edition is issued every two months.

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TO THE PUBLIC.

OFFICE OF HUNT'S MERCHANTS' MAGAZINE, }  
New York, April 29th, 1858. }

By the immutable laws of change the entire interest of this Magazine having passed into the hands of the undersigned, after a connection with it for the last sixteen years, we deem it our privilege to state that nothing of the vigor or energy which the late FREEMAN HUNT, for more than eighteen years, devoted to the success of this journal, will be lost sight of in his demise. Having secured the editorial services of THOMAS P. KETTEL, Esq., whose well-earned reputation, as a financial writer, it is unnecessary to speak here; and numbering, as it does, among its contributors minds of the first ability in every part of the country; freely admitting into its pages articles advocating antagonistic doctrines and opinions upon all disputed points, thereby infusing into it a NATIONAL spirit and character, and possessing arrangements for procuring information of the most extensive character, and that knowledge which a long experience can only give, we can offer the surety that no effort or expense will be spared to keep this journal not only the *vade mecum* for that most enlightened class—the MERCHANT, but a standard work of reference for the Statesman and Business Man, in whatsoever particular, as a record of the trade of the world.

The outstanding debts and accounts having passed into our hands, all remittances and communications of a business character are in future to be addressed to us as the Publishers and Proprietors of *Hunt's Merchants' Magazine and Commercial Review.*

Respectfully, yours,

GEO. W. & JNO. A. WOOD.