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HUNT'S
MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

JUNE, 1860.

Art. I.—CHANGE IN THE FRENCH COMMERCIAL POLICY.

THE new direction given to affairs in France by the present government has opened before that nation a career of material prosperity which, with its vast natural resources, governed by the genius and energy of its people, may enable it to outrival any of its competitors in the race of industry. That England has hitherto maintained the foremost rank as a commercial and manufacturing nation, has been due less to her great natural advantages, her accumulation of means and the inventive genius of her people, than to the fact that her continental rivals have spent their time and money in war rather than in industry, and to the policy of the governments which have sought by protection and monopoly to build up and sustain class interests around the throne at the expense of the working masses. The Emperor Napoleon was the first to attack the formidable body of monopolists who based their usurpation on the prejudices of the people against foreign goods, and who drew large profits from consumers by compelling the government to continue the prohibitive system. The Emperor broke away from the financiers when he appealed to the people so successfully for loans, and he has perseveringly carried out his intentions of freeing the people from the clutches of the monopolists. The prohibitive policy required the people to consume little, and that little to be of home production and dearly paid for. The new policy is to enable them to consume much larger quantities, to enjoy more, and, as a consequence, that more shall be produced. In short, that labor shall enjoy more of the fruits of industry, and capital less. The new policy has been but shadowed forth in the recent official report of the French government.

The budget for 1861 was given by the minister as follows:—

	1860.	1861.
Expenses.....	1,829,911,778 f.	1,844,188,685 f.
Receipts.....	1,825,854,379	1,845,733,670

The direct taxes and the domains show an increase of receipts. The most important changes are made in the duties under the new laws proposed by the government, reducing the duties on certain articles. These reductions are estimated as follows:—

Wool and cotton.....	25,409,000 f.	Sugar.....	53,243,000 f.
Coffee.....	6,442,000	Navigation.....	3,500,000
			<hr/>
			88,594,000 f.

This reduction, it is supposed, will be compensated to the extent of 17,702,000 f., by increased consumption of the articles named, by 6,777,000 f. in consequence of the treaty with England, by 24,000,000 f. increased tax upon alcohol, making 48,475,000 f., and showing a net loss of 40,119,000 f. In proposing these reductions of duties to the Legislative Assembly, an *exposé des motifs* was read, setting forth the reasons that have guided the government. As this interesting paper contains much valuable information upon the use of and tax upon sugar, as well as the general operation of taxes upon consumption, we lay it before our readers. A singular state of things presents itself in relation to the operation of taxes and drawbacks. Thus, it appears that in France refined sugar only is used, and the various taxes and protections have so loaded this article with cost as very much to restrain its use, so that 11 lbs. per head only is used in France, against 30 lbs. per head in the United States. The production of sugar, colonial and beet root, is 244,000 tons. All this passes through 40 refineries, and 65,000 tons is re-exported from France to foreign markets at an expense of 40,000,000 f., paid as drawbacks to the refineries by the government. Thus the sugar is made so dear that the French cannot use it themselves, but they must pay the refineries to send it out of the country. The prohibition of foreign refined sugar has therefore not increased the home market. The government now propose to throw off all restriction and let Frenchmen eat their own sugar at its proper value. Instead of paying a drawback to send 65,000 tons of sugar out of France, it is hoped so to increase the home market by low prices that more than all the present production shall be consumed at home. In this connection, on the occasion of the lately made commercial treaty between France and England, a very valuable parliamentary return was issued, showing the rates of duty chargeable in 1820 and 1860, respectively, on sugar, tea, coffee, brandy, rum, French and other wines, and malt, with the amount of duty paid on each article; and the average consumption per head of each, in the years ending January 5, 1820, and January 1, 1860. It appears from this return, that the consumption of sugar per head has been doubled by the reduction of the duty, that of tea rather more than doubled, and that of coffee more than trebled; but on the other articles the increase has been very trifling, and the consumption per head of some has actually diminished. The consumption of brandy increased only to the extent of 0.002 of a gallon per head, and that of rum diminished 0.003 of a gallon per head. The consumption of French wines has doubled, but is still only 0.02 of a gallon per head; whilst that of Cape wines has increased from 0.025 to 0.027 of a gallon per head; and that of Spanish, Portuguese, Rhenish, and Italian wines has diminished from 0.19 to 0.18 of a gallon per head. The consumption of malt has increased from 1.25 to 1.44

bushel per head. Owing to the increase of population since 1820 from 20,398,000 to 29,014,000, at which it is now estimated, the revenue arising from the duties on the articles enumerated, except spirits and foreign wines other than French, has increased. The amount of duty paid on sugar, although the duty has been reduced to about one-third, has increased one-half; that on tea in the same proportion; that on coffee, which has been reduced one-fourth, nearly as much; and that on malt, reduced from 3s. 7d. to 2s. 8d. per bushel, more than half. The revenue from French wines, the duty on which has been reduced from 13s. 9d. to 5s. 9d. per gallon, rose from £150,641 to £189,438; and that from Cape wines, though the reduction of duty was only 2d. per gallon, from £77,805 to £112,866. The revenue from foreign wines, other than French, on which the old duties ranged from 9s. 1d. to 11s. 3d., has fallen from £1,776,913 to £1,539,835. The revenue from foreign spirits, though the duty has been reduced from 22s. 7d. to 15s. per gallon, has diminished from £1,007,093 to £1,001,148; and that from colonial spirits, the duty on which was reduced from 13s. 11d. to 8s. 2d. per gallon, the rate to which it is now proposed to reduce the duty on foreign spirits, from £1,776,913 to £1,539,835.

In relation to the reduction of the French duty on wool, it is interesting to observe that the system of drawbacks has hitherto absorbed all the duties. From the beginning of the century up to 1823 foreign wool entered France free of duty, but in the last-named year the price of wool underwent a heavy decline in all the markets of Europe. A certain description of merinos, for example, which were worth 4 f. to 4 f. 5 c. the kilogramme, fell successively to about 2 f., and has since remained on an average at 2 f. to 2 f. 50 c. Protection was in fashion in those days, and an import duty of 33 per cent *ad valorem* was imposed on wool. But this duty, though, so to speak, prohibitive, did not cause a rise in price. From 1823 to 1834 the average price was 2 f. 20 c. the kilogramme, the lowest being 1 f. 70 c., and the highest 2 f. 80 c. In 1834 the duty was reduced to 22 per cent, including what is called the *dixième*; and that duty was maintained up to 1855, a period of 20 years, during which the price varied, according to the abundance of the crops and the manufacturing and commercial situation, from 1 f. 40 c. (in 1848) to 2 f. 50 c. (in 1855.) In 1856 the duty was reduced to 15 c. the kilogramme; and from that year up to 1859 the price of wool in France was, notwithstanding commercial and financial crises, 2 f. 40 c. to 2 f. 50 c. the kilogramme. It will be seen that under the most moderate duty, that which now exists, the price of wool has not fallen; and the reason is this:—A reduction of duty has always for effect to maintain prices in foreign markets, and the wool of France being the best, if not the finest of all wools, manufacturers, influenced by the firmness of foreign markets, hasten to lay in stocks of French wool, which is the quality that suits them best. During the last ten years the importation of foreign wool has been on the increase; in 1850 and in preceding years it was 20,000,000 kilogrammes, and since 1852 it has been on an average 35,000,000. How is it that with such an importation the price of wool in France does not decline? The answer is—1. Because the price of wool in France must be on a level with the price of wool abroad. 2. Because the consumption of woollen fabrics in France is constantly on the increase. 3. Because the export of French woollen fabrics abroad increases considera-

bly every year. On this subject the customs returns present some curious results. It is known that the French manufacturers of woolen goods cannot compete with foreigners, except on the condition that the custom-house shall restore to them, on the export of their fabrics, the duties which were paid on the import of the raw material. This is what is called drawback. For so many kilogrammes of tissues exported, the custom-house reimburses the duty paid on the import of so many kilogrammes of wool. Proportionate rates are established for that purpose according to the sort of tissues exported. In 1856 the Board of Customs thus reimbursed as drawback 9,379,000 f. to French exporters, though in that year it only received on the import of wool 8,571,000 f. In 1857 the duties levied on the importation of wool were 7,600,000 f. and the drawback reimbursed was 6,183,000 f. In 1858 the duties levied on imports were 7,600,000 f., and the drawback reimbursed was 5,500,000 f. It will be seen that in France very little foreign wool remains in the form of tissues, since the export takes away almost all that is brought in, and this explains why, at one period, the exporting manufacturers of Elbeuf supported a demand for the maintenance of the duty of 33 per cent on foreign wool. The higher this duty was the greater was the advantage derived by them from the premiums paid to them on the export of woven goods. French agriculture would therefore gain nothing by the maintenance of this customs machinery, which is entirely to the advantage of exporters. This machinery will be suppressed at the same time as the duty on wool.

The desire to promote the welfare of the people by removing restriction manifests itself in other European countries. The removal of internal customs in the Zollverein has had too marked a benefit to be disregarded. France, after the revolution of 1848, made an effort to remove a similar system, called the *octrois* (town dues) or taxes on produce coming into cities. The means of replacing the municipal revenues so derived caused the project to fail. Belgium has determined to suppress the evil, however, and the report upon the subject is of interest. The population is about 4,500,000, divided into 2,538 communes; of these 78, with a population of 1,222,991, levy *octrois* which amounted in 1858 to 10,876,085 f., and with expenses and costs of collections 14,000,000. To support this it is necessary to find the money elsewhere. It was first proposed to adopt the first system of a tobacco *regie*, now free in Belgium. It was estimated that this would give 7,000,000 f., but the cost of establishing would be 25,000,000 f. It was then proposed to monopolize the manufacture and sale of sugar. For this two plans were proposed: one, to buy the beets of the farmers and manufacture, refine, and sell the sugar; the other, to buy the sour sugar and refine and sell it only. This, it was estimated, would give 12,000,000 f. The expense of establishing it was objectionable. It was then determined for the State to relinquish to the communes the duties on coffee, 2,000,000 f., the postage revenue, 1,500,000 f.—making 3,500,000 f.—to transform the *octrois* on five articles into excise taxes—making 4,500,000 f.—and to readjust some indirect taxes for the amount of 5,900,000 f. The new excise taxes would fall on wines and brandies. The burden is still, under this regulation, paid by the consumers, but in a manner that does not restrict intercourse or tax the necessaries of life. The desire which thus prevails in Belgium and France to promote the consumption of necessaries, and consequently to

stimulate the production of equivalents, is well expressed in the official reports of the French commission.

In accordance with this policy, the late modifications of the tariff, following the treaty with England, have been made, and the very interesting report on the subject to the Legislative Assembly gives the reasons for the law. This report proceeds as follows:—

GENTLEMEN: We have the honor to present to the corps legislative a project of law which has for its object to reduce in considerable proportions the duties on sugar, coffee, cocoa, and tea. The reduction of the sugar duties is, in a financial as well as an economical point of view, the most important, and the question which it raises ought to attract the attention of the legislative corps. The question of the sugar duties, and the consequences which result from them, have for a long time occupied the attention not only of the economists, but of the public authorities. In 1850 the administration of indirect duties took the initiative in a reduction similar to that which is now proposed. A bill was prepared and presented to the Assembly, after having received the approbation of the Council of State. The duty of 45 f. was in four years to be reduced to 25 f. The other duties were to be reduced in the same proportion. An illustrious philosopher, then Minister of Agriculture and Commerce, said in the "statement of motive:"—

"Among the economic problems bequeathed to the present government by the old administration of the country, none is more urgent to resolve than that which concerns the taxing of sugar.

"The interest of the consumer exacts the solution; in effect, sugar can no longer be considered as an element of luxury reserved to the rich classes, as an agreeable seasoning, which might be dispensed with without hardships. A long and universal experience has pronounced in favor of sugar. It has marked its place among the aliments the best appropriated to the wants of man. When its consumption is greatest it contributes in the highest degree to improve the sanitary condition of the laboring classes, to improve their welfare, and augment the enjoyments of the family that surrounds the domestic hearth." He adds: "the bill that we have the honor to submit to your discussion has for its object to give to the consumption of sugar all the extension which is compatible with our actual financial condition."

The commission of the Legislative Assembly adopted the project with very light modifications. Thus, at an epoch when the financial situation of the country was profoundly shaken, the Administration, the Government, the Council of State, and a Commission of the Legislative Assembly were in accord in acknowledging the necessity of reducing to a considerable extent the duties on sugar. The Legislative Assembly did not admit the proposed reduction, being governed by the financial reasons which grew out of the difficult position in which France was then placed. The precedent to which we have alluded affords evidence that the necessity of reducing the duties on sugar, in the view of extending its consumption among classes where its high price is an obstacle to that extension, has long since been recognized. It is, however, not the less our duty to demonstrate that the reform now asked of the Assembly is possessed of considerable economic advantages, and that, in the present situation of France, the financial consequences have nothing redoubtable. Before discussing these points of view, we will indicate the fundamental question that we have to resolve.

We will not enter into the divers phases of legislation on sugar, because that would have neither interest nor utility. That legislation was entirely a legislation of circumstances—sometimes the interests of the treasury, sometimes the rivalry of colonial and foreign sugar, sometimes the inquietude of the colonies, awakened by the progress of home-grown sugar, have provoked the solicitude of legislators. We should find in the long recital of old laws no instruction applicable to present circumstances. For the present discussion it will suffice to indicate the normal duty which serves to regulate the entire tariff. The home-made sugar of grade "above type" has been charged with 45 f., which is raised by the two-tenths to 54 f., and this duty is also to be paid by the sugar from the French West Indies, from January 1, 1861. This duty of 45 f. goes back to April 28, 1816, and on this figure the duties between home-made and colonial sugar were equalized in 1847. It is the point of departure for the increase and the reductions, and the differential duties upon sugar of different origin which exist in our tariff. It is, then, really the normal duty. The question embraced in the present bill can then be expressed in very simple terms. Is it useful and possible to lower the actual duty from 45 f. to 25 f., or, embracing the tenths, from 54 f. to 30 f.? It has not been theoretic consideration that has determined the Emperor's government in the preparation of this bill. However the question will present itself, whether the reduction proposed is not contrary to the general principles of our legislation upon taxes. The fundamental principle of taxation in France is proportionality. In respect to the contribution which can be decided on certain determined laws, the principle is applied directly. It is not the same, however, for the duties on articles of consumption, among which is sugar. Taxes upon consumption generally fall equitably upon the consumer, because each pays in the proportion in which he consumes, and on this fact is founded the legitimacy of the system. That is true, however, only on the condition that in levying the taxes account is taken of the nature and destination of the thing taxed. Hence, in our financial legislation, as in all legislation governed by a principle of justice, the objects of luxury only have been stricken with a duty much higher than that imposed upon articles consumed equally by rich and poor. In levying the duties another object has been kept in view. The articles which respond to fictitious wants, such as tobacco and sporting powder, have been submitted, without injustice, to a considerable taxation. In what category should sugar be placed, in accordance with these principles? Is it requisite to tax it as an object of luxury, or as satisfying a fictitious want, or as an article of general consumption? Sugar cannot be completely assimilated to bread or flesh; but it has, with modern nations, become so important an article of food as to be classed with matters of first necessity. It has, however, not the less been treated by the law as an object of luxury. The duty of 45 f., augmented by the two-tenths, is equal to 80 per cent of the average value.

It will be understood that in 1816 sugar had, to a certain extent, been classed as a luxury. At that epoch the consumption in France was no more than 25,000,000 kilogrammes. (55,000,000 lbs.) During the long wars of the Empire, and under the continental blockade, the prices of sugar were so high as to limit its consumption to the rich classes only. On the other hand, in 1816 the financial situation was in all respects critical, and in view of imperious necessity, the legislators could take

only the financial view of the question. To-day, however, sugar can no longer be held as a luxury, nor is the tax a financial question only. Duties levied upon luxuries are just, and do not much limit their consumption. For persons who can buy them at all, the high price is an attraction, because their use, under such circumstances, confers distinction. It is not the same, however, with articles of general consumption; too heavy taxes greatly restrain the use of them. Experience has always shown that when taxes are raised the consumption contracts, and the increase of revenue never equals the augmentation of duty. From these observations it may be concluded that the reduction in the sugar duties conforms to the general principles which govern indirect taxation, and that it ought to remove an important obstacle to the more extensive use of sugar. Some figures will suffice to demonstrate, at least approximately, what influence the actual duties may have upon the use of sugar. The annual consumption in France is above 5 kilogramme, (11 lbs.) per head. In England the consumption is 15 kilogrammes (33 lbs.) per head. In the United States, 17 kilogrammes (37 lbs.) If we compare the duties paid in the three countries it will be seen that they are in inverse ratio to the consumption. Thus, in France the tax is 54 f. for 100 kilogrammes, (4.6 cents per lb. ;) in Great Britain, 34 f. per 100 kilogrammes, (3 cents per lb. ;) in the United States, 15 f. per 100 kilogrammes, (1 1-4 cents per lb.) It is necessary to take into view, certainly, the difference in the habits and customs which distinguish the three countries, and which influence consumption; but the disproportion is so great that it is impossible not to acknowledge that the difference of taxes has a great influence upon the results. It appears to us, then, that it is permitted to attribute to our higher duties the fact of our lesser consumption, and to find in the figures furnished by England and the United States a means of estimating the extension which the use of sugar may one day acquire. When, however, the tax is excessive it acts not only upon the consumption, but also indirectly upon the industries that supply it. Thus the restrictions laid upon the consumption of sugar also limit the production of it, in France as well as in the colonies. The home-grown sugar for 1859 reached 131,000,000 kilogrammes.

	Kilogrammes.	Tons.
Beet root sugar	131,000,000	131,000
Colonial sugar, less local... ..	113,000,000	113,000
Total consumption.....	244,000,000	244,000

This result is far from giving an exact idea of the productive power of our factories. These, as well native as colonial, could produce with the present organization much greater quantities of sugar, but they are met by an insufficient consumption. There has been for some years an excess of production. It was in 1856, 25,000,000 kilogrammes (25,000 tons); in 1857, 37,000,000 kilogrammes; in 1858, 67,000,000 kilogrammes; in 1859, 61,000,000 kilogrammes.

There results a glut of the markets and the necessity of relieving it by exportation, often on onerous conditions, not only for colonial refined sugars, but for raw beet root sugar. By these means a fall in the home market—a fall in prices that would have been ruinous for the manufacturer and colonies—was avoided. In effect, when an article is loaded with a tax approaching 80 per cent of its value, a sufficient reduction of the market price to stimulate consumption would leave little to the pro-

ducer. Such a state of affairs should awaken the attention of the government to the duty of applying a remedy.

On the other hand, the sufferings of the colonies affect our navigation. Restrained in their production, and not profiting by all the riches of their soil and climate, they are forced to limit the purchases they would otherwise make at the metropolis, and the commerce of exchange, of which our ships, in virtue of our colonial regulations, are the necessary instruments, has neither the activity nor the importance which it is susceptible. We have laid before you the principles, the equitable reasons, and the economic considerations which have determined the government to propose a reduction in the sugar duties; similar motives have suggested a reduction of the duties on coffee, cocoa, and sugar.

The consumption of coffee in France is very limited. In 1859 it did not exceed 841 grammes (28 ounces) per head, yet this was larger than in previous years. In the United States the consumption is 3 kilos. 600 grammes, (7 lbs. 13 ozs. ;) in Germany it is 1 kilo. 700 grammes, (3 lbs. 9½ ozs. ;) in Belgium, 4 kilogrammes, (8.8 lbs. ;) in Holland, 4 kilos. 125 grammes, (9 lbs. ;) in Switzerland, nearly 6 kilogrammes, (13¼ lbs.) In England the consumption is not large, for the reason that tea is more generally used; it has entered so largely into the national habits as to leave little room for coffee. The great difference which exists between the quantity of coffee consumed in France and that used in other nations that we have cited can explain itself not otherwise than by the effect produced on the price by the high duties levied by us, and by the low duties or absence of all duties in the other countries. In the United States and Holland coffee is free; in Switzerland it is 15 cents per 100 lbs; in Belgium 11 f. per 100 kilogrammes, (\$10 per 230 lbs. ;) in Germany, 37 f. 50 c. per 100 kilogrammes; and in France, 100 f. per 100 kilogrammes, (9 cents per lb.,) or nearly equal to the value of the article. The duties on cocoa in France are relatively lower than on coffee; they correspond nearly to a value of 30 per cent. On tea the duty is 100 per cent or more, according as the importation is made in a French or foreign ship. But relatively to cocoa and to tea, as in regard to coffee, the question should be regarded in the point of view of the sugar consumption. In effect, if the duties on those articles are reduced one-half, as the bill proposes, there will be a double reduction on those drinks in which sugar allies itself to coffee, cocoa, and tea. The use of them will spread so much the more rapidly that there will be a double reduction in the cost of the mixtures.

FINANCIAL CONSEQUENCES OF THE BILL.

When the important measure, of which we have had the honor to present to you the motives, is examined exclusively in respect of the interests that the reduction will favor, we encounter no serious objections. The amelioration of the material conditions of existence among the laboring classes, the development of a great industry, which is the life of our colonies, and which in developing itself on our soil augments the national industry, and imparts a new activity to our merchant marine, whence the navy draws its seamen—these are immense political and economic interests which no one can mistake. But these interests, however great they may be, cannot be opposed to those of the public treasury, of which the resources may during many years suffer a severe attenuation.

We are thus led to ask to what interests it is necessary to give the preference, and if economical and political considerations, even the highest, ought to give way before financial considerations. In order to respond to these questions, it is necessary to measure the grandeur of the opposing interests. We have laid before you the political advantages of the bill; it remains to explain the financial consequences. To appreciate the extent of the loss to the treasury, and to estimate the duration of the sacrifice that will be imposed upon it, are two points upon which some explanations are necessary.

The reductions proposed should, in the view of the government, be made at once, in order that their effects may make themselves immediately felt. Many inconveniences would in effect attend a system of gradual reduction spread over many years. If such a course were pursued, the diminution of the tax during many years would not be sufficiently marked to act sensibly upon consumption, and the treasury would not at first obtain compensation for the loss it would experience, and would be exposed to finding itself at the end of a period of reduction in a situation similar to that in which it now is, but aggravated by losses suffered during preceding years. The reductions of duties thus graduated also operate injuriously upon industrial and commercial transactions. In effect, under the operation of continual changes in duties, the fear will not cease to act, that merchandise made or bought under high taxes may be sold only at a loss when the price falls through the effect of a diminished tax. It is thus that the mere announcement of a reduction in tax, before it is even voted, produces a certain stagnation in business.

When England, in 1844, reformed the sugar duties, the tax was at once lowered from 59 f. to 34 f. It is true that there have been successive reductions below this last figure, but these were in proportions so small as to have no sudden or material effect upon market prices, or to impart any uncertainty to operations of business. Thus the reduction ought to be accomplished at once, as much in the interests of the treasury as in those of industry and commerce.

If the reduction is important, the loss for the treasury at first would be more considerable, because it is not to be supposed that the consumption would immediately rise to a compensating point. But under the pressure of a large reduction in tax, the price would fall rapidly, and would thus give a lively impulsion to the development of consumption in such a manner that increasing compensation to the treasury might be relied upon with each successive year.

It is incontestible that the use of sugar is capable of the most considerable extension. It agrees with all ages, and reduced to a moderate price it may penetrate all ranks of society. It is employed for a great number of purposes. It is eaten alone, and is mixed with food and with drinks. Its consumption has thus a vast field in which to extend itself. We can at least judge of the future by the past. From 1816 to 1841, the consumption rose from 25 to 100 millions of kilogrammes, and has reached 200 millions at later dates. There is, therefore, to-day eight times as much consumed as in 1816. It required, without doubt, forty years to arrive at such a result. The movement was, however, interrupted by the revolution of February, causing a loss of time. The fact, however, that from 1851 to 1859, the consumption rose from 115 to 185 millions, shows with what rapidity it increases under favorable circum-

stances. In eight years the consumption rose 70 million kilogrammes, or 61 per cent. These results were produced under the present duties, and it may be inferred how great might be the increase under a prosperity always increasing, with duties reduced four-ninths. The experience of the past justifies the belief that the treasury will be reimbursed in four or five years. If this may not be declared a certainty, still, on the other hand, it cannot be denounced as an illusion.

There is also no reason to think that sugar will maintain its price through shortness of supply checking consumption, since we have shown that there has been a permanent surplus, and the manufacturers, both colonial and native, are in a position to meet any demand that can manifest itself. It has been estimated that the treasury will lose 51 millions by carrying the measure proposed at once into effect, in the budget of 1861, but, as we have seen, we can count on compensation resulting from progressive development of the consumption.

It remains for us to give the Assembly details of the new tariff, and of other dispositions of the projected law. Independently of the reduction of the taxes, the bill proposes many simplifications of the tariff. We have already said that the normal duty on home made sugars is reduced from 45 to 25 francs, and with the two-tenths from 54 to 30 francs the 100 kilogrammes. Colonial sugars are to pay the same duty, but, to avoid the inconvenience of a sudden change, the equality of home-made and colonial sugars will not be immediately established.

The law of the 28th June, 1856, in maintaining in principle the duty on sugar from the other side of the Cape of Good Hope at 42 francs, and at 45 francs for that of the American colonies, established in their favor a discrimination, temporary and decreasing. This discrimination was 7 francs from March 27, 1856, to June 30, 1858; 5 francs from July, 1858, to June 30, 1859; and finally 3 francs from July, 1859, to June 30, 1861. That discrimination of 3 francs is the only one which now exists. We now propose that it shall close entirely June 30, 1861.

Foreign sugars imported by French ships from countries out of Europe are to pay 28 francs, without counting the two-tenths; that is to say, 3 francs more than French sugars. The projected law abolishes all discrimination between French and foreign sugar. It substitutes a single duty for the various rates that are now levied upon the sugars of China, Cochin-China, Philippines, Siam, and other countries out of Europe. Those differential duties established to encourage distant navigation have not produced the results that were expected from them, and under the new tariff they would only produce useless complications.

In readjusting the duties on foreign sugar the interests of our flag have not been neglected. Those duties are fixed at 28 francs when foreign sugars are imported from countries out of Europe in French vessels; they are placed at 34 francs when imported coastwise. In foreign vessels from countries out of Europe the duty is 30 francs. Our flag, therefore, profits by a protection of 11 francs in one case, and by 5 francs in the other, without the two-tenths. The government thinks that protection quite sufficient to insure the trade to French ships over rival vessels. We have hitherto spoken only of raw sugar; we will present a few remarks on refined sugars.

The proposed law allows the prohibition against foreign sugar to remain, except where the stipulation of the treaty with England and other trea-

ties interfere. The law also maintains the supplementary duty on refined sugars of the home factories. This duty is now 10 per cent above the duty applicable to sugar, a degree above that of the first type. The law transfers the tax into a charge of 5 francs per 100 kilogrammes. This grows out of another change in the tariff; raw sugars above first type are subject to an additional tax of 3 francs, which it is proposed to suppress; hence, it becomes necessary to reach the tax in another manner.

The duties on coffee, cocoa, and tea have also been much simplified, all differential duties of origin having disappeared. Coffee, the produce of French colonies on the west coast of Africa, will bear no higher tax than that of the other colonies.

The principal object proposed in the bill is to extend the consumption of sugar by such a reduction of taxes as will insure lower prices to the consumer. The largest portion of the sugar now used in France is refined. The government has thought that, as the use of sugar extends itself, the custom of using raw sugars, as in England, will become more general among those who are not rich. There are in France only 35 a 40 sugar refineries, forming separate establishments. These furnish almost exclusively the refined sugar consumed in France, because foreign refined sugar is prohibited; the colonies send us none, and the refineries connected with the home sugar factories refine but about four million kilogrammes, (4,000 tons.) There is, then, reason to fear that, when through reduction of tax the fall in price makes itself felt, there will not be refined sugar enough to be had to meet the demand. It is not to be disguised that an industry situated like that of sugar refining in France can, to a certain extent, control the market, and counteract the effects of diminished duties. It is necessary, then, to foresee and, as much as possible, guard against such contingencies, in giving to the sugar makers at home and in the colonies the means of meeting the new demand. For this purpose the *surtaxe* on raw sugar above type is suppressed. A short explanation is necessary to fully understand the importance of this change. At present raw sugar bears a duty of 54 francs, with the tenths; if they rise above the type they pay 60 francs. The refined sugar of home factories, and those of the colonies, pay a high duty. This higher duty is suppressed in such a manner that all raw sugar, whatever its saccharine richness, would be subjected to the same duty, but for the grade under type. Regard has, however, been had to the position of some of the colonies where the methods of manufacture are very imperfect, and by means of the lower grade those factories that are unfavorably situated pay only a reduced duty on their inferior article. This presents a slight obstacle to the plan proposed, but it has been thought better not to disturb it. In suppressing the overtax, it is designed to encourage the production of a sugar of a high grade, that may enter at once into consumption without being subjected to any extra tax or refining process. There results a double loss to the treasury. The sugars below and above type will pay less than the normal tax. The higher grades will not pay the extra tax; that reduction will not, however, be very considerable, by reason of the advantages expected from it. The subscription of the manufacture has the same object as the suppression of the duties on the high grades. It will be optional, and those who do not subscribe will remain under the present regulation.

Under the existing law great precautions have been taken to guaranty

the treasury against fraud; thus, before the juice of the beet-root is boiled, the government agents test its density, and the manufacturers must account for 1,400 grammes of sugar for 100 litres of density, ($3\frac{1}{2}$ lbs. to 22 gallons,) by each degree of the *densimetre*. When the sugar is made a new inspection verifies the quantities. The sugars completed are placed in warehouse, of which the agent has the key, and it is delivered only with his consent. With the manufacturers who come under the new law, there will remain only the inspection of the juice, which will be the basis for the levying of the tax. When the quantities of sugar shall have been valued according to the density of the juice, the duties will be fixed. The manufacturer will be relieved from inspection in the other stages of manufacture and sale; whether the sugar is more or less perfect, or more or less in a refined state, will no longer be demanded of him. If, in order to produce sugar fit at once for use, it will be necessary to mix beet-root juice with cane sugar, it will rest with the maker. Thus the object sought, with the concurrence of the manufacturer, is to produce a sugar fit at once for consumption, in order to lessen the cost to the consumer. The tax is diminished 24 francs, and the cost of refining 16 francs; there should be a diminution of 40 francs. Such a result, if realized, and experience already gives assurance of success, will justify the change. It is no doubt the case that the density of the juice gives no absolute certainty. The *densimetre* does not indicate the quantities of crystalized sugar in the juice; it marks only its density in such a manner that the quantity of sugar sometimes falls short, and at others shows an excess. But when that becomes the only basis of taxation, they will employ the *densimetre* with far greater care, and chances of fraud will be diminished.

The final disposition of the projected law is in relation to the drawback on refined sugar. To cause the duty to operate as justly as possible, it has always been sought to establish a relation as exact as possible between the quantity of raw sugar imported and that required for the refiner. Legislation upon this point has been very variable, not only because of the inherent difficulties of the appreciation, but because it was desired also to make the drawback a source of profit to the marine and to the colonies more or less considerable.

The law of July, 1840, gave to the law of drawback the following basis:—The legal equivalent for the first category was 70 kilogrammes of refined for 100 kilogrammes of raw sugar; and for the second, 73 kilogrammes of refined for 100 kilogrammes. These are applicable only to the grade equal and inferior to the first type. It will be understood that, if this grade had been higher, the advantages to the importer and refiner would have been greater. This took place when, by the law of March, 1852, the type admitted for home-made or beet sugar was applied to colonial and foreign sugar. The necessity of modifying the basis soon made itself felt in the interests of the treasury; the law of June, 1856, carried the basis from 70 to 75 per cent, and from 73 to 78 per cent, as it remains to this day. This change produced the highest clamor from the interested parties, but neither the imports nor the activity of the refineries has been diminished. The payments on refined sugar exported, which had been 26,290,000 francs in 1857, rose to 40,200,000 in 1858, and were 39,600,000 in 1859. Such results attract the attention of the government, and after careful examination it has been decided to fix the

equivalent at 80 and 83 per cent. This change will have the effect of assuring to the treasury a first compensation for the sacrifice it encounters, without materially affecting the manufacture or the shipping. As to the French refineries, they have arrived at such a state of perfection as to enable them to sustain any competition.

The Assembly has now been informed of the views of the government, and it will doubtless agree with it, that the question should be solved in a political and economical point of view, rather than as one purely financial.

Art. II.—MICHIGAN: ITS PROGRESS, MINES, AND MANUFACTURES.

THE State of Michigan has made, like all the Western States, extraordinary progress during the last ten years, but its prosperity and prospects seem to rest on a firmer basis than those of most of the other States. The commercial and mining advantages of the peninsula have assumed a position, as well in relation to the commerce of the great lakes as to the connections with Canada on one hand, and the British northwestern possessions on the other. The peninsula puts out north between two great lakes, at a point which commands the route of connection between the British Atlantic possessions and those on the Pacific. A network of railroads spreads northward through a country of the greatest mining and industrial wealth, to connect what must in the future be the great rail route to the Pacific. The railroads that have already been built in Michigan have given a great impetus to the settlement of the State. In order to estimate the growth of the State, we may go back just ten years to the *Merchants' Magazine* of February, 1850, in which the finances and resources of Michigan were fully treated. We there find, page 138, that the railroads of the State consisted of the two unfinished roads, the Central, 146 miles, and the Southern, 68 miles, making 214 miles, which had cost \$3,363,880. These roads belonged to the State, and were sold to private companies, and the roads now compare with their then position, as follows:—

	Central.		Southern.	
	1850.	1859.	1850.	1859.
Miles.....	146	842	68	264
Cost.....	\$2,288,289	\$12,874,250	\$1,125,590	\$14,742,753
Receipts.....	201,501	2,056,542	61,501	1,728,902

The aggregate miles of railroad in Michigan is now 1,032, and the expenditure has been \$36,362,812, or about \$33,000,000 in the last nine years. There are 600 miles of road now in progress north and south, through Lansing to Saginaw and from Kalamazoo to Grand Rapids. This expenditure has, of course, given a great impulse to industry within the borders of the State, and if we compare the situation of the public lands now and at that time, we shall observe the progress of the absorption of the federal lands. The position of the public lands in Michigan, January, 1849, and January, 1858, was as follows:—

	1849.	1858.
Area reported... ..acres	35,995,520	36,128,640
Granted to school.....	1,113,477	1,113,477
Seat of government.....	3,200	13,200
Salines.....	46,080	46,080
Individuals.....	4,080	4,080
Internal improvements.....	500,000	1,250,000
Military bounties.....	34,517	2,100,653
Indian reservation.....	109,301	109,301
Private claims.....	126,711	126,711
Swamp lands.....	.....	7,273,721
Railroads.....	.....	3,096,800
	<u>2,937,366</u>	<u>15,163,523</u>
Sold.....	33,058,155	20,965,117
	<u>9,071,223</u>	<u>11,248,776</u>
Balance acres.....	23,986,932	9,716,341

It appears from these official figures that 12,000,000 acres have been disposed of in the State during the nine years. Of these, 700,000 acres have been given by Congress to the State in aid of internal improvements; 2,000,000 to individuals for military services; 7,250,000 swamp lands to the State to be improved, and nearly 3,100,000 for railroads. In addition to these gifts, 2,200,000 acres have been sold for cash. Of the residue of lands a good deal is of course waste, and the government interest has become very small. With this progress of the land distribution, the population, rose from 212,267, in 1840, to 304,278, in 1845, 400,237, in 1850, as per United States census, and 511,672, in 1854, per State census, and is, at the same ratio of progression, now not far from 700,000 souls. The taxable property of the State was given in 1848 at \$29,908,769, but was last year as follows:—

Acres taxed, 7,917,322, value.....	\$88,101,204
Personal property.....	32,261,670
Total taxable.....	<u>\$120,362,474</u>

This would give nearly \$200 per head of the population against \$90 per head in 1845—a very gratifying instance of progressive wealth. The natural resources of Michigan are second to those of no State in the Union. Mines of copper, iron, coal; beds of stone and gypsum; immense forests of pine and hard woods, and the fisheries, have long demanded an increasing supply of capital for their prosecution. Within a few months a new element of wealth has been added to the list. In the above table of land grants will be found a grant of salines to the State. These were but of little real value to the State. Last year the Legislature offered a bounty of 10 cents per bushel for salt produced in the State. This stimulated efforts, which have been attended with immense success. The *East Saginaw Courier* of a late date, after remarking upon the operations of the salt company, states that “the new tubing was put down in the well between five and six hundred feet, and when the weak brine was completely exhausted, it was found that the strong brine rose to within twenty-five feet of the surface. A common lifting-pump was then fixed in the tubing, capable of raising six gallons per minute. This pump has been running all day to-day, bringing up brine which stands by the salometer at 90°, and instead of diminishing the

volume of water seems to increase. This settles the 'salt question' beyond a contingency, and who is there in all this region with an imagination sufficiently prolific to portray the mighty results which must flow from the full development of the salt operations of Michigan successfully inaugurated?"

This salt, it is said, yields in the ratio of one bushel to 29 gallons, nearly double the strength of Kanawha and Onondaga water. North of Saginaw, to the Sault, the land is underlaid with salt. The following facts are established for East Saginaw and its salt:—"The strongest and purest brine in the world." "An inexhaustible supply." "An inexhaustible supply also of fuel, and timber for barrels, at a merely nominal price." "The best of facilities for shipment to all sections of the country." "Worlds of lumber for all buildings, works, sheds, &c." "It is a further fact that, with the bounty paid by the State, salt can be made here, sent to Syracuse and sold to the manufacturers there at what it costs them for the barrels to put it in."

The East Saginaw Salt Manufacturing Company have contracted for all the timber and lumber requisite for building an extensive roadway and wharf, and the necessary buildings for two blocks of kettles, to be delivered at their works within thirty days.

This opens a new and important industry to the State of Michigan, added to its other mining resources.

Much has been said in reference to the coal fields of Michigan, and within the past two or three years explorations, with a view of developing these deposits, have been conducted in different portions of the State. There exists no longer any doubt of the existence of a valuable field of coal in central Michigan. There have been openings at different points in the State; at Jackson and Sandstone, in Jackson County; at Owosso and Corunna, in Shiawassee County; at Flint, in Genesee County; and at Lansing, coal has been found deposited in veins of from twenty inches to four feet in thickness. Most of the openings have been upon veins outcropping at the surface of the ground, and there has been little difficulty in procuring samples of coal from these veins in many localities in the State. These deposits of coal found at and near the surface are producing coal in limited quantities in different localities, but no works have been prosecuted with a view to supplying any but a limited local demand. From the surface evidences of a coal field on the line of the Detroit and Milwaukee Road, near Owosso, and from explorations and developments already made, some specimens of the coal having been produced and shipped to Detroit, it has been determined to prosecute the work at that point. In Jackson County, however, the matter of mining coal has become an enterprise of considerable magnitude, and we are enabled to give some facts and figures which exhibit in some measure the importance to the State of this new branch of industry.

There are several "workings" of coal in the vicinity of Jackson, and several companies have been formed for the purpose of mining coal. Considerable coal has been mined and sold from these different workings and mines. The principal mine, and one which in all its arrangements and provisions is equal to any mine in the country, is that of the Detroit and Jackson Coal and Mining Company. The works of this company are at Woodville station, on the line of the Michigan Central Railroad, about three-and-a-half miles west of Jackson city. The mine is situated

on the north side of the railroad, and about half a mile from the main track. The coal company have built a side track from the Central Road to the mouth of their shaft. The shaft from which the coal is taken is 90 feet deep, and at the bottom passes through a vein of coal about four feet in thickness. This vein has been opened in different directions for several hundred feet from the shaft, and with a tram road through the different entries the coal is reached, and brought from the rooms to the shaft, and then lifted by steam to the surface. This coal has been transported to different points in the State, and is rapidly coming into use for all ordinary purposes, taking the place of many of the Ohio coals, and at a reduced cost. The mine to which reference is made is within four hours' ride of Detroit on the Central Road, and a visit of two hours (which can be accomplished any day, by taking the morning train, and returning so as to reach Detroit at half-past six in the evening) will repay any one for the trouble. The station is called Woodville, and is only three-and-a-half miles west of Jackson.

There are indications that Michigan is slowly but surely taking the rank to which she is entitled in the manufacture as well as production of iron. The first shipment of pig-iron of any consequence was made by the Pioneer Company in the fall of 1858. Dr. Russell, of Detroit, is turning out large quantities. His works went into operation about two years and a half ago, but were burned after running sixty days. They were immediately rebuilt by the enterprising proprietor. The Lake Superior iron has been proclaimed the best in the world, a proposition that none can successfully refute, and it is most desirable for gearing, shafting, cranks, flanges, and car-wheels. A large amount of capital is invested in the iron interest in Michigan, as the following figures prove:—

Companies.	Capital.	Companies.	Capital.
Pioneer	\$150,000	Wyandotte Rolling Mills.....	\$236,000
Jackson.....	300,000	Eureka Iron Company	117,500
Collins.....	150,000	Dr. G. B. Russell's.....	60,000
Cleveland	300,000	Ford & Philbrick's Steam Forge	25,000
L. Sup'r & Iron Mount'n R'd Co.	700,000		
Northern Michigan Iron Co....	110,000	Total.....	2,148,000

Marquette is the only point on Lake Superior where the iron ore deposits have been worked. There are deposits of iron in the mountains back of L'Anse, but this wonderful region leaves nothing more to be desired for the present. At a distance of eighteen miles from the lake are to be found iron mountains named the Sharon, Burt, Lake Superior, Cleveland, Collins, and Barlow, while eight miles further back lie the Ely and St. Clair mountains. Three of these mountains are at present worked—the Sharon, the Cleveland, and the Lake Superior—and contain enough ore to supply the world for generations to come. The mountains further back embrace tracts of hundreds of acres rising to a height of from four to six hundred feet, which there is every reason to believe, from the explorations made, are solid iron ore. The extent of the contents of these mountains is perfectly fabulous; in fact, so enormous as almost to baffle computation. The ore, too, is remarkably rich, yielding about 70 per cent of pure metal. There are now in operation at Marquette three iron mining companies and two blast furnaces for making charcoal pig-iron—the Pioneer and Meigs. The Pioneer has two stacks, and a capacity of twenty tons pig-iron per day; the Meigs one stack, capable of turning out about eleven tons. The Northern Iron Company is building a large

bituminous coal furnace at the mouth of the Chocolate River, three miles south of Marquette, which will be in operation early in the summer. Each of the mining companies—the Jackson, Cleveland, and Lake Superior—have docks at the harbor for shipment, extending out into the spacious and beautiful bay which lies in front of Marquette, to a sufficient length to enable vessels of the largest dimensions to lie by their side and be loaded directly from the cars, which are run over the vessels and “dumped” into shutes, which are made to empty directly into the holds. The process of loading is therefore very expeditious and easy. The amount of shipments of ore for 1859, from Marquette to the ports below, reaches 75,000 gross tons in round numbers, and the shipments of pig-iron 6,000 gross tons more. To this must be added the amount at Marquette when navigation closed, the amount at the mines ready to be brought down, and the amount used on the spot. This will give a total product of the iron mines of Michigan for the past year of between *ninety and one hundred thousand tons*. These mining companies simply mine and ship the ore and sell it. Their profit ranges between seventy-five cents and one dollar per ton. The quality of the iron of Lake Superior is conceded by all to be the best in the world, as the analysis of Prof. Johnston, which we reproduce, shows. The table shows the relative strength per square inch in pounds:—

Salisbury, Conn., iron.....	58,009	Lancaster County, Pa.....	58,661
Swedish, (best).....	58,184	Russia, (best).....	76,069
English cable.....	59,105	Common English & American...	30,000
Center County, Pa.....	59,400	Lake Superior.....	89,582
Essex County, N. Y.	59,962		

The manufacture of pig-iron at Marquette will probably be carried on even more extensively as the attention of capitalists is directed to it. The following may be considered a fair statement of the cost of producing one ton of pig-iron at the Pioneer Iron Company's works:—

1½ tons iron ore, at \$1 50 per ton..	\$2 50	} Cost at the works.....	\$15 00	
125 bushels charcoal, at 7 cents ..	8 75			
Fluxing.....	0 50			
Labor	2 50			} Freight on railroad and dockage. 1 37
Incidental expenses.....	1 00			} Cost on board vessel 16 37

The quantity of wood required for charcoal for both furnaces is immense. The Pioneer furnace requires 2,500 bushels of coal in twenty-four hours; and in blast, as they are, day and night for six months, and at a yield of forty hushels of coal to a cord of wood, it would require 15,000 cords of wood to keep them going. The company has had 120,000 cords chopped this season. This vast consumption of wood will soon cause the country to be completely stripped of its timber. Coal will then come into use. The business of manufacturing pig-iron may be extended indefinitely, as the material is without limit, and the demand thus far leaving nothing on hand. These facts exhibit the untold wealth of Michigan in iron alone, and point with certainty to an extent of business that will add millions to our invested capital, dot our State with iron manufactories of all kinds, and furnish regular employment to tens of thousands of our citizens, while our raw material and our wares shall be found in all the principal markets of the world.

The great copper interest of Michigan was first brought into public notice by the enormous speculations and the mad fever of 1845. The

large spur of country which projects far out into the lake, having its base resting on a line drawn across from L'Anse Bay to Ontonagon, and the Porcupine Mountains for its spine, became the El Dorado of all copperdom of that day. In that year the first active operations were commenced at the Cliff Mine, just back of Eagle River Harbor. Three years later, in 1848, work was undertaken at the Minnesota, some fifteen miles back from the lake at Ontonagon. The history of the copper mines on Lake Superior shows that even the best mines disappointed the owners in the beginning. We give the facts relative to the three mines at present in the Lake Superior region to illustrate this. The Cliff Mine was discovered in 1845, and worked three years without much sign of success; it changed hands at the very moment when the vein was opened, which proved afterwards to be so exceedingly rich in copper and silver, producing now, on an average, 1,500 tons of stamp, barrel, and mass copper per annum. The Minnesota Mine was discovered in 1848, and for the first three years gave no very encouraging results. The first large mass of native copper of about seven tons was found in a pit made by an ancient race. After that discovery much money was spent before any further indications of copper were found. This mine yields now about 2,000 tons of copper per annum, and declared for the year 1858 a net dividend of \$300,000. The dividends paid since 1852 amount to upwards of \$1,500,000 on a paid-up capital of \$66,000. The same has been experienced at the Pewabic Mine. That mine commenced operations in the year 1855, with an expenditure of \$26,357, which produced \$1,080 worth of copper; the second year it expended \$40,820, and produced \$31,492 of copper; in 1857, \$54,484 of expenses produced \$44,058 worth of copper; in 1858, the amount expended was \$109,152, and the receipts for copper \$76,538; the total expense amounts to \$235,816, and the total receipts for copper to \$153,168, leaving an excess of expense amounting to \$82,648, which is, however, amply covered by the extensive works established above and below ground at the mine. The Pewabic will undoubtedly take its place among the dividend-paying mines of the present year.

It is scarcely ten years that mining has been properly commenced in that remote region. At that time it was difficult, on account of the rapids of St. Mary's River, to approach it by water with large craft. Being more than a thousand miles distant from the center of the Union, destitute of all the requirements for the development of mines; every tool, every part of machinery, every mouthful of provisions had to be hauled over the rapids, boated along the shores for hundreds of miles to the copper region, and there often carried on the back of man and beast to the place where copper was believed to exist. Every stroke of the pick cost tenfold more than in populated districts; every disaster delayed the operations for weeks and months. The opening of the Sault Canal has changed all this, and added a wonderful impetus to the business, the mining interests, and the development of the Lake Superior country. Nearly one hundred different vessels, steam and sail, have been engaged the past season in its trade, and the number of these is destined largely to increase year by year, an indication of the growth of business and the opening up of the country. For the growth in the copper interest we have only to refer to the shipments from that region year by year. These, in gross, are as follows:—

	1853.	1854.	1855.	1856.	1857.	1858.	1859.
Tons.....	2,535	3,500	4,544	5,357	6,094	6,025	6,245

The same facts of development would hold generally true with regard to the other industrial interests of that vast country.

The copper region is divided into three districts, viz., the Ontonagon, the most northern, the Keweenaw Point, the most eastern, and the Portage Lake, lying mostly below and partially between the range of the two. In the first are situated the Minnesota, the Rockland, the National, and a multitude of other mines of lesser note, profit, or promise. In the second are the Cliff, the Copper Falls, and others. In the last are the Pewabic, Quincy, Isle Royale, Portage, Franklin, and numerous others. Each district has some peculiarities of product, the first developing more masses, while the latter are more prolific in vein-rock, the copper being scattered throughout the rock. There have been since 1845 no less than 116 copper mining companies organized under the general law of Michigan. The amount of capital invested and now in use, or which has been paid out in explorations and improvements and lost, is estimated by good judges at \$6,000,000. The nominal amount of capital stock invested in all the companies which have charters would reach an indefinite number of millions. As an offset to this it may be stated that the Cliff and Minnesota mines have returned over \$2,000,000 in dividends from the beginning of their operations, and the value of these two mines will more than cover the whole amount spent in mining, and for all the extravagant undertakings which have been entered upon and abandoned. The copper is smelted mainly in Detroit, Cleveland, and Boston. There is one establishment at Pittsburg, which we believe does most of the smelting for the Cliff Mine; one at Bergen, N. Y., and one at New Haven, Conn. There are two at Baltimore, but they are engaged on South American mineral. The Bruce Mines, on the Canada side of Lake Huron, have recently put smelting works in operation on their location. Prior to this the mineral was barreled up and shipped to London, being taken over as ballast in packet ships at low rates. The amount of copper smelted in Detroit we can only judge by the amount landed, but this will afford a pretty accurate estimate. The number of tons landed in 1859 was 3,088. The copper yield of Lake Superior will produce between 60 and 70 per cent of ingot copper, which is remarkably pure. The net product of the mines for 1859 is worth in the markets of the world nearly or quite \$2,000,000. This large total shows the capabilities of this region, and affords us some basis of calculation as to the value and probable extent of its future developments. Besides the amount already noticed as landed, there were 1,268 tons brought to Detroit from the Bruce Mines, and sent on to London. The mineral of this location is of a different quality from that of Lake Superior, and not near as productive of pure copper. The price of ingot copper in New York the past season has ranged from 20½ to 23½ cents per pound, averaging full 22½ cts.

The extent and value of the pine lands of Michigan was for a long time a matter of debate. The resurvey of portions of the government land, the exploration of the country by parties in search of pine, the developments made by the exploring and surveying parties along the lines of the land grant railroads, and the more recent examinations by the different commissions for laying out the several State roads under the acts passed by the last Legislature, have removed every doubt in reference

to the subject. The universal testimony from all the sources above mentioned seem to be that in all the natural elements of wealth the whole of the northern part of the peninsula abounds. A large proportion of the pine lands of the State are in the hands of the canal company and individuals who are holding them as an investment, and it is no detriment to this great interest that the whole State has been thus explored and the choicest of the lands secured. It is a remarkable fact that almost every stream of water in the State, north of Grand River, penetrates a district of pine lands, and the mouths of nearly all these streams are already occupied with lumbering establishments of greater or less magnitude. These lumber colonies are the pioneers, and generally attract around them others who engage in agriculture, and thus almost imperceptibly the agricultural interests of the State are spreading and developing in every direction. The want of suitable means of access alone prevents the rapid settlement of large and fertile districts of the State.

The valley of the Muskegon embraces every variety of soil and timber, and is one of the most attractive portions of the peninsula. The pine lands upon this river are scattered all along the valley in groups or tracts containing several thousand acres each, interspersed with hard timber, and surrounded by fine agricultural lands. The Pere Marquette River and White River, large streams emptying into Lake Michigan, pass through a region possessing much the same characteristics. This whole region is underlaid with lime rock, a rich soil, well watered with living springs, resembling in many features the Grand River Valley. Beds of gypsum have been discovered on the head waters of the Pere Marquette.

The unsettled counties in the northern portion of the State, the northern portion of Montcalm and Gratiot, Isabella, Gladwin, Clare, and a portion of Midland, are not inferior to any other portion. There is a magnificent body of pine stretching from the head of Flat River, in Montcalm County, to the upper waters of the Tettibewassee, and growing upon a fine soil, well adapted to agriculture. This embraces a portion of the Saginaw Valley, and covers the high ground dividing the waters of lakes Huron and Michigan.

In the lower peninsula there are, in round numbers, about 24,000,000 acres of land. Taking Houghton Lake, near the center of the State, as a point of view, the general surface may be comprehended as follows:—The Muskegon Valley to the southwest, following the Muskegon River in its course to Lake Michigan—the western slope of the peninsula directly west, embracing the pine and agricultural districts along the valleys of several large streames emptying into Lake Michigan—the large and beautiful region to the northwest, embracing the valley of the Manistee and the undulating lands around Grand Traverse Bay—northward, the region embraces the head waters of the Manistee and Au Sauble, with the large tracts of excellent pine in that locality, and beyond, the agricultural region extending to Little Traverse Bay and the Straits of Mackinaw—to the northeast, the valley of the Au Sauble, and the pine region of Thunder Bay—to the east, the pine and hard timber extending to Saginaw Bay—to the southeast, the Saginaw Valley; and to the south, the high lands before described in the central counties. That portion of the State south of Saginaw and the Grand River Valley is so well known that a description here would be unnecessary. Thus we have yet undeveloped over half of the surface of this peninsula, embracing certainly 12,000,000

to 15,000,000 of acres, possessing stores of wealth in the timber upon its surface, reserving soil for the benefit of those who, as the means of communication are opened, will come in and possess it, and thus introduce industry and prosperity into our waste places.

The most experienced judges concur in fixing the amount of logs got out this winter on River St. Clair, at Port Huron, and Saginaw Bay, but not including the rivers above, at 175,000,000 feet. In the Saginaws, it is ascertained that about 100,000,000 will be got out. Taking the entire coast, it is thought the logs this winter would exceed those of last by 15 to 20 per cent. By Custom-house statements of shipments, added to actual receipts at one of the receiving points—Chicago—it will be seen below that for 1859 a little over 269,000,000 feet is the amount of shipments arrived at. These figures, taken in connection with the estimates of those competent to judge, render it certain that the actual amount shipped out of the State did not vary materially from 400,000,000 feet. There being no penalty involved in the failure of masters of vessels to report, there is great carelessness in the matter. The Cleveland, Toledo, and Sandusky shipments are, at the outside, not more than half reported. Those reported to Buffalo, Oswego, &c., are a little nearer the truth, but they fall considerably below the mark. The amount made in 1859 did not vary materially from that shipped. In the district embracing the River St. Clair, Port Huron, and the lake shore, 6,000,000 feet more were wintered over last year than this. On the west coast it was different generally, so that the variation in the aggregate cannot be much either way. The capacity of the mills in the pine lumber region is 900,000,000 feet, or possibly a little more.

As regards the amount of shingles made, even dealers are much in the dark. To add 50 per cent to the Custom-house returns would certainly be within bounds for the eastern coast. This would give 120,000,000 as the amount. For the west coast, if we take the amount received at Chicago, say 165,000,000, with an additional 25 per cent for that received at Milwaukee, and then estimate that two-thirds of the whole amount were from the west coast of Michigan, which is doubtless true, we have 137,500,000 as the amount shipped by that coast, and 257,500,000 for the whole State.

The improved demand for staves has greatly stimulated the production, and in localities where the production of pine lumber is decreasing, that of staves is taking its place. At Saginaw, 2,500,000 were got out last year, and this year there will be full as much or more. The greatest activity prevails, and dressing by machinery has been started. At Lakeport, Burchville, Lexington, Port Sanilac, Forester, Point aux Barque, and Forestville, 850,000 were got out last year; from Port Huron and St. Clair, 750,000; the amount turned out in the whole State could not have been short of 20,000,000.

The lumber on the east coast is worth at the mills \$9 per M.; that on the west coast, \$7; at the average of \$8, the amount made last year would be worth \$3,200,000; the value of shingles, at \$2 per M., was \$515,000; and the lath, at \$1 per M., are worth \$133,000. The capital invested in the State in the business is \$8,029,500.

An intelligent gentleman, who recently visited all the establishments around Saginaw, and procured statistics, reports the amount of lumber manufactured as follows:—

Places.	Mills.	Feet.	Places.	Mills.	Feet.
Bay City	11	20,000,000	Saginaw City	4	14,000,000
Portsmouth	4	5,000,000	Bad River	2	4,500,000
Zilwaukee	1	3,000,000	Rafted lumber		4,000,000
Carrolton	1	2,800,000			
East Saginaw	8	19,750,000	Total		73,050,000

Valuation, at \$8 50 per M., \$620,925. The rafted lumber includes what was cut by the small mills above and floated down, and also that brought in from the country mills by teams. Of the above lumber, 63,000,000 has been shipped; the rest is now on the docks.

	Amount.	Price.	Value.
Shingles manufactured.....	25,000,000	\$2 50	\$62,500
Lath.....	5,000,000	1 00	5,000
Oak staves manufactured and shipped	2,000,000	30 00	60,000
Add lumber.....			620,925
Total.....			\$748,425

The supply of pine in some few localities is becoming exhausted, and some few mills have ceased operating. This is the case at Lexington, but the machinery and capital have been taken elsewhere. At the present ratio of consumption, the supply of pine must rapidly become diminished, but profitable employment will then be found in the manufacture of hemlock and hard wood. Some little has already been done in the way of turning out hemlock, and the manufacture of hard-wood lumber is increasing very rapidly. The reported shipments of the State foot up as follows:—

	Lumber.	Shingles.	Lath.
Reported at Detroit	141,595,000	82,466,000	19,823,000
Additional at Chicago	127,513,000	24,801,000	.....
Total	269,108,000	107,267,000	19,823,000

If accurate returns could be given of the receipts at the ports on Lake Erie and Lake Ontario, it is altogether probable that nearly or quite the amount we have estimated would be shown, viz., 400,000,000 feet. As we have hereinbefore stated, not more than half the shipments to the Lake Erie ports ever find their way to our Custom-house books.

The fisheries of Michigan are a great resource. It is estimated by men of intelligence that the value of her yearly catch of fish is greater than that of all taken in fresh waters in the thirty-two remaining States of the Union. This may at first blush seem like a broad assertion, but it is no doubt strictly within bounds. Most of the fish packed on Lake Huron and rivers St. Clair and Detroit find their way into the Ohio market; the trade with that State having rapidly increased. The principal varieties of fish are—

WHITE FISH.—These are more highly prized than any other kind found in our waters, being decidedly the most delicious in a fresh state, and when packed command a higher price than any other by \$1 per barrel. They are found in the straits and all the lakes; they spawn in the fall in the straits and in shoals and on reefs about the lakes; they are caught in seines, gill nets, trap nets, and spears—never with hooks. Their ordinary weight is from three to five pounds, length fifteen inches, though some have been caught weighing not less than eighteen pounds. They are a beautiful fish, and when first taken out of the water, and struggle and flounder in the sun, they exhibit all the colors of the rainbow, but they

soon expire, and when dead they are of a delicate white color. The trout, pike, and muscalonge devour them without mercy. Some of these voracious kinds have been caught with the remains of six white fish in them. The Detroit River white fish are more juicy and better flavored than those caught in the upper lakes, probably from the fact that they feed on more delicate food, but those found in Lake Superior surpass all others in size. They were once so numerous that eight thousand were taken at a single haul. At present a haul of one or two thousand is thought a very good one. In all the rivers they are growing scarce, very gradually but surely; the ratio of decrease cannot be arrived at with any degree of precision. A few years ago they were mostly taken with gill nets, and when they fell off in one place a corresponding increase would be found in another. Now they are taken with trap nets along the shore. The trap nets are a decided advantage over gill nets; they allow the fish to be kept alive, and they are taken out at leisure; they are therefore of better quality.

PICKEREL.—This variety is also held in high esteem—they are good either fresh, or salted and dried, and for packing rank next in value to white, although held nominally at the same price as trout when packed. They generally run up the rivers and lakes in the spring to spawn, where they are caught in considerable numbers; average weight, 2 lbs.; large, 20 lbs.; common length, 15 inches.

LAKE OF MACKINAC TROUT.—This species are as voracious as pike; they are chiefly caught on Lake Huron with gill nets and hooks. Saginaw Bay appears to be a favorite resort with them. Some winters large quantities are caught in the bay through the ice, with a decoy fish and spear. They spawn in the fall, generally in the bays and inlets; average weight, 5 lbs.; large, 75 lbs.

SISCOWIT.—These are mostly found in Lake Superior, and are preferred by some to any other kind. They are of the trout family, and for fat are unequalled; they are mostly taken in gill nets. They spawn in the fall, and are very superior for packing; they are also of some value for their oil; common weight, 4 lbs.; length, 16 inches.

LARGE HERRING.—These are very good fish, found only in the straits and large lakes. They spawn in the fall. But few are caught; average weight, 1½ lbs.; common length, 10 inches.

In addition to the above the muskelonge—a large and delicious variety—black and white bass, rock bass, perch, sturgeon, and at least twenty other kinds, abound in our waters, a minute description of which we are compelled to forego.

The number of men employed, and the consequent expense, varies according to the method employed. With seines, the occupation is very laborious, and requires a much stronger force than pound nets; one set of hands can manage a number of the latter. Some of the fisheries on Detroit and St. Clair rivers use seines altogether, to draw which horse power is brought into requisition in some cases. A double set of men are employed, working alternately day and night, and the exposure is a most disagreeable feature of the business, particularly in bad weather. The great bulk of the aggregate catch continues to be taken with seines or gill nets, but pound (or trap) nets are on the increase. They have been in use below Lake Huron more or less for the past four or five years, but it is only about two years since their introduction in the upper lakes.

With these nets 100 barrels of white fish have been taken at a single haul; of course their general use must produce a material diminution in the supply. As regards capital invested, there is in particular instances a wide difference. Geo. Clark, Esq., nine miles below Detroit, has \$12,000 invested in his grounds, owing mostly to the cost of removing obstructions; but this is an exception. The barrels for packing constitute no inconsiderable item of this vast and immense trade; their manufacture is a regular branch in Port Huron, but most of them are made by the fishermen when not engaged in their regular vocation—they are made at all the villages and fishing stations on Lake Huron, pine being generally easy of access; the barrels are worth 63 cents each; half-barrels, 50 cents. Over two-thirds of the packages used are halves, but our estimated totals of the catch represent wholes. Formerly the nets used also to be made almost entirely by the fishermen, who usually procured the twine from Detroit; latterly, many of them have been brought from Boston already made. Salt is another large item. For packing and re-packing, about one-fourth of a barrel is used to each barrel of fish. For the amount packed, therefore, in the fisheries we have described, about 20,000 barrels are used.

AGGREGATE VALUES.

Proceeds of Michigan fisheries. \$620,000	Aggregate bbls. salted, say....	80,000
Total proceeds 900,000	Cost of packages.....	\$70,000
Total capital invested 252,000	Cost of salt	22,000
Paid for wages 171,000		

White fish are taken both spring and fall, chiefly the latter; spring is the season for pickerel; trout are taken at all seasons.

The following is a list of the ports from whence fish were received during the year, and the amount from each. To the receipts reported at the Custom-house we have added those by the steamer Columbia, which, as she does not go beyond the district, is not required to report:—

Saginaw..... 6,564	Forest Bay 316	Green Bay... .. 100
Thunder bay 3,800	Harrisville 400	Lexington 172
Port Huron 1,343	Bark Shanty..... 200	Bruce Mines ... 63
Whitefish Point.. 500	Buffalo..... 209	Marquette..... 56
Ontonagon..... 407½	Point aux Barque.. 190	Chicago 141
Port Austin 400	Sangeen..... 215	Port Hope..... 50
Au Sauble..... 1,025	Collingwood 150	Other ports 61
Willow Creek ... 300	Chatham..... 118	
Total		16,771½

The reported shipments from Detroit for 1859 are as follows:—

Cleveland 10,303	Buffalo 1,751	Ogdensburg 764
Sandusky..... 4,295	Huron..... 1,119	Other ports 80
Toledo 3,806	Dunkirk..... 842	
Total.....		22,960

Considerable quantities are loaded for Cleveland at Thunder Bay, and at other points, which are not entered at our Custom-house. Formerly, many from Lake Huron and Mackinac, particularly the latter, were taken to Chicago, but that market now derives its supplies from grounds nearer home.

The trade of Lake Superior has received a rapid development in the last few years. In the spring of 1845 the fleet on Lake Superior consisted of eleven schooners. In 1845 the propeller Independence, the

first steamer that ever floated on Lake Superior, was taken across the portage, and the next year the Julia Palmer followed her, she being the first side-wheel steamer. In the spring of 1855, the Sault Canal was completed, since which date the trade with that important region has rapidly grown into commanding importance. It will be seen by the table below that the importations of machinery, provisions, supplies, and merchandise for the past year amount to \$5,298,640, while the exports of copper, iron, fur, and fish amount to \$3,071,069. The following are the names of the steam craft now regularly employed in this trade:—Steamers Illinois, Lady Elgin, and North Star; propellers Marquette, Mineral Rock, Montgomery, Northern Light, and Iron City. The Detroit shipping office has published the names of ninety-six sail vessels that have been engaged in the iron trade the past year.

Rapid as this trade has increased, it is destined, no doubt, to yet undergo a still greater transformation. The latent resources of the upper peninsula are of a character and magnitude that defy all estimates of their future greatness. S. P. Mead, Esq., Superintendent of the Canal, has furnished a monthly statement of its commerce for the past year, the figures of which for the year foot up as follows:—

DOWN FREIGHT.

	Quantity.	Value.		Quantity.	Value.
Copper, tons & lbs.	6,245 105	\$245,290	Hides.....No.	993	3,972
Iron ore.....	65,768 422	395,209	Pelts & furs....bcls.	212	31,800
Iron bars.....	4,951 954	150,197	Fish.....bcls.	3,985½	31,484
Iron blooms.....	263 500	13,167			
Total value.....					\$3,071,069

UP FREIGHT.

	Quantity.	Value.		Quantity.	Value.
Flour.....bcls.	39,259	\$245,140	Powder.....tons	280½	\$67,726
Wheat.....bush.	74	98	Coal.....	7,614	45,683
Coarse grain.....	71,738	45,898	Nails.....kegs	2,712	13,560
Ground feed.....tons	1,006	25,153	Merchandise.....tons	7,842	3,922,250
Beef.....bcls.	3,781½	45,326	Lime.....bcls.	4,169	6,254
Pork.....	4,890	88,020	Lumber.....M.	7,690	115,348
Bacon.....	262	5,255	Lath.....bcls.	2,473	742
Lard.....	499½	19,980	Window glass..boxes	968	1,936
Butter.....lbs.	313,724	59,244	Hay.....tons	603½	8,856
Cheese.....	52,592	5,259	Horses & mules..No.	90	11,150
Tallow.....	5,250	525	Cattle.....	1,761	78,910
Candles.....	92,883	14,022	Sheep.....	1,032	5,248
Soap.....pkgs.	2,079	11,747	Hogs.....	361	2,166
Apples.....bcls.	3,764	9,393	Brick.....M.	684½	30,000
Dried fruit.....lbs.	23,737	3,750	Furniture.....pieces	4,881	24,405
Sugar.....	448,855	44,885	Machinery.....tons	706½	108,975
Coffee.....bags	1,084	39,960	Engines & boilers.No.	15	20,000
Tea.....chests	532	21,280	Wagons & buggies...	103	10,300
Vegetables.....bush.	6,527	3,716	Liquor & beer...bcls.	6,261	125,220
Salt.....bcls.	2,219	4,438	Malt.....lbs.	222,402	4,450
Vinegar.....	284	1,420	Shingles.....M.	24	96
Tobacco.....lbs.	17,280	3,456			
Total value.....					\$5,298,640

The aggregate amount of tolls collected in May, July, August, and September was \$10,374 18, a large increase over the corresponding months last year. Including the probable amount for the months not reported, and we have at the lowest not less probably than \$16,000 as the tolls for 1859. Number of passengers—May, 2,493; June, 1,764;

July, 2,116; August, 2,617; September, 1,538; October, 1,015. The leading shipments from Detroit to Lake Superior were as follows:—

Flour.....bbls.	11,415	Apples.....bbls.	2,059	Candles.....boxes	2,372
Corn.....bush.	3,400	Cattle & horses.No.	667	Castings.....tons	557
Oats.....	11,962	Ale, beer, &c..bbls.	3,340	Machinery...pieces	841
Malt.....	8,602	Feed.....tons	260	Machinery...boxes	90
Pork.....bbls.	1,752	Hay.....	421	Brick.....bbls.	446
Beef.....	1,350	Sour krout...bbls.	750	Brick.....No.	2,400
Beef...quarters	97	Sheep.....head	606	Flat bar rail...tons	36
Dressed hogs..No.	81	Lime.....bbls.	2,121	Tram T rail.....	15
Butter.....lbs.	229,400	Soap.....boxes	792	Gen'l merchandise.	2,745

From the sketch here given of the natural wealth of Michigan, it is evident that the completion of its means of communication, opening up access to regions which have hitherto proved so attractive to capital, must give a new impulse to the employment of that capital which is so rapidly accumulating at the East. A large population will inevitably gather around the head of that magnificent peninsula, commanding not only these vast resources pointed out, but the point of communication between the Atlantic and the Pacific.

Art. III.—MONEY, THE CREDIT SYSTEM, AND PAYMENTS.*

GOLD and silver, although the universally preferred material for money and coinage, are yet so expensive a medium of exchange that all civilized people, without giving up this preference, have constantly endeavored to effect their exchanges, as far as practicable, in some more economical way. In this the success has been so great that now more than three-fourths of all the large transactions of both foreign and domestic trade are effected without aid or agency of the precious metals, which are, nevertheless, by the laws of legal tender and by universal assent, the final resort in all cases of difference.

But money is not the real object of trade or industry. It is neither food nor raiment; it is neither house nor lodging. The commodities exchanged in commercial life are those which minister to these wants, and money is only an agent in the exchange of such commodities, in the same sense as ships, warehouses, railroads, merchants' bills of exchange, books of account, and many other things. The main object is the exchange of the commodities of industry. In effecting this the use of money, or any other of the usual agencies, is wholly a question of expediency, economy, or convenience. Money is not to be regarded as holding the office of a necessary medium of exchange or measure of value, as being the main representative of value, or as being the main purchasing power; it is rather a preferred commodity, which all are willing to receive for what they sell or deliver. Coinage makes the facility of employing gold and silver, as a preferred commodity, very complete, as it furnishes these metals, weighed in convenient denominations, with the cer-

* The object of this article is to present some of the leading topics and positions of the following work: "The Ways and Means of Payment: A full Analysis of the Credit System, with its Various Modes of Adjustment." By Stephen Colwell. 8vo., pp. 644. Philadelphia: T. B. Lippincott & Co., 1859. 2d edition, 1860.

tificate of the mint as to quality and quantity. But governments have taken another important step in adding to the usefulness of the precious metals as money. They have made gold, or silver, or both, at a fixed price, a legal tender in all payments. By this law every debtor may acquit himself of his debt by payment in one or both of these metals at the rate named in the law, and every creditor has a right to exact payment in one of these metals at the rate fixed. The law of legal tender is one of the most firmly established enactments of modern times. The necessity of such a regulation is scarcely ever called in question. There is one feature of it, however, which is undoubtedly of questionable policy in large transactions. That gold or silver should by law be the proper medium of payment between those who cannot agree upon any other, is clearly right as well as expedient, but that they should always be taken at the same rate in large payments, when it is well known they fluctuate in price, is not merely anomalous—it is fruitful of injurious tendencies and actual injustice. If this be a difficulty hard to surmount, it requires, at least, more careful consideration than it has hitherto received.

In the consideration of money, as a means of payment, gold and silver only are treated as money. In popular estimation and language, other things are so considered and called, but, in strictness, they are only substitutes for money or devices to dispense with money. The law which enforces the acceptance of coins at a specific rate, constituting them a legal tender at that price, makes them the standard of payment; it does not make them money, for they would pass as such without force of law. Gold and silver, when employed as money, are used as the small change of trade, as reserves for banks, and to pay balances of trade, both foreign and domestic. As thus employed, the extent of their agency is easily seen and appreciated. The actual utility and efficiency of money is limited to its actual employment.

As more than nine-tenths of all the payments of trade are effected without the intervention of gold or silver, it becomes proper to ascertain the way in which this large proportion of payments is effected. It is very true that the commercial paper which represents this indebtedness is made payable in gold or silver, though in practice not so paid. The effect of the law of legal tender, which makes these commercial securities payable in gold or silver, is merely cautionary, and enables creditors to demand such payment if not satisfied with that which is offered. How, then, are the payments chiefly made in the commercial world?

The reply of this work to this inquiry is, that the large proportion of nine-tenths of the whole payments of trade is effected by the various devices of the Credit System. The credit system does not merely imply that time is given in which to pay debts; it implies that payments are not only deferred to a future day, but that they are finally effected without the aid of money, of gold, or silver. The devices by which this is accomplished are numerous and largely treated in this volume. The commodities of trade circulate in the regular channels according to the course of business, proceeding by the usual steps to their final destination and consumption; but the payments involved in this mighty mass of transactions are deferred and reserved for adjustment by a class of men devoted to this business. It is through the agency of banks, bankers, and dealers in exchange and commercial paper that these payments

are effected. The mode of proceeding by which this is done is exceedingly complicated and difficult of analysis, though the principle on which it rests is simple. Commerce is an exchange of commodities—the merchant purchases to sell, the manufacturer purchases raw material and sells his manufactured goods. This is chiefly done under the credit system; the individuals engaged give their promissory notes, or bills of exchange, for what they purchase, and take those of the purchasers for what they sell. Every such person is debtor for what he purchases and creditor for the amount he sells. So far as the payments of his business are concerned, it becomes the chief object of each one to apply the securities or paper he has taken to pay or discharge that which he has given. This is mainly effected upon the books of banks and dealers in commercial paper. These agents, or intermediates in the business of payment, give credit on their books for commercial securities, deducting interest until their maturity, the effect of which is to form a fund of credit upon which the previous holders of the paper can draw at once in sums to suit their purposes. The fund thus formed is that which is chiefly employed in payment of debts. It is known by the name of deposits, and paying by checks on these deposits is the chief process of adjustment. Debtors are thus enabled to apply the paper they take in payment of that which they give, and the same individuals being, to a large extent, both debtors and creditors upon commercial paper thus converted into a paying fund, they pay their debts by a check upon their credits, which is equivalent to a direct set off. The great and rapid circulation which these deposits attain makes them available for vast amounts of payments where mere set off would not be applicable. Being the chief fund in which debts are paid, and being the cheapest and most convenient means of payment, their value is sustained by constant and pressing demand for that purpose.

It is obvious that the fund thus employed is adequate to the whole payment to be effected; for every debt implies an equal credit, and if the credits were all discounted they would furnish a sum equal to the debts, less only the interest. As the proceeds of the discounted paper circulate freely on the books of the banks, they pay an amount of debts far exceeding their nominal aggregate.

The creditor is fully satisfied with this payment, for he receives what is due to him in the same in fund which he pays what he owes. If not satisfied with the payment offered, each creditor may exact payment in gold or silver—an exaction so rarely made as to show that the substitutes are effective and satisfactory. Commerce is, then, a virtual exchange of commodities: men deliver what they sell, that they may be able to pay for what they purchase, and the payments involved in this commerce, so far as it is carried on by the credit system, are an exchange of credits for debts, by which both credits and debts are extinguished. The process of creating and extinguishing debts and credits thus goes on in strict correspondence with the progress of industry and trade.

By the agency of banks in discounting commercial paper, which means giving a credit on their books for the amount of the paper, less the interest to maturity, an immense fund is created, susceptible of the most rapid circulation which can be given to anything that is called currency. The great mass of the commercial payments, perhaps nine-tenths of the whole, is made in this fund. It is, therefore, the fund which is specially

sought for that purpose. There is no other existing currency in which these payments could be effectually made. It is important to notice that it is the demand for this fund or currency which determines the rate of interest, so far as it fluctuates in the money market.

A facility for this mode of payment exists, heretofore the subject of too little notice, without which it could not be so effective, and perhaps could not be employed at all. This is what merchants call Money of Account, which, owing to mercantile usage and the mental habits of people acquainted with arithmetic, is always employed in bookkeeping in naming prices and in stating amounts. By the use of figures, whether in tables of statistics, or upon the face of commercial paper, or in any other way, the money of account is employed so to express sums of any amount that they are appreciated and understood at a glance. Every money of account had its origin in some unit of value fixed by law, convention, or usage. The continued use of such a unit, whether at first a coin, or weight, or any other thing by reference to which prices are currently expressed, soon fastens upon the minds of those using it such a distinct impression of the value intended that it can subsequently be used abstractly and without any actual reference to the material value at first included in the unit. This abstract use of the unit of value is so easy and so consonant to the mental processes of a people familiar with arithmetic, that an inveterate mental habit supervenes, and this unit of value becomes as familiar to the mind as the units of arithmetic, and quite as susceptible of addition, multiplication, and division by whole numbers and fractions. Experience proves that a unit of value is as easily borne in the mind as the powers of the numerals themselves, and close observation evinces that the universal habit is to express values and sums, or amounts, as we express numbers abstractly. Hence, an extreme facility of expression and comprehension in all commercial and financial statements. This abstract mode of expression is not readily perceived where the current coin corresponds in value with the denominations of the money account. There are in Europe many moneys of account to which no coins correspond. The mark banco of Hamburg, in which the deposits of the bank there are kept, has no corresponding coin. In England, previous to 1816, there was no coin of the value of a pound sterling. There were no coins corresponding to the moneys of account employed by our American colonies before their independence, neither did their pounds, shillings, and pence correspond with each other or with those of the parent country.

For the purpose of illustration, let us suppose two persons dealing largely with each other upon mutual credit. The prices of their respective commodities, expressed in a moment and understood as quickly, are debited to the respective purchasers in the seller's books of account. The articles thus sold and charged have been, according to their various kinds, subjected to the measurement of yards, feet, inches, acres, bushels, gallons, or barrels, or to weight by tons, pounds, or ounces, and the price and sum of all these ascertained quantities accurately written down or expressed in the money of account. When these persons balance their accounts every debt is paid except the balance, which may fall either way. Neither gold nor silver has lent any aid to these payments. Neither of these metals have been weighed, measured, counted, nor delivered in payment. The amounts balanced may have been kept in a

money of account which never had any corresponding coins, as, for instance, that of the colony of Pennsylvania previous to the adoption of the dollar unit. All the commodities which in this case changed hands have had actual measures applied to them; but the nominal money employed to express the prices and amount existed only in idea, and was only employed as a means of expression and comparison.

The subject of banking occupies much space in this work; it is treated exclusively in the aspect of the agency of banks, in effecting payments by devices and modes of adjustment which do not require the employment of the precious metals. The main efficiency of banks for this purpose consists, as we have before said, in their enabling men to convert their business or commercial paper into a transferable fund applicable to the payment of debts; in enabling them to employ their credits—the debts which others owe to them, in paying the debts which they owe to others. This is the office or function of that vast fund which stands on the books of the banks under the name of deposits. Credits and debts are counterparts—that is, there being two parties to each debt and credit, one is always a debtor and the other always a creditor. All the credits include all the debts, and all the debts include all the credits. A fund formed of all the credits will, of course, pay all the debts; but, although all the credits may never be discounted so as to become a fund of deposits, yet much the largest portion pass through the hands of banks, either public or private, and thus provide the means of their own payment.

Banks, in giving a credit on their books for promissory notes, do not thereby convert them into money, but into a fund transferable by written order of the holder to any amount at his pleasure. The banks take the promissory notes and furnish, upon that security, an open credit for the amount, and they surrender each note upon the return of an equal amount of the credit on their books. Their commission for the accommodation afforded is the discount. There is nothing hard to understand in the resort to this very efficient and economical mode of paying debts. The credits opened with their customers by the banks imply that there are debtors for the whole amount of credits, and to a large extent these debtors are the holders of the credits. All such are thus prepared to pay their debts by the surrender or transfer of their credits. It is thus strictly a private business operation, which can be done upon the books of individuals as validly as upon the books of banks. These bank credits do not become money, but they become a currency the most efficient ever yet devised. This currency is very different from that of bank notes; it does not require for its successful use any such banking system as that now existing in the United States, or elsewhere, having the power to issue bank notes as a currency.

Any man of sufficient credit, enjoying the confidence of those around him, could open an account with his neighbors, giving them credits on his books for their commercial paper, and these customers could draw upon this fund to pay all their notes held by him, or payable to him. A banker thus constituted could fulfill every function of the deposits of a bank, so far as they are derived from the discount of commercial securities.

Unhappily, our present business of discount and deposit, or commercial adjustment, is complicated with a system of banking in which bank notes are issued for circulation as a substitute for money. This privilege

not only demands the supervision of legislative authority, but it has proved one of the most difficult problems which has in modern times engaged the attention of that authority, to regulate, restrain, and reconcile the different functions of modern banks. These banks receive on deposit coin, bank notes, (their own and those of other banks.) checks on their own and other banks; they receive and give credit in deposit account for commercial paper having yet several months to run, and for all this mingled deposit, a very small part of which, perhaps not one per cent, is gold or silver, they become responsible to pay coin on demand. This responsibility is only supposed to be good when compliance is not required; but compliance is known to be impossible.

These various functions, if not inconsistent with each other, are not susceptible of harmonious operation; whilst no one can dispute that the issue of bank notes for circulation should be held under strict public regulation, and subject to constant restraint, and that the issuing banks should, under the present system, be bound to redeem their notes on demand with coin, it is questionable how far the credit given by banks on their books for unmatured paper discounted should, in like manner, be payable on demand in coin. If men of business find it to their advantage to adjust and pay their debts in that way, the public has no more interest in preventing them than it has in prohibiting the use of bills of exchange and promissory notes. If we suppose a thousand men of business to have severally issued their notes in various sums, amounting on the average to \$10,000 each, and payable at two, three, or four months, these thousand individuals may be supposed, without any great departure from what is frequently the case, to be among them the holders of the whole \$10,000,000 which they owe. This large sum may be all maturing in the progress of 120 days. If the whole thousand were met together it would be impossible to effect the payment of this vast debt, although the assembly would consist of all the debtors and all the creditors, and although they would have in their hands the proper evidences of all this debt and credit, without some special device for this purpose. It could be done in the mode pursued in the Fairs at Lyons, as set forth in the chapter on these Fairs, and it might be done in other modes; but in no way could it be done more promptly and safely than by the process now pursued by our banks. This vast amount, secured by commercial paper, being discounted by banks, and the proceeds placed to the credit of the parties obtaining the discount on the books of the banks, becomes divisible and transferable to any extent, and fully competent to payment of all the securities held by the banks, and upon which they granted the credits. The banks give nothing for these securities but credits upon their books, and they can afford to give them up upon the surrender of the credits. The commission charged by the banks for this facility is merely the interest. No coin is required for this operation upon any consideration, public or private, beyond what the parties to it may for convenience choose to employ.

The individuals in the case supposed have merely converted the securities they held upon others into a fund to pay the securities which others held upon them. The operation resolves itself into bookkeeping; the parties to it have been charged and credited according to the evidences of debt and credit; the accounts arising thereon between them have been accurately stated and adjusted, and the debts have been discharged in the

same medium of which they were at first constituted. That is, the men who were creditors upon commercial paper were paid by the proceeds of commercial paper; or the men who were creditors upon the books of the banks were paid with the same sort of credits, and the credits they were willing to receive in payment were for the same reason readily received by others from them in payment.

In principle this process of adjustment by the agency of bank deposits is the same as that which occurs between individuals who transact business together, and for the respective debts incurred debit each other in their books of account; when these accounts are compared and balanced, the debts on both sides are paid—debts are set off against debts and extinguished. By the process of the discount and deposit system carried on by our banks, the customers of the banks apply the debts which are owing to them to pay what they owe others; the whole process is one of exchanging debts for debts, and thus discharging them as effectually and finally as if paid in gold. This operation being a business of a purely private nature, and deserving of all encouragement as being the most economical method of exchange ever devised, should be regarded with the utmost favor both by people and governments. In this country at least two-thirds in amount of the current payments are thus effected.

There is no more necessity of public restraints or supervision in this business than there is in the transactions out of which these debts and credits arise. So long as a man's own debts are to be regarded as a good currency to pay him with, and he is willing to receive such payment, the public can have no interest in the matter but to encourage it as the greatest possible facility to trade, and one of the strongest supports of industry.

The efficacy of the circulation of deposits as a mode of payment is strongly evinced by the operations of the banks in New York and other large cities. In New York, for a year past, the deposits have averaged over eighty millions of dollars, whilst the specie has averaged only twenty-five millions. The activity of these deposits, as a medium of payment, is shown by the movements of the Clearing-house. The daily average clearing has been over twenty millions, whilst the daily balances scarcely exceeded a million of dollars. The circulation of the deposits shown at the Clearing-house is only that which is produced by checks paid into different banks from those on which they are drawn, and the bank notes drawn upon such checks for the purpose of payment into other banks. Besides this circulation as between the banks arising from the payment of debts in one bank by checks upon or notes of another bank, there is a large circulation of deposits in each bank confined to its own books and customers. Whether this circulation is more or less than that exhibited at the Clearing-house, we have no means of knowing. If only one-third as much, it would carry the daily payments by circulation of the deposits to thirty millions in the single city of New York. This vast amount, however, is far from exhibiting the whole daily movement of the deposits in that city; the diversity of transactions, and the uses made of deposits and checks, must attain an immense aggregate in modes not reached by any form of statistics. The actual movement of specie in New York seldom reaches two millions per day, leaving out the payments of government and the occasional movements for export, so that the pay-

ments of New York are mainly, if not nearly altogether, effected by a movement of the deposits.

The efficacy of this form of currency in large payments is shown by the fact that the balances of the Clearing-house which are discharged in specie, are paid by a check on a deposit of the precious metals maintained by the banks for that purpose. The coin and bullion deposited for this purpose are so much less convenient and suitable as a medium of payment, that they too are deposited and transferred by check, employed in the same manner as the great commercial fund created by the proceeds of discounted paper. This transfer of the ownership of gold or silver can only be done upon the confidence that the deposit is intact; it is therefore founded upon confidence among the banks or individuals concerned, and is thus indebted to the principle of credit for its efficacy.

It was the advantage gained in this way which made the great deposit Bank of Amsterdam, and others founded on that plan, so efficient. The debt due by the bank to the depositor became in fact the thing transferred. And so it proved when the deposits of the Bank of Amsterdam continued to be transferred a long time after the precious metals had been abstracted. The actual constitution and mode of operation of these banks is minutely set forth in the work before us, and their practical uses more fully shown than in any previous work in the English language. Their history and practice afford many lessons for the present day on the subject of money and banking. They were established to avoid the intolerable nuisance of a multiform and much deteriorated coinage, and were unexpectedly found to afford a facility for payments far beyond any previous experience, even with the best of coins. It was discovered that a hundred thousand ducats could be paid over in as little time as one hundred, and without loss of time in counting, or risk of counterfeits or expense of assaying. The great economy and rapidity of this mode of payment led the way to many of our modern financial facilities.

For the purpose of further explaining the object of the work before us, we add the following extracts from the introduction, which indicate other topics largely treated in it. Speaking of the large use made of the Public Fairs, some three or four centuries ago, to facilitate the process of payments among merchants and others, he says:—

“The Credit System was, in fact, a growth of necessity. It was indispensable to the advance of civilization and industry; it grew with the progress of commercial punctuality and integrity; it now flourishes only in this soil, and cannot be destroyed where it finds this aliment of its growth. It sent forth many vigorous shoots, in various countries, long before it attained its present magnitude and wide extension. The payments at the fairs so prevalent in Europe during the middle ages, some of which continue even down to our time, were, to a large extent, made by setting off debts against debts. Men learned to pay their debts with their credits; and this mode of payment only disappeared as the progress of the credit system, and the growth of cities, absorbed both the business and the payments of the fairs. These payments at the fairs revealed that the best fund with which to pay debts is debts. Every debt implying a credit, no one could better employ his credits than in paying his debts. This required no money, and was, therefore, not only economical, but free from innumerable risks and troubles inseparably connected with payments in money.” (p. 6.)

THE BANKS OF VENICE AND GENOA.

"The Banks of Venice and Genoa were both remarkable forerunners of the credit system, and beautiful examples of its economy and power. The political and commercial importance of these two great republics were, in a great measure, owing to their respective banks, the oldest and most important of which we have any account. The lessons taught by these institutions have no doubt entered largely into the progress of the credit system, as now developed; but we strongly insist that the study of the system of these two banks is yet necessary to any thorough comprehension of the power of credit, and of what is necessary to an enlarged and efficient financial system.

"The capital of the Bank of Venice consisted of a debt due by the republic to its citizens. The government took the money, and gave in its place an inscription on the books of the bank for the amount, bearing interest. The government returned the money immediately into the channels of circulation among its citizens, whilst the lenders of the money circulated the debt as a deposit in the bank. All the large payments of this great commercial city were, for many centuries, paid in this fund, and the gold and silver coins were released for the purposes of the retail trade, the payment of foreign debts, and the foreign expenditures of the republic. The government of Venice dealt faithfully with these holders of stock in the bank, not only paying the interest punctually, but redeeming any amount which seemed superfluous, or beyond the demand of the public. This policy not only kept the bank fund at par with specie, but more than twenty per cent above it. The bank was always open to further loans to the government, when such investment was in demand. The capital of the bank fluctuated in amount according to the wants of the people, and not according to the wants of the public treasury.

"The Bank of Venice performed its functions for over five hundred years, with a uniformity of success, and immunity from censure or complaint, which no other currency has enjoyed for a tithe of that period. During that time of vast commerce and immense public expenditure, the republic had incessant trouble with their own and foreign coinage, and very many stringent regulations were made and enforced, to cure evils and prevent abuses; but we have no record of abuses on the part of the bank, or of injuries inflicted by it upon the people.

"Believing that the commercial fairs of Europe, and the Banks of Venice and Genoa, were capable of imparting historical lessons not yet properly appreciated, we have brought them more prominently before the reader than has been done in any work upon money or currency. We have, in later times, achieved a method of clearing debts between banks; but a lesson may be learned from the payments at the fairs, of successful clearing between individuals. There is no reason, in theory or in practice, why clearing may not, to a considerable extent, be practiced between individuals mutually indebted. The history of these fairs furnishes abundant exemplification of this most economical and effective of all the modes of payment." (p. 7.)

CLEARING OR PAYING DEBTS BY SET OFF.

"The practice of paying or extinguishing debts by the process of clearing, now becoming so common among the banks, is not new. Three cen-

turies ago, a very large proportion of the payments of central Europe were made in that way. Then it was effected, on a large scale, between individuals; now it is wholly confined to the banks. Then it was the chief mode of accomplishing the vast payments arising from the trade of the multitudinous fairs of that period; and it so continued, until other modes of commerce supplanted that of the fairs. The clearing at the fairs was simply a process of setting off debts against debts—the same, in effect, as balancing book accounts. A said to B, you owe me a thousand florins; pay that amount for me to C, to whom I am in debt. This being done, A is acquitted, and thus the process goes on. It is obvious that the final balances, among hundreds assembled for that purpose, may be reached by setting off mutual debts, and drawing verbally on each other at sight, where the process involves more than two persons, and thus continuing to pay until the result is reached of those who have more coming to them than they had to pay, and of those who had more to pay than they had due to them. The conclusion of the whole was, that the balances to pay were the exact amount of those to receive.

“The mode of payment which had most prominence in large transactions, after clearing began to lose its importance with the decay of the fairs, was that of circulation. This was practiced not only at the great Banks of Venice and Genoa, but also at the deposit banks which succeeded them. The same money in a bank, or the same credits upon the books of a bank, was by this method kept circulating or passing from person to person, accomplishing a continued circle of payments. Its effectiveness did not come to an end, for it moved in a circle embracing nearly the same parties, gradually passing from the men of one generation to those of another. This circulation is still in full vigor in the Bank of Hamburg, and other survivors of the deposit banks of the seventeenth century; but it has no counterpart in our more modern institutions. The deposits in our banks are the proceeds of discounted commercial paper. The credits issued by the banks, of which these deposits are composed, are absorbed and wholly extinguished whenever they are paid to the banks. Their place is supplied continually by new discounts and new credits.

“This mode of payment by circulation of the same money, or the same fund, as, for instance, national debt, differs from clearing. In the former, it passes from hand to hand, performing all the payments its successive owners can effect with it. If these owners were seated at one table, they could circulate a sum in coins from hand to hand to the same effect, and see the money before them at the same time. But if seated at the same table, they could extinguish a large portion of their debts by simply exhibiting their claims, and balancing or clearing them, so far as mutual, and by verbal transfers, as in the fairs, until the final balances were reached, seldom over five per cent on the amount paid.

“Clearing is, beyond all question, the simplest, the most economical, and, when applicable, the most efficient of all modes of paying debts. It is precisely analogous to balancing accounts. Parties who are in business relations arrange to ascertain daily, or at convenient times, the state of their mutual claims; and having verified, extinguish them by set off. The banks of New York extinguished among themselves in that way, in 1857, upwards of \$7,000,000,000, or upwards of \$20,000,000 each day, upon which the daily balances did not exceed five per cent. This enor-

mous sum is cleared in New York alone, without the use of any currency or medium of payment whatever. It is done by evidences of debt bearing the items of mutual claim, by a statement of the amounts, and by the processes of a balance." (pp. 14-16.)

INTEREST OF MONEY: DISCOUNT ON COMMERCIAL PAPER.

"The subject of interest has engaged our attention upon only two or three points. Interest is almost exclusively considered in the light of a charge for the use of money. No adequate explanation of the term interest, as now very generally employed, can be given from that point of view. Strictly speaking, very little money is lent upon interest; there is probably, in the United States, ten times as much interest paid as there is money lent upon interest. We do not regard the proceeds of discounted notes, whether they take the shape of bank notes or bank deposits, as money. They are merely the credits or securities of the bank substituted for those of individuals. Yet these bank notes, but more especially the deposits, are really the chief medium of payment. The fund upon which interest is chiefly paid, is that which stands in the banks under the name of deposits. The two great items of interest paid in this country are the deduction made from notes and bills of exchange sold or discounted, and loans of amounts deposited in the banks, the proceeds of discounted paper.

"Gold and silver are seldom lent upon interest; they are never sought for as a medium of payment, because a check upon a bank is preferred. Gold will command no higher rate of interest than a credit in bank. When interest has advanced even one or two hundred per cent, there is no corresponding advance in the precious metals. The current rate of interest depends upon the facility of obtaining the needful supply of that fund which is usually employed in paying debts. It is not the plenty or scarcity of this fund which determines the rate of interest, so much as the disposition of the holders. The fluctuations in its amount do not correspond with the fluctuations of interest. It often happens that the deposits in the banks are largest when the rate of interest is highest.

"There are many speculations about the level of the precious metals, about money flowing to one country and from another; this flux and reflux, when applied to problems of interest, furnish no light. Within the range of trade, foreign or domestic, the precious metals receive little impulse in any direction from the rate of interest; nor do they exert upon it any appreciable influence, except so far as the loss of specie by the banks may lead to a contraction of the currency." (p. 17.)

PRICES; THE EFFECT OF MONEY UPON PRICES.

"We have discussed the topic of prices more elaborately, perhaps, than was necessary for our purpose, which was chiefly to show that the relation between the quantity of money, or currency, and prices was not, by any means, so close as many have supposed. The notion long prevalent, that prices were exactly adjusted to the quantity of currency, is shown to have been long since exploded. Among the innumerable influences which go to determine the general range and fluctuation of prices, the quantity of money or currency is found to be one of the least effective.

"This subject is specially important as bearing upon the results of fluctuations in the issues of banks. Besides the fact, that quantity of currency has less effect upon prices than is generally supposed, it is to be

taken into account that, for all the currency issued by the banks, there is a special and constant demand from the debtors of the banks, which prevents it from having as much influence as it might otherwise have. The debtors of the banks having in their possession the whole range of commodities to which prices apply, are offering them for this currency, to secure it for their constantly recurring payments. Their constantly maturing obligations do not permit them to hold out for extra prices." (p. 17.)

PUBLIC PAYMENTS—NATIONAL TREASURIES.

"That which has so constantly occupied the minds of men of business cannot be beneath notice of governments, under the same circumstances. If the annual receipts into the treasury of France are \$300,000,000; if the annual receipts into that of Great Britain are \$260,000,000; and if in the United States, the treasury annually receives \$75,000,000, the mere method of receiving and disbursing these vast revenues must become an important consideration—very important, if we take the conduct of the most intelligent men of business, for ages past, as a criterion. This importance refers to the people from whom the revenues are collected, as well as to those to whom they are paid, and to the government itself, in regard to the facility and economy of its financial operations.

"A financial system should be specially adapted to the habits and customs of the people for whom it is designed. No government can long depart from the usages of its people, or disregard their modes of business, without paying some penalty, soon or late, for the mistake. We regard the present mode of administering the treasury of the United States as involving this error. The habit of the people to employ paper currency and credit wherever they are applicable, is almost universal. This use would be still more general and uniform, but for restrictive laws, which the abuses of banking have provoked. In the face of this custom of the country, the public treasury has rejected the use of paper currency altogether, and reserves for itself an exclusive currency of gold and silver. This policy has had, during nearly its whole existence, the extraordinary support of the California gold mines, and has not, therefore, developed fully the harsh and evil tendencies with which it is fraught. The day is approaching when this system, if continued in its present shape, will create a financial disturbance great enough to shake the industry of the country to its center, and endanger any administration which may attempt to uphold it.

"We have compared our exclusive system, as administered under the act of 1846, with the financial systems of France and Great Britain, and find nothing in either to justify or encourage us in continuing a scheme of finance so fraught with peril to the interests of labor and trade. We refer to the manner in which that act has been carried out, not to its provisions as they stand in the statute book. Our system assumes at once the attitude of being independent of the people and the commercial institutions of the country. It has been very aptly called the Independent Treasury, for it admits no sympathy and no relations with the business or the interests of the people. In Great Britain, the Exchequer leans upon the Bank of England, the greatest commercial institution of the country; and in this way a sympathy between the movements of the Exchequer, or public treasury, is established, which runs through and tempers, if it does not control, its whole operations. Besides this, the Ex-

chequer is a constant borrower from the people, to the extent of nearly the whole annual revenue upon Exchequer bills. It borrows, in anticipation of the public revenue, from those who lend voluntarily upon short loans, and is thus enabled to disburse the revenue previous to its receipt. This is a great accommodation to a large class of lenders, who are pleased to have an opportunity of realizing interest upon short loans, and upon such undoubted security; this class are thus kept in constant relations with the government, and are prompt to supply the treasury with any required assistance in financial emergencies. The creditors of the public derive even more advantage from this mode of disbursement in anticipation; for the Exchequer being always ready to pay, the whole payments of the annual expenditure are made not only with more regularity, but probably weeks, if not months, in advance of what would otherwise be the time.

"The present financial system of France, the result of a reform which has been in progress under the auspices of men of great ability and experience for more than thirty years, is perhaps, in many aspects, the most perfect of any now extant. It has rescued the finances of France not only from the greatest confusion and embarrassment, but has placed them in a more enviable position than those of any country in Europe. To the astonishment of the capitalists of Europe, the government of France was able to borrow, in 1855, for the expenditure of the war in the Crimea, upwards of \$250,000,000, without resorting to the city of Paris, or capitalists out of France. Not only so, but the sum actually offered in the departments out of Paris was \$332,000,000. This offer to the government was from 360,000 persons in the interior of France, very few of whom would have been lenders to the public but for the very excellent financial system which now prevails in that empire.

"In Great Britain and France, large use is made of treasury notes, called, in the one, Exchequer bills, and in the other, *Bons du Tresor*. In both countries, the ministers of finance are permanently authorized to issue them upon certain principles, and under specific regulations. In England, the Exchequer bills are issued and managed with a skill and success which nothing of the kind can surpass. In neither country has there been an over-issue of these treasury securities, for more than a generation past. In Prussia, a treasury currency in denominations as low as five dollars has been issued, for that length of time, and no abuse has occurred.* It is very true, that the over-issues of the assignats during the French Revolution, of the continental paper currency during the American Revolution, and the later over-issues in Russia and Austria, are well calculated to create distrust in the minds of all whose attention is turned to the use of a paper currency for public purposes. But as this whole matter resolves itself into questions of knowledge, official integrity, and financial skill, it should not be summarily dismissed, unless it is conceded that these requisites are beyond the reach of our government. When we remember the fact, that a bank can, with its own notes, or credits on its books, purchase commercial paper to the amount of millions of dollars, and that it can take its own notes and issues in payment of the commer-

* The Prussian government is so careful of the credit and stability of this omission of currency from the public treasury, that it redeems promptly every counterfeit brought to the public offices. By this wise policy, it obtains the earliest information of the existence of counterfeits, and is thus able promptly to follow the offender. Of course, this secures the utmost confidence in the currency.

cial paper as it matures, thus providing a special currency for this purpose, and saving the use of millions of money—when we know that many nations could pay the entire national expenditure in treasury notes, and that they could, of course, afford to take such notes in payment of all dues at their public treasuries, we should hesitate to give up the problem of a government currency as impossible to solve.

“The truth is, not only can it be solved, but it is of much easier solution than many others which constantly engage the attention of men in authority. The order, subordination, and numerous checks which now characterize our treasury department, are a far greater triumph of financial skill and good administration than would be the successful employment of treasury notes as a currency. Of course, such an issue by the treasury could only be upon a well-devised plan, and well-settled principles, to be as faithfully observed as are the present processes of the many functionaries of the Treasury Department.

“The leading principle of every such emission of paper, as well as that of the banks, is to issue only so much as will return in the regular course of the business in which the issue is made. It is not, and should not be, the issue of so much as will not probably be returned for payment, but the issue of so much as will inevitably return in payment to the issuer. Whatever amount the return payments to the issuer will absorb, is a safe emission; beyond that, all is unsafe. The treasury of the United States could, in any year, issue one-fourth the amount of the estimated income in treasury notes; the next year, one-half; the following year, three-fourths; and by the experience gained in three years, the officers entrusted with this duty could manage such emission without danger of over-issue. If the public would not readily receive them, they should not be issued at all; if they should fall below par, immediate measures should be taken, at any cost, as to recall them in such quantities as would restore them to perfect equality with gold.” (p. 22.)

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

NUMBER LXXVI.

FORT WAYNE, INDIANA.

SITUATION OF FORT WAYNE—EARLY EXPLORERS—SUMMIT LEVEL—WATER SHED—EXTENT OF NAVIGATION—CONFLUENCE OF RIVERS—FIRST SALE—GOVERNMENT SURVEY—CANALS—TRADERS—RAILROADS—POPULATION—VALUATION—FUR TRADE—ORIGIN AND EXTENT—AMERICAN FUR COMPANY—WHEAT AND FLOUR—WHEAT SHIPMENTS—MILLS—STORES—DRY GOODS—HARDWARE—DRUGS—CLOTHING MANUFACTURE—EMPLOYMENT OF WOMEN—VALUE MADE—BARRELS—BUILDING MATERIALS—BOOTS AND SHOES—WOOLEN MILL—WOOL ON SHARES—LOCAL GOODS USED FOR CLOTHING—EFFECT ON EASTERN TRAFFIC—FUTURE OF FORT WAYNE.

FORT WAYNE is one of those geographical points that, while yet buried in the wilderness, give indication of future importance to the coming Empire. The early Canadian explorers, leaving Quebec, ascended the St. Lawrence in their tiny barks, on their way to the Mississippi valley, crossed Lake Erie, entered the mouth of the Maumee, and on reaching the confluence of the St. Mary and St. Joseph, whose united streams form the Maumee, landed and transported their canoe 32 miles to the

Wabash, and then launching it, pursued their way through the Ohio to the Mississippi. That narrow strip which divided the rivers that flowed northeast into the lake from those that run southwest into the distant ocean, was the key of an inland navigation of more than 3,000 miles, connecting the Gulf of St. Lawrence with the Gulf of Mexico. Such a point was marked out by nature as of immense importance. The Indians recognized its value as a commanding point, and its local advantages of rich soil and abundant timber at the junction of the St. Marys and St. Josephs attracted the whites, the French early occupying it, and about the date of the national independence Fort Wayne was built, continuing long an important Indian outpost. In 1819 it became occupied by traders, and in 1825 the site of the present city was sold to a Baltimore gentleman for \$2,838. Soon after the improvement system of the State of Indiana began, and under the administration of John Q. Adams, a grant of lands was made, and a survey for a canal was commenced at Fort Wayne, extending from the mouth of the Tippecanoe, on the Wabash, along the Maumee to Lake Erie. The State of Indiana surrendered the lands in Ohio to the State of Ohio, on her agreeing to build that portion of the canal. In 1831 the division across the summit was completed, uniting the Lakes with the Ohio. In 1840 the canal was completed from steam navigation on the Wabash to the east line of the State, and in 1843 Ohio had completed the connection to Lake Erie.

From the completion of the canal through Ohio may be dated, says the Fort Wayne *Republican*, the beginning of the prosperity of Fort Wayne. Previously it had no outlet to the Eastern markets, the products of the surrounding country were valueless except for local consumption. The Maumee was only navigable for canoes or small row boats. The goods sold there were either brought up from the Lake on that class of boats on the Maumee, or by wagon carriage. On the opening of the canal new life was given to trade. Wheat, flour, and other products could then be shipped to an Eastern market at a rate of transportation which did not consume their whole market value, and goods could be brought there at corresponding low rates. These advantages attracted general attention, and from that time to this the country and town has been increasing in population and wealth, greatly facilitated, however, by other improvements of a later date. The railroads have had much to do with quickening and energizing the movements which have made Fort Wayne what it is.

The Pittsburg, Fort Wayne, and Chicago Railroad had its beginning in 1848, in the commencement to build the Ohio and Pennsylvania Railroad, from Pittsburg west. It was opened to Fort Wayne in November, 1854, on the completion of the Ohio and Indiana Railroad, and finally opened through to Chicago in November, 1858, on the completion of the Fort Wayne and Chicago Railroad. These three original lines are now consolidated into one road, under the titled first above named. The length is 465 miles; cost, \$14,270,704. Of this, 144 miles is in Indiana.

The Toledo, Wabash, and Western Railroad was organized in 1852, and the whole road completed, from Toledo to the Illinois State line, during the succeeding four years. In 1856 its connections were perfected with St. Louis. Its length is 243 miles; cost, \$10,542,600. The length in Indiana is 172 miles. These roads intersect and cross each other at Fort Wayne, and with the numerous connecting lines furnish the people

forms an important item in our business, and during the past year about eighty thousand dollars' worth of furs have been collected in this locality.

Fort Wayne has heretofore been the largest shipping point on the Wabash Canal for wheat and flour. In 1858 the shipments of wheat by canal were near 500,000 bushels. During the present year there has been a great falling off in the shipments of that article. This has been the result of two causes. First, a deficient harvest in 1858; and second, an almost total failure of the wheat crop in about twenty counties in Ohio, occasioned by severe frosts about June last. These counties have obtained a large portion of their supply for the past fall, from along the Pittsburg, Fort Wayne, and Chicago Railroad, which supplies would otherwise have been shipped by the canal. The shipments of wheat by canal and railroad, for 1850, have been 160,000 bushels.

There are in Fort Wayne, in active operation, six flour mills—four run by water and two by steam power. During the year 1859 these mills have shipped, chiefly to Eastern markets, 45,000 barrels of flour. In addition to shipments, they have manufactured for home trade 15,000 barrels. It must be remembered, however, that in a city surrounded by wheat growers, a large portion of the business of the mills consists in custom work. Some of the mills in the city will manufacture for customers, including all kinds of grain, as much as eighty bushels per day. Hence it will be seen that the quantity shipped is but one part of their business.

In all early settlements the first trader, as a matter of necessity, is a general dealer. Groceries, dry goods, hardware, and drugs all find a place on his shelves. As stores multiply, convenience requires a separation, and in process of time the above articles, and others, all find their appropriate places in separate stores. It is but a few years since that all the stores in Fort Wayne were amongst the former class; but for some time past they have been in a transition state, and now we have merchants dealing separately in drugs, hardware, groceries, liquors, and stoves and tinware. Yet the majority of our grocery houses deal largely in dry goods, crockery, wooden-ware, and carpets. On this account it is not possible to present such a complete statement of the year's transactions in each staple article as we could desire. Yet, through the kind assistance of our merchants, we are able to present such a statement of the totals in dollars and cents as will enable our readers to form a correct estimate of the business actually transacted in Fort Wayne during the past year.

There is also another change worthy of observation. Formerly there were, within the circle of country trading with Fort Wayne, a large number of small dealers just starting business in the many new settlements then springing up. These men had not sufficient capital to make New York, or Cincinnati, their market, but purchased small bills of goods at Fort Wayne, which, in the aggregate, swelled the business of the city. The condition of this class is changed. Those settlements have become important towns, those new beginners well-established business men, who, by the means of railroad communications, are able to buy on terms as advantageous as our best merchants.

Then, as a community increases, it is impossible to confine the sale of groceries to large houses, hence we have a large number of small houses, from twenty to forty at least, selling a few thousands' worth each per year, many of whom purchase in other markets. This is especially true

of Fort Wayne, where there is so large an element of thriving German population, who have saved sufficient to build and stock their own store, and some of whom, in time, will become important business houses. As stated above, we are unable to separate dry goods from groceries, but the amount of both combined, wholesaled and retailed during the year 1859, as furnished us by our merchants, amounts to the sum of \$869,000.

It is but a few years since hardware and stoves became separate branches of business; before that time these articles were sold by the grocery and dry goods houses. The neighborhood of Fort Wayne being agricultural, a very large amount of iron and steel are used for agricultural implements. There is a limited amount of jobbing done by one or two of the houses, but the bulk is retail trade. The amount of sales for 1859, in all trades combined, sums up to \$150,000.

The trade in drugs is swelled by the sale of such articles as glass, paints, and oils. Some of the firms, besides retailing, transact a considerable wholesale business. The wholesale and retail drug business amounts to the sum of \$112,000.

For a number of years past the manufacture of clothing has been steadily on the increase. The present year, however, has been an exception. Very few of our oldest houses have either sold or manufactured as many goods during 1859 as formerly. Probably few trades have been more influenced by hard times than this. Yet, within the year, or a little over that period, several new, and some of them extensive, houses have commenced business. During the past year all parties have been rather curtailing than extending their business; stocks of clothing, both Eastern bought goods and home manufactured, are exceedingly light, the consequence of which is, that the present returns are far from being a fair average; probably it is safe to say that so few goods have not been either made or sold in any one year during the past five, as during the present year.

There is a growing disposition amongst merchants to manufacture as many as possible of their own goods. Some of our largest houses already manufacture nearly the whole of their stock, and several others are contemplating and preparing for the same thing during the coming spring. Every such movement increases population, circulates money, and builds up the city. There is no doubt but clothing can be made cheaper here than in Eastern cities. There, living is expensive; here, it is cheap. There, female labor is more sought after, as it can be employed in many branches of trade. Here, many females are unable to find any kind of employment, and consequently would be much benefited by such an opening for their labor. There can be little doubt but the sewing machine is destined to work a revolution in the mode of manufacturing clothing. Time was when nearly the whole labor was performed by men. With the aid of a machine, women are now fast taking their places, and we understand that in most of the large Eastern manufactories but few men are to be found. There may be certain kinds of work which women will be unable to execute, but as a general rule, they will hereafter become our clothing manufacturers. Many of our merchants have become satisfied that, with proper arrangements, they can manufacture at a cheaper rate and more satisfactorily than they can purchase in the Eastern market.

During the year, as furnished by the various houses, there has been about \$180,000 or \$200,000 worth of clothing sold in the city, a little more than one-half of which has been manufactured there. There are

about 100 or 120 hands employed in this branch of business, many of whom, however, are females, and not employed steadily all the year round.

Barrel making, for flour, pork, and butter, is extensively carried on in and about the city. Between forty and fifty thousand flour barrels are annually manufactured and shipped. These are made principally by hand in the city and at factories within a circle of a few miles.

Lumbering is a heavy branch of business in and around Fort Wayne. From the peculiarities of the trade, however, it is almost impossible to give the facts relating to it. Within a short distance of the city there are ten or twelve lumber mills in constant and active operation. Most of the lumber made by these mills, in some shape or other, comes to this city, either for home use or for shipments. A large quantity is shipped by railroad. There is manufactured in and around the city between four and five million feet of lumber; the qualities are black walnut, maple, oak, and poplar. Poplar generally takes the place of pine for building purposes throughout this region of country, on account of its abundance; it can be furnished so much cheaper than pine can be brought from Michigan, that it will always find ready sale about the city; and there is no doubt but the shipment to the middle portions of the State of Illinois, which has already been considerable, will be in future much increased.

The buildings, generally, are constructed of brick, for the manufacture of which there is every facility in the environs of the city. A good quality of clay is found in unlimited quantity, fuel is extremely cheap, so that a good article of brick can be furnished at a low rate. Brickmaking, during the season, is extensively carried on, and affords employment for a large number of hands.

Within a few miles from the city, at Huntington, La Gro, and Wabash, on the Wabash and Erie Canal, there is a large supply of common stone, suitable for foundations and rough stone work.

There is also at the same places a large amount of good limestone, from which Fort Wayne and the surrounding country is well supplied with lime. Hence it will be seen that few places are more favorably situated for obtaining a good supply of building material than this place.

During the year there have been manufactured 15,000 barrels of lime, and there have been sold 6,000 perches of rough foundation stone.

Probably there are few places where a larger proportion of boots and shoes are of domestic manufacture than Fort Wayne. Nearly all kinds of leather are manufactured there. Hides and skins can be obtained to any extent in the market. Tan bark abounds, and leather can be made as good there as at any other point. The average number of men employed in boot and shoe making in the city, is about one hundred and fifty, and the cash value of goods manufactured the present year, according to figures obtained from the manufacturers, amount to \$140,000. Eastern made goods, consisting chiefly of ladies', children, and fine goods, \$75,000.

A large and substantial three-story brick building, with basement, situated on the north bank of the canal, is occupied by the Summit City Woolen Mills. The manufactory was originally built for an oil and carding mill about the year 1844, but shortly after its erection was converted into a woolen mill, since which time it has been uninterruptedly used for spinning yarns and manufacturing woolens. It is run by water power, has two sets of machinery, and, in addition, two heavy mammoth card-

ing machines, capable of carding 400 pounds of wool each per day, which are used for custom work.

The mill usually employs from twenty to twenty-five hands, some of whom are females. During the year 1859, about 50,000 pounds of wool were worked up for various purposes. The goods manufactured are cloths, tweeds, casimeres, satinets, jeans, flannels, blankets, coverlets, linseys, and yarns. The raw material, of course, is collected from the surrounding farmers, and the market for their manufactured goods is right at home.

The mill takes the place of the household spinning-jenny and the old fashioned hand-carding machine; but yet the farmer, his wife, sons, and daughters have the satisfaction of wearing their own fleece without the toil and trial of patience formerly required. Then again, by having their wool manufactured on shares, a plan adopted by many wool-growers, they obtain from 7 to 12 cents per pound more than Eastern merchants would pay in cash. Some of the clothing merchants are making up some kinds of clothing almost exclusively from cloth manufactured at this mill, and they speak in the highest terms of the satisfaction generally expressed by their customers with such goods.

In addition to the manufactories and industries here enumerated, there is a great variety of the production usual to a growing city, administering to the increasing wants of a thriving people. A city so situated, in the midst of a most fertile district, with every element of growth at hand, and with the best means of communication with distant points, cannot but have a bright future before it. The mode of progression, in respect of stores and manufactories, is common in some respects to all Western cities, and it is very useful to observe the effects of that progress upon the business of the great Eastern cities.

JOURNAL OF MERCANTILE LAW.

LIBEL ON A BILL OF LADING.

In the Supreme Court of the United States. Rufus Allen, *et al.*, libelants and appellants, vs. Henry L. Newberry, claimant of the steamboat "Fashion," &c.

1. Under the act of Congress of 26th February, 1845, prescribing and regulating the jurisdiction of the federal courts in admiralty upon the lakes, a libel cannot be sustained on a bill of lading for the carriage of goods between two ports of the same State, though in a general ship whose principal voyage is between ports of different States. WAYNE, GRIER, and CATRON, *JJ. diss.*
2. Whether the federal courts might not have jurisdiction in such a case, however, where it becomes necessary to adjust the questions of general average and contribution, *que.*

The opinion of the court was delivered by—

NELSON, J.—This is an appeal in admiralty from a decree of the District Court for the district of Wisconsin.

The libel states that the goods in question were shipped on board the Fashion at the port of Two Rivers, in the State of Wisconsin, to be delivered at the port of Milwaukee, in the same State, and that the master, by reason of negligence and the unskillful navigation of the vessel, and of her unseaworthiness, lost them in the course of the voyage.

The respondent sets up, in the answer, the seaworthiness of the vessel, and that the goods were jettisoned in a storm upon the lake.

The evidence taken in the court below was directed principally to these two grounds of defence; but in the view the court has taken of the case, it will not be important to notice it.

The act of Congress of 26th February, 1845, prescribing and regulating the

jurisdiction of the federal courts in admiralty upon the lakes, and which was held by this court in the case of the *Genesee Chief*, 12 How. 443, to be valid and binding, confines that jurisdiction to "matters of contract and tort, arising in, upon, or concerning steamboats and other vessels," * * * "employed in business of commerce and navigation between ports and places in different States and territories upon the lakes, and navigable waters connecting said lakes, &c."

This restriction of the jurisdiction to business carried on between ports and places in different States, was doubtless suggested by the limitation in the constitution, of the power in Congress to regulate commerce. The words are:—"Congress shall have power to regulate commerce with foreign nations and among the several States, and with the Indian tribes." In the case of *Gibbon vs. Ogden*, 9 Wh. 194, it was held that this power did not extend to the purely internal commerce of a State. Chief Justice Marshall, in delivering the opinion of the court in that case, observed:—"It is not intended to say that these words comprehend that commerce which is completely internal, which is carried on between man and man in a State or between parts of the same State and which does not extend to or affect other States." Again, he observes:—"The genius and character of the whole government seem to be, that its action is to be applied to all the external concerns of the nation, and to those internal concerns which affect the States generally, but not to those which are completely within a particular State when they do not affect other States, and with which it is not necessary to interfere for the purpose of executing some of the general powers of the government. The completely internal commerce of a State, then, he observes, may be considered as reserved for the State itself." *Ib.* 195.

This distinction in the act of 1845 is noticed by the present Chief Justice in delivering the opinion in the *Genesee Chief*. He observed:—"The act of 1814 extends only to such vessels when they are engaged in commerce between the States and territories. It does not apply to vessels engaged in the domestic commerce of a State."

This restriction of the admiralty jurisdiction was asserted in the case of the *New Jersey Steam Navigation Company vs. the Merchants' Bank*, 6 How. 392, the first case in which the jurisdiction was upheld by this court upon a contract of affreightment. It was there remarked, that "the exclusive jurisdiction of the court in admiralty cases was conferred on the national government, as closely connected with the grant of the commercial power. It is a maritime court, instituted for the purpose of administering the law of the seas. There seems to be ground, therefore, for restraining its jurisdiction in some measure within the limit of the grant of the commercial power, which would confine it, in cases of contract, to those concerning the navigation and trade of the country upon the high seas, &c., with foreign countries and among the several States. Contracts growing out of the purely internal commerce of the State, &c., are generally domestic in their origin and operation, and could scarcely have been intended to be drawn within the cognizance of the federal courts."

The contract of shipment in this case was for the transportation of the goods from the port of Two Rivers to the port of Milwaukee, both in the State of Wisconsin; and upon the principles above stated, the objection to the jurisdiction of the court below would be quite clear, were it not for the circumstance that the vessel at the time of this shipment was engaged in a voyage to Chicago, a port in another State. She was a general ship, with an assorted cargo, engaged in a general carrying business between ports of different States; and there is some ground for saying, upon the words of the act of 1845, that the contracts over which the jurisdiction is conferred, are contracts of shipment with a vessel engaged in the business of commerce between the ports of different States. But the court is of opinion that this is not the true construction and import of the act. On the contrary, that the contracts mentioned relate to the goods carried as well as to the vessel, and that the shipment must be made between ports of different States.

This view of the act harmonizes with the limitation of the jurisdiction as expressed, independently of any act of Congress, in the case of *New Jersey Steam Navigation Company vs. the Merchants' Bank*, before referred to.

We confine our opinion upon the question of jurisdiction to the case before us, namely, to the suit upon the contract of shipment of goods between ports and places of the same State.

The court is of opinion that the district court had no jurisdiction over it in admiralty, and that the jurisdiction belonged to the courts of the State.

It may be, that in respect to a vessel like the present, having cargo on board to be carried between ports of the same State as well as between ports of different States, in cases of sale or bottomry of a cargo for relief of the vessel in distress, of voluntary stranding of the ship, jettison, and the like, where contribution and general average arise, that the federal courts shall be obliged to deal incidentally with the subject, the question being influenced by the common peril in which all parties in interest are concerned, and to which ship, freight, and cargo, as the case may be, are liable to contribute their share of the loss.

A small part of the goods in question in this case were shipped for the port of Chicago, but are not of sufficient value to warrant an appeal to this court.

The decree of the court below, dismissing the libel, affirmed.

Dissentientibus—WAYNE, GRIER, CATRON.

COMMERCIAL CHRONICLE AND REVIEW.

GENERAL ABUNDANCE OF CAPITAL—NO SPECULATION—LARGE MEANS FROM THE SOUTH—CHANGE IN BUSINESS WITH THE WEST—MANUFACTURES—LOCAL RESOURCES—EFFECT ON TRADE—COTTON—EXPORTS—SUPPLY OF BILLS—DISCOUNT MOVEMENT IN ENGLAND—OPERATIONS OF THE DISCOUNT HOUSES—DEPOSITS AND LOANS—PANIC OF 1857—RULE OF THE BANK—GOVERNMENT PERMIT—DISSATISFACTION—WITHDRAWAL OF NOTES—RISE IN INTEREST—UNEASINESS—RETURN OF THE NOTES—EFFECT ON COTTON—DISTRUST OF BILLS—SHIPMENTS OF SPECIE—RETURN OF EASE—LARGE CROP—ELEMENTS OF A LARGE DEMAND—AMERICAN INTERESTS—RATES OF MONEY—STERLING BILLS—SPECIE MOVEMENT—CHANGE IN CALIFORNIA BILLS—PONY EXPRESS—ASSAY OFFICE—MINT—NEW DISCOVERIES OF SILVER—EFFECT ON THE MARKET—GOLD NECESSARILY EXPORTED—MONEY OF ITSELF OF NO VALUE—ONLY WANTED FOR CIRCULATION—SEEKS THE RICHEST COUNTRY—RETURNS WHEN BUSINESS REVIVES—FOR CIRCULATION—IMPORTS.

THE general abundance of capital, relative to demand, continues to manifest itself in the cheapness of money, and this has lasted through the season of heavy spring payments for goods. The absence of any enterprise of a nature to absorb much capital, in the face of a flow of means so extensive as that which this year takes place from the South, leaves a redundant supply of means for the ordinary calls of business. The preparation for large Western business does not appear to have been so extensive as in a few previous years. There has, therefore, been a diminished demand for capital for that purpose. It has been the case since the panic of 1857, that the operations of the West have become more concentrated, thereby laying the foundation for a permanent change in business to some extent. When the West could no longer buy freely on almost unlimited credit at the East, other means were resorted to to supply local wants. This led to a more decided development of local manufactories; many thriving towns that formerly bought their clothing and other supplies from the East turned their attention to manufacture. It is found that goods can be produced cheaper by giving employment to the hands on the spot, and a home market to materials. The pressing wants of the people in considerable districts have thus been so far supplied that the hope of an accumulated demand, as a consequence of a long delay in purchasing, seems not likely to be realized. The result is diminished intercourse East and West, to be revived, no doubt, when large crops

and better prices shall have renewed a speculative action, calling Eastern and imported goods, through the medium of credit, once more to compete with the nascent fabrics of the West. These circumstances have, however, not been without their influence upon the demand for capital. The South has sent forward more than an equivalent in available means for the amount of her purchases. Already 4,250,000 bales of cotton have been delivered, an excess of 400,000 over the largest entire crop ever before delivered. Of this vast quantity, 3,197,523 bales have been exported, at a value of over \$160,000,000, or \$40,000,000 more than the value exported the same time last year—an amount that far exceeds the excess of imports over last year. This immense movement of the cotton crop has afforded an ample supply of bills at the South on the North, and has also met every demand of the importers for sterling bills. The stock of cotton naturally accumulated abroad, and a singular movement of the London market, by causing the rate of interest to rise suddenly to five per cent, inducing momentary fears that the price of cotton would suffer by that rise, and that, as a consequence, cotton bills would be less available, involving the necessity of a strong specie support there. The Bank of England is the only source for the supply of money in London and for sixty miles around it. It takes gold and gives bank notes, which are used as circulation by the public. The large discount houses of London, of whom OVEREND, GURNEY & Co. are the type, receive deposits from the public on demand at one rate of interest, and with those deposits discount notes at a higher rate, at for one to six months. The difference of interest between what they allow and what they charge is their profits. Their liability is that they may be called upon for the deposits suddenly, while the money, being loaned at long dates, is beyond their control. This liability fell upon them in the panic of 1857, and they demanded that the Bank of England should relieve them of it, by lending them the money to pay their depositors. The Bank could not do it unless the government relaxed the law, and allowed it to issue notes not represented by specie. This was done, but high rates were charged for the money. Nevertheless, the discount houses having lent the money of their depositors at one rate, say five, could not think of paying the Bank ten, hence they resolved that the "country was ruined," unless the Bank put down the rate to save them from loss in their speculation. The Bank then determined, by rule, that they would thenceforth never lend to the discount houses on any terms. Hence, if those houses go on to lend other peoples' money, and take the risk of its being demanded of them when money becomes dear, they must do so entirely on their own risk, like all other dealers. This was very unsatisfactory, and the houses have not ceased to demand a repeal of the rule. The rate of interest in London continued to be low— $3\frac{1}{2}$ per cent down to February, when it was found that the reserve of notes in the Bank was rapidly falling, without any regard to the shipment of specie. The rate of money was put up to $4\frac{1}{2}$ and 5 per cent, causing much uneasiness. So rapid a rise naturally induced people to ask for more money than they wanted, and there were signs of a stringency which would affect prices, cotton, particularly, of which the stock is large, and supported only by an abundance of money. Weakness in that article would affect a large amount of bills. Hence the rate rose here, and specie began to move freely. On comparing the denomination of notes outstanding it was found that the demand had been for £1,000, or \$5,000, notes, a kind which does not come into general circulation.

Further investigation showed that Messrs. OVEREND, GURNEY & Co. had drawn out £1,500,000, or \$7,750,000, of these notes into their own coffers to show their power. They kept them a week and returned them, having effected nothing but a loss of some \$7,000, since they were paying 4½ per cent for money while that amount was idle in their coffers. The discovery of the cause of the perturbation was followed by a decline in the value of money and a resumption of the usual course of business.

The cotton crop is doubtless very large, but the circumstances of Europe are such as to warrant a large demand. Food is cheap, capital is abundant, and labor in good supply, with a pause in the investments of capital in fixed enterprises. While the policy of the governments of France, Belgium, and the Zollverein is avowedly to encourage the consumption of goods, as well imported as domestic, all these are elements of an extended market for cotton, which must give great support to American interests. The rates of money in New York have not varied during the month, unless it may be said that a momentary hesitation about long paper showed itself on the renewal of shipments of specie. The rates are as follows:—

	On call.		Indorsed—		Single names.	Other good.	Not well known.
	Stocks.	Other.	60 days.	4 a 6 mos.			
Jan. 1st, 1859.	4 a 4½	4 a 5	4 a 5	5 a 6	6 a 7	7 a 8	8 a 10
Feb. 1st.....	5 a 6	6 a 7	5 a 6	6 a 7	7 a 7½	8 a 9	9 a 10
Mar. 1st.....	4 a 5	4½ a 6	4½ a 5½	5½ a 6½	6 a 7	7 a 8	9 a 10
Apr. 1st.....	4 a 5	5 a 6	5 a 5½	6 a 6½	6½ a 7	8 a 9	9 a 10
May 1st.....	5 a 6	6 a 7	6 a 6½	6½ a 6	7 a 9	9 a 10	10 a 12
Jun. 1st.....	6 a 7	7 a 8	6½ a 7	7 a 8	8 a 9	9 a 10	10 a 12
July 1st.....	5 a 6	6 a 7	6½ a 7	7 a 7½	8 a 9	10 a 12	12 a 15
Aug. 1st.....	6 a 7	7 a 8	6½ a 7½	7 a 8	8 a 9	11 a 13	12 a 15
Sept. 1st.....	5½ a 6	7 a 8	6 a 7	7 a 7½	8 a 8½	11 a 14	12 a 16
Oct. 1st.....	5½ a 7	6 a 7	6½ a 7	7 a 8	8 a 9	10 a 12	12 a 18
Nov. 1st.....	5 a 5½	6 a 7	6½ a 7½	7½ a 8	8½ a 9½	12 a 15	12 a 18
Dec. 1st.....	5 a 5½	6 a 7	6 a 7	7 a 8½	8 a 9	9 a 10	12 a 18
Dec. 17th.....	5½ a 6	6 a 7	7 a 7½	7½ a 8½	8 a 9	9 a 10	12 a 18
Jan. 1st, 1860.	6 a 6½	6½ a 7	7 a 7½	7½ a 8½	7½ a 8	9 a 10	12 a 18
Jan. 15th.....	7 a 7½	7 a 7½	8½ a 9	9 a 9½	9 a 10	10 a 11	15 a 20
Feb. 1st.....	6 a 6½	7 a 7½	8½ a 9	9 a 9½	9 a 10	11 a 12	15 a 20
Feb. 15th.....	5 a 6	6 a 7	7 a 7½	7½ a 8	8½ a 9½	10 a 12	15 a 18
Mar. 1st.....	5½ a 6	6 a 7	7 a 7½	7½ a 8	8½ a 9½	10 a 12	15 a 18
Mar. 15th.....	5 a 5½	5½ a 6	6 a 7	7½ a 8	8½ a 9	10 a 12	15 a 18
Apr. 1st.....	5 a 5½	6 a 6½	5½ a 6	6 a 6½	5½ a 7½	9 a 10	11 a 13
Apr. 15th.....	5 a 5½	6 a 6½	5½ a 6	6 a 6½	6½ a 7½	9 a 10	11 a 13
May 1st.....	5 a 5½	6 a 6½	5 a 6	6 a 6½	6½ a 7½	9 a 10	11 a 12
May 15th....	5 a 6	6 a 6½	5 a 6	6 a 7	6½ a 7½	9 a 10	10 a 12

The value of money was rather less, May 1, than at the same date last year, when the war news was influencing the market. The rates of sterling and convertible bills ruled as follows:—

	RATES OF BILLS IN NEW YORK.					
	London.	Paris.	Amsterdam.	Frankfort.	Hamburg.	Berlin.
Jan. 1..	9 a 9½	5.18½ a 5.17½	41½ a 41½	41½ a 41½	36½ a 36½	73 a 73½
15..	8½ a 9	5.21½ a 5.18½	41½ a 41½	41½ a 41½	36½ a 36½	73½ a 73½
Feb. 1..	8½ a 9	5.18½ a 5.17½	41½ a 41½	41½ a 41½	36½ a 36½	73½ a 73½
15..	8½ a 9	5.18½ a 5.17½	41½ a 41½	41½ a 41½	36½ a 36½	73½ a 73½
Mar. 1..	8½ a 9	5.17½ a 5.15	41½ a 41½	41½ a 41½	36½ a 36½	73½ a 73½
15..	8½ a 8½	5.17½ a 5.15½	41½ a 41½	41½ a 41½	36½ a 36½	73½ a 73½
Apr. 1..	8½ a 8½	5.18½ a 5.16½	41½ a 41½	41½ a 41½	36½ a 36½	73½ a 73½
15..	8½ a 8½	5.16½ a 5.17½	41½ a 41½	41½ a 41½	36½ a 36½	73½ a 73½
May 1..	9½ a 9½	5.18½ a 5.12½	41½ a 41½	41½ a 42	36½ a 36½	73½ a 73½
15..	9½ a 9½	5.13½ a 5.13½	41½ a 41½	41½ a 42	36½ a 37	73½ a 78½

An advance took place in francs, as well as in sterling, but the rates obtained for bankers' signatures did not warrant the large shipments of specie, which were therefore regarded as precautionary, swelling suddenly to the following figures :

GOLD RECEIVED FROM CALIFORNIA AND EXPORTED FROM NEW YORK WEEKLY, WITH THE AMOUNT OF SPECIE IN SUB-TREASURY, AND THE TOTAL IN THE CITY.

1859.	1859.		1860.		Specie in sub-treasury.	Total in the city.
	Received.	Exported.	Received.	Exported.		
Jan. 7.....		\$1,052,558		\$85,080	\$7,737,965	\$25,600,699
14.....	\$1,376,300	218,049	1,788,666	88,482	7,729,646	26,470,512
21.....		567,398		259,400	8,352,485	27,585,970
28.....	1,210,713	467,694	1,760,532	81,800	8,957,123	29,020,862
Feb. 4.....		606,969	94,569	427,457	9,010,569	28,934,870
11.....	1,319,923	361,550	1,476,621	92,350	9,676,732	29,464,299
18.....		1,013,780		592,997	10,012,572	30,603,762
26.....	1,287,967	358,554	1,393,179	202,000	8,955,203	29,729,199
Mar. 3.....		1,427,556	382,503	667,282	8,734,028	31,820,840
10.....	933,130	307,106	1,198,711	115,473	8,237,909	30,139,089
17.....		870,578	152,000	429,260	8,099,409	31,271,247
24.....		208,955	895,336	465,115	8,122,672	31,408,876
31.....	1,032,314	1,343,059	155,110	706,006	8,026,492	31,447,251
Apr. 7.....		576,107		310,088	7,562,885	30,162,017
14.....	1,404,210	1,637,104	1,146,211	630,010	7,714,000	31,640,982
21.....		1,496,889		241,503	7,531,483	30,764,897
28.....	1,723,352	1,680,743	1,455,337	1,774,767	7,668,723	30,848,532
May 5.....		2,169,197		2,355,117	7,041,143	30,856,889
Total.....	10,287,801	16,162,648	11,898,856	9,524,179		

Over \$4,000,000 went in the fourteen days ending with the 5th May. There was a good supply of bills at the South on New York. The receipts of specie were to the 5th May \$1,600,000 in excess of last year, and \$2,300,000 in excess of the exports. The usual mode of drawing against specie from California has heretofore been by the same boat that brought it. The establishment of the overland express has produced a change, since the seconds of exchange now arrive about fourteen days ahead of the specie. A remittance of \$1,382,753 was thus announced May 5th. The effect of this may be to cause the bills to be drawn against time, or to change the current of the business. The operation of the Assay-office at New York has been as follows :—

NEW YORK ASSAY-OFFICE.

	Foreign.				United States.			Payments in	
	Gold. Coin.	Bullion.	Silver. Coin.	Bullion.	Gold. Coin.	Silver. Bullion.	Bars.	in Coin.	
Jan. 14,000	13,000	11,200	14,000	2,478,000	1,800	20,000	647,000	1,910,000	
Feb. 5,000	23,000	6,500	24,000	951,000	....	7,500	932,000	90,000
Mar. 8,000	15,000	23,400	5,500	267,000	1,100	2,500	180,000	142,500	
Apr. 8,000	32,000	14,500	10,000	183,000	3,700	3,800	187,000	70,000	
Tot. 35,000	93,000	55,600	53,500	3,879,000	6,600	35,800	1,946,000	3,212,500	

There has been a marked decline in the operations, effected to some extent by the new premium rates established in California. Following the same movement, the coinage at the United States Mint has showed less activity, as follows :—

	UNITED STATES MINT, PHILADELPHIA.					
	Deposits		Coinage			Total
	Gold.	Silver.	Gold.	Silver.	Cents.	
January.....	\$200,000	\$41,000	\$1,024,563	\$41,000	\$24,000	\$1,090,568
February.....	1,338,578	35,573	1,632,160	21,600	24,000	1,677,760
March.....	144,478	82,255	317,451	132,989	29,000	479,440
April.....	281,891	49,764	252,756	38,431	30,000	321,188
Total, 1860.	\$2,484,947	\$218,572	\$3,126,930	\$234,020	\$107,000	\$3,568,956
Total, 1859.	359,390	336,940	369,847	419,500	118,000	907,347

With the rising accumulation in the banks and the cheapness of money, the activity of the Mint was less. The export of specie from the country during the last five months has been small, as compared with the same period of the previous year; but gold has become one of the staple money products of the country, and must necessarily form one of the staple exports; the more so that the new discoveries of silver are likely to add to the supplies of circulation. The production of the metals necessitate their export, since they have no value except in parting with them. It is a great but general mistake to suppose that a country is rich in proportion to the precious metals it preserves. This is taking effect for cause. An individual who should obstinately hoard gold, desiring that and nothing else, would soon die, since the gold could minister to no one of his wants unless he parted with it. Mankind desire as much of the metals as are convenient for circulation, and they give capital for it. Having enough for that purpose, no more is required. A nation, like savages, possessed of no capital despises gold, and cannot understand why it is coveted. The moment that it is discovered that gold is the key to real capital it is at once eagerly coveted. As a nation grows in wealth it requires more gold as an exponent of that wealth, and the metal gravitates towards that country which most abounds in capital. In periods when natural wealth diminishes, as in seasons of short crops, gold flows out in search of a supply elsewhere, and it returns as soon as general industry shall have supplied an abundance of those exchangeable articles that constitute floating capital. Gold will come back in search of them. That is, gold will seek the richest country, other things being equal, because the more a country possesses of general commodities the more money it requires to effect the exchanges. When its business is less active, its commodities not exchanging freely, gold will flow from it, because at such times it requires less circulation. This was the case last year, but is not likely to be the case this year, since reviving business will require more of the metals to transact it.

The imports for the month of April at the port of New York show some reaction from the free receipts of the previous months of the present year. The aggregate arrivals have been considerably less than for the corresponding month last year, and the proportion put upon the market has also declined. The entries for warehouse have been very large, although there has been an abundance of money. The figures are as follows—

	FOREIGN IMPORTS AT NEW YORK IN APRIL.			
	1857.	1858.	1859.	1860.
Entered for consumption.....	\$11,155,530	\$5,837,546	\$15,595,747	\$10,407,966
Entered for warehousing.....	8,168,143	2,148,241	3,754,895	4,127,857
Free goods.....	955,428	2,658,381	2,802,542	2,386,347
Specie and bullion.....	939,218	524,857	272,441	49,186
Total entered at the port.....	\$21,218,318	\$11,169,025	\$22,425,619	\$16,971,356
Withdrawn from warehouse.....	2,237,315	3,203,539	1,543,551	2,069,423

The reduced import for April causes the aggregate for the four months of the present year to approximate very closely to that of the same period last year. There is, however, rather a larger increase of goods in warehouse, nearly two-and-a-half millions having accumulated since January 1, this year. The amount entered for warehouse has been larger than for any year since 1857:—

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

	1857.	1858.	1859.	1860.
Entered for consumption.....	\$57,314,960	\$23,093,345	\$61,697,937	\$57,559,878
Entered for warehousing	19,066,239	7,200,542	9,025,517	11,991,133
Free goods.....	6,592,569	8,567,911	10,301,338	11,560,620
Specie and bullion.....	3,911,278	1,351,691	517,615	552,505
Total entered at the port.....	\$86,885,046	\$40,213,489	\$81,542,407	\$81,664,136
Withdrawn from warehouse	10,101,989	16,886,251	7,518,056	9,572,213

The imports for the ten months of the present fiscal year show a large increase over any previous year in the aggregate:—

FOREIGN IMPORTS AT NEW YORK FOR TEN MONTHS ENDING APRIL 30.

	1857.	1858.	1859.	1860.
Six months	105,254,740	109,688,702	91,082,433	116,000,642
January	19,006,732	8,105,719	19,447,962	21,756,273
February	25,524,492	9,209,043	18,848,370	19,356,379
March.....	21,135,504	11,729,702	20,820,456	23,580,126
April.....	21,218,318	11,169,025	22,425,619	16,971,358
Total for ten months.....	192,139,786	149,902,191	172,624,840	197,664,778

If we compare the dry goods with the general merchandise we shall find that a larger portion of the decrease is in the dry goods imports, which show a decline of \$3,470,000 for the month.

IMPORTS OF FOREIGN DRY GOODS AT NEW YORK FOR THE MONTH OF APRIL.

ENTERED FOR CONSUMPTION.

	1857.	1858.	1859.	1860.
Manufactures of wool.....	\$1,050,426	\$584,218	\$2,391,302	\$1,531,097
Manufactures of cotton.....	1,175,355	512,673	1,668,878	687,423
Manufactures of silk	1,135,152	722,704	2,315,015	1,337,223
Manufactures of flax.....	424,456	239,784	814,808	432,832
Miscellaneous dry goods.....	377,234	191,644	464,360	225,875
Total.....	\$4,162,623	\$2,251,023	\$7,684,363	\$4,214,455

WITHDRAWN FROM WAREHOUSE.

	1857.	1858.	1859.	1860.
Manufactures of wool	\$189,145	\$288,766	\$130,156	\$223,577
Manufactures of cotton.....	113,017	296,142	40,881	162,159
Manufactures of silk	155,778	188,442	30,722	55,843
Manufactures of flax.....	115,220	165,205	41,081	57,806
Miscellaneous dry goods.....	38,771	141,547	14,339	80,850
Total	\$611,961	\$1,080,102	\$257,179	\$580,235
Add entered for consumption.	4,162,623	2,251,023	7,684,363	4,214,455
Total thrown upon market..	\$4,774,584	\$3,331,125	\$7,941,542	\$4,794,690

ENTERED FOR WAREHOUSING.

	1857.	1858.	1859.	1860.
Manufactures of wool.....	\$1,106,176	\$122,899	\$196,379	\$207,484
Manufactures of cotton.....	821,358	84,825	54,249	179,526
Manufactures of silk.....	738,832	78,823	17,951	140,298
Manufactures of flax.....	477,973	55,196	62,267	77,299
Miscellaneous dry goods.....	185,193	61,918	25,459	46,681
Total.....	\$2,779,532	\$403,612	\$356,301	\$651,288
Add entered for consumption....	4,162,623	2,251,023	7,684,363	4,214,455
Total entered at the port...	\$6,942,155	\$2,654,685	\$8,040,668	\$4,865,743

The warehousing movement for the month has been quite large, as compared with previous years. The entries have been considerable, and the withdrawals show a greater increase:—

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

ENTERED FOR CONSUMPTION.

	1857.	1858.	1859.	1860.
Manufactures of wool.....	\$7,008,227	\$3,034,304	\$10,442,013	\$10,411,495
Manufactures of cotton.....	8492,962	2,905,522	9,846,310	7,403,582
Manufactures of silk.....	10,938,002	4,920,197	11,503,681	13,494,206
Manufactures of flax.....	2,978,058	1,143,309	3,926,080	3,016,549
Miscellaneous dry goods.....	3,085,724	1,058,046	2,356,285	1,932,007
Total.....	\$32,502,973	\$13,061,578	\$38,074,378	\$36,257,929

WITHDRAWN FROM WAREHOUSE.

	1857.	1858.	1859.	1860.
Manufactures of wool.....	\$831,093	\$1,753,102	\$659,583	\$1,019,681
Manufactures of cotton.....	1,653,974	2,535,089	944,539	1,539,664
Manufactures of silk.....	1,056,445	2,977,839	379,923	712,875
Manufactures of flax.....	658,267	1,185,683	516,243	418,782
Miscellaneous dry goods.....	316,863	759,820	204,047	315,462
Total.....	\$4,516,642	\$8,311,533	\$2,754,335	\$4,006,464
Add entered for consumption ...	32,502,973	13,061,578	38,074,378	36,257,929
Total thrown on market....	\$37,019,615	\$21,373,111	\$40,828,713	\$40,264,393

ENTERED FOR WAREHOUSING.

	1857.	1858.	1859.	1860.
Manufactures of wool.....	\$1,946,680	\$763,655	\$557,607	\$1,084,113
Manufactures of cotton.....	1,333,654	1,255,507	528,749	1,084,960
Manufactures of silk.....	1,806,460	765,607	203,059	655,497
Manufactures of flax.....	1,003,847	434,506	213,381	162,380
Miscellaneous dry goods.....	358,593	316,963	118,273	290,955
Total.....	\$6,451,234	\$3,536,248	\$1,621,069	\$3,280,905
Add entered for consumption ...	32,502,973	13,061,578	38,074,378	36,257,929
Total entered at the port...	\$38,954,207	\$16,597,826	\$39,695,447	\$39,538,834

The exports of merchandise from the port of New York continue to show a large excess over last year, which was larger than for the same period of preceding years. The specie movement has shown a greater decline, giving an aggregate diminution in the actual exports from this port. The specie shipments have been governed by the large supply of cotton bills:—

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

	1857.	1858.	1859.	1860.
Domestic produce.....	\$5,162,160	\$5,513,117	\$5,950,921	\$6,638,682
Foreign merchandise (free).....	195,642	154,416	441,489	254,742
Foreign merchandise (dutiable)...	341,343	432,393	382,289	482,489
Specie and bullion.....	3,354,805	646,285	6,259,167	2,995,502
Total exports.....	\$9,026,950	\$6,746,211	\$13,033,866	\$10,371,415
Total, exclusive of specie...	5,672,145	6,077,926	6,774,699	7,375,913

The export of specie has been much less than last year, and in that only is there any decline manifest.

The exports for the four months since January 1st, show a favorable result, if we consider that the movement in breadstuffs has been almost nothing.

EXPORTS FROM NEW YORK TO FOREIGN PORTS FOR FOUR MONTHS, FROM JANUARY 1.

	1857.	1858.	1859.	1860.
Domestic produce.....	\$23,009,686	\$17,934,664	\$18,374,535	\$24,635,808
Foreign merchandise (free).....	1,006,598	509,993	949,967	1,209,690
Foreign merchandise (dutiable)...	1,494,709	1,699,445	1,175,339	2,358,011
Specie and bullion.....	8,669,442	9,975,010	14,279,959	7,207,736
Total exports.....	\$34,180,434	\$30,119,112	\$34,780,300	\$35,410,735
Total, exclusive of specie..	25,510,992	20,344,102	20,500,341	28,202,999

The exports of the ten months of the fiscal year are about \$6,000,000 in excess of last year. The following is a brief comparison of the shipments of produce, to which we have added, at the foot, the shipments of specie. These were large in the first months of the fiscal year.

EXPORTS, EXCLUSIVE OF SPECIE, FROM NEW YORK TO FOREIGN PORTS FOR TEN MONTHS ENDING WITH APRIL.

	1857.	1858.	1859.	1860.
Six months.....	\$43,596,501	\$34,702,441	\$27,994,834	\$36,371,058
January.....	4,884,170	4,689,739	4,114,008	6,022,462
February.....	5,938,786	4,173,577	3,735,633	6,675,870
March.....	9,015,891	5,180,860	5,876,001	8,128,754
April.....	5,672,145	6,099,926	6,774,699	7,375,913
Total.....	\$69,107,493	\$54,846,548	\$48,495,175	\$64,574,057
Specie for same time.....	30,619,848	31,937,122	27,921,431	43,725,630

Total exports..... \$99,727,341 \$86,783,665 \$76,416,606 108,299,687

The receipts for cash duties of course show an increase in the aggregate, keeping pace with the import of goods at the port. The following is a comparative summary:—

CASH DUTIES RECEIVED AT NEW YORK.

	1858.	1859.	1860.
Six months ending January 1.	\$16,345,553 57	\$15,387,618 49	\$19,322,060 96
In January.....	1,641,474 59	3,478,471 38	3,899,166 17
February.....	2,063,784 86	3,328,688 93	3,378,043 28
March.....	2,213,452 15	3,164,011 25	3,477,545 74
April.....	1,786,510 41	3,212,060 49	2,444,267 96
Total ten months.....	\$24,000,775 58	\$28,570,850 54	\$32,521,984 11

The amount of cash duties has increased in New York, it appears, \$3,950,075 over last year, and nearly \$8,500,000 over the same period of 1858.

JOURNAL OF BANKING, CURRENCY, AND FINANCE.

COINAGE OF THE DIFFERENT COUNTRIES OF THE WORLD IN 1849 AND 1859.

PREPARED BY DAVID M. BALFOUR, ESQ., OF MASSACHUSETTS.

		1849.					
		Gold.		Silver.		Total.	
France.....	Francs	91,397,849	\$17,000,000	Francs	80,645,108	\$15,000,000	\$32,000,000
United States.....			9,007,761			2,114,950	11,122,711
Austria.....	Florins	4,784,627	2,320,544	Florins	18,084,922	8,771,187	11,091,731
Great Britain.....	Pounds	2,177,955	10,454,184	Pounds	119,952	575,770	1,029,954
Mexico.....			1,000,000			18,000,000	19,000,000
Russia.....	Roubles	16,844,984	12,633,783	Roubles	3,810,100	2,807,575	15,441,313
British India.....	Rupees	7,834,270	3,548,700	Rupees	23,492,809	10,451,300	14,000,000
Brazil.....	Contos	6,400	8,000,000	Contos	800	1,000,000	9,000,000
Holland.....				Florins	11,085,540	5,376,487	5,376,487
Belgium.....	Francs	4,121,455	766,590	Francs	27,016,370	5,025,045	5,791,625
Peru.....			1,000,000			2,000,000	3,000,000
Colombia.....			500,000			1,500,000	2,000,000
Prussia.....	Thalers	591,272	431,629	Thalers	1,514,000	1,105,235	1,536,864
Other countries.....			1,000,000			2,000,000	3,000,000
Grand total.....			\$67,663,146			\$75,727,549	\$143,390,695

		1859.					
		Gold.		Silver.		Total.	
France.....	Francs	532,258,064	\$99,000,000	Francs	5,376,344	\$1,000,000	\$100,000,000
United States.....			52,000,000			6,000,000	60,000,000
Austria.....	Florins	10,299,622	4,995,816	Florins	57,843,389	28,056,469	83,051,785
Great Britain.....	Pounds	4,588,333	22,000,000	Pounds	208,333	1,000,000	23,000,000
Mexico.....			1,000,000			19,000,000	20,000,000
Russia.....	Roubles	22,666,667	17,000,000	Roubles	2,666,666	2,000,000	19,000,000
British India.....	Rupees	8,426,966	3,750,000	Rupees	25,280,800	11,250,000	15,000,000
Brazil.....	Contos	7,200	9,000,000	Contos	1,200	1,500,000	10,500,000
Holland.....				Florins	12,195,122	5,914,634	5,914,634
Belgium.....				Francs	26,887,091	5,000,000	5,000,000
Peru.....			1,000,000			2,000,000	3,000,000
Colombia.....			500,000			1,500,000	2,000,000
Prussia.....	Thalers	684,930	500,000	Thalers	2,054,790	1,500,000	2,000,000
Other countries.....			1,000,000			2,000,000	3,000,000
Grand total.....			\$211,745,816			\$89,721,108	\$301,466,419

There has been no gold coinage in Holland since 1847; nor in Belgium since 1850.

MASSACHUSETTS STATE DEBT.

The amount of the State debt of Massachusetts is as follows:—

Western Railroad sterling.....	\$3,999,555 56
Troy and Greenbush Railroad sterling.....	149,628 00
Eastern Railroad.....	500,000 00
Northampton and Worcester.....	400,000 00
School fines.....	75,000 00
State Prison.....	100,000 00
Lunatic Hospital.....	170,000 00
Almshouse.....	210,000 00
State House.....	165,000 00
“ Prison.....	94,000 00
“ “ six per cent.....	300,000 00
Northampton Asylum.....	200,000 00
Total.....	\$6,363,183 56
Temporary.....	580,244 88
Total State debt.....	\$6,943,428 44
“ “ resources.....	\$13,520,679 50

CITY WEEKLY BANK RETURNS.

NEW YORK BANK RETURNS.—(CAPITAL, JAN., 1860, \$69,333,632; 1859, \$68,050,755.)

	Loans.	Specie.	Circulation.	Deposits.	Average clearings.	Actual deposits.
Jan. 7	124,597,663	17,863,734	8,539,063	97,493,709	22,684,854	74,808,855
14	123,582,414	18,740,866	8,090,548	99,247,743	23,363,980	75,883,763
21	123,845,931	19,233,494	7,880,865	99,644,128	22,812,547	76,830,581
28	123,088,626	20,063,739	7,760,761	98,520,793	21,640,967	76,879,826
Feb. 4	124,091,982	19,924,301	8,174,450	99,476,430	21,898,736	77,577,694
11	123,336,629	19,787,567	8,185,109	98,146,463	21,674,908	76,471,055
18	124,206,031	20,591,189	8,050,001	100,387,051	22,061,811	78,325,240
25	124,398,239	20,773,896	7,928,595	100,622,481	22,151,504	78,470,977
Mar. 3	125,012,700	23,086,812	8,165,026	103,663,462	22,787,290	80,876,172
10	127,301,778	21,861,180	8,419,633	104,813,906	23,791,958	81,021,948
17	127,562,848	23,171,833	8,380,999	108,560,981	25,562,858	82,998,123
24	127,613,507	23,286,204	8,335,266	107,505,395	25,397,976	82,107,419
31	128,388,223	23,420,759	8,444,327	106,311,554	22,899,523	83,422,031
Apr. 7	130,606,731	22,599,132	8,929,223	109,193,464	26,656,629	83,536,835
14	129,919,015	23,626,982	8,775,297	109,153,863	24,256,270	84,897,593
21	128,448,868	23,233,314	8,790,459	108,145,233	25,758,735	82,386,498
28	127,085,667	23,279,809	8,749,048	103,206,723	21,391,290	81,815,433
May 5	127,479,520	23,815,746	9,391,861	108,505,388	26,546,063	81,539,325
12	126,184,532	22,780,387	9,153,811	108,038,848	27,802,174	80,236,674

BOSTON BANKS.—(CAPITAL, JAN., 1859, \$35,125,433; 1860, \$36,581,700.)

	Loans.	Specie.	Circulation.	Deposits.	Due to banks.	Due from banks.
Jan. 2	59,807,566	4,674,271	6,479,483	18,449,305	7,545,222	6,848,374
16	60,068,941	4,478,841	6,770,624	17,753,002	7,867,400	6,735,283
23	59,917,170	4,182,114	6,486,139	17,378,070	7,784,169	6,516,532
30	59,491,387	4,172,325	6,199,485	17,483,054	7,388,370	6,517,541
Feb. 6	50,705,422	4,249,594	6,307,922	17,900,002	7,259,703	6,656,460
13	59,993,784	4,462,698	6,364,320	17,271,596	7,426,539	6,593,702
20	60,115,836	4,577,334	6,805,537	17,597,881	7,430,060	6,549,382
27	59,927,917	4,714,034	6,411,573	18,020,239	7,700,530	7,480,954
March 5	59,993,784	5,034,787	6,396,656	18,645,621	7,736,290	7,768,074
12	59,885,196	5,328,610	6,430,643	18,893,293	7,715,663	7,390,935
19	60,258,208	5,446,840	6,405,084	18,660,205	.....	.....
26	60,180,209	5,627,961	6,328,273	18,742,817	8,351,016	8,004,222
Apr. 2	60,060,953	6,045,703	6,340,263	19,262,894	8,473,775	8,080,218
9	60,668,559	6,320,551	7,753,491	20,469,893	9,206,161	9,788,121
16	61,189,629	6,284,719	7,267,165	20,291,620	9,160,868	8,314,312
23	61,035,965	6,315,952	7,152,766	20,266,917	9,055,077	8,138,121
30	61,239,552	6,317,919	6,992,903	20,195,951	9,273,558	7,948,086

PHILADELPHIA BANKS.—(CAPITAL, JAN., 1860, \$11,687,435.)

Date.	Loans.	Specie.	Circulation.	Deposits.	Due banks.
Jan. 2	25,386,337	4,450,261	2,856,601	14,982,919	2,619,192
9	25,248,051	4,453,252	2,675,623	14,161,437	2,596,212
16	25,275,219	4,561,998	2,672,730	14,934,517	2,563,449
23	25,445,737	4,514,579	2,644,191	15,064,970	2,601,271
30	25,526,198	4,535,321	2,601,750	15,401,915	2,619,573
Feb. 6	25,493,975	4,669,929	2,656,310	15,409,241	2,574,015
13	25,493,975	4,669,929	2,656,310	15,409,241	2,574,015
20	25,458,354	4,581,356	2,663,695	14,864,302	2,782,306
27	25,553,918	4,706,108	2,653,192	14,590,092	3,115,010
Mar. 5	25,742,447	4,816,052	2,697,108	15,192,971	3,133,312
12	25,742,447	4,816,052	2,697,108	15,192,971	3,133,312
19	25,832,077	4,873,419	2,783,345	15,205,432	3,209,553
26	26,043,772	4,992,542	2,784,773	15,693,622	3,198,530
April 2	26,405,229	5,060,274	2,858,812	15,553,269	3,652,757
9	27,214,254	5,209,576	3,528,762	15,528,762	4,085,695
16	27,444,580	5,415,711	3,252,186	16,012,140	4,164,678
23	27,545,351	5,464,280	3,154,285	16,613,616	3,985,110
30	27,571,002	5,453,470	3,037,846	16,529,391	3,902,514

NEW ORLEANS BANKS.—(CAPITAL, JAN., 1860, \$18,917,600.)

	Short loans.	Specie.	Circulation.	Deposits.	Exchange.	Distast balances.
Jan. 7 ..	25,022,456	12,234,448	12,038,494	18,563,804	7,323,530	1,557,174
14 ..	24,928,909	12,336,785	12,417,847	18,678,233	7,410,360	1,387,704
21 ..	24,699,024	12,821,411	12,809,512	18,664,355	7,423,629	1,377,796
28 ..	24,916,431	12,818,159	12,882,184	19,677,121	8,144,681	1,603,763
Feb. 4 ..	25,145,274	12,750,642	13,215,494	19,565,305	8,003,380	1,613,036
11 ..	25,197,351	12,741,881	13,343,924	19,244,847	7,349,365	1,396,150
18 ..	25,005,952	12,894,521	13,458,989	19,903,519	7,886,609	1,470,787
25 ..	24,397,286	12,945,204	13,600,419	19,218,590	8,083,929	1,635,526
Mar. 3 ..	24,946,210	12,952,002	13,860,399	20,116,272	8,027,049	1,992,475
10 ..	24,088,800	13,039,092	13,726,554	19,711,423	8,532,012	1,601,149
17 ..	24,054,845	12,729,356	13,797,154	19,304,618	8,498,790	1,718,310
24 ..	23,832,766	12,610,790	13,835,755	19,102,068	8,342,599	1,738,246
31 ..	23,674,714	12,437,195	13,975,624	18,681,020	8,149,061	1,610,499
Apr. 7 ..	23,107,740	12,368,071	14,100,890	18,070,209	8,560,117	1,942,056
14 ..	22,422,203	12,290,539	13,688,089	17,849,018	8,179,441	1,684,463
21 ..	22,380,033	12,100,687	12,999,204	18,380,033	7,649,069	1,649,060
28 ..	21,437,974	11,910,361	12,783,749	17,699,538	7,686,634	1,877,017

PITTSBURG BANKS.—(CAPITAL, \$4,160,200.)

	Loans.	Specie.	Circulation.	Deposits.	Due banks.
Jan. 16.....	7,202,367	980,530	2,080,548	1,527,548	304,362
23.....	7,060,471	1,022,273	2,012,478	1,545,103	255,076
30.....	6,989,320	1,003,037	1,896,363	1,555,686	265,804
Feb. 6.....	6,984,209	997,589	1,907,323	1,609,692	230,426
13.....	6,989,052	951,638	1,883,093	1,602,311	191,322
20.....	6,957,621	988,306	1,868,598	1,643,703	175,051
27.....	7,022,230	991,377	1,821,253	1,760,957	224,434
Mar. 5.....	7,101,459	1,018,255	1,871,873	1,768,879	273,343
12.....	7,035,624	999,093	1,901,543	1,651,216	197,007
19.....	7,066,774	1,004,750	1,945,328	1,636,887	198,556
26.....	7,038,891	981,560	1,980,732	1,572,130	192,411
Apr. 2.....	7,166,377	1,005,415	2,085,533	1,601,167	191,101
9.....	7,206,737	990,962	2,072,373	1,693,230	171,100
16.....	7,159,568	1,018,445	2,071,878	1,651,362	187,255
23.....	7,278,279	1,156,278	2,024,138	1,897,498	240,143
30.....	7,234,761	1,141,373	1,995,053	1,913,637	175,671

ST. LOUIS BANKS.

	Exchange.	Circulation.	Specie.
Jan. 7.....	4,373,543	538,555	662,755
14.....	4,467,513	520,305	642,497
21.....	4,352,699	502,175	580,754
28.....	4,290,563	495,380	563,335
Feb. 4.....	4,149,236	457,095	590,502
11.....	4,048,593	424,605	625,043
18.....	3,906,896	391,605	639,450
25.....	3,951,433	399,085	630,877
March 3.....	3,891,263	395,905	689,301
10.....	3,998,827	377,935	651,302
17.....	3,963,924	377,355	641,252
24.....	3,880,915	356,245	664,179
31.....	3,790,291	340,095	683,984
April 7.....	3,862,454	344,630	637,321
14.....	3,868,345	325,950	676,858
21.....	3,852,614	314,360	601,014
28.....	3,694,877	306,750	678,234
May 5.....	3,609,648	301,300	746,176

PROVIDENCE BANKS.—(CAPITAL, \$14,903,000.)

	Loans.	Specie.	Circulation.	Deposits.	Due banks.
Jan. 2.....	19,144,354	315,917	2,011,336	2,635,486	938,508
Feb. 6.....	19,144,846	326,297	1,958,540	2,566,168	921,779
Mar. 3.....	19,009,255	342,965	1,917,593	2,598,169	970,971
Apr. 1.....	18,686,210	343,992	1,952,022	2,640,170	1,040,260
May 7... ..	18,893,653	448,413	2,045,590	2,778,248	1,356,071

DEBTS AND EMIGRATION IN CANADA.

The St. Catherine's *Post*, in the following remarks, embraces some facts which are new, and may serve as useful hints on this side of the line:—

The evils that result from the present condition of a large number of municipalities in Canada, which have become deeply involved for railways, are not only very serious, but they are every day increasing and extending their baneful influence. The general depression and non employment of labor spreads with deepening gloom. The taxation is high, and threatens to rise still higher. Confidence, and the spirit of enterprising industry, are giving place to distrust and apprehension. They feel that their burdens are too heavy to bear, and they see the blighting effects of their condition. Population and capital are deserting them, and unless relief is afforded from the Legislature—the only quarter from which it can be afforded—their condition must grow worse.

Such is really the condition of some of our municipal cities and towns, and unless relief be afforded, the same must be the condition of many more. A continuance of this state of things must of necessity have its effect on the revenue and material advancement of the country. Of what use is it to send agents to Europe to induce immigration to come to Canada under such circumstances? Strangers come to our country and find the best and most favored parts of the Province pining and sinking under the load of municipal liabilities, and the other parts of the country if less burdened, it is because they have avoided supplying themselves with ordinary means of communication. Our agencies will only aid our United States neighbors at our cost. Emigration to Canada has been growing less, year by year, and 1859 figures small enough, and unless something is done to revive confidence, create new energy, and employ labor, the few that come to Canada will leave it, as many of our inhabitants are now doing.

The present condition of this matter is all wrong. Even the reduction of rate which took place last year, falls unequally and without any regard to any equitable rule. Our municipality is debtor for fifty thousand pounds, and its amendable yearly value is sixty thousand pounds, and at one shilling in the pound it has to pay three thousand pounds. Another, whose assessed value is only fifteen thousand pounds, has double the amount—one hundred thousand pounds—and only has to pay for it seven hundred and fifty pounds—that is, for a given amount the first is obliged to pay four times as much as the other. It might seem that the last, having got off so easy on this score, would experience no inconvenience, and have no cause to ask for relief, but that is not the fact. The immense debt held over the place is ruinous, and literally starves and frightens business and capital out of the place. From whatever point the subject is viewed, it grows worse and worse the more it is examined, and shows the more strongly the necessity for relief.

NEW YORK VALUATIONS.

The relative progress of New York city to the rest of the State, in respect of real and personal estate valuations, has been as follows:—

ASSESSED VALUE OF REAL AND PERSONAL ESTATE IN THE STATE AND CITY OF NEW YORK, 1844-1859.

Years.	New York county.	Other counties.	Total.
1844	\$236,727,143	\$363,164,780	\$599,891,923
1845	239,995,217	360,650,578	605,646,095
1849	254,192,527	411,658,210	665,850,737
1850	286,061,816	441,432,767	727,494,583
1851	286,061,816	791,769,814	1,077,831,630
1852	351,768,396	816,566,841	1,168,335,237
1853	413,631,432	853,034,758	1,266,666,190
1854	462,237,550	901,917,075	1,364,154,625
1855	487,060,338	915,788,466	1,402,848,804
1856	511,740,491	918,594,205	1,430,334,696
1857	520,545,282	912,764,431	1,433,309,713
1858	531,222,642	873,685,037	1,404,907,679
1859	552,008,742	864,282,095	1,416,290,837
Totals.....	\$5,133,254,192	\$9,430,309,057	\$14,563,563,249

It is remarkable that during the years which followed the high prices of food, resulting from the great famines of 1845-6-7, the interior counties increased more rapidly than the city. In 1844 the city valuation was nearly 40 per cent of the whole from that time up to 1854, which was of the highest price of food, the country valuation rose to \$901,000,000, and the city to \$462,000,000, being only 30 per cent of the whole. In the five years of cheap food and greater speculation that have since elapsed the city value has increased \$90,000,000, and the country valuation has declined \$37,000,000, leaving the city valuation again 40 per cent of the whole, or the same proportion as in 1844. The affluence of the agricultural sections during the years of dear food was, for the same reason, accompanied by a depression in the city values. This tendency seems to have culminated without restoring those prices which should make the country prosperous. This is but for a moment, probably, since the abundance of capital and cheapness of food and material cannot but give a new impetus to manufacturing productions.

USURY IN LOUISIANA.

Louisiana has gone one step further, and adopted a new law in reference to the rate of interest. The Legislature of Louisiana, at its recent session, has abolished the old law regarding usurious rates of interest, as will be seen by the following act:—

AN ACT RELATIVE TO THE RATE OF INTEREST.

SECTION 1. Be it enacted by the Senate and House of Representatives of the State of Louisiana, in general assembly convened, that the owner of any promissory note, bond, or written obligation for the payment of money, to order or bearer, or transferable by assignment, shall have the right to collect the whole amount of such promissory notes, bonds, or written obligations, notwithstanding such promissory notes, bonds, or written obligations may include a greater rate of interest or discount than eight per cent per annum. Provided, such obligations shall not bear more than eight per cent interest per annum after their maturities until paid.

NEW YORK STATE TAX.

The tax levied in the State of New York was commenced in 1842, and the progress of taxation has been as seen in the following table, taken from the Albany Argus:—

Year.	Governor.	Rate on \$1 of value, mills.	For support of governm ^t .	For canals.	Total.
1842.....	Seward	one mill	\$586,549	.....	\$586,549
1843.....	Bouck	"	280,563	\$280,563	561,126
1844.....	"	1 and 1-10	565,034	56,303	621,538
1845.....	Wright	six-tenths	291,085	58,217	349,302
1846.....	"	"	395,966	61,193	367,159
1847.....	Young	half	292,829	.....	292,829
1848.....	"	"	314,276	.....	314,276
1849.....	Fish	"	324,352	.....	321,352
1850.....	"	"	352,522	.....	352,522
1851.....	Hunt	"	563,812	.....	563,812
1852.....	"	quarter	284,565	.....	284,565
1853.....	Seymour	one	590,972	657,145	1,248,118
1854.....	"	three-quarter	991,049	.....	991,049
1855.....	Clark	1 and $\frac{1}{2}$	1,431,717	320,000	1,751,717
1856.....	"	one	1,080,000	350,000	1,430,000
1857.....	King	2 and $\frac{1}{2}$	1,858,208	1,368,567	3,221,775
1858.....	"	1 and $\frac{3}{4}$	1,817,500	685,000	2,502,500
1859.....	Morgan	"	1,575,000	875,000	2,450,000

The progress of the canal debt has been as follows:—

Year.	Politics.	Canal.	Borrowed.	Paid.	Canal debt 30th Sept. each year.
1825.....	.....	.....	.....	.....	\$7,737,770
1826.....	Dem.	C. & S. canal built	\$377,000	\$270,000	7,844,770
1827.....	"	.....	.....	94,615	7,750,155
1828.....	"	Oswego built	210,000	20,000	7,940,155
1829.....	"	.....	87,000	321,142	7,706,013
1830.....	"	.....	150,000	30,977	7,825,035
1831.....	"	.....	240,263	9,653	8,055,645
1832.....	"	.....	.....	.....	8,055,645
1833.....	"	.....	95,737	1,478,376	6,673,000
1834.....	"	Chemung built	950,000	588,037	7,034,999
1835.....	"	Crooked Lake blt	.....	706,943	6,328,056
1836.....	"	.....	650,000	651,249	6,326,806
1837.....	"	Chenango built	810,920	971,644	6,166,082
1838.....	Whigs	New Impulse	3,493,061	351,023	9,308,120
1839.....	"	.....	1,445,000	67,300	10,785,820
1840.....	"	.....	3,478,553	137,726	14,126,647
1841.....	"	Broke down	2,213,497	83,770	16,306,374
1842.....	Dem.	.....	3,411,618	143,600	19,574,392
1843.....	"	.....	1,002,700	184,768	20,392,324
1844.....	"	.....	655,000	333,418	20,713,905
1845.....	"	.....	245,000	1,268,884	19,690,020
1846.....	"	.....	300,000	2,961,780	17,028,240
1847.....	"	N. con. sink's fd	.....	284,490	16,743,749
1848.....	Whigs	.....	489,819	519,919	16,713,649
1849.....	"	.....	150,000	358,304	16,505,345
1850.....	"	.....	195,385	482,786	16,215,144
1851.....	"	Stopped payment	1,000,000	573,609	16,641,534
1852.....	Dem.	.....	700,000	340,265	17,091,269
1853.....	"	.....	.....	.....	17,091,269
1854.....	Rep.	Amend. Con.	2,250,000	479,025	18,772,244
1855.....	"	.....	2,750,000	2,249,911	20,281,333
1856.....	"	.....	6,750,000	4,489,266	22,542,066
1857.....	"	Stopped payment	2,750,000	102,285	25,189,781
1858.....	Dem.	.....	2,200,000	2,929,767	24,460,614

The addition to the above table of the \$2,500,000 loan of 1859, to pay the floating debt, swells the canal debt above \$26,000,000.

THE BANKS OF CANADA.

We give below a table of the Canada banks on the 29th February, and similar results for the month of February, 1859.

The Gore Bank is not included, as under its charter the management are not required to make monthly returns to the government.

Names of banks and head office.	Loans.		Deposits.	
	1859.	1860.	1859.	1860.
Quebec Bank, Quebec.....	\$2,000,794	\$2,163,163	\$404,980	\$483,498
City Bank of Montreal, Montreal...	1,985,686	1,942,122	686,148	642,852
Bank of Montreal, "	10,037,478	9,479,367	2,904,631	3,088,543
Commercial Bank, Kingston.....	6,113,606	6,870,148	1,348,879	1,795,592
Bank of Upper Canada, Toronto...	7,466,911	8,967,165	3,345,589	3,660,357
Banque du Peuple, Quebec.....	1,721,425	1,862,119	533,151	559,779
Molsons Bank, Montreal.....	1,441,963	1,827,838	1,005,403	638,060
Bank of British N. A., London, Eng. ....	.....	5,633,544	.....	1,624,595
Niagara District Bank, Niagara.....	428,145	483,376	55,368	74,632
Bank of Toronto, Toronto.....	995,817	1,181,416	221,114	360,849
Eastern Township Bank, Brantford..	.....	171,325	.....	15,025
Ontario Bank, Toronto.....	620,559	1,005,787	73,295	133,882
International Bank, Toronto.....	84,080	.....	9,368	.....
Total.....	\$32,896,492	41,589,369	10,166,666	13,077,663

Names of banks and head office.	Notes in circulation.		Coin and bullion.	
	1859.	1860.	1859.	1860.
Quebec Bank, Quebec.....	\$598,350	\$663,047	\$193,310	\$177,946
City Bank of Montreal, Montreal...	509,974	415,829	205,824	183,017
Bank of Montreal, "	2,635,361	2,493,004	715,715	832,398
Commercial Bank, Kingston....	1,526,918	1,556,413	480,465	467,692
Bank of Upper Canada, Toronto...	2,368,728	2,306,912	686,596	518,733
Banque du Peuple, Quebec.....	323,516	279,033	113,472	96,610
Molsons Bank, Montreal.....	399,098	450,849	88,985	103,726
Bank of British N. A., London, Eng. ....	.....	1,043,159	.....	500,791
Niagara District Bank, Niagara.....	170,957	169,033	22,349	26,193
Bank of Toronto, Toronto.....	441,539	546,498	82,068	180,235
Eastern Township Bank, Brantford..	.....	146,132	.....	31,103
Ontario Bank, Toronto.....	239,564	476,874	32,067	103,839
International Bank, Toronto.....	36,156	.....	17,050	.....
Total.....	\$9,300,161	10,547,073	2,637,901	3,227,281

MASSACHUSETTS BANK SECURITY.

The following law has been passed in Massachusetts:—

AN ACT CONCERNING THE DELIVERY OF CIRCULATING NOTES BY THE AUDITOR TO BANKS ORGANIZED UNDER GENERAL LAWS.

SECTION 1. Be it enacted by the Senate and House of Representatives, in general court assembled, and by the authority of the same, as follows:—Any public stock issued by the United States, either of the New England States, or any city, town, or county of this State, producing five per cent a year, may be transferred to the auditor for the purposes specified in the one hundred and seventeenth section of the fifty-seventh chapter of the General Statutes, passed the twenty-eighth of December, in the year eighteen hundred and fifty-nine, at a rate not above its par value nor above its current market value, with the same effect as a stock of this State producing six per cent a year, may be so transferred.

SEC. 2. This act shall take effect from its passage.

Approved April 3, 1860.

BANKS OF PENNSYLVANIA.

The annual returns of all the banks of Pennsylvania, according to the official returns, were as follows:—

Year.	Capital.	Loans.	Specie.	Circulation.	Deposits.	Bank checks Balances.
1847 ...	\$21,585,900	\$22,152,000	\$7,362,000	\$13,737,000	\$15,009,000	\$7,054,000
1848 ...	21,462,000	28,001,000	6,801,000	9,992,000	12,845,000	5,320,000
1849 ...	18,478,000	32,949,000	6,260,000	11,385,000	15,412,000	5,924,000
1850 ...	18,675,000	36,408,000	7,212,000	11,988,000	17,719,000	7,182,000
1851 ...	18,895,000	36,706,000	6,685,000	11,933,000	15,871,000	6,244,000
1852 ...	19,213,000	42,855,000	7,840,000	14,624,000	22,048,000	8,569,000
1855 ...	22,026,000	47,511,000	6,738,000	16,878,000	24,321,000	10,108,000
1856 ...	23,599,000	50,171,000	5,967,000	17,362,000	26,405,000	10,846,000
1859 ...	25,565,000	49,598,000	8,378,000	13,122,000	25,166,000	7,950,000

The leading items, divided between the banks of Philadelphia and those outside of its limits, were as follow:—

	Phila. banks.	Other banks.	Total.
Capital stock.....	\$11,971,000	\$12,594,000	\$25,565,000
Loans.....	24,918,000	24,680,000	49,598,000
Specie.....	5,201,000	3,176,000	8,378,000
Deposits.....	16,798,000	8,367,000	25,166,000
Circulation.....	3,449,000	9,683,000	13,132,000

PHILADELPHIA BANK DIVIDENDS.

All the Philadelphia banks, with the exception of the Bank of North America, declared their semi-annual dividends on the 1st of May. Annexed is a list of the banks, with the amount of their capital, and the rate of dividend:—

Banks.	Capital.	---Dividend---	
		Per cent.	Amount.
Philadelphia.....	\$1,800,000	5	\$90,000
Farmers and Mechanics'	2,000,000	4	80,000
Commercial.....	841,400	3½	29,349
Mechanics'.....	800,000	5	40,000
Northern Liberties.	500,000	5	25,000
Southwark.....	250,000	10	25,000
Kensington.....	250,000	5	12,500
Penn Township.....	350,000	4	14,000
Western.....	418,000	5	20,930
Manufacturers and Mechanics'.....	570,150	4	22,806
Commerce.....	250,000	5	12,500
Girard.....	1,250,000	3	37,500
Tradesmen's.....	150,000	4	6,000
Consolidation.....	267,560	3	8,026
City.....	433,850	3	13,015
Commonwealth.....	238,340	3	7,150
Corn Exchange.....	155,945	3	4,648
Union.....	167,340	3	5,020
Total, May, 1860	\$10,692,185		\$453,444
Total, May, 1859	10,459,390		462,313
Increase in 1860.....	\$232,795		Dec. \$8,876

WEAR AND TEAR OF COINS.

The *Gazette* of St. Petersburg gives a curious account of an experiment recently made at the mint of that city, for the purpose of ascertaining the comparative loss by ordinary wear of gold and silver coins. It appears, contrary to the generally received opinion, that gold wears away faster than silver. The

means employed were as follows:—Twenty pounds of gold half-imperials, and as much of silver copecs, coins of about the same size were put into two new barrels, mounted like churns, which were kept turning four hours continuously. It was then found on weighing the coins that the gold coins had lost 64 grammes, while the silver coins had only lost 34 grammes; but as the number of gold pieces was 29 per cent less than those of silver, the proportion is greater to that amount in favor of the latter. It must, however, be mentioned that the silver contained more alloy than the gold, the standard of the former being 868-1,000ths of pure metal, and that of the latter 917-1,000ths. The result of the experiment is, that the pecuniary loss on the value of gold coins is about thirty times more than on silver.

PROPERTY IMPROVED AND UNIMPROVED IN NEW YORK.

Notwithstanding the immense size this city has reached, it has not as yet covered half its boundary; 54,725 lots have been built upon or otherwise improved, while there yet remains 86,761 vacant or unimproved lots. Probably fifty years will hardly pass before the latter will be improved; and if Brooklyn and its suburbs are in the meantime consolidated with this city, New York will become a metropolis scarcely less than London. The following shows the number of improved and unimproved or vacant lots in each ward:—

Wards.	Improved.	Unimproved.	Total.	Wards.	Improved.	Unimproved.	Total.
1.....	2,033	24	2,057	13.....	1,508	131	1,639
2.....	1,214	1	1,215	14.....	1,531	6	1,537
3.....	1,232	5	1,237	15.....	2,617	89	2,706
4.....	1,358	40	1,398	16.....	3,709	1,045	4,754
5.....	1,935	12	1,947	17.....	3,559	229	3,788
6.....	1,261	11	1,272	18.....	4,155	2,491	6,646
7.....	2,532	420	2,952	19.....	2,065	12,977	15,042
8.....	2,705	31	2,736	20.....	4,275	1,721	5,996
9.....	3,650	405	4,055	21.....	3,441	1,647	5,088
10.....	1,647	22	1,669	22.....	3,699	10,589	14,288
11.....	2,534	656	3,190				
12.....	2,062	54,239	56,301	Total.....	54,725	86,761	141,486

IMPORTS AND DUTIES.

The New York *Courier* contains the following official figures showing the operation in some points of the present and preceding tariffs:—

The value of our importations, and the amount of duties collected upon them during four years past, have been as follows:—

	Value.	Duty.		Value.	Duty.
1856.....	\$257,684,236	\$65,341,510	1858.....	\$202,293,875	\$38,671,242
1857.....	294,160,835	75,445,426	1859.....	259,047,014	48,869,879

In 1856-57 the tariff of 1846 was in operation, and in 1858-59 that of 1857. Under the latter the rates on many articles were reduced, and the free list was also increased. The following table shows the value of imported dutiable goods, of such as were free under the tariff of 1846, and of such as were made free by the tariff of 1857, in each of the four years named:—

	1856.	1857.	1858.	1859.
Dutiable.....	\$257,684,236	\$294,160,835	\$202,293,875	\$259,047,014
Free, 1846.....	56,905,706	66,729,306	64,756,975	63,502,865
Free, 1857.....	.....	.....	15,562,300	16,218,251
Total.....	\$314,639,942	\$360,860,141	\$282,613,150	\$338,768,130

Of the articles added to the free list by the act of 1857, there was imported in 1856 the value of \$11,697,523, paying a duty of \$1,433,393, and in 1857, \$13,757,398, paying duties to the amount of \$1,843,076.

The chief articles of increase under free trade, are raw silk and coarse wool. Of these we imported as follows:—

1856.....	Coarse wool. \$1,665,064	} 30 p. c.	Raw silk. \$991,234	} 15 p. c.
1857.....	2,125,744		953,734	
1858.....	3,843,320		1,300,065	
1859.....	4,363,121		1,330,890	

The wool which is admitted free is that which does not exceed in value twenty cents per pound.

BRITISH NATIONAL WEALTH.

The aggregate of the national capital of Great Britain, says the *Bankers' Circular*, or, in other words, the value of the material wealth of the country, should be clearly understood by financiers, as it has an immediate connection with the amount of revenue to be derived from the income and property taxes. Two versions of the national wealth have been offered to the public within the last fourteen months—one by Mr. EDWARD CAPPS, the author of the "Prize Essay" on the national debt, and the other in the last number of the *Edinburgh Review*, No. 225, pp. 236 to 272. The statistics, in the *Edinburgh Review*, are supposed to have been compiled by a high financial authority, who, from having held the office of Chancellor of the Exchequer, may be supposed to possess every Parliamentary document which can throw light on the subject.

According to Mr. CAPPS the following are stated to be the results of his researches:—

Years.	Population.	National debt.	Total wealth in real & personal property.
1700.....	8,000,000	£15,000,000	£615,000,000
1800.....	16,000,000	450,000,000	2,250,000,000
1812.....	18,000,000	670,000,000	2,736,640,000
1857.....	30,000,000	800,000,000	6,000,000,000

The figures, in the *Edinburgh Review*, are somewhat different, namely:—

Years.	Real property.	Personal property.	Total.
1803.....	£1,063,000,000	£800,000,000	£1,863,000,000
1814.....	1,650,000,000	1,200,000,000	2,850,000,000
1845.....	2,300,000,000	2,200,000,000	4,500,000,000
1858.....	3,200,000,000	2,775,000,000	5,975,000,000

On a subject of such vital interest, it is much to be regretted that neither Mr. CAPPS nor the *Edinburgh Reviewer* considered it necessary to give the authorities or data on which these calculations are founded. The figures bear no resemblance in either case to the capital represented by the amounts assessed under the income tax, as shown by Lord MONTEAGLE'S return, (No. 47, session 1859,) and it would be desirable that some official document should be prepared, wherein the capital of the country and also the annual income were placed before the House of Commons in a form which would appear to be entitled to credit. Many persons are inclined to doubt the accuracy of these statements, and there is reason to believe that sufficient attention has not been devoted to the best means of obtaining an authentic and impartial record of the sources of the national wealth. We incline to the opinion that both the above estimates are understated, and that to a very considerable extent.

TAXABLE VALUATION AND TAX OF CINCINNATI.

The table below exhibits the real property, rate of taxation, and amount of taxes levied in Cincinnati for the past thirty years. The table was prepared by Mr. LEE, of the County Auditor's office, with great care, for the forthcoming report of the City Auditor:—

Years.	Real estate.	Personal.	Rate.	Taxes.
1830	\$3,157,675	\$1,048,529	\$1 20	\$51,435
1831	3,356,525	1,363,057	1 20	57,917
1832	3,717,785	1,620,924	1 35	72,667
1833	3,912,075	1,391,731	1 35	74,307
1834	3,972,000	1,355,990	1 45	79,131
1835	4,814,030	1,394,542	1 90	107,445
1836	4,881,880	1,661,024	1 85	126,458
1837	4,813,840	1,555,060	1 85	117,824
1838	4,935,500	1,574,516	2 10	141,231
1839	4,933,830	1,628,324	2 55	167,334
1840	4,731,390	1,440,108	2 45	151,201
1841	5,464,800	1,249,501	2 50	167,857
1842	5,840,950	1,147,434	3 00	209,651
1843	5,703,670	1,018,240	3 20	215,101
1844	5,885,650	1,059,632	3 20	222,249
1845	6,157,890	2,015,890	3 00	245,211
1846	6,317,740	3,390,330	2 95	236,338
1847	27,902,220	9,159,960	0 95	362,748
1848	28,820,410	9,409,836	1 00	394,363
1849	32,622,500	8,731,174	1 33	566,109
1850	34,194,430	8,668,298	1 70	728,666
1851	34,678,450	11,430,364	1 50	690,132
1852	35,697,540	16,764,570	1 65	910,308
1853	36,520,040	20,321,148	1 85	1,236,561
1854	58,135,456	28,914,269	1 68	1,458,082
1855	60,335,932	24,994,948	1 48	1,262,897
1856	60,701,267	20,795,203	1 35	1,116,927
1857	61,340,971	25,104,120	1 50	1,296,676
1858	62,681,602	26,051,151	1 66	1,472,963
1859	63,764,316	29,292,788	1 64	1,584,110

AUSTRALIAN GOLD COINAGE.

A very important series of dispatches have just been presented to Parliament, in reference to the above subject. Sir W. DENISON, the Governor-General, urges upon the home government the propriety of recognizing as legal tender all coins, the produce of the colonial branch of the royal mint. In this he is supported by the local legislature. The treasury reply, that my lords are not prepared to recommend to Parliament any legislation on the subject. The points urged by the Governor-General are of considerable importance. A mint is in operation at Sydney, issuing coinage passing current within the colony. For all external purposes, bullion, or English sovereigns, have to be used. To obtain English sovereigns, freight and insurance, to and from England, of the gold produced, are considered as charges in excess, and the continuance of which may be terminated. It is clearly a simple remedy to recognize the Sydney mint, to place it under the same regulations, subject to the same investigation into the character of the coin issued from it, and thus secure to its coinage the same trust and value as is placed in that issued from the Tower Hill. "My lords" consider a question of imperial interest is involved, and hesitate as to their course. In this matter colonial and imperial interests are as one, and there can be no reason for delaying the adoption of the very reasonable requests of the local legislature.

STATISTICS OF TRADE AND COMMERCE.

UNITED STATES COMMERCE—DEBITS AND CREDITS.
TRADE OF THE UNITED STATES WITH FOREIGN COUNTRIES.

The following tables show, first, the exports to and imports from countries which take larger sums than we receive from them; secondly, the countries from which we import more largely than we exported to, in the last fiscal year, ending 30th June, 1859:—

FISCAL YEAR 1858-1859.

Debtor countries.	Exports.	Imports.
Russia.....	\$5,714,355	\$877,835
Sweden, Norway and Colonies.....	1,448,905	558,075
Denmark and Colonies.....	1,051,877	297,718
Great Britain.....	174,945,853	125,754,421
British Colonies.....	40,733,908	32,229,466
France and Colonies.....	45,107,074	41,447,004
Portugal.....	868,549	242,841
Austria and Possessions.....	2,837,992	571,178
Bremen.....	12,537,948	9,694,377
Other German Ports.....	35,742	.....
Belgium.....	4,195,773	3,467,222
Sardinia.....	2,994,993	299,475
Papal States.....	222,298	5,390
Ports in Africa.....	1,678,350	1,548,710
Bolivia.....	5,355	.....
Peru.....	955,164	323,894
Ecuador.....	35,210	.....
Sandwich Islands.....	1,138,983	486,191
Other Islands in the Pacific.....	46,525	31,033
Total.....	\$246,354,854	\$217,584,830
Creditor countries.	Exports.	Imports.
Holland and Colonies.....	\$5,693,022	\$6,863,418
Spain and Colonies.....	22,917,402	44,505,409
Turkey and Possessions.....	661,722	775,091
Hamburg.....	3,600,268	8,071,964
Tuscany.....	245,390	1,294,350
Two Sicilies.....	575,771	2,180,639
Greece.....	15,415	67,290
Hayti.....	2,484,764	2,666,246
San Domingo.....	19,788	193,390
Mexico.....	2,992,546	5,389,974
Central Republic.....	172,262	589,911
New Granada.....	1,562,964	2,848,141
Venezuela.....	1,720,499	4,231,031
Brazil.....	6,256,976	22,439,842
Uruguay.....	630,356	774,543
Buenos Ayres.....	1,438,235	4,070,033
Chili.....	1,967,324	2,646,800
Japan.....	.....	295
China.....	7,127,199	10,791,381
Other ports in Asia.....	.....	154,121
Whale Fisheries.....	148,705	350,654
Uncertain places.....	.....	68,786
Total.....	\$101,434,608	\$121,183,300
Totals, 1858-59.....	\$356,789,462	\$338,768,130

From Spain and Brazil we import, together, \$38,000,000 more than they take from us. Large portions of the exports included under the heads of Great Britain and France, are, in fact, intended for other countries, especially in the article of cotton. Our exports to the debtor countries give us a balance of \$29,000,000, and with the creditor countries there is a balance of nearly \$11,000,000 in our favor, making an aggregate apparent balance of \$18,000,000 in favor of this country. This, of course, includes the specie sent forward. That balance may have been spent by travelers and used in interest payments.

IMPORT TRADE OF NEW YORK.

FOREIGN IMPORTS (OTHER THAN DRY GOODS AND SPECIE) AT THE PORT OF NEW YORK FOR THE YEAR 1859.

(The quantity is given in packages, when not otherwise stated.)

	Quantity.	Value.		Quantity.	Value.
Alabaster ornaments	348	\$5,215	Cream Tartar...	1,782	426,929
Bags.....	.....	17,127	Essential Oils....	1,403	127,017
Baskets.....	1,702	95,202	Flor Sulphur.....	.....	11,919
Bottles.....	.....	20,415	Gambier.....	20,267	117,935
Boxes.....	.....	27,554	Gum Arabic.....	7,873	197,075
Books.....	5,595	777,470	Gum Copaiva ...	328	19,716
Bricks.....	.....	8,782	Gum Copal.....	458	5,645
Bristles.....	1,035	248,234	Gum Crude.....	17,509	207,617
Building stones....	.....	30,929	Glue.....	144	14,911
Burr stoues..	.....	39,010	Insect powder...	8	868
Buttons.....	1,782	464,450	Iodine potash....	525	48,405
Castor seed.....	.....	.....	Ipecac.....	.....	8,602
Chalk.....	2,316	9,197	Hy. of potash....	492	51,975
Cheese.....	2,543	101,796	Jalap.....	.....	4,978
China ware.....	12,247	609,730	Lac dye.....	247	11,009
Cigars.....	.....	2,320,408	Licorice paste....	21,277	512,547
Clay.....	1,166	46,709	Licorice root....	10,733	50,370
Clocks.....	351	44,207	Madder.....	5,308	1,007,502
Coal..... tons	127,717	553,613	Madder, ext.....	.....	20,812
Cocoa..... bags	6,713	131,823	Magnesia.....	1,325	28,090
Coffee... bags & mats	671,002	8,689,520	Nitrate of soda..	.....	25,978
Corks.....	.....	157,920	Opium.....	394	302,805
Cotton.....	1,457	50,101	Paris white.....	888	4,250
Drugs, unspecified..	.....	419,752	Peruvian bark...	12,865	337,548
Acids.....	1,820	192,223	Phosphorus.....	534	34,643
Alkali.....	150	4,201	Quinine.....	20	4,212
Aloes.....	.....	861	Quicksilver.....	.....	108,185
Alum.....	626	20,420	Reg antimony...	704	52,494
Aluminous cake..	.....	21,475	Rhubarb.....	1,599	51,896
Ammonia.....	1,460	75,689	Safflower.....	.....	2,382
Annate.....	.....	3,209	Safflower, ext...	.....	3,040
Argols.....	283	34,581	Sal soda.....	31,592	273,654
Arrowroot.....	716	7,520	Salt peter.....	.....	72,600
Arsenic.....	.....	10,104	Sarsaparilla.....	2,249	64,696
Barites.....	2,957	14,185	Shellac.....	804	23,354
Barilla.....	.....	6,919	Soda ash.....	38,558	908,890
Bi-carb. soda....	110,898	467,299	Sugar of lead....	1,198	58,479
Bleaching powder	17,379	271,571	Sumac.....	38,183	124,761
Borax.....	3,432	112,149	Tonqua beans...	213	21,138
Brimstone.....	47,536	135,019	Vanilla beans...	59	13,423
Camphor.....	1,851	31,804	Vermillion.....	932	54,224
Cantharides.....	.....	613	Whiting.....	5,150	8,573
Carmine.....	9	1,855	Yellow ochre...	3,389	13,774
Castor Oil.....	1,449	26,059	Dyewoods—		
Chickory.....	13,096	111,343	Brazil wood.....	.....	253,728
Cochineal.....	1,526	232,528	Camwood.....	.....	2,313
Cubebs.....	.....	980	Fustic.....	4,519	38,718
Cudbear.....	831	47,457	Logwood.....	23,706	135,968
Cutch.....	5,004	25,445	Sapan wood.....	.....	16,400

	Quantity.	Value.		Quantity.	Value.
Earthenware.....	40,918	1,355,861	Brandy.....	68,868	2,683,089
Emery.....	1,611	18,758	Beer.....	1,630	14,516
Fancy goods.....	.....	2,414,266	Champagne.....	170,832	1,097,460
Felting.....	747	13,430	Cordials.....	2,418	15,272
Fish.....	.....	542,995	Gin.....	14,633	646,888
Fire-crackers.....	.....	60,120	Porter.....	7,574	66,151
Firearms.....	.....	4,500	Rum.....	3,670	199,448
Flax.....	1,443	42,301	Whisky.....	2,327	189,064
Flour, sago.....	.....	3,895	Wines.....	212,657	1,757,021
Free-stone.....	170	5,878	Metal Goods.....	3,321	577,137
Fruit, unspecified..	.....	37	Brass goods.....	473	88,217
Bananas.....	.....	12,434	Bronzes.....	11	2,211
Citron.....	.....	73,041	Chains & anchors.	6,806	323,490
Currants.....	.....	419,403	Copper.....	.....	968,496
Dried fruit.....	.....	41,477	Cutlery.....	4,029	1,810,593
Figs.....	.....	68,303	Guns, etc.....	1,953	360,760
Lemons.....	.....	310,390	Hardware.....	9,964	1,288,089
Nuts.....	.....	554,070	Iron, hoops . . tons	4,543	229,040
Oranges.....	.....	283,381	Iron, pig.....	43,856	607,180
Pineapples.....	.....	54,834	Iron, rails. . . bars	314,180	1,642,015
Preserved ginger.	.....	12,670	Iron, sheet. . . tons	9,144	509,688
Plums.....	.....	163,007	Iron, tubes.....	16,873	80,578
Prunes.....	.....	126,186	Iron, other. . . tons	72,886	3,122,572
Raisins.....	.....	979,809	Lead, pigs.....	269,326	1,551,996
Sauces & preserv's	.....	261,231	Lead ore.....	.....	3,815
Furniture.....	740	32,329	Nails.....	3,497	66,599
Furs.....	5,289	2,378,174	Needles.....	535	231,506
Gas Fixtures.....	1,410	34,657	Nickel.....	272	101,664
Glass.....	235,189	687,736	Old metal.....	.....	154,800
“ plate.....	6,078	213,833	Plated ware.....	294	101,136
“ ware.....	5,250	592,111	Platina.....	52	78,833
Grain.....	.....	116,135	Percussion caps..	535	123,326
Grindstones.....	.....	22,258	Saddlery.....	619	133,807
Guano.....	28,487	141,591	Silver ore.....	349	3,732
Gunny cloth.....	13,561	302,445	Silver ware.....	85	28,536
Gunpowder.....	.....	3,822	Spelt.....lbs.	7,515,414	357,867
Gutta percha.....	442	1,083	Steel.....	132,149	1,798,932
Hair.....	3,109	375,585	Tin plate.. boxes	560,193	3,999,687
Hair cloth.....	454	220,205	Tin slabs.....	.....	900,218
Hatters' goods.....	5	1,480	Wire.....	12,200	374,117
Hemp.....	79,249	1,031,115	Zinc.....	.....	391,655
Honey.....	8,209	159,917	Machinery.....	375	32,571
Horns.....	.....	3,124	Marble and manfs..	.....	175,800
Hops.....	.....	2,784	Matches.....	390	10,481
India rubber.....	10,995	707,517	Miscellaneous.....	.....	346,092
Indigo.....	5,021	690,323	Molasses.....	84,236	1,902,994
Instruments—			Oils, unspecified...	4,643	198,159
Chemical.....	63	2,604	Anise.....	71	9,166
Mathematical.....	60	12,979	Cod.....	3,200	105,998
Musical.....	2,232	395,267	Coal.....	264	6,533
Nautical.....	9	2,453	Linseed.....	6,210	408,873
Optical.....	327	132,876	Olive.....	72,157	248,925
Surgical.....	48	13,700	Palm.....	3,462	163,859
Ivory.....	195	80,872	Whale.....	69	7,175
Jewelry.....	1,142	1,506,257	Oil paintings.....	560	240,212
Leather, unspecified	5	1,063	Palm leaf.....	.....	14,761
Patent.....	236	129,603	Paper hangings....	3,136	144,714
Boots and shoes..	212	43,797	Perfumery.....	3,091	267,745
Dressed hides . .	9,403	748,477	Plaster.....	.....	40,333
Undressed hides..	.....	8,914,682	Pipes.....	.....	194,796
Leeches.....	379	13,051	Pitch.....	.....	1,412
Liquors—			Potatoes.....	.....	180,348
Ale.....	22,908	217,240	Provisions.....	.....	70,462

	Quantity.	Value.		Quantity.	Value.
Rags.....	49,693	1,057,502	Sugar.. boxes & bags	345,509	4,412,478
Ratan.....	.....	218,808	Tapioca.....	2,135	15,662
Rice.....	.....	42,165	Tea.....	875,579	7,540,351
Rope.....	.....	35,881	Tobacco.....	58,342	1,250,889
Salt.....	.....	321,051	Tomatoes.....	.....	11
Sago.....	.....	12,238	Toys.....	8,012	416,691
Seeds.....	.....	323,299	Trees and plants...	.....	25,527
Linseed.....	147,071	554,886	Twine.....	2,849	23,746
Rape seed.....	19	822	Vegetable wax....	350	16,498
Soap.....	84,885	359,454	Vulture feathers...	.....	25,671
Spices—			Watches.....	1,888	2,697,037
Cassia.....	.....	242,298	Wax.....	.....	6,599
Cinnamon.....	.....	15,483	Woods, unspecified..	.....	58,147
Cloves.....	.....	27,971	Cedar.....	.....	46,432
Ginger.....	.....	26,371	Cork.....	.....	22,526
Mace.....	.....	11,647	Ebony.....	.....	7,793
Mustard.....	.....	62,856	Lignum vitae.....	.....	7,087
Nutmeg.....	.....	226,225	Lima... ..	.....	35,705
Pepper.....	.....	281,161	Mahogany.....	.....	252,596
Pimento.....	.....	93,165	Rose.....	.....	163,384
Sponge.....	923	49,519	Willow.....	.....	42,299
Stationery.....	2,787	296,040	Wool.....	44,547	2,543,519
Engravings.....	395	139,382	Waste.....	18,156	507,153
Paper.....	4,154	360,281	Corrections.....	.....	1,932,171
Statuary.....	.....	84,168			
Sugar.. hds. bbls. tcs.	265,801	14,288,051	Grand total.....		\$129,196,471

MANILLA HEMP.

Exports of hemp from Manilla to the United States, Europe, and Great Britain, and total to all countries:—

	United States.	Continent of Europe.	Great Britain.	Aggregate of these.	Total to all countries.
1850.....	102,194	3,735	17,481	123,410	124,829
1851.....	143,133	7,202	23,603	173,948	174,572
1852.....	220,514	3,991	23,752	248,357	249,265
1853.....	204,584	3,844	13,090	221,518	222,689
1854.....	228,017	1,864	92,739	322,620	322,652
1855.....	214,580	3,094	20,669	238,343	238,985
1856.....	312,386	2,192	37,207	351,785	355,293
1857.....	243,110	2,487	95,983	341,580	347,574
1858.....	288,953	6,650	105,633	401,236	412,504
1859.....	284,657	4,644	130,672	419,973	426,177
Ten years.	2,242,128	39,708	560,829	2,842,770	2,874,540

PRICES OF HEMP AT MANILLA, AND RATES OF FREIGHT.

	Prices of Hemp.			Freights to United States.		
	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.
1850.....	\$6 50	\$5 62	\$6 25	\$15	\$10	\$12 50
1851.....	7 50	6 12	6 62	10	6	7 00
1852.....	8 12	6 50	7 12	12	8	10 00
1853.....	8 37	7 00	7 55	10	10	10 00
1854.....	11 50	7 00	8 42	20	14	17 50
1855.....	8 00	6 50	7 25	17½	12	15 25
1856.....	8 25	7 00	7 50	14	8	10 80
1857.....	8 50	6 00	7 75	13	5	8 65
1858.....	5 75	4 75	5 37	11	5	8 00
1859.....	5 25	4 50	5 00	7	3	5 00

AVERAGE FROM 1850 TO 1859.

\$11 50	\$4 50	\$6 88	\$20	\$3	\$10 37
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EXPORTS OF DOMESTIC COTTONS FROM NEW YORK TO FOREIGN PORTS.

Where to.	1855.	1856.	1857.	1858.	1859.
Mexico.....pk'gs.	2,972	4,827	2,084	2,446	2,475
Dutch West Indies.....	337	151	581	317	531
Swedish West Indies.....	6	10	....	4	....
Danish West Indies.....	284	427	564	691	696
British West Indies.....	499	880	207	219	227
Spanish West Indies.....	1,143	151	223	358	366
St. Domingo.....	411	228	591	262	977
British North America.....	16	25	42	14	18
New Granada.....	131	949	560	627	967
Brazil.....	2,764	3,756	2,751	4,466	3,637
Venezuela.....	1,094	335	268	523	919
Argentine Republic.....	498	590	90	328	903
Central America.....	495	190	161	200	55
West coast of South America.....	1,152	158	3,710	4,195	6,606
Honduras.....	401	160	190	436	259
Africa.....	1,324	1,874	1,414	1,200	323
Australia.....	1,908	2,060	418	109	135
East Indies and China.....	11,929	17,674	12,676	43,419	53,662
All others.....	251	267	203	180	1,793
Total.....	27,585	34,782	26,653	59,994	74,549
Total from Boston.....	34,093	37,880	26,900	29,375	31,661

The exports of domestics have been larger for the last year than ever before in the history of the trade, and the great increase, like that shown in the year 1858, has been in the shipments to China and other East Indian ports.

EXPORTS OF DOMESTIC GOODS AND MANUFACTURES FROM GREAT BRITAIN.

The London *Times* of February 28th, prefaces a table showing the growth of British manufactures, with the following remarks:—

A return has been issued by the Board of Trade of the declared value of British and Irish produce and manufactures exported from the United Kingdom during the past year. Its chief feature is again the extraordinary growth of our Eastern trade. In 1857 the value of our exports to Australia was exactly equal to those to India, namely, £11,600,000. In the subsequent two years the Indian total has increased 75 per cent, while our commerce with Australia, although better in 1859 than 1858, shows a decline.

Within the same period, also, our dealings with China have doubled. Contrasted with the figures of 1858 the trade with our own possessions during the past year, which still constitutes more than 35 per cent of the entire export operations of the United Kingdom, presents an increase in all instances save those of the West Indies, Singapore, the Channel Islands, Mauritius, the Ionian Islands, and British Honduras. The shipments to the United States, which experienced a serious check after the panic of 1857, have recovered to a point beyond their former scale, and are now more than 17 per cent of our total exports, foreign and colonial, and 27 per cent of our foreign exports alone. Germany, although her trade with us has declined for the past three years, takes about half as much as the United States, and then follow South America and Holland. France again presents a falling off sufficient to indicate a most unhealthy state of the commercial relations of the two countries. In 1857 Turkey stood before Russia; but last year their positions were transposed. Spain, Portugal, Naples, and the Papal States all figure on the unfavorable side. Sardinia, however, shows a good increase. Sweden and Norway have also carried on a large trade, while that with Belgium has been unsatisfactory. Finally, it is to be remarked that our trade with European States is every year becoming of a more secondary character as compared with that which we have established among our colonial and American progeny. It is to those quarters that the

magnificent augmentation exhibited in the present total over 1858, and which render it of unprecedented amount, is entirely due. The general increase is £13,831,671, while to the colonies and the United States it was £14,022,424. The balance of our business carried on with all other parts of the world resulted, therefore, in a falling off.

	1858.	1859.		1858.	1859.
British possessions :—			Russia :—		
India	16,782,386	19,832,699	Northern ports . . .	2,724,609	3,493,016
Australia	10,463,032	11,225,616	Southern ports . . .	367,890	546,133
Brit N. America . .	3,159,845	3,615,987	Territory in N. E.		
Hong Kong	1,145,669	1,931,595	Asia		13,762
Cape of G. Hope . .	1,602,612	1,762,168	Settlements on N.		
British W. Indies . .	1,792,323	1,606,700	coast of America		602
Singapore	960,335	1,420,324		3,092,499	4,053,453
Gibraltar	852,728	714,267	Turkey	4,255,612	3,752,458
Ceylon	541,131	667,680	Foreign W. Indies,		
Malta	433,066	624,107	Hayti, &c	2,587,063	2,556,971
Channel Islands . .	508,264	612,953	China (exclusive of		
Mauritius	603,103	567,204	Hong Kong) . . .	1,730,778	2,526,036
British Guiana . . .	459,743	555,346	Egypt	1,985,829	2,195,882
W. Coast of Africa	263,725	279,058	Spain & Canary Is.	2,179,126	2,081,627
Ionian Islands . . .	337,905	251,032	Belgium	1,815,257	1,474,873
Natal	100,785	174,936	Sardinia	1,174,580	1,406,884
British Honduras . .	136,717	115,614	Portugal & Azores	1,548,207	1,398,020
Heligoland	282	60,238	Two Sicilies	1,569,166	1,161,783
St. Helena	34,957	43,890	Java	832,045	1,073,088
Aden	36,899	42,705	Tuscany	933,931	801,779
Falkland Islands . .	33	11,183	Austria	1,298,199	789,886
Ascension	6,917	9,637	Denmark, (includ-		
Kooria Moorla Is.	....	977	ing Iceland) . . .	595,309	724,002
	40,222,457	46,125,046	West c. of Africa.	691,405	710,239
United States :—			Philippine Islands	541,475	684,788
Atlantic ports . . .	13,994,815	22,174,245	Syria	760,497	677,337
California	496,633	437,038	Mexico	411,831	597,951
	14,491,448	22,611,283	Sweden	428,144	546,632
Germany :—			Norway	295,288	497,644
Hanse Towns	9,031,877	9,180,104	Greece	249,462	262,309
Prussia	1,956,199	1,492,541	Papal States	409,543	259,987
Hanover	1,640,189	987,049	Central America . .	393,179	226,662
Mecklenburg	59,331	64,370	African ports in		
Oldenburg	61,584	53,098	the Red Sea	4,525	*204,924
	12,749,180	11,777,162	South Sea Islands .	67,233	114,949
South America :—			Wallachia & Mol-		
Brazil	3,984,817	3,686,353	davia	175,986	111,026
Chili	1,117,580	1,474,563	Morocco	84,076	96,390
Buenos Ayres	1,008,819	958,177	Cape Verd Islands	14,725	22,204
Peru	1,163,155	857,008	Algeria	21,033	22,159
New Granada	505,749	729,468	Persia	8,998	18,915
Paraguay	522,670	692,688	Tunis	4,520	5,597
Venezuela	316,738	317,706	E. coast of Africa . .	1,927	4,391
Ecuador	26,963	22,251	Japan . . . . .	....	2,892
	8,646,491	8,738,214	Camboja, Cochín,		
Holland	5,473,312	5,379,794	China, & Tonquin	....	505
France	4,863,131	4,744,103	Ladron Islands . .	468	372
			Greenland & Davis'		
			Straits . . . . .	....	45
			French possessions		
			in India	831	..
				1858.	1859.
Total exports				£116,608,756	£180,440,427

* £200,000 for telegraph wires.

FOREIGN COMMERCE OF AMERICAN CITIES, 1859.

	Boston.	New York.	Philadelphia.
Foreign entries.....	3,073	3,902	553
Tons shipping entered.....	734,167	1,890,144	189,421
Foreign clearances.....	2,919	3,086	485
Tons shipping cleared.....	642,023	1,476,279	125,657
Foreign imports.....	41,174,670	218,231,398	14,517,542
Domestic exports.....	14,196,130	97,461,576	5,218,514
Tonnage owned.....	455,622	1,444,360	220,889
Tons shipping built.....	21,751	15,145	7,887
Valuation.....	254,174,100	551,923,122	225,000,000
	Baltimore.	New Orleans.	San Francisco.
Foreign entries.....	626	1,038	303
Tons shipping entered.....	189,992	659,083	221,439
Foreign clearances.....	602	1,168	515
Tons shipping cleared.....	172,446	808,248	354,406
Foreign imports.....	9,713,921	18,339,516	11,155,767
Domestic exports.....	9,074,511	100,890,689	12,403,782
Tonnage owned.....	195,832	215,417	78,847
Tons shipping built.....	5,842	795	2,055
Valuation.....	150,000,000	104,856,912	.....

COMMERCE OF NEW ORLEANS.

IMPORTS OF MERCHANDISE INTO THE PORT AND DISTRICT OF NEW ORLEANS, THROUGH THE CUSTOM-HOUSE, ON WHICH DUTIES WERE PAID FOR THE CALENDAR YEAR ENDING THE 31st DECEMBER, 1859.

Months.	Dutiable.	Free.	Specie.	
January, 1859.....	\$1,131,280	\$983,154	\$246,921	
February.....	858,492	739,372	175,239	
March.....	888,428	537,380	201,975	
April.....	888,363	846,617	39,814	
May.....	604,896	374,231	46,777	
June.....	904,707	479,811	34,178	
July.....	595,491	115,499	733,201	
August.....	771,750	77,042	118,214	
September.....	1,494,057	613,795	26,438	
October.....	1,090,894	104,772	127,903	
November.....	1,025,935	638,748	192,373	
December.....	1,018,794	846,486	241,857	
	\$11,273,087	\$6,358,904	\$2,184,890	
	1856.	1857.	1858.	1859.
Merchandise paying duties..	\$12,440,695	\$14,587,457	\$9,746,240	\$11,273,087
Merchandise free.....	5,817,586	5,756,346	5,781,246	6,358,904
Bullion and specie.....	1,614,095	5,038,903	1,763,965	2,184,890
Total.....	\$19,872,376	\$25,382,706	\$17,291,451	\$19,816,881

There was a greater amount of specie imported in 1857 than in any year recorded, as well as a greater amount of merchandise. The free list shows a larger excess for 1859 than for any previous year. The last month (January, 1860.) shows a large increase of importations, greater than any previous January on record.

GRAIN AND SEED EXPORT OF ROSTOCK.

	Wheat.		Rye.		Oats.		Peas.		Rape.		Total.	
	Last.	Scheffel.	Last.	Scheffel.	Last.	Sch'l.	Last.	Sch'l.	Last.	Sch'l.	Last.	Scheffel.
1859...	8,378	82½	319	77	430	43	40	92	138	50	9,688	86½
1858...	6,555	4¾	788	½	187	45½	2	88	2	24	7,708	41
1857...	8,721	28¾	1,767	18¾	1,038	80¾	82	68	133	84	11,840	26½
1856...	4,179	87	506	35	386	5½	2	..	64	..	5,160	11½
1855...	8,734	48½	1,812	34½	172	38	248	8½	..	..	10,976	2½

MANILLA CHEROOTS.

Cheroots (cigars) are manufactured in two forms—that of the Havana, the smaller end being twisted to a point—or cut at both ends, the usual Manila form. They are of sundry qualities, as follows:—Largest size, 125 to a box—1st Regalias, 1st Caballeros, and Londres; second size, 250 to a box—2d Regalias and 1st Cortados, 2d Caballeros, 1st Havanas, (ordinary size, and such as are more commonly used, Nos. 2 and 3 being those in most demand;) 500 to a box—Nos. 2, 3, 4, and 5 Havanas, 2 and 3 Cortados. Besides these, enormous quantities of paper cigars (*Cigarillos*) are consumed by the natives. They are sold in packets of twenty-five, at 5 cuartees; thirty, at 5½ cuartees; thirty-six, at 5 5-7 cuartees. The estanco prices for these cigars are, per box:—

	Cigars.	Dollars.		Cigars.	Dollars.
Imperiales, box containing.	125	3.750	3	Havanas, 3 Cortados....	500 3.500
Regalias and Caballeros...	125	3.125	4	"	500 3.000
1 Havanas, 1 Cortados....	250	3.509	5	"	500 2.500
2 " 2 "	500	4.000		Londres.....	125 1.875

Upon these minimum prices biddings take place at the monthly public auctions. So large is the demand that it is difficult to obtain any but fresh cigars, which require to be kept for two or three years to ripen. The collection of tobacco and the manufacture of cigars are under the charge of an administration whose headquarters are in Manilla. The warehouses are of immense extent, and 20,000 persons probably find occupation in the preparation of this article of luxury, to say nothing of those employed in its production.

The money value of the tobacco grown in the Philippines is estimated at from \$4,000,000 to \$5,000,000, say £1,000,000 sterling. Of this nearly one-half is consumed in the islands, one-quarter is exported in the form of cheroots, (which is the Oriental word for cigars,) and the remainder sent to Spain in leaves and cigars, being estimated as an annual average contribution exceeding \$800,000. The sale of tobacco is a strict government monopoly, but the impossibility of keeping up any efficient machinery for the protection of that monopoly is obvious even to the least observant. The cultivator, who is bound to deliver up all his produce to the government, first takes care of himself and his neighbors, and secures the best of his growth for his own benefit. Out of the capital of Manilla scarcely anything is smoked but the *cigarro ilegítimo*; and in the capital you frequently get a hint that "the weed" is not from the *estanco real*. From functionaries able to obtain the *best* which the government brings to market, a present is often volunteered, which shows that they avail themselves of something *better* than that best.

EXPORT TRADE OF ODESSA FOR FOUR YEARS.

	No. of vessels.	Wheat. Tschetw.	Rye. Tschetw.	Indian corn. Tschetw.	Oats. Tschetw.
1856.....	941	689,528	1,727	277,286	159,382
1857.....	1,143	906,315	31,066	632,252	389,224
1858.....	1,268	909,808	168,085	384,022	649,992
1859.....	1,462	1,413,535	389,472	403,255	429,848

	Oats. Tschetw.	Linseed. Tschetw.	Wool. Pud.	Tallow. Pud.	Value. Silver roubles.
1856.....	53,319	146,621	120,035	207,802	17,799,983
1857.....	442,964	110,690	189,362	245,354	27,629,876
1858.....	745,704	131,077	213,719	284,715	30,492,121
1859.....	612,581	233,356	173,076	222,628	31,512,772

The silver rouble is 75 cts., the pood is 35 lbs., and tschetw is 6 bush. ; consequently the export of wheat in 1859 was equal to 8,481,210 bushels.

THE SCOTCH PIG IRON TRADE.

In the London *Times* of January 6th, a table of returns for the production and trade in Scotch pig iron is given, from which we take the following items, giving first the comparison for the last ten years :--

Year.	Furnaces in blast.	Tons made.	Shipments and con- sumption.	Stock.
1849.....	112	690,000	578,000	210,000
1850.....	105	595,000	535,000	270,000
1851.....	112	760,000	680,000	350,000
1852.....	113	775,000	675,000	450,000
1853.....	114	710,000	950,000	210,000
1854.....	117	770,000	860,000	120,000
1855.....	121	825,000	847,000	98,000
1856.....	128	832,000	842,000	88,000
1857.....	123	915,000	843,000	160,000
1858.....	132	945,000	810,000	295,000
1859.....	125	950,000	915,000	330,000

There are, in all, 174 furnaces, 125 in blast, 49 out of blast. It is stated that the year 1859 has been more satisfactory than any other recently, the demand for consumption and shipment exceeding any year except 1853. The malleable iron works of the Clyde have continued in remarkable activity, it is said, and contracts to the extent of £1,000,000, or \$5,000,000, having been made during the year for iron shipbuilding on that celebrated little river, the Clyde. Up to 1825 the annual production of Scotch iron did not exceed 30,000 tons, and for fifteen or twenty years afterwards the Clyde had no better channel than the Schuyllkill has now. Finally they dug an adequate depth there, and have for years supplied the world with iron ships.

Our total imports of pig iron for 1858-59, the fiscal year, were 72,567 tons, against 41,985 in 1857-58, and 51,794 tons in 1856-57. We offer an improving market, it appears, for the enterprising Scottish manufacturers, and retrograde in 1859 from the independence we were developing in 1856.

TRADE OF MILWAUKEE.

The Milwaukee *Sentinel*, of a late date, has a very full and interesting exhibit of the commerce of that thriving city for 1859. With reference to the grain trade, it says :--

Although the receipts of wheat for 1859 exceed those of the previous year by nearly eight hundred thousand bushels (794,780,) the total receipts of grain—adding flour reduced to bushels—exhibit an increase of only 520,501 bushels over the year 1858. This light increase in the aggregate receipts of grain is attributable to the great drouth of last summer, which partially destroyed the hay crop, thus necessitating the consumption of large quantities of oats by the producers, which would otherwise have been marketed.

The subjoined table shows the total receipts of flour and grain for the year, and the sources of supply :--

Railroads.	Flour.	Wheat.	Oats.	Corn.	Barley.	Rye.
Milwaukee & Mississippi...	75,362	2,217,790	99,731	94,768	36,567	19,874
Milwaukee & Minnesota....	99,178	1,357,773	123,808	24,809	41,466	5,201
Milwaukee & Watertown..	25,170	720,447	37,332	1,288	20,957	21
Milwaukee & Horicon.....	17,608	528,972	50,741	11,627	12,044	507
Milwaukee & Chicago.....	6,634	153,137	25,034	23,096	12,594	1,565
	223,332	4,978,109	336,676	155,588	123,628	27,168
Received by steam	20,000	553,654	.....	.....	.....	.....
Total.....	243,332	5,450,957	336,676	155,588	123,628	27,168

COMPARATIVE RECEIPTS OF GRAIN FOR TWO YEARS.

	1858.	1859.
Flour reduced to bushels	1,039,645	1,116,660
Wheat	4,676,177	5,450,957
Oats	762,744	836,676

The following is a statement of the pork trade :—

The pork packing of 1859-60 presents a highly satisfactory showing, so far as the statistics of the trade are concerned, the number of hogs cut between November 1st and January 15th, by our city packers, exceeding the total packing of 1858-59 by 15,000, and being much larger than any previous season. The following statement is made up from the books of our packers and other reliable sources :—

HOGS CUT FROM NOVEMBER 1 TO JANUARY 15.

Total packing.	City consumption.	In hands of dealers	Shipped Eastward.	Total receipts.
47,000	3,000	3,000	907	53,907

The manufacture of lager beer is thus compared :—

The following statement exhibits the amount of lager beer manufactured here during the past two years :—

1858.....barrels	49,800		1859.....barrels	37,200
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Decrease 12,600 barrels. To this should be added some 5,000 barrels of ale manufactured at the Spring and Lake breweries. During the first half of the year beer sold at \$7 per barrel. During the past six months prices have ranged from \$5 to \$6 per barrel.

The facilities for storing and handling grain at Milwaukee is as follows :—

Capacity for storing grain.....bushels	1,695,000
Capacity for shipping in one day.....	331,000
Capacity for rolling freight.....barrels	101,000

EXPORTS FROM MANILLA TO THE UNITED STATES.

TO ATLANTIC PORTS.

	1858.	1859.		1858.	1859.
Sugar.....piculs	16,030	109,526	Sapan wood ....piculs	10,594	15,141
Hemp.....	288,951	284,655	Cigars.....M.	4,613	10,132
Coffee.....	2,390	2,256	Moth-o'-pearl shell,pic.	....	120
Indigo.....qtls.	503	2,374	Buffalo hides	999	2,026
Hide cuttings...piculs	2,929	3,597	Ratans	120	....
Grass cloth.....pcs.	57,224	27,471			

TO CALIFORNIA.

	1858.	1859.		1858.	1859.
Sugar.....piculs	45,038	44,155	Grass cloth.....pcs.	....	300
Hemp.....	10,140	4,880	Cigars.....M.	3,416	5,759
Coffee.....	236	313			

The above exports for 1859, include the cargo of the Juan Fernandez, for Boston, which was lost on the passage, 7,213 piculs sugar, 11,244 piculs hemp, &c.

IMPORT TRADE OF BOSTON.

IMPORTS OF FOREIGN GOODS INTO THE DISTRICT OF BOSTON AND CHARLESTOWN DURING TEN YEARS.

	Free.	Paying duty.	Total.		Free.	Paying duty.	Total.
1850	\$1,910,822	\$27,998,554	\$29,909,376	1855	\$4,373,006	\$37,611,007	\$41,984,013
1851	2,797,489	29,053,069	31,850,558	1856	4,883,099	38,131,801	43,014,900
1852	3,147,145	30,839,999	33,987,144	1857	11,881,357	36,626,567	48,507,924
1853	2,573,211	40,744,158	43,317,369	1858	9,675,587	23,065,129	32,740,716
1854	3,185,085	43,295,359	46,480,444	1859	11,932,068	32,021,957	43,954,025

DEAL TRADE OF ST. JOHN, N. B.

NUMBER OF AMERICAN VESSELS ENGAGED.

Messrs. J. H. CHENEY & Co. have compiled an annual statement of American vessels cleared at St. John, N. B., for Europe, in 1859, giving the names of the vessels, their tonnage, ports of destination, and number of standards composing each cargo. The following is a recapitulation:—

Eighty-one vessels, measuring 84,049 tons, approximate value	\$4,202,900
Carrying 33,015 standard deals	673,383
Earning freights amounting to.....	523,580
Approximate value of vessels, cargo, and freights.....	\$5,399,863

COMPARATIVE STATEMENT SINCE 1854.

Years.	Vessels.	Tonnage.	Approximate value.	Standard deals.	Value deals.	Freights earned.
1858	53	45,299	\$2,264,950	19,117	\$321,165	\$330,952
1857	76	64,292	3,214,600	25,606	430,680	426,584
1856	91	78,644	3,932,200	31,834	611,212	718,915
1855.....	90	85,898	4,294,900	32,633	665,700	549,970
1854.....	66	59,651	3,877,315	21,915	580,748	540,058

TOBACCO IN VIRGINIA.

The inspections of tobacco in Virginia for the years ending, respectively, on the 1st October, in—

	Richmond.	Petersburg.	Lynchburg.	Farmville.	Clarksville.	Total.
1858.....hogsheads	44,616	15,154	8,788	2,412	1,750	72,720
1859	41,797	16,079	7,621	1,193	2,263	68,953

The loose tobacco brought to the inspection warehouses, and that which is manufactured by country factories, is variously estimated at from 16,000 to 20,000 hogsheads. Tobacco in Virginia, 1859:—

Inspected in Richmond as above.....	41,797
Received tobacco inspected in other inspection towns.....	5,647

Total receipts in Richmond..... 47,444

Besides the receipts in hogsheads, there were received at the warehouses in Richmond in 1859, 4,418,664 pounds loose tobacco.

NEW YORK AUCTION DUTIES.

As a subject of interest to a large class of our readers, says the *Courier and Enquirer*, we give, in full, the following statement showing the amount of duties received on the sale of foreign goods, by public auction, in the city of New York, during each year since the passage of the act entitled "An act to regulate sales by public auction," passed April 15, 1817; also, the total amount of such duties collected in said city during said period:—

Year.	Duties.	Year.	Duties.	Year.	Duties.	Year.	Duties.
1817..	\$122,031 76	1828..	\$255,591 84	1839..	\$180,321 48	1850..	\$85,566 13
1818..	176,267 29	1829..	241,436 18	1840..	131,697 11	1851..	101,769 92
1819..	141,953 76	1830..	217,111 57	1841..	208,530 08	1852..	108,620 96
1820..	154,576 85	1831..	177,397 10	1842..	160,227 62	1853..	93,274 53
1821..	151,783 29	1832..	249,349 40	1843..	128,898 42	1854..	108,291 34
1822..	179,641 69	1833..	210,723 66	1844..	139,799 49	1855..	144,680 30
1823..	207,469 09	1834..	203,366 53	1845..	140,958 90	1856..	120,970 04
1824..	231,836 86	1835..	195,629 80	1846..	111,449 78	1857..	132,105 63
1825..	285,854 63	1836..	*47,867 69	1847..	70,345 74	1858..	100,354 69
1826..	233,401 75	1837..	171,566 90	1848..	103,553 29	1859..	119,750 00
1827..	296,862 57	1838..	113,681 88	1849..	91,456 71		
Total							6,848,024 45

* Restored to the General Fund, July 18th, 1836.

NAUTICAL INTELLIGENCE.

LIGHTS IN THE GULF OF FINLAND.**ALTERATION OF LIGHTS IN THE KALBADEN-GRUND AND REVEL-STEIN LIGHT-VESSELS.**

The Imperial Ministry of Marine of Russia has given notice, that during the navigation of the Gulf of Finland, in the year 1860, the following alterations will be made in the lighting the Kalbaden-grund and Revel-stein light-vessels, the former lying 14 miles to the southwest of Glosholm, on the north shore of the gulf, and the latter off Revel, on the south shore. The light-vessel which will be placed off the south side of the Kalbaden-grund, instead of the red light, will exhibit a fixed white light on her mainmast and a ball at the masthead.

The light-vessel which will be placed off the north side of the Revel-stein, instead of three lights will exhibit only two fixed white lights, one on her fore and the other on her mizzen-mast; and a ball at the fore and mizzen mast-heads.

LEBIADNIKOVA SHOAL, lying $7\frac{1}{2}$ miles to the westward of the north point of Hogland, and hitherto distinguished by a flag—will for the future be marked by a beacon having six streaks, three colored white and three red, and with a double broom at the side, in order to distinguish it from the Hogland Shoal, which lies N. N. W. $\frac{3}{4}$ W. 2 miles from the north point of Hogland, and is marked by a flag. The bank of 5 fathoms discovered in 1859, lying 9 miles to the eastward of Ekholm, and $1\frac{1}{2}$ miles N. 42 W. (true) from the white flag on the north part of the Kalk-grund, will in future be marked by a black instead of a white buoy.

NAMSI BANK. For the convenience of vessels navigating the eastern part of the entrance to Narva Bay, between the New Ground and the Namsi Bank, the 5 feet water on the Namsi Bank will in future be marked by a black buoy.

HARBOR LIGHTS AT REVEL.

In reference to Notice to Mariners, No. 42, dated 15th October, 1859, information has been received at the Admiralty that the lights are exhibited from the wall at the entrance of the new military port of Revel, and not from four light-vessels as previously reported. By command of their lordships,

JOHN WASHINGTON, Hydrographer.

LONDON, February, 1860.

FIXED LIGHT ON ISLA Mouro, COAST OF SPAIN.

The Minister of Marine at Madrid has given notice, that on and after the 15th day of February, 1860, a light would be exhibited from the light-tower recently erected on Mouro Islet, at the entrance of the port of Santander, on the southern shore of the Bay of Biscay, north coast of Spain. The light is a fixed white light, illuminating an arc of 270° of the horizon, or from S. by W. to W. by N.; through the remainder of the circle a faint light will be seen when beyond the distance of $4\frac{1}{2}$ cables' lengths from the lighthouse. The light is elevated 141 feet above the level of high water, and should be seen in clear weather from a distance of 12 miles. The illuminating apparatus is catoptric, or by reflectors of the fifth order. The light-tower is slightly conical, 56 feet high from base to upper balcony, and stands 14 yards from the north shore of the islet. It rises from the center of the light-keeper's dwelling, which is circular, and both are built of white stone; the windows and top of lantern are painted green, and upper balcony, red. The dwelling will be hid by the rocks off the islet when approaching it from the northeast. The position of the light-tower is given as latitude $43^\circ 28' 37''$ N., longitude $3^\circ 45' 43''$ west of Greenwich. A rock called the Corbera, and a bank of 3 feet water, lie respectively S. E. by E. $\frac{1}{2}$ E. 112 fathoms, and W. by S. 140 fathoms, from the lighthouse. The bearings are magnetic. Variation $21\frac{1}{2}^\circ$ west in 1860. By command of their lordships,

JOHN WASHINGTON, Hydrographer.

LONDON, February 16, 1860.

NEW LIGHTHOUSE ON THE LAGSKAR ROCKS, GULF OF BOTHNIA.

The Imperial Ministry of Marine of Russia has given notice, that (instead of the old lighthouse of wood) a new lighthouse has been erected on the north-western of a cluster of low rocks, named the Lagskar, lying in the southwestern part of the entrance of the Gulf of Bothnia, and that the light would be exhibited from it on and after the 30th day of September, 1859. The light is a fixed white light, and it illumines an arc of the horizon from N. $40\frac{1}{2}^{\circ}$ E., round northerly to S. $32\frac{1}{2}^{\circ}$ E. It is elevated 101 feet above the mean level of the sea, and should be visible in clear weather from a distance of 14 miles. The illuminating apparatus is catoptric, or by metallic reflectors. The lighthouse is 89 feet high. The lower part, 18 feet, is built of granite, and the upper part, 53 feet, of brick, which is surmounted by a lantern, 18 feet high, painted yellow. It stands in latitude $59^{\circ} 50' 50''$ N., longitude $19^{\circ} 55' 50''$ east of Greenwich, and from it the south point of Aland Island bears N. E. by N., $10\frac{1}{2}$ miles, and Soderarm lighthouse W. $\frac{3}{4}$ S. $16\frac{1}{4}$ miles.

WELLINGHAMM AND KUGGHOLM ROCKS.

Also, that two rocky ledges, named Wellinghamm and Kuggholm, have lately been discovered in the southeastern part of the entrance of the Gulf of Bothnia. The former, with only 8 feet of water on it, lies in latitude $60^{\circ} 6'$ N., longitude $21^{\circ} 8'$ east of Greenwich, and bears from S. W. to S. $\frac{1}{2}$ W., distant one mile, from the Wellinghamm Islet; its southern point is marked by a pole with a red flag on it. The Kuggholm, with 9 feet over it, lies W. by S. $\frac{1}{2}$ S. one mile from Bjornholm, in latitude $60^{\circ} 12'$ N., longitude $21^{\circ} 35'$ east of Greenwich. Its northwestern point is marked by a pole.

BEACON ON HIIDENNIEMI POINT.

Also, that the beacon on Hiidenniemi Point, the northwest extreme of Carlon Island, in the northeast part of the Gulf of Bothnia, and which is the leading beacon for Port Uleaborg, has been rebuilt of wood, and painted red. The beacon is sexangular and has a pointed roof, which is surmounted by an iron weather pendant. It is 94 feet above the mean level of the sea, and is visible in clear weather from a distance of about 10 miles. The bearings are magnetic. Variation 11° west in 1859. By command of their lordships,

JOHN WASHINGTON, Hydrographer.

LONDON, November 24, 1859.

BEACON ON HOGSTY REEF, BAHAMA ISLANDS.

Information has been received at the Admiralty, that the stone beacon, (62 feet high,) which was erected on the Northwest Cay of the Hogsty Reef towards the end of the year 1858, has been leveled to about six feet of the ground by the hurricane which passed over it in October, 1859. Orders has been given for the immediate rebuilding of the beacon. The Northwest Cay is in latitude $21^{\circ} 42'$ N., longitude $73^{\circ} 51'$ west of Greenwich, and bears N. by W. $\frac{1}{4}$ W., distant 41 miles from the west extreme of Great Inagua Island, and S. E. $\frac{1}{4}$ E. 37 miles from the west end of Castle Island. The bearings are magnetic. Variation $3\frac{1}{4}^{\circ}$ east in 1859. By command of their lordships,

JOHN WASHINGTON, Hydrographer.

LONDON, November 26, 1859.

MONTAUK POINT, LONG ISLAND.

Notice is hereby given that the present light at Montauk Point, on Long Island, N. Y., will be extinguished on the 10th of July next, for the purpose of repairing this tower. A temporary light, consisting of three 21-inch reflectors, will be exhibited from and after that date until the repairs and alterations have been completed. The temporary light will be shown from a height of 110 feet above the sea level, and should be seen at a distance of sixteen nautical miles. It will be of the natural color, and the time of revolution will be two minutes, the same as the present light. By order of the Lighthouse Board,

WM. F. SMITH, Secretary.

WASHINGTON, April 13, 1860.

ALTERATION OF LIGHT AT CROOKHAVEN, IRELAND.

The Port of Dublin Corporation has given notice, that on and after the 1st day of February, 1860, the following alteration will be made in the light at present exhibited from the lighthouse situated on the north side of the entrance to Crookhaven, on the southwest coast of Ireland. The light, which is a fixed light, will continue to show white towards Long Island Bay, and towards the inner portion of Crookhaven, but it will be colored red in the direction of the Alderman Rocks and Streek Head, or when bearing from a vessel between N. W. $\frac{1}{4}$ W. and N. by E. Vessels, therefore, about to enter Crookhaven should, in order to clear these rocks in passing them, keep to the northward of the northern limit of the red light. The light is elevated 82 feet above the level of high water; the white portion of it should be visible in clear weather from a distance of 13 miles, and the red about 10 miles. The light-tower is circular, 45 feet high, and colored white. It stands in latitude $51^{\circ} 28' 35''$ N., longitude $9^{\circ} 42' 39''$ west of Greenwich. A beacon will be erected on the outer eastern point of the Alderman Rocks, of which due notice will be given. The bearings are magnetic. Variation $26\frac{1}{4}^{\circ}$ west in 1859. By command of their lordships,

JOHN WASHINGTON, Hydrographer.

LONDON, December 13, 1859.

FIXED LIGHT ON GRINDSTONE ISLAND, BAY OF FUNDY.

Information has been received at the Admiralty, that the light is exhibited from the light-tower recently erected on the western point of Grindstone Island, on the New Brunswick shore, at the head of the Bay of Fundy. The light is a fixed white light, placed at an elevation of 60 feet above high water, and visible in clear weather from a distance of 12 miles. The rise of tide at springs is about 48 feet. The light-tower is octagonal, and painted white. It stands in latitude $45^{\circ} 43' 13''$ N., longitude $64^{\circ} 37' 25''$ west of Greenwich, and from it Cape Enrage lighthouse bears S. W. by W. $\frac{1}{4}$ W. 10 miles. The keeper's dwelling is about 50 feet to the eastward of the light-tower, and is also painted white. The above position is according to Captain SHORTLAND, R. N., but the longitude differs about 10 miles from the position of Grindstone Island on the Admiralty charts. (The bearings are magnetic. Variation $19\frac{1}{4}^{\circ}$ west in 1859.) By command of their lordships,

JOHN WASHINGTON, Hydrographer.

LONDON, December 16, 1859.

NEW LIGHT AT CAPE OF GOOD HOPE.

Official information has been received at this office that an iron lighthouse tower has been erected on the Cape of Good Hope, a light from which will be exhibited on the 1st of May, 1860. The tower is 30 feet above the ground, and is painted white, the light is 816 feet above the sea, and is visible in all directions from N. 34° W., round by the west, south, east, north to N. 7° west, save and except on a sector included between N. 54° W. and N. 61° W., where it is obscured by the intervention of a high peak 880 feet above the sea, and 1,800 yards from the light-tower. The light is on the catoptric principle, and of the first class; it is white, revolving, and shows its most brilliant beam once in a minute for the space of twelve seconds of time, and it is visible in clear weather, from a deck 16 feet high, at the distance of 36 miles, (nautical.) Latitude of the light, $34^{\circ} 21' 12''$ south. Longitude of the light, $18^{\circ} 29' 30''$ east. (Bearings true.) By order of the Lighthouse Board,

R. SEMMES, Secretary.

WASHINGTON, April 20, 1860.

ROCK OFF ST. THOMAS HARBOR, ST. THOMAS ISLAND.

Information has been received at the Admiralty, from Her Majesty's Consul at St. Thomas Island, that a small detached coral rock has recently been discovered lying to the southward of the Triangles Rocks, off the eastern point of entrance to St. Thomas Harbor, Virgin Islands. The rock, which is only 100

feet in diameter, has 17 feet least water on it, and 7 fathoms close to. It lies 165 fathoms to the southward of the southwest rock of the Triangles group, with the two western rocks of that group in line bearing north Judge BERG'S house, (the only flat-roof building above the town of Charlotte Amalia, on the second hill from the west,) kept well open to the westward of Mohlenfels Point, or Constant Mill in line with Cowell Point, will lead to the westward of this danger; but a vessel of large draught on nearing the port from the eastward, should keep East Gregerie Channel well open until the west point of Water Battery is in one with the east end of the northern church, bearing N. by W. $\frac{1}{4}$ W., which is the fairway leading mark into the harbor. The bearings are magnetic. Variation $1^{\circ} 30'$ east in 1860. By command of their lordships,

JOHN WASHINGTON, Hydrographer.

LONDON, March 10, 1860.

LIGHTS ON THE SOUTH COAST OF AUSTRALIA.

With reference to Notice to Mariners, No. 47, dated 20th October, 1859, the Department of Trade and Customs at Melbourne, Victoria, has given the following additional information relative to the lights exhibited on and after the 1st day of September, 1859, in Warrnambool Harbor and Port Albert, on the south coast of Australia:—

FIXED LIGHT IN WARRNAMBOOL HARBOR.

The light is a fixed white light, elevated 78 feet above the mean level of the sea, and in clear weather is visible seaward from all points of the compass from a distance of 13 miles. The illuminating apparatus is dioptric, or by lenses of the fourth order. The lighthouse stands on Middle Island, and its approximate position is latitude $38^{\circ} 26'$ S., longitude $142^{\circ} 32'$ east of Greenwich. From the lighthouse the southeast extremity of the reef bears S. E. by E. $\frac{1}{4}$ E., distant half a mile; and the southern extreme of Hopkins Reef E. $\frac{1}{4}$ S., 2 miles.

CAUTION.—No stranger should attempt to enter Warrnambool Harbor at night, nor should the light on Middle Island be approached within one mile. Vessels bound to the harbor from the westward should not bring the light to bear to the southward of E. $\frac{1}{4}$ S.; nor to the westward of N. W. by W. $\frac{1}{4}$ W. if bound from the eastward.

FIXED AND FLASHING LIGHT IN PORT ALBERT.

The light is a fixed red light, varied by a bright flash every three minutes, and is visible seaward from a vessel when bearing between W. by S and N. E. The light is elevated 40 feet above the mean level of the sea, and should be seen in clear weather from a distance of 9 miles. At the distance of 6 miles and upwards, it will appear as a steady light for a space of one minute and forty seconds, be suddenly eclipsed thirty-four seconds, then exhibit a bright flash for twelve seconds, and be again eclipsed for thirty-four seconds, when the steady light will reappear. When within about 3 miles of the light, the eclipses will be scarcely observable, a continued fixed light being at that distance visible between the intervals of the bright flashes. The illuminating apparatus is dioptric, or by lenses of the fourth order. The lighthouse, built of wood, and colored red, stands on the eastern end of La Trobe Island, in the northern part of Corner Inlet, and its approximate position is latitude $38^{\circ} 46'$ S., longitude $146^{\circ} 31'$ east of Greenwich.* From the lighthouse the outer red buoy, old channel, bears S. E. by E. $\frac{1}{4}$ E., distant $3\frac{1}{4}$ miles; Cliffy Island S. S. E. $\frac{1}{4}$ E., 13 miles; North Seal Island S. by E. $\frac{1}{2}$ E., 9 miles; Rabbit Island S. by W. $\frac{1}{4}$ W., 11 miles; and Point Townsend S. W., $3\frac{1}{2}$ miles. The bearings are magnetic. Variation in Lady Bay, $6\frac{1}{2}^{\circ}$ E.; and in Port Albert, $9\frac{1}{2}^{\circ}$ E., in 1859. By command of their lordships,

JOHN WASHINGTON, Hydrographer.

LONDON, November 14, 1859.

* This would place the lighthouse on the southwest part of La Trobe Island; in a former notice from Melbourne, dated 22th May, 1859, the longitude was given as 146 deg. 38 min. E.

POSTAL DEPARTMENT.

DEAD-LETTER OFFICE.

The report of the Postmaster-General contains some interesting information upon the causes of the miscarriage of letters:—

The following resolution was adopted by the United States Senate, March 9, 1859:—

Resolved, That the Postmaster General is hereby requested to state, as near as possible, in the next annual report of the service of the Post-office Department, the number of letters consigned to the Dead-letter Office during the fiscal year, and what further legislation is necessary to diminish the number of such letters, or to provide for their return to the writers thereof.

Accordingly, I have to report that the whole number of dead-letters during the fiscal year is estimated at 2,500,000, including about 500,000 "drop letters" and 50,000 "held for postage." Deducting these two classes, the number of letters actually conveyed in the mails and failing to reach the persons addressed may be estimated at less than 2,000,000 a year.

More than fifty per cent of the entire accumulation of dead-letters occurs at about forty out of the 28,539 post-offices, including, of course, the large cities and towns.

Particular efforts have been made to ascertain the true reasons why letters, especially those with valuable enclosures, failed to reach their destination, and it is satisfactorily established, in the large majority of cases, that the fault is with the writers themselves, either in misdirecting or illegibly directing their communications. The migratory habits of the people must also be considered among the prominent causes of the accumulation of dead-letters, more particularly in the western or newer portions of the country.

By way of illustration, it is stated, as the result of inquiries which have been made to a limited extent, that more than sixty (60) per cent of letters containing money recently restored to the owners, failed to reach their destination entirely from being either misdirected, held for postage, or addressed to transient persons.

And in reference to dead-letters with valuable enclosures other than money, the results have been found still more glaring—over eighty (80) per cent having been either misdirected, held for postage, or addressed to transient persons. These are the proportions of cases explained. Further investigations on this point are in progress, the result of which will hereafter be fully shown.

The attempt has also been made to sound public sentiment on the subject of restoring to the writers dead-letters which do *not* contain enclosures of value, and from information thus far received it would seem that, in about one-third of the cases the writers are willing to pay for recovering their letters. At the same time the fact is shown that, of this class of letters, forty (40) per cent miscarry through fault of the writers.

The whole number of dead-letters, containing money, registered and sent out during the year ending June 30, 1859, was 9,726, of which 8,574 were delivered, leaving 1,152 unclaimed. The whole amount of money received was \$45,718 14; amount restored to owners, \$41,143 74.

The number of letters registered and sent out, containing valuable enclosures other than money, such as bills of exchange, drafts, bonds, treasury warrants, &c., was 8,647; of which 7,738 have been restored to the owners, leaving unclaimed 909.

The amount of the enclosures was \$2,502,298 11; the amount of the enclosures in sterling was £6,983 15s. 5d.; the amount of the enclosures in francs was 104,421.

The number of dead-letters returned (unopened) to foreign countries during

the last fiscal year was 133,981, divided as follows, viz.:—England, 60,310; France, 15,757; Prussia, 18,409; Bremen, 6,919; Hamburg, 1,401; Canada, 27,537; New Brunswick, 1,780; Nova Scotia, 1,868.

This course of business in the Dead-letter Office seems to have remained without material, if any, change since the organization of the Department in 1836, being limited to the examination of letters only so far as necessary in order to restore to the owners those containing money or other valuable enclosures; and from the amount of labor and the small number of clerks, it has been impossible to make needed improvements. Indeed, it has been found, of late years, that even the ordinary duties could not be duly performed; and it is, therefore, now a matter of urgent importance to provide the means of improving this interesting branch of the public service.

COMMERCIAL REGULATIONS.

CHANGES IN NEW YORK CANALS TOLLS.

We have compared the rates of tolls on the canals, as recently established and published by the Canal Board, with the rates for last year, and find the following changes. The figures expressing the tolls are mills and tenths of a mill:—

	1860.		1859.	
	m.	fr.	m.	fr.
Barley.....	3	0	2	0
Bars of iron, going from tide-water.....	2	0	1	0
Beans.....	3	0	2	0
Bolts, stave, if carried in boats.....	1	5	1	0
Bones, for manure.....	1	0	0	5
Brick.....	1	0	0	5
Butter.....	2	0	1	0
Butts, stave, if carried in boats.....	1	5	1	0
Castings, all iron castings, except machines, and parts thereof.	3	0	2	0
Cement, hydraulic.....	2	0	1	0
Cheese.....	2	0	1	0
Coal, mineral.....	1	0	0	5
Coal, bituminous, from Lake Erie to tide-water.....	0	5	0	0
Coffee, going from tide-water.....	2	0	1	0
Crockery, going from tide-water.....	2	0	1	0
Enameled ware, flint, going from tide-water.....	2	0	1	0
Flint, enameled ware, going from tide-water.....	2	0	1	0
Glassware, going from tide-water.....	2	0	1	0
Heading, cut or undressed, transported in boats.....	1	5	1	0
Heading, dressed or partly dressed.....	1	5	1	8
Horse shoes going from tide-water.....	2	0	1	0
Hydraulic cement.....	2	0	1	0
Iron in sheets, bars, or bundles, going towards tide-water.....	2	0	1	0
Iron ore.....	1	0	0	5
Iron, boiler, going from tide-water.....	2	0	1	0
Iron, bridge and railing, going from tide-water.....	2	0	1	0
Iron safes.....	2	0	4	0
Lard.....	1	5	1	0
Lard oil.....	1	5	1	0
Leather, going from tide-water.....	2	0	1	0
Lime.....	1	5	1	0
Hemlock.....	1	6	0	6
Merchandise not enumerated, going from tide-water.....	2	0	1	0
Molasses going from tide-water.....	2	0	1	0
Nails, going from tide-water.....	2	0	1	0

	1860.		1859.	
	m.	fr.	m.	fr.
Oats	2	5	2	0
Peas.....	3	0	2	0
Pork, salted.....	2	0	1	5
Potatoes.....	2	0	1	0
Railroad chairs.....	2	0	1	5
Railroad iron.....	2	0	1	5
Rye.....	2	5	2	0
Sand.....	5	0	1	0
Sawdust.....	1	0	0	5
Soda ash.....	1	0	2	0
Spikes, going from tide-water.....	2	0	1	0
Staves, cut or undressed, and staves bolts and butts, transported in boats.....	1	5	1	0
Steel, going from tide-water.....	2	0	1	0
Stone for the manufacture of lime.....	1	0	0	5
Stoves.....	3	0	2	0
Sugar, going from tide-water.....	2	0	1	0
Tallow.....	1	5	1	0
Tar, going from tide-water.....	2	0	1	0
Timber, square and round.....	6	0	4	0
Turpentine, going towards tide-water.....	1	0	2	0
Varnish.....	2	0	4	0
Ware, flint, enameled, going from tide-water....	2	0	1	0
Water lime.....	1	5	1	0

INTERNATIONAL SIGNALS.

The Committee on Commerce of the House of Representatives have instructed the Hon. Mr. ELIOT, of Massachusetts, to report a "bill to provide for the general introduction of an international code of marine signals for the use of all nations." The following letter on the subject, addressed to the Hon. Mr. ELIOT, will doubtless prove interesting to our readers:—

OBSERVATORY, WASHINGTON, March 15, 1860.

DEAR SIR:—Your communication, requesting my views as to the value of ROGERS'S Marine Signals,* and the expediency of legislation with regard to them, has been received.

In reply, I beg leave to state—

That the code to which they relate has been passed upon by some of the most distinguished officers of the British navy; that they have given it their hearty approval, and that, upon their recommendation, it has been adopted, by authority of the Board of Trade, on board of all British ships. This has stamped their sterling value upon them.

The importance of some code of signals is, and ever has been, acknowledged by all who use the sea, and it will be readily understood that the value of any code is, like that of a language, enhanced precisely in proportion to the number who use it. Two-thirds of all the shipping in the world sail under the American or English flag, and the benefits of this code have already been extended by the Board of Trade to no less than 40,000 British ships.† So that each American ship that adopts it now is thereby possessed of the ability to tell her distress, and make known her wants to any one of this immense fleet, in whatever part of the world she may fall in with one—herself adding to the number, and giving additional value to the code. If these signals be adopted by the American marine also, there is no doubt all nations will adopt them, and thus introduce a universal language for the sea, in which persons speaking unknown tongues may, in spite

* The new Commercial Code of Signals, for the use of all nations—Rogers's American edition and flags.

† By appropriating to each vessel a special signal for identification at sea.

of wind and waves, make known each to the rest, from the deck of his own vessel, all his wants and wishes as clearly as though he were side by side speaking the same language. Indeed, if we may imagine two travelers, one with the power to converse in their own language with all whom he may chance to meet, the other without the ability either to make himself understood or to understand others, the difference in the situation of the two would, in kind, if not in degree, be precisely similar to that of the two ships in distress at sea, one with the power, the other without the power, of using this or some other general code.

The circumstances of the loss of the steamship *Central America*, when *HERNDON* perished so nobly, are doubtless fresh in the memory of the Committee. Besides the every-day importance of this code to the business of commerce, its very great advantages to ships in distress were strikingly exemplified on that occasion.

You recollect that six hours before the ship went down, the brig "*Marine*" hove in sight to windward. Seeing the steamer's signal of distress—the flag union down—and which at present is the only universal signal known at sea—she ran down to see what was the matter. This, Captain *BURT* did not discover until he passed under the steamer's stern. Then, by the time he could round to and stop, his brig had drifted far to leeward, so far that the boats of the steamer could return for passengers only once from the brig. Now, if this code could have been on board those two vessels, *HERNDON* could have flung out his signal as the brig drew near, "I am in a sinking condition." The "*Marine*" could then have rounded to the windward, and doubtless would, by so doing, have saved the lives of all the passengers and crew, if not the mails and treasure also.

Seeing that this code will be shorn of its great current value to a vessel whose name and number are not contained in it, recognizing also the demands of humanity, which require at the hands of legislators all encouragement that they may lawfully and wisely give for the safety of life at sea, I think some legislation, looking to the establishment of this code in our commercial marine, not only expedient, but highly important. The establishment of a new code of signals, and bringing them into vogue at sea, is as much beyond the compass of private enterprise as is the establishment throughout Christendom of a uniform system of weights and measures. Respectfully, &c.,

M. F. MAURY.

To Hon. *THOMAS D. ELIOT*, of Committee on Commerce, House of Representatives, Washington.

THE EAST RIVER.

The following is a copy of an act to amend an act entitled "an act concerning the pilots of the channel of the East River, commonly called Hell Gate," passed April 15th, 1847. Passed March 12th, 1860:—

SECTION 1. Section nine of the act entitled "An act concerning the pilots of the channel of the East River, commonly called Hell Gate," passed April fifteenth, eighteen hundred and forty-seven, shall be and the same is hereby amended so as to read as follows:—

SEC. 9. If any person other than a Hell Gate pilot shall pilot or tow for any other person, any vessel of any description, on board such vessel for that purpose, except barges, vessels of less than ninety-five tons burthen, and canal boats, actually used in navigating the canals, or shall offer to pilot or tow any such vessel in the channel of the East River, commonly called Hell Gate, without the aid of a branch pilot on board, he shall forfeit and pay the sum of thirty dollars for every such offence, to be sued for and recovered by the board of port wardens of the port of New York, for the benefit of the Hell Gate pilots, and shall also be deemed guilty of a misdemeanor, and on conviction thereof, shall be punished for such offence; but nothing in this act shall be construed to prevent one of the crew of the vessel from piloting said vessel through the aforesaid channel, nor impair or affect the seventh section of the act hereby amended.

SEC. 2. This act shall take effect immediately.

JOURNAL OF INSURANCE.

INCREASE OF LIFE INSURANCE.

The following table, giving the "whole life policies of sixteen life insurance companies doing business in Massachusetts, outstanding November 1, 1859, arranged according to the year in which they were issued, each year ending Nov 1, 1859," is from the Fifth Annual Massachusetts Report. We give the aggregate, or all companies combined:—

Year.	No. of policies.	Amount insured.	Net value.	Ratio of value to amount.
1827.....	1	\$5,000 00	\$3,488 64	69.67
1830.....	1	2,000 00	971 93	48.60
1834.....	2	5,000 00	2,417 05	48.34
1835.....	1	5,000 00	1,572 35	31.44
1836.....	1	3,500 00	1,474 98	42.14
1838.....	2	4,500 00	1,456 66	32.37
1839.....	2	6,000 00	2,843 47	47.39
1840.....	1	2,000 00	979 16	48.96
1842.....	1	1,500 00	553 92	36.93
1843.....	114	495,713 59	163,060 37	32.89
1844.....	214	794,815 89	235,481 72	29.62
1845.....	580	2,033,640 20	550,651 43	27.08
1846.....	1,193	3,553,049 91	807,418 52	23.57
1847.....	1,516	4,368,975 91	937,657 26	21.47
1848.....	1,861	4,868,122 44	979,486 85	20.12
1849.....	2,796	7,205,744 11	1,260,137 95	17.49
1850.....	3,032	7,423,934 76	1,199,054 65	16.19
1851.....	2,739	6,562,321 97	950,931 38	14.40
1852.....	1,867	4,975,933 35	540,913 20	12.85
1853.....	2,259	5,922,064 74	674,785 67	11.40
1854.....	2,753	7,653,927 06	719,844 57	9.43
1855.....	2,614	7,822,039 33	619,666 55	7.92
1856.....	3,476	9,915,652 19	632,374 13	6.38
1857.....	4,135	11,595,703 00	536,728 69	4.63
1858.....	5,254	15,394,604 63	480,950 89	3.12
1859.....	7,177	23,262,853 00	418,604 57	1.80
Totals.....	44,593	\$123,913,596 10	\$11,853,461 56	9.57

This combination seems to show the general progress of the business, and that its income does not depend materially upon the increase of the number of companies, for it seems to have fallen off considerably, just as the number of companies had remarkably increased, and to have begun to increase again, some time after new companies had ceased to be added. The commissioners think the increase of companies rather the *effect* than the *cause* of an increase of life assurance. In regard to the formation of more life companies, the commissioners suggest that, "as the larger companies appear to invest as profitably as the smaller ones, and have generally a smaller ratio of expenses to receipts, it follows that there will be little need of any new companies, till the existing small ones have all become larger, and perhaps not even then."

MARINE LOSSES FOR APRIL, 1860.

	Vessel and freight.	Cargoes.	Total.
Steamers.....	\$110,000	\$242,000	\$352,000
Ships.....	379,000	720,000	1,099,000
Barks.....	161,000	376,600	537,600
Brigs.....	57,500	66,400	123,900
Schooners.....	75,600	75,700	151,300
Total.....	\$783,100	\$1,480,700	\$2,263,800

RECAPITULATION OF LOSSES.

January, 1860.....	\$1,223,900	\$749,950	\$1,973,850
February.....	1,295,000	1,114,000	2,409,000
March.....	1,537,450	1,894,500	3,431,950
April.....	783,100	1,480,700	2,263,800

ENGLISH LIFE INSURANCE COMPANIES.

We make, says the *Wall Street Underwriter*, the annexed interesting extracts from a letter of Mr. WM. CARPENTER, of London, entitled "The Perils of Policy Holders and the Liabilities of Life Offices," and which that gentleman has addressed to the Chancellor of the Exchequer. Mr. CARPENTER'S figures as given below are very valuable, more especially as he has adopted a mode of analysis for English offices which is the same in principle as that which we apply to the annual accounts of our life companies here :—

COMPARATIVE VIEW OF PRINCIPAL OFFICES.

Names of office.	Date of establishment.	Sums Assured.	Realized assets.	Percentage of assets to liabilities.	Premium income
Eagle.....	1807	£9,396,333*	£1,853,744	19 $\frac{3}{4}$	£281,890
Scot. Widows' Fund....	1815	14,069,666*	3,341,010	47 $\frac{1}{4}$	422,090
University.....	1825	1,529,396†	806,183	52 $\frac{3}{8}$	45,036
Standard.....	1825	6,378,753†	1,684,000	26 $\frac{1}{2}$	276,000§
National.....	1830	1,178,003†	374,551	31 $\frac{1}{2}$	46,415
National Provident....	1835	6,708,066*	1,755,685	26	201,242
Metropolitan.....	1835	3,125,017†	848,457	27	67,646
Legal and General....	1836	3,686,633*	1,033,616	28	110,599
Liverpool and London..	1836	4,247,033†	816,503	17 $\frac{1}{4}$	121,411
Minerva.....	1836	1,771,899	320,085 ||	18	77,247§
International.....	1837	2,184,303†	192,397	8 $\frac{3}{4}$	69,528
Victoria.....	1838	1,553,619†	305,737	19 $\frac{3}{8}$	61,000§
Star.....	1843	2,032,441*	286,497	12 $\frac{1}{4}$	68,002
Sovereign.....	1845	827,342	94,916	11 $\frac{1}{2}$	22,880
Consolidated.....	1846	420,174†	59,007	14	12,075
Gresham.....	1848	3,793,533*	184,610	4 $\frac{1}{2}$	113,806
Kent Mutual.....	1850	773,166*	44,223	5 $\frac{1}{2}$	23,315
New Equitable.....	1851	1,051,100*	25,438	2 $\frac{1}{2}$	31,533
British Industry.....	1853	722,166	14,249¶	2	21,665
European.....	1854	3,520,000*	220,780	6 $\frac{1}{2}$	105,600

* These offices do not give the amount of the sums assured. I have got it by assuming the average of the premiums to be at 3 per cent.

† These are the sums given by the offices.

‡ I have included in the sum assured, £200,000 for fire risks, which is a low estimate. I have deducted from the assets £188,422, for paid-up capital share, and £188,422 for annuities payable by the office, valuing them at ten years' purchase, £151,110: together, £339,532.

This is the gross income. I could not obtain the premium income alone.

The realized assets are stated to be £362,045, but this includes proprietors' fund, £41,960.

¶ The capital has all disappeared.

DESTRUCTION OF PROPERTY BY FIRE.

We have referred to the great aggregate loss of property by fire that has taken place in the country this spring. The Chicago *Journal* has collected from its exchanges the following list of fires that have occurred in the month of March, in the Western States alone, taking only those where the losses amount to over \$10,000 :—

March.	Amount.	March.	Amount.
1.. Winchester, Ohio.....	\$12,000	21.. Yellow Springs, Ohio..	50,000
3.. Hannibal, Mo.	10,000	22.. Pekin, Ill.	125,000
10.. East Saginaw, Mich.	35,000	22.. Clarksville, Mo.	20,000
10.. Naples, Ill.	10,000	23.. Owensboro, Ky.	50,000
11.. Alton, Ill.	10,000	24.. Carlinville, Ill.	12,000
13.. Mobile, Ala.	275,000	24.. Fort Wayne, Ind.	15,000
15.. Niles, Mich.	20,000	25.. Fort Snelling, Minn.	10,000
16.. Havana, Ill.	100,000	26.. Mt. Clemens, Mich.	25,000
16.. Alton, Ill.	30,000	28.. Nashville, Tenn.	13,000
16.. St. Paul, Minn.	100,000	28.. Jacksonport, Ark.	150,000
16.. Rockford, Ill.	20,000	28.. Independence, Mo.	150,000
18.. Sparta, Wis.	40,000	31.. Kenosha, Wis.	40,000
21.. Milwaukee, Wis.	12,000		
Total.....			\$1,346,000

RAILROAD, CANAL, AND STEAMBOAT STATISTICS.

NEW YORK CANALS.

The following table shows the gross tolls, expenses, and net proceeds of the New York State Canals, since 1836 :—

Year.	Gross tolls in each fis. year.	Expense of collection, superintendence, and ordinary repairs.	Net proceeds each year.
1836.....	\$1,598,455	\$467,599	\$1,130,856
1837.....	1,325,609	608,993	716,616
1838.....	1,655,275	622,027	843,247
1839.....	1,655,788	504,757	1,151,026
1840.....	1,606,827	505,020	1,031,806
1841.....	1,939,666	514,517	1,475,169
1842.....	1,797,163	642,584	1,154,879
1843.....	1,953,329	531,145	1,422,683
1844.....	2,388,457	636,857	1,751,599
1845.....	2,375,533	733,106	1,637,427
1846.....	2,798,849	639,353	2,159,496
1847.....	3,463,710	643,768	2,819,944
1848.....	3,156,968	855,850	2,301,117
1849.....	3,378,920	685,803	2,693,116
1850.....	3,393,081	835,965	2,557,115
1851.....	3,703,999	907,730	2,796,269
1852.....	3,174,357	1,049,045	2,125,811
1853.....	3,162,190	1,098,476	2,063,713
1854.....	2,982,114	1,237,806	1,744,248
1855.....	2,672,906	989,792	1,643,114
1856.....	2,721,740	786,633	1,935,107
1857.....	2,529,866	970,453	1,561,350
1858.....	2,072,204	1,078,878	993,325
Total.....			\$59,709,048

Deduct estimated cost of Canals, viz. :—

Erie Canal enlargement.....	\$26,000,000	
Genesee Valley Canal.....	5,000,000	
Black River Canal.....	3,000,000	
Oswego enlargement.....	2,000,000	
Debt in 1836.....	2,744,804	
Cayuga and Genesee enlargement.....	650,000	
Locks, Champlain Canal.....	350,000	
		39,744,804
Deficiency.....		\$35,256

RAILROADS OF CONNECTICUT.

Governor BUCKINGHAM, in his message to the new Legislature of Connecticut, says :—The whole length of railroads built within the State of Connecticut is 602 miles, constructed at a cost of \$29,861,532 04, of which \$18,727,717 31 has been paid in. The gross income has been \$3,527,903 79, which is an increase of \$409,921 64. The net income has been \$1,221,797 51, or four per cent on the cost, showing an increase of \$175,392 59.

The governor further says :—The commissioners report the roads as having been conducted with increased economy, with convenience to the public, and without the loss of the life of a single passenger. These facts, taken in connection with the attention which has been given to the roads, the renewal of rails and the repairs and reconstruction of bridges, show a gradual improvement in the roads and their management. Many who engaged in the building of these railroads sustained great personal losses, yet the roads are of almost incalculable benefit and importance to the public, and could not now be dispensed with. They have been constructed with private capital, aided by grants from the State, of the franchises embraced in their several charters. The stockholders naturally desire a remuneration for their investment, while the State aims to promote the convenience and increase the business of the people. These objects are highly proper, are consistent with the interests of all parties, and may be, in a great measure, secured by harmonious action.

ST. MARY'S CANAL.

STATEMENT OF RECEIPTS FROM THE OPENING OF THE CANAL, JUNE 18TH, 1855, TO THE CLOSING, OR NOV. 30TH, 1859.

Month.	1855.	1856.	1857.	1858.	1859.
April.....	.....	.....	.....	\$476 78	.....
May.....	.....	\$742 30	\$500 86	1,438 08	\$2,393 86
June.....	\$390 84	1,541 96	1,605 84	2,088 56	3,294 04
July.....	830 24	1,548 26	2,325 40	2,182 44	3,446 28
August.....	990 72	1,548 28	1,822 02	1,731 34	3,091 98
September.....	756 88	1,134 80	1,576 79	1,442 34	2,425 42
October.....	835 26	790 18	1,146 70	1,442 34	1,244 80
November.....	520 72	471 96	429 50	405 76	1,045 46
Total.....	\$4,374 66	\$7,575 78	\$9,406 74	\$10,848 80	\$16,941 84

Aggregate tonnage for the year 1859. 352,642.

The Superintendent's report states that, in order to fully comprehend the im-

portance of the St. Mary's Falls Ship Canal, in connection with the commerce of the lakes, we must anticipate the time when railroad communication will be opened from the head of Lake Superior with Minnesota and the fertile regions beyond, whose imports and exports will necessarily pass through this canal, and thus augment its business to an almost indefinite extent, even beyond the anticipations of those whose estimates are now considered extravagant and chimerical.

The average number of vessels per day for the months of July and August last was seven, and the aggregate tonnage for the season 352,642. He considers it perfectly safe, in view of the flattering prospects of next year's business, that the number will be doubled. At this rate, it will be but a short time before a demand will exist for all the accommodations which the most perfect system of operating the canal can furnish.

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 SPANISH RAILWAYS.

Some weeks ago the opening for public traffic of the Seville and Jerez Railway was announced to take place shortly; but though numerous trains have transported war appliances, wounded soldiers, and railway materials, the day was not fixed for the opening when our correspondent wrote. This is owing to the very bad state of the weather for the last two months. Throughout Andalusia circulation has been so impeded that the principal towns are completely cut off from all communication with each other, and the Seville and Cordova line resembles an island surrounded by a sea of mud.

Most active steps are being taken for the speedy construction of a line from the sea coast to Tetuan, in Morocco, lately taken by the Spanish troops. Don Mariano Elola, government officer of the province of Seville, has already arrived at the camp in the Tetuan valley, in charge of railway materials, etc. The line is to be nine kilometres in length.

At the close of the year 1859 the following was the state of railways in Spain, with their annual receipts:—

|                              | Kilometres.<br>in length. | Receipts, 1859.<br>Reals vellon. |
|------------------------------|---------------------------|----------------------------------|
| Madrid to Alicante.....      | 482                       | 44,228,893                       |
| Madrid to Saragossa.....     | 57                        | 2,126,720                        |
| Cordova and Seville.....     | 131                       | 4,259,146                        |
| Valencia and Almansa.....    | 138                       | 6,430,425                        |
| Alar and Santander.....      | 91                        | 8,540,372                        |
| Barcelona to Saragossa.....  | 37                        | 2,905,680                        |
| Barcelona to Martorell.....  | 27                        | 2,083,765                        |
| Barcelona to Arens.....      | 36                        | 4,185,787                        |
| Barcelona to Granollers..... | 29½                       | 2,742,050                        |
| Jerez to Trocaders.....      | 27½                       | 3,717,408                        |
| Langres and Gijon.....       | 39                        | .....                            |
| Tarragon.....                | 14                        | 761,198                          |
| Totals.....                  | 1,109                     | 81,981,444                       |

The Langres and Gijon line, in 1858, received 1,832,071 reals vellon, (£1 equals 96 reals vellon.)

Five locomotives, of the most improved workmanship and solidity, have arrived at Santander, from Havre, on board the French vessel Salamandre, for the Northern Spanish Railway.

On the the 2d February the first gas lighting was inaugurated in the flourish-

ing city of Jerez. Much praise is given to the Spanish Compañia de Credito for this enterprising work.

The works of the fourth, fifth, and sixth sections of the Alcazar de San Juan and Ciudad-Real position of the Madrid and Saragossa Railway have been advertised for contract, tenders being received up to the 15th February. The total estimate for the three sections is 5,850,000 reals vellon, or about £58,500.

In 1860, according to the laws of the different concessions, the following railways are to be opened for public service:—Granollers to Santa Coloma; Valladolid to Burgos; Duenas to Alar; Arenys de Mar to Santa Coloma; Avila to Valladolid; and Burgos to Vittoria. In 1861 are to be completed the sections, Madrid to Saragossa; Saragossa to Barcelona; Madrid to Avila; and Montblanch to Reus. In 1863 are to be finished the Tudela and Bilbao; Saragossa and Alsassia; and Vittoria to Irun, at the French frontier.

#### OPERATIONS OF THE RAILWAYS OF MASSACHUSETTS FROM 1842 TO 1859.

| Year.   | No. of railr'ds in operat'n. | No. of miles in operat'n. | Cost.        | Receipts.        |               |                  | Total.      |
|---------|------------------------------|---------------------------|--------------|------------------|---------------|------------------|-------------|
|         |                              |                           |              | From passengers. | From freight. | From mails, etc. |             |
| 1842... | 10                           | 431                       | \$19,241,858 | \$1,216,866      | \$669,682     | \$84,239         | \$1,971,787 |
| 1843... | 12                           | 461                       | 19,974,593   | 1,236,231        | 783,416       | 81,137           | 2,218,234   |
| 1844... | 12                           | 461                       | 20,369,055   | 1,498,026        | 963,863       | 80,344           | 2,559,969   |
| 1845... | 12                           | 463                       | 21,572,820   | 1,612,625        | 1,163,010     | 100,323          | 2,895,219   |
| 1846... | 16                           | 622                       | 27,034,927   | 2,018,163        | 1,467,969     | 119,217          | 3,642,171   |
| 1847... | 18                           | 715                       | 32,796,393   | 2,509,784        | 2,205,310     | 196,721          | 4,964,532   |
| 1848... | 21                           | 787                       | 41,392,632   | 2,849,722        | 2,335,407     | 220,725          | 5,405,845   |
| 1849... | 27                           | 945                       | 45,125,768   | 3,033,701        | 2,411,307     | 252,991          | 5,741,799   |
| 1850... | 32                           | 1,092                     | 59,959,452   | 3,404,948        | 2,608,766     | 296,537          | 6,419,533   |
| 1851... | 36                           | 1,142                     | 52,595,888   | 3,525,188        | 2,650,465     | 280,248          | 6,599,576   |
| 1852... | 36                           | 1,150                     | 53,076,013   | 3,641,790        | 2,819,409     | 273,801          | 6,885,517   |
| 1853... | 38                           | 1,164                     | 54,914,506   | 4,171,964        | 3,330,369     | 317,627          | 7,977,527   |
| 1854... | 37                           | 1,194                     | 57,095,498   | 4,495,836        | 3,725,186     | 346,441          | 8,696,251   |
| 1855... | 37                           | 1,281                     | 60,339,391   | 4,600,377        | 3,904,075     | 451,504          | 9,077,529   |
| 1856... | 42                           | 1,325                     | 62,261,670   | 4,804,288        | 4,372,913     | 452,757          | 9,749,918   |
| 1857... | 43                           | 1,351                     | 62,794,422   | 4,424,347        | 3,833,807     | 478,529          | 9,094,008   |
| 1858... | 41                           | 1,380                     | 62,178,535   | 3,944,803        | 3,794,295     | 502,979          | 8,596,703   |
| 1859... | 41                           | 1,380                     | 61,611,721   | 3,870,982        | 4,613,831     | 372,372          | 9,771,378   |

#### EXPENSES.

| Year.     | Of road bed. | Of machinery. | Miscellaneous. | Total.    |
|-----------|--------------|---------------|----------------|-----------|
| 1842..... | \$190,844    | \$163,330     | \$605,226      | \$959,400 |
| 1843..... | 182,580      | 666,819       | 151,964        | 1,001,313 |
| 1844..... | 217,454      | 219,290       | 670,896        | 1,109,580 |
| 1845..... | 247,033      | 246,878       | 786,873        | 1,281,032 |
| 1846..... | 313,798      | 331,562       | 1,059,604      | 1,696,576 |
| 1847..... | 480,040      | 438,088       | 1,434,790      | 2,372,432 |
| 1848..... | 484,009      | 498,556       | 1,754,419      | 2,741,604 |
| 1849..... | 579,370      | 530,919       | 1,679,613      | 2,890,818 |
| 1850..... | 578,673      | 485,762       | 1,995,619      | 3,112,795 |
| 1851..... | 652,666      | 591,360       | 2,083,411      | 3,338,905 |
| 1852..... | 750,701      | 594,144       | 2,288,296      | 3,763,410 |
| 1853..... | 912,586      | 725,301       | 2,674,558      | 4,324,013 |
| 1854..... | 1,233,076    | 1,008,041     | 3,151,117      | 5,451,047 |
| 1855..... | 1,367,102    | 886,056       | 3,395,647      | 5,650,600 |
| 1856..... | 1,513,313    | 938,793       | 3,277,487      | 5,755,144 |
| 1857..... | 1,391,543    | 829,086       | 3,040,319      | 5,301,198 |
| 1858..... | 1,246,202    | 437,345       | 3,821,925      | 4,813,944 |
| 1859..... | 1,499,350    | 939,531       | 3,079,609      | 5,813,944 |

| Year.     | Net income. | Net income        |                      | Number of miles run. |                  | Total.    |
|-----------|-------------|-------------------|----------------------|----------------------|------------------|-----------|
|           |             | per cent on cost. | By passenger trains. | By freight trains.   | By other trains. |           |
| 1842..... | \$1,012,387 | 5.26              | 824,062              | 420,583              | 90,056           | 1,334,701 |
| 1843..... | 1,116,971   | 5.59              | 886,183              | 480,444              | 92,252           | 1,458,879 |
| 1844..... | 1,459,389   | 7.12              | 939,598              | 549,065              | 66,940           | 1,555,603 |
| 1845..... | 1,614,188   | 7.48              | 1,010,510            | 610,698              | 94,630           | 1,715,838 |
| 1846..... | 1,945,595   | 7.20              | 1,435,737            | 746,547              | 145,708          | 2,339,484 |
| 1847..... | 2,592,079   | 7.95              | 1,789,038            | 1,181,432            | 206,673          | 3,177,143 |
| 1848..... | 2,666,411   | 6.51              | 2,112,496            | 1,220,319            | 261,772          | 3,598,089 |
| 1849..... | 2,850,980   | 6.32              | 2,330,891            | 1,243,739            | 232,122          | 3,806,752 |
| 1850..... | 3,306,738   | 6.49              | 2,607,611            | 1,327,046            | 281,168          | 4,215,825 |
| 1851..... | 3,259,671   | 6.20              | 2,760,888            | 1,424,209            | 203,067          | 4,398,870 |
| 1852..... | 3,212,107   | 6.05              | 2,997,022            | 1,589,590            | 199,171          | 4,785,783 |
| 1853..... | 3,653,514   | 6.64              | 3,186,957            | 1,792,544            | 241,338          | 5,230,840 |
| 1854..... | 3,245,204   | 5.68              | 2,814,459            | 1,962,108            | 254,447          | 5,531,064 |
| 1855..... | 3,426,929   | 5.68              | 3,115,401            | 2,041,834            | 228,181          | 5,385,416 |
| 1856..... | 3,994,774   | 6.42              | 2,966,711            | 2,036,348            | 251,289          | 5,304,348 |
| 1857..... | 3,792,819   | 6.10              | 3,063,599            | 1,925,993            | 208,985          | 5,197,957 |
| 1858..... | 3,782,759   | 6.08              | 3,098,510            | 2,128,017            | 202,876          | 5,454,641 |
| 1859..... | 4,210,104   | 6.80              | 3,293,140            | 2,462,258            | 182,877          | 5,949,761 |

| Year.     | Total receipts per mile run. | Total expen's per mile run. | Net income per mile run. | Passengers carried in the cars. | Number of passengers carried one mile. | Tons carried in the cars. | Number of tons of merchandise hauled one mile. |
|-----------|------------------------------|-----------------------------|--------------------------|---------------------------------|----------------------------------------|---------------------------|------------------------------------------------|
|           | \$                           | 72 | \$ |  |  |  |  | 76 |
| 1842..... | \$1 48                       | 0 70                        | 0 76                     | .....                           | .....                                  | .....                     | .....                                          |
| 1843..... | 1 47                         | 0 70                        | 0 77                     | .....                           | .....                                  | .....                     | .....                                          |
| 1844..... | 1 65                         | 0 72                        | 0 93                     | .....                           | .....                                  | .....                     | .....                                          |
| 1845..... | 1 63                         | 0 75                        | 0 88                     | .....                           | .....                                  | .....                     | .....                                          |
| 1846..... | 1 56                         | 0 73                        | 0 83                     | 4,752,818                       | 82,024,265                             | 1,140,265                 | 89,295,049                                     |
| 1847..... | 1 56                         | 0 75                        | 0 81                     | 5,341,341                       | 99,870,187                             | 1,661,218                 | 66,898,793                                     |
| 1848..... | 1 50                         | 0 76                        | 0 74                     | 6,728,427                       | 118,005,742                            | 1,894,182                 | 64,577,165                                     |
| 1849..... | 1 51                         | 0 76                        | 0 75                     | 8,335,854                       | 136,090,369                            | 2,025,727                 | 66,734,812                                     |
| 1850..... | 1 52                         | 0 74                        | 0 78                     | 8,751,372                       | 147,605,638                            | 2,188,838                 | 72,111,962                                     |
| 1851..... | 1 60                         | 0 76                        | 0 74                     | 9,510,858                       | 152,916,183                            | 2,260,346                 | 70,205,310                                     |
| 1852..... | 1 44                         | 0 77                        | 0 67                     | 9,810,056                       | 161,694,655                            | 2,563,387                 | 77,638,247                                     |
| 1853..... | 1 52                         | 0 82                        | 0 70                     | 11,479,232                      | 185,865,727                            | 3,041,781                 | 95,985,832                                     |
| 1854..... | 1 57                         | 0 98                        | 0 59                     | 12,392,703                      | 194,158,802                            | 3,757,631                 | 104,583,043                                    |
| 1855..... | 1 69                         | 1 05                        | 0 64                     | 11,339,850                      | 185,160,127                            | 3,062,251                 | 103,676,163                                    |
| 1856..... | 1 83                         | 1 08                        | 0 75                     | 11,528,417                      | 191,756,170                            | 3,247,210                 | 109,183,605                                    |
| 1857..... | 1 92                         | 1 10                        | 0 82                     | 11,250,189                      | 185,733,612                            | 3,231,674                 | 97,821,259                                     |
| 1858..... | 1 57                         | 0 88                        | 0 69                     | 8,443,789                       | 168,637,421                            | 3,174,909                 | 107,303,461                                    |
| 1859..... | 1 64                         | 0 93                        | 0 71                     | 11,974,393                      | 184,468,837                            | 3,616,733                 | 112,621,312                                    |

BRITISH RAILROADS.

The following is a summary of the annual aggregate resources of the railroads of the United Kingdom, since 1842, with the number of miles in use at the end of each year:—

| Year.     | Miles open. | Receipts.  | Year.     | Miles open. | Receipts.  |
|-----------|-------------|------------|-----------|-------------|------------|
| 1842..... | 1,630       | £4,470,700 | 1851..... | 6,928       | 14,037,310 |
| 1843..... | 1,736       | 5,022,650  | 1852..... | 7,337       | 15,543,610 |
| 1844..... | 1,950       | 5,814,980  | 1853..... | 7,774       | 17,920,530 |
| 1845..... | 2,243       | 6,909,270  | 1854..... | 8,028       | 20,000,520 |
| 1846..... | 2,840       | 7,945,870  | 1855..... | 8,240       | 21,123,300 |
| 1847..... | 3,710       | 9,277,671  | 1856..... | 8,661       | 22,995,500 |
| 1848..... | 4,626       | 20,455,100 | 1857..... | 9,171       | 24,162,460 |
| 1849..... | 5,950       | 11,683,800 | 1858..... | 9,568       | 23,763,764 |
| 1850..... | 6,733       | 13,142,235 | 1859..... | 9,883       | 25,476,100 |

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**JOURNAL OF MINING, MANUFACTURES, AND ART.**


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**LABOR AND WAGES IN NEW YORK.**

The New York *Tribune* has an article upon this subject, from which we take the following recapitulation of the average earnings of trades and professions during the whole year. In many cases workmen lose three and four months in the whole year, while in the wintry weather, when they are employed, their receipts are reduced by reason of short hours:—

|                                                     | Average wages per week. | No of hours per day. |
|-----------------------------------------------------|-------------------------|----------------------|
| Bakers .....                                        | \$6 00                  | 17                   |
| Barbers .....                                       | 8 00                    | 11                   |
| Bookbinders .....                                   | 9 00                    | 10                   |
| Boot and shoe makers.....                           | 5 00                    | 15                   |
| Boot and shoe makers by the piece.....              | 7 50                    | 15                   |
| Brewers and distillers, seven days per week..       | 6 00                    | 12                   |
| Bricklayers and masons.....                         | 10 00                   | 10                   |
| Cabinet makers.....                                 | 7 00                    | 10                   |
| Coopers .....                                       | 7 50                    | 10                   |
| Carpenters, (house) .....                           | 7 00                    | 10                   |
| Carmen .....                                        | 7 00                    | 10                   |
| Cigar makers .....                                  | 7 50                    | 10                   |
| Drug clerks .....                                   | 9 00                    | 13                   |
| Dry goods clerks (retail).....                      | 10 50                   | 14                   |
| Domestic servants.....                              | 6 00                    | ..                   |
| Engineers.....                                      | 11 00                   | 10                   |
| Fancy goods clerks (retail).....                    | 10 00                   | 14                   |
| Folding girls (books) .....                         | 4 50                    | 10                   |
| Grocers' clerks (retail) including board .....      | 9 00                    | 17                   |
| Gunsmiths.....                                      | 9 00                    | 10                   |
| Hatters.....                                        | 10 00                   | 10                   |
| Hooped-skirt makers.....                            | 5 50                    | 9                    |
| Iron-moulders.....                                  | 10 00                   | 10                   |
| Machinists .....                                    | 11 00                   | 10                   |
| Millwrights.....                                    | 11 00                   | 10                   |
| Painters.....                                       | 7 00                    | 10                   |
| Piano forte makers.....                             | 7 00                    | 10                   |
| Porters in stores.....                              | 7 00                    | 10                   |
| Pressmen (morning papers).....                      | 12 00                   | 8                    |
| Printers (daily papers).....                        | 16 00                   | 10                   |
| Printers (book) .....                               | 10 00                   | 10                   |
| Printers (job).....                                 | 11 00                   | 10                   |
| Pressmen (hand and machine).....                    | 11 00                   | 10                   |
| Police captains .....                               | 23 00                   | at call.             |
| Police sergeants.....                               | 17 46                   | 11                   |
| Police patrolmen.....                               | 15 38½                  | 11                   |
| Rope spinners.....                                  | 6 00                    | 10                   |
| Railroad conductors (city) seven days per week..... | 10 50                   | 12                   |
| Railroad drivers (city) seven days per week.....    | 8 75                    | 12                   |
| Stage drivers.....                                  | 7 58                    | 18                   |
| Shirt sewers.....                                   | 3 00                    | 20                   |
| Stone cutters .....                                 | 7 50                    | 10                   |
| Teachers (in private schools).....                  | 18 00                   | 8                    |
| Waiters, (saloon) including board.....              | 6 00                    | 10                   |
| Waitresses, (saloon) including board.....           | 4 00                    | 10                   |
| Watch makers.....                                   | 11 00                   | 10                   |

#### NEW STEAM-ENGINE.

A Parisian inventor has recently patented an improved steam-engine, actuated by regenerated steam, which consists in generating steam at about three atmospheres' pressure in a boiler surrounding the fire-box, and conveying the said steam issuing from the boiler into a superheating receiver placed within the fire-box. The steam superheated being thus brought almost instantaneously to a very high pressure, rushes from the receiver into the steam-chest of a horizontal cylinder, where it is distributed in the usual way by a slide valve; as it escapes therefrom it is conveyed by a suitable pipe to a second cylinder, where it expands and works in the same way, thence the steam is conveyed back to the boiler, which it enters freely after raising a valve, because its pressure is still higher than that of the steam contained within the boiler. The steam cylinders are in a horizontal position; their rods being in a straight line are keyed in a guide working in suitable guides. The slide has the shape of a frame standing upright, and a special brace in which a cranked pin, or cranked-shaft journal, revolves, sliding up and down in the above mentioned slide, so that the main shaft is caused directly to revolve by the two sliding motions without the help of a connecting rod.

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#### THE MANUFACTURE OF NAILS.

About seventy years ago, some men in Massachusetts, then unknown and in obscurity, began to make nails by cutting slices out of old hoops, and gripping these pieces by a common vice, headed them with several strokes of the hammer. By progressive improvements, slitting mills were built, and the shears and heading tools were perfected; but still, much labor and expense were requisite in making nails. The first machine ever made for cutting nails, it is said, was invented by a shopmate of ELI WHITNEY, called BENJAMIN COCHRANE. This inventor died at Batavia, New York, in 1846, in a ripe old age. His machine cut out the nails without a head. Previous to the date of his invention, (1790,) nails had been punched out of plates by hand in Connecticut; these also had no head. In 1810, the ingenious JACOB PERKINS and JONATHAN ELLIS, of Massachusetts, erected the first machinery for cutting and heading nails at one operation. In 1792, cut nails were first made in England by machinery, two rollers with dies being employed for the purpose. One-half the impress was made in each roller when they came in contact, the blanks were fed in at the top, and the finished nails dropped out below as the steam rollers revolved.

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#### INDIANA COAL.

At Cannelton, Indiana, there is a tunnel cut 1,600 feet long from the mines, and a double railroad laid in it down to the river. The vein of coal worked is  $4\frac{1}{2}$  feet thick; 110 miners are employed, and 8,000 bushels of coal are raised per day. The railroad is on an incline from the mines to the river, and is operated entirely by gravitation. The loaded cars, going down on one track, carry up the empty cars by an endless rope on the second track. The coals drop through the bottom of the cars into boats below in the river; no expense is therefore incurred either for haulage or loading the boats. The price of coal is about seven cents per bushel. It is used on Ohio and Mississippi steamboats.

**PROTECTION OF BRICKWORK.**

The penetration of moisture through the surface of brickwork may be obviated by the following simple remedy:—Three-quarters of a pound of mottled soap are to be dissolved in one gallon of boiling water, and the hot solution spread steadily with a flat brush over the outer surface of the brickwork, taking care that it does not lather; this is to be allowed to dry for twenty-four hours, when a solution formed of a quarter of a pound of alum, dissolved in two gallons of water, is to be applied in a similar manner over the coating of soap. The operation should be performed in dry, settled weather. The soap and alum mutually decompose each other, and form an insoluble varnish which the rain is unable to penetrate, and this cause of dampness is thus said to be effectually removed. Another method was some time since described (as, by the way, the previous one was) at the Royal Institute of Architects. It consists of sulphurizing oil as a varnish or paint, and is said to improve the color of brick and stone, as well as preserve them. It is prepared by subjecting eight parts of linseed oil and one part of sulphur to a temperature of 278 degrees in an iron vessel. It is said to keep out both air and moisture, and prevent deposits, and soot, and dirt, when applied with a brush to the surface of a building of brick or stone, or even of woodwork.

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**MILK OF WAX.**

Wax is readily converted into a soluble soap, which has the appearance of milk, by heating it in a solution of pearl ash. When one part of pearl ash in ten of water is heated to boiling, and two parts of yellow wax are introduced, a disengagement and effervescence of carbonic acid takes place, and when the whole is boiled with the same quantity of water as at first, a uniform milk will be the result. This liquid, when evaporated, gives a coating of wax insoluble in cold water, while the potash is dissolved. We have here an excellent medium for the polishing of wood, and for the penetration with wax of numerous porous substances, such as ornaments and statues of plaster of Paris, which may obtain by it a weatherproof coating. The same liquid mixed with a similar solution of rosin, prepared in the same manner and proportions, furnishes an excellent wax paper, especially for packing purposes. But as the rosin milk, even after drying, is still completely soluble in water, the paper must be finally treated with a bath of alum water, (4 of alum to 100 of water,) which renders the wax and rosin insoluble. The alum may be replaced by either Epsom salts or green or blue vitriol.

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**COAL IN CHICAGO.**

The large bituminous coal-fields of the West are being rapidly developed. Last year 131,204 tons were received in Chicago, and the best qualities of Pennsylvania and Ohio bituminous ranged in price, in that city, only from \$3 50 to \$4 per ton. The Illinois coal sold for \$2 25 and \$2 75 per ton. The lower veins of this field are much superior in quality to those of the upper series of veins. In a few years hence, therefore, the people of the West will be getting much better coal than they do at present.

**COLORS IN FRESCO.**

In fresco work, only those colors can be used which light will not act upon, or lime deteriorate. The fresco painter is therefore limited to a few pigments, which are principally natural colors or earths, and consequently sober in hue. The blue is the only brilliant color in fresco; but the old artists rarely employed either the cobalt, or the still more beautiful ultramarine used in modern frescoes—probably on account, partly, of the expensiveness of these colors. Their blues, therefore, being generally imperfectly prepared mineral compositions, have commonly faded, there being only now and then an exception to this fact. The blacks and grays, which are nearly all derived from animal and vegetable substances, have also proved very fugitive. Lime is mixed with the colors; but lime itself is also used alone as a pigment for the lights, the presence of sand with the lime rendering the plaster ground a delicate half-tint. The German fresco painters consider it indispensable that the lime should be slaked and kept buried underground several years before it is used, either as a pigment or for coating the walls. Others, however, do not insist upon the necessity of keeping the lime for a very long period, and there is no apparent scientific reason for doing so. From the power of absorption, little force of shadow is obtainable in fresco compared to the depth and transparency of oil painting; but this deficiency is more than compensated, for internal decoration, by the far greater luminousness of color in fresco, and its breadth of bright pearly effect. The colors assume, as it were, crystalline brilliancy, yet with none of the glare of oil painting. The power of fresco lies in light—the power of oil in depth and tone.

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**LIME.**

There are few minerals more widely distributed throughout nature than lime. It is in almost every portion of the earth's crust, from the primitive granite to the surface soil of the present time; in the waters of the sea; in the ashes of the plant; in the shell of the mollusc, and in the bones of the vertebrate; in the sparkling waters of the rippling brook; in the polished marble of the sculptor; in the gorgeous palace of the king; in the red brick building of the manufacturer, there lime is. It is used in the operations of the builder, the manufacturer, the chemist, and in almost every department of life; our walls and ceilings are plastered with lime; the stones are cemented together with lime; the glass of our windows is fixed in the sashes with lime; lime is used in the purification of coal gas, and in dyeing; our clothes are bleached with chlorine, held in store by lime; leather cannot be made without the use of lime; in the extraction of many of the organic acids, as the citric, tartaric, and malic, lime is indispensable; in agriculture, too, lime is indispensable in many of its forms as a manure; and in the reclamation of certain kinds of waste lands, lime is used as a valuable agent for correcting certain positively bad properties of the soil.

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**COAL IN FRANCE.**

France possesses large coal resources that await only development. She possesses in the department of the Gard, which borders the Mediterranean, and in the department of the Herault, which also touches the shore of that sea, important coal deposits. Alais, Besseges, Portes, and Senechas, in the Gard; Graissessac, in the Herault—all these coal fields are now connected by railway with the arsenal of Toulon. The mines of Rive-de-Gier (Loire) might also supply coal to Toulon, although at a somewhat higher price. Each of these coal fields is well known, and considerably worked, although they might be

worked on a still larger scale; and any of them could now, with a little care, yield a coal little inferior to the best English. The coal of Rive-de-Gier equals the latter in quality.

The French arsenals on the coast of the ocean—namely, Cherbourg, Brest, l'Orient, and Rochefort—are far from being destitute of the means of supplying themselves with coal. The mines of the department of the North, and those which have recently been opened in the Pas de Calais, mines which extend from d'Auzin to Bethune, can easily forward their coals, which are of good quality, to Cherbourg and Brest by sea. It is no great distance from d'Auzin to Dunkirk, and Bethune is still nearer to Boulogne.\* This coal might be sent also by land on the lines of railway which are actually finished as far as Cherbourg, and the distance to which is about to be shortened by Rouen. The works on the Brest Railway are proceeding actively to a termination.

To supply Rochefort and l'Orient, France possesses the coal fields of Commentry, in the department of l'Allier, which has a water communication with l'Orient and Brest by the Canal du Berri, the Loire, and the canals of Brittany. A parallel communication by railway will shortly be completed. The communication between Commentry and Rochefort is still more easy, the latter being united by a branch line to the railway of the Valley of the Loire, which communicates with Commentry.

The Commentry coal is of very good quality, and the deposit is abundant. The two basins of Creuzot and of Blanzay would, if necessary, supplement the supply of Commentry. They are both in the department of the Soane and Loire, and contain rich, accessible deposits, especially that of Blanzay.

The coal deposits of the department of l'Aveyron will shortly be placed in communication with Rochefort by a line of rails, independent of the water conveyance from Bordeaux.

Thus the arsenal of Rochefort in particular could be abundantly supplied with coal, and this arsenal appears destined to have great importance, because it is more sheltered than the others from those attacks which the new system of maritime artillery will introduce.

The coal basin of Brassac, (Puy de Dome,) and even that of St. Etienne, (Loire,) although more distant than the aboved named, can communicate by railway with Rochefort, and also with l'Orient. These two coal fields offer considerable resources.

There are also a number of small deposits, whence the imperial marine could derive supplies, and which are nearer to the coast than those indicated. There is one in La Vendee, and another near d'Auzin, on the borders of the Loire. There is also that of d'Ahun, (Creuse.†)

As to the price at which these mines could furnish coal to the different arsenals, it would exceed 10s. a ton that at which English coal could be supplied. The government is at the present moment negotiating generally with the railway companies to get their assent to a moderate transport charge on coal. It is likely that, for the public generally, the scale will be three times a ton per kilometre distance, equivalent to  $\frac{1}{2}$ d. per ton each mile English; for the arsenals it will probably be still less, for in France the government is in the habit of ex-

\* Bethune is only fifteen English miles from Boulogne.

† This is an interesting coal field, although small. It is nearer to Rochefort than is Commentry.

pressly reserving a tariff in its own favor. In a distance of 400 miles, which is much greater than will actually be necessary, let us nevertheless assume that the State will pay the same tariff as the public; this would come to two hundred pence, or 16s. 8d.

The production and consumption of coal in France has been at two periods as follows :—

|                            |      | 1847.     |           | 1858.      |
|----------------------------|------|-----------|-----------|------------|
| Production.....            | tons | 5,153,200 |           | 7,340,000  |
| Imported from Belgium..... |      | 1,634,900 | 3,089,400 |            |
| “ England.....             |      | 504,400   | 1,146,800 |            |
| “ Prussia.....             |      | 254,400   | 1,027,800 |            |
| “ Other.....               |      | 1,500     | 3,000     |            |
| “ Marine.....              |      | 77,500    | 165,000   |            |
|                            |      | 2,472,500 | 5,432,400 |            |
| Total tons.....            |      | 7,625,700 |           | 12,772,400 |

This statement includes the use of coke, and gives the result of increasing consumption under the old law.

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SILVER IN NORWAY.

The following table shows the produce and expenses at the “King’s Mines,” in the royal Norwegian government’s silver works, at Kongsberg, from January 1, 1834, to December 31, 1858, as given in the annexed extracts of the official returns :—

Years.	Produce of silver sold.	Expenses by the mines and stamping work	Net profit.	Years.	Produce of silver sold.	Expenses by the mines and stamping work.	Net profit.
1834... £88,962	£9,700	£79,262	1848... £77,535	£11,289	£66,246		
1835... 69,279	9,600	69,679	1849... 51,118	11,056	40,062		
1836... 54,223	10,356	43,867	1850... 48,756	11,329	37,427		
1837... 53,459	12,807	40,652	1851... 39,133	11,259	27,874		
1838... 59,692	13,871	45,821	1852... 41,832	11,656	30,176		
1839... 69,580	12,644	56,936	1853... 37,310	11,911	25,399		
1840... 65,911	12,716	53,195	1854... 52,962	12,772	40,190		
1841... 64,637	13,274	51,363	1855... 64,960	6,390	58,570		
1842... 30,710	12,561	18,149	1856... 73,120	6,811	66,309		
1843... 42,481	11,499	30,982	1857... 61,422	7,148	54,274		
1844... 40,494	11,878	28,616	1858... 61,008	7,204	53,804		
1845... 37,731	11,443	26,288					
1846... 38,273	10,913	27,360	Total ..	£1,377,760	£272,770	£1,104,999	
1847... 53,181	10,683	42,498	Average	55,110	10,910	44,200	
Average produce in twenty-five years.....			yearly	£55,110			
Average expenses in twenty-five years.....				10,910			
Average net profit in twenty-five years.....				44,200			

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**ELECTRO-MAGNETISM APPLIED TO WEAVING.**

The extraordinary improvement introduced into weaving by M. BONELLI, director of the electric telegraphs of Sardinia, by the application of electro-magnetism, has been known to the public. The following more minute description of his system may prove acceptable to our readers :—

By peculiar mechanical arrangements a certain number of threads of the warp are raised, and all the others depressed, and another cast of the shuttle leaves its web between them. The pattern depends entirely upon the order in which the respective threads of the warp are raised and depressed. The peculiarity of the JACQUARD loom consists in the use of perforated pieces of cardboard, through

the holes in which some of the wires or small rods, one of which is attached to each thread in the warp, are allowed to slip, and thus raise these threads, while the others are opposed to solid portions of the card. In the new invention the design traced in black varnish on the tinfoil paper is placed in the band, as an endless band over a roller. A row of thin brass plates, terminating in points, touch with these points the patterns in a horizontal line right across it. These touching plates correspond in number with the threads of the warp; the pole of a magnetic battery is in contact with the tinfoil of the pattern. The electric current passes through the tinfoil, and enters every brass plate in contact with it which stands on the bare surface of the tin. The black varnish of the pattern is a nonconductor, and prevents the electricity from passing into any of the brass plates touching the varnished portion of the tinfoil. The electric current passing through any one of those brass plates is made to magnetize a little iron rod. The magnetized rod attracts another rod, and, by the aid of mechanism, the corresponding thread of the warp is elevated.

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#### ZEIODELITE.

Such is the name which has been given to a new composition which has recently been patented by Mr. JOSEPH SIMON, of Paris, and intended as a substitute for lead. He mixes with about 19 pounds of sulphur 42 pounds of broken jars or glass finely pulverized; he exposes the mixture to a gentle heat, which melts the sulphur, and then stirs the mass until it becomes thoroughly homogeneous, when he runs it into suitable molds, and allows it to cool. This preparation is proof against acids in general, whatever their degree of concentration; consequently, as it can never communicate any impurity to or be destroyed by them, it will last an indefinite time. It melts at about 120° Centigrade, and may be re-employed whenever found desirable to change the form of the apparatus, without loss of any of its properties, by melting at a gentle heat, and operating as with asphalt; at 110° Centigrade, it becomes as hard as stone, which permits it to preserve its solidity in boiling water. In constructing the chambers used in sulphuric acid manufactories, slabs of lead are used of about one-eighth inch in thickness, whereas, when made of zeiodelite, they should be one-half inch thick, and will be lighter than leaden ones. If slabs of zeiodelite, of equal weight to the leaden ones at one-eighth inch be desired, they would be about one inch in thickness, and still cost but one-fifth the price of lead. To unite these slabs no solder is required; a portion of the molten zeiodelite being run in between the slabs placed one inch apart, when the heat being 200° Centigrade, the edges of the slabs will be melted, and a uniform surface will be obtained, the entire vessel forming but one piece.

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#### TO GILD ON GLASS.

To make a small sign, take a piece of glass the required size, and clean it with alcohol or soap. Next, with a sharp penknife cut the back from a book of gold foil, and then, having licked with the tongue the plate of glass, (as saliva is the best sticking substance,) or if the glass is very large, use a weak solution of gum arabic, or the white of an egg in half a pint of water; now taking the leaves of the book off in order, lay them on the glass, or spread the leaves out and lay the glass on them, and it will take up the whole foil. When dry, which is known by the brilliant appearance of the foil through the glass, take a soft piece of canton flannel, and rub off all the loose pieces of foil; then with a rule draw two lines from end to end, the same distance apart, according to the height of the letters wanted, and remove all the superfluous foil. Then place your cardboard letters on backward, and with a pointed stick mark all around the letter, and remove the waste foil. When the letters are all left in gold, paint the glass and the sign is finished.

## STATISTICS OF AGRICULTURE, &amp;c.

## TEA PLANT.

Twenty-six thousand tea plants, either imported or raised from imported seed, have been distributed during the past spring by the Patent-office, and the experiment of acclimatizing this valuable production will doubtless be fairly and fully tried. The honor of first introducing the tea plant into this country belongs, as the readers of this magazine well know, to the late JUNIUS SMITH, LL. D., who fully believed that it would become one of the staple products of the Southern States. He published a work on the cultivation of the tea plant, in 1848, which embodies much valuable information on the culture of the plant in China, and gives a history of the successful attempts made to introduce it into Java and Brazil. The results of these experiments, as narrated by Dr. SMITH, clearly proved the practicability of growing the tea plant in various and wide-separated positions of the globe. He established an experimental plantation himself, near Greenville, South Carolina, which he considered similar, as to soil and temperature, to the tea-growing districts of China.

Dr. SMITH's tea plantation was injured by mischievous lads prior to his death, and the plants that remained were afterwards dispersed as objects of curiosity rather than for culture. Some of them, preserved by Mr. THOMAS M. COX, Esq., of Greenville, have thriven so well that he is supplied with tea for home use, and is now experimenting with the Patent-office plants. Dr. J. P. BARRETT, of the same region, is also able to treat his friends with a cup of tea of his own growing.

In 1852, Mr. FRANCIS BONYNGE, then recently from the East Indies, came to this country with the avowed purpose of introducing the tea, coffee, and indigo plants. He published a small work, entitled "The Future Wealth of America," in which he fully explained his opinions, and expressed a hope that they might be produced at from two to five cents a pound, free from the noxious adulterations of that imported.

The successful introduction of the tea plant into the British East India provinces, by ROBERT FORTUNE, Esq., having attracted attention in this country, the Commissioner of Patents engaged him to visit China, and procure plants and seed for the United States. Mr. FORTUNE left London on the 4th of March, 1858, and it was his desire, expressed in a letter to the Commissioner, to ship his purchases by six or seven different vessels, and return by the overland route, to reach America as early as possible, in order to receive the plants on their arrival. If, (he went on to say,) on the contrary, I accompany the last shipment, *via* the Cape, the first would necessarily be home several weeks before I could be upon the spot to examine it and do what is needed. My object in offering this suggestion is to secure, if possible, the success of my mission, and I have no doubt you will agree with me in the propriety of such a course of procedure.

Mr. FORTUNE made his purchases and shipments, but on arriving at London on his way here, he received information that his further services were not desired. It is to be hoped that this dismissal really arose from a desire on the part of the government to economize, and not from the jealous fears of any subordi-

nate official that Mr. FORTUNE would receive the honors attendant on the successful introduction of the tea plant.

The Patent-office Report of 1859 admits that the arrangements for receiving and for propagating the plants were not by any means *perfect*. The report says :

"In August, 1858, intelligence of the transmission of a quantity of tea seeds from China, created an immediate necessity for their provision. A plot of five acres was accordingly chosen, in a central position, in the city of Washington, and prepared in the manner described in the report of the Commissioner of Patents on agriculture for that year. A system of underground tile-drainage, upon a plan now common in the United States and in Europe, was applied to this ground, and with excellent results for a time ; but, unfortunately, there was want of adaptation in the manner of laying the tiles upon the yielding, marshy base, and the continuity has consequently been interrupted by occasional depressions. When this shall have been remedied, as it doubtless may be without serious detriment to the field or its products, the experiment may be regarded as complete and satisfactory.

"The plan pursued in constructing and warming the green-houses upon this ground, though successful in its present application, is not commended for all purposes. Decomposing vegetable matter, covered with a portion of nitrogenous materials, might be adapted to general use, were the process of decomposition susceptible of being controlled at will ; but so variable is its progress, and so dependent upon external influences, in a ratio inverse to the requirements within, that the vicissitudes of temperature proceeding from it are such as none but hardy plants can endure. The volatile emanations are likewise in excess in this process, insomuch that even those plants which become accustomed to and prove capable of sustaining an atmosphere so highly stimulating may suffer when suddenly withdrawn from its influence and exposed to open air.

"This partial exclusion of the light and the warmth of the sun, practiced in connection with this plan, also proves detrimental to these plants, while the altitude of the roof, eleven feet at the apex, is to them a constant and certain cause of slender and feeble growth.

"Happily, these disadvantages are remediable at small cost of money and labor, by the provision of apparatus for artificial heating, the elevation of the beds, the adoption of means of ventilation, and the extension of the glass roofing over the whole of each structure."

The tea plants (*Thea Viridis*) have been propagated from seeds, from layers, and from cuttings, with marked success, and this spring large distributions have been made. About 18,000\* have been sent into the different Congressional districts south of the northern line of North Carolina and Tennessee, that portion of our country being the most favorable to the cultivation of the plant. The consignment of a sufficient number of plants to occupy a few square rods of ground has been made to some intelligent and responsible person, selected with the assistance of the representative of the district. As it is supposed that the plant cannot be cultivated in the open air north of the northern boundaries of Tennessee and North Carolina, but must be protected in heated conservatories and green-houses during the winter, about 8,000 plants will be distributed among from fifty to a hundred persons in the States, respectively, north of the above-named line, for the gratification of the taste and the curiosity of the public. The names and address of these persons, also, have been obtained through the aid of their representatives in Congress.

A large number of cuttings, taken from the plants, are now thriving finely, and the gardener in charge at the propagating establishment is of opinion that he will be able to furnish at least 10,000 plants a year for distribution. Let the tea plant have a fair trial.

## LIVE CATTLE WEIGHED BY MEASURE.

The only instrument necessary is a measure with feet and inch marks upon it. The girth is the circumference of the animal just behind the shoulder blades. The length is the distance from the shoulder blades. The superficial feet are obtained by multiplying the girth and length. The following table contains the rule to ascertain the weight of the animal :—

If less than one foot in girth, multiply superficial feet by eight.

If less than three and more than one, multiply superficial feet by eleven.

If less than five and more than three, multiply superficial feet by sixteen.

If less than seven and more than five, multiply superficial feet by twenty three.

If less than nine and more than seven, multiply superficial feet by thirty three.

If less than eleven and more than nine, multiply superficial feet by forty-two.

Example : Suppose the girth of a bullock to be six feet three inches ; length five feet six inches ; the superficial area will then be thirty-four, and in accordance with preceding table, the weight will be seven hundred and eighty-two pounds.

Example : Suppose a pig to measure in girth two feet, and length one foot and nine inches. There would then be three-and-a-half feet, which, multiplied by eleven, gives thirty-eight-and-a-half pounds as the weight of the animal when dressed. In this way, the weight of the four quarters can be substantially ascertained during life.

## ACCLIMATIZATION OF ANIMALS.

The peculiarly utilitarian impulse given to natural science in France, aided in no small degree by the report on certain questions relative to the naturalization of useful animals, by M. ISIDORE GEOFFREY ST. HILAIRE, published at the request of the Minister of Agriculture, gave birth to the Imperial Zoological *Society d'Acclimation*, which has been so universally received and supported that its muster roll is now perfectly cosmopolite, and includes already fourteen sovereigns, with working members in every country in Europe, and many beyond its limits. A section of the Bois de Boulogne, comprehending near forty acres of salubrious soil, has been appropriated by the city of Paris for a vivarium and garden, and we may presume that all the appliances which experience and ingenuity can bring to bear upon the undertaking will be made available for its completion.

## TILE DRAINS.

H. S. OLCOTT, Esq., in his Yale Agricultural Lectures, remarks upon drains :

PARKES, the great English drainer, states, after experiments, that only 1-500 of the water gets through the pores of the tile ; the balance is admitted through the joints. English farmers make their ditches a foot wide at top, four inches at the bottom, and with an appropriate tool, scoop out a little rough trough in which to lay their pipes. The clay is then packed upon them without further trouble or anxiety as to the result. Drains well laid last more than fifty years. A half century is the time counted upon by all the land drainage companies, at the end of which the whole amount of their loan to the farmer is to be paid in. Water enters tile drains at bottom, not at top ; for the same reason that if you pour water into a cask of sand, with holes made in the sides at several heights, the lowest hole will discharge first, and the top one last. The capacity of pipe-

tile is in proportion to the squares of their diameter. Thus, if an inch tile will carry two inches of water, a two inch will carry four inches, a three-inch nine, and so on. Inch tiles, therefore, although perhaps large enough to hold all the water that we would discharge from our fields, are practically not large enough, for they become filled at say half way down the slope, and of course all the ground they pass through after that might as well have no tile beneath it. A two-inch bore is the smallest Judge FRENCH would recommend for general use, and, although previously a friend to smaller sizes, I feel convinced of the justice of his arguments, and shall hereafter recommend and use accordingly. Laterals should be jointed into the mains *pointing down stream*, and enter the mains near the top. By this plan a good fall and unimpeded discharge are insured. In respect to the minimum of fall consistent with good function of tile-drains, the lecturer stated that one-inch fall in each rod of length was ample; three inches to the 100 feet was a fair proportion, but then the tiles should be longer; and so on to the end of the calculation.

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#### CROPS OF IRELAND.

The Registrar-General of Ireland, Mr. DONNELLY, very recently issued his annual tables for 1859. We here desire to draw attention to the estimated average produce of crops for the year 1859.

It is shown, by evidence collected all over Ireland by the excellent machinery of the Registrar's Office, that there was a great diminution in the yield of crops in 1859, compared with the previous year, the cereals produce less by 1,183,519 quarters. Potatoes show a decrease of 562,702 tons, or about sufficient to supply every family in Ireland, averaging five persons to a family, with a stone of potatoes each day for nearly two months and a half; turnips show a reduction of 902,717 tons, mangold-wurtzel of 96,477 tons, cabbage of 51,487 tons, and hay of 379,227 tons. The only crop which shows an increase is the important one of flax, which yielded 3,994 tons above the produce in 1858, but this was owing to 44,636 acres more having been sown in 1859. It appears from other returns furnished that the rates of produce per acre in 1859 were lower than the average of ten years—1850 to 1859—for every crop with the exception of wheat, a cereal crop which is chiefly exported. The diminution of laborers in the agricultural parts of Ireland may account, in some degree, for the above lamentable state of things—for one of the finest and most fertile countries in the world perpetually becoming deteriorated and depopulated. This is a fact, supplied by the British government, and not to be denied or challenged.

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#### PLANT TREES.

WALTER SCOTT, in his "Heart of Midlothian," puts in the mouth of the dying Laird of Dumbiedikes the following advice, which is worthy of more general adoption, and needs no "improvement" from the pen of the present writer in order to give it force:—"Jock, when ye hae naething else to do, ye may be aye sticking in a tree; it will be growing, Jock, when ye're sleeping. My father na sae forty years sin; but I ne'er fand time to mind him." Scott, in a note, says these words were actually delivered by a Highland laird, while on his death-bed, to his son.

CORN CROP OF THE WEST.

The corn crop of 1859 (says a Chicago paper,) was good all over the West, with the exception of some portions of Northern Illinois, Wisconsin and Northern Iowa, where much injury was sustained by the frosts. In Central and Southern Illinois it is known to have been large—perhaps larger than ever before in the history of the State. Under ordinary circumstances, therefore, prices would have been low; but, as the crop of 1858 was a partial failure, and the country almost entirely bare of corn before the new crop was ready for market, it altered somewhat the aspect of affairs in this particular. The following table shows the receipts of corn at Chicago from the 1st of January to the 1st of April, for seven years:—

|                  |           |                  |         |
|------------------|-----------|------------------|---------|
| 1860.....bushels | 1,915,706 | 1856.....bushels | 458,940 |
| 1859.....        | 427,739   | 1855.....        | 410,185 |
| 1858.....        | 137,116   | 1854.....        | 413,065 |
| 1857.....        | 351,549   |                  |         |

STATISTICS OF POPULATION, &c.

SARDINIA AS SHE IS.

The population of the kingdom of Sardinia has been changed considerably by the war. In order that an accurate notion may be formed of the gains that Sardinia has acquired by her recent military and diplomatic struggles, we have prepared a table showing her population previous to and immediately subsequent to the Italian campaign, with the additions made to it by the recent vote. We also give the vote itself, as evidence of the unprecedented unanimity of feeling which has animated the Italians on the annexation question:—

|                          |  |           |
|--------------------------|--|-----------|
| SARDINIA BEFORE THE WAR. |  |           |
| Population.....          |  | 5,167,542 |
| SARDINIA AFTER THE WAR.  |  |           |
| Sardinia proper.....     |  | 5,167,542 |
| Lombardy.....            |  | 2,866,396 |
| Total.....               |  | 8,033,938 |

|                      |           |                                 |
|----------------------|-----------|---------------------------------|
| SARDINIA AS SHE IS.  |           |                                 |
| Sardinia Proper..... | 5,167,542 | Forli..... 218,433              |
| Lombardy.....        | 2,866,396 |                                 |
| Tuscany.....         | 1,806,940 | Total..... 11,783,813           |
| Modena.....          | 604,512   | Deduct Savoy and Nice.. 847,738 |
| Parma.....           | 490,835   |                                 |
| Bologna.....         | 375,631   | Total..... 10,936,075           |
| Ferrara.....         | 214,524   |                                 |

|                                                         |                     |                  |
|---------------------------------------------------------|---------------------|------------------|
| ANNEXATION VOTE.                                        |                     |                  |
|                                                         | No. of inhabitants. | Votes expressed. |
| Tuscany.....                                            | 1,806,940           | 386,445          |
| Amelian provinces, (Parma, Modena, and the Legation)... | 1,942,935           | 426,006          |
| Total.....                                              | 3,749,875           | 812,451          |

We take the statistics of population from the Almanach de Gotha, which is more reliable in such matters than the gazetteers or than newspaper authorities. These show that twenty-two per cent of the population have pronounced in favor

of annexation, being, with the exception of about 15,000, the whole of the persons entitled to exercise a vote. This is a remarkable result in a country so long depressed by despotic restraints, and where some of the old influences might still be expected to remain in force.

#### MIGRATION FROM, AND POPULATION OF, IRELAND.

From the Registrar-General's report we quote the following interesting details, which show that the exodus of the Irish peasantry continues undiminished:—

The emigration from Irish ports during the past year exceeded that of the previous one by 16,506 persons, 68,093 having left the country in 1858, and 84,599 in 1859; of this latter amount 46,431 were males, and 38,168 females. These include 2,679 males and 1,321 females, or 4,000 persons, who did not belong to Ireland, leaving the remaining 80,590 to represent the Irish during 1859. Owing to the continued want of a general measure for the registration of births and deaths in this country, it was necessary in the computation to use the averages of these events in England and Wales, as given in the reports of the Registrar-General. The births are therefore assumed to have been one to 31, and the deaths are one to 45 of the population in each year.

It is greatly to be regretted that there are not more satisfactory data upon which to base important and interesting calculation; and it is earnestly to be desired that this session of Parliament may not pass over without supplying so great a want in the social legislation of this part of the United Kingdom, which presents the strange anomaly of being the only civilized country in the world in which the births, deaths, and marriages of the inhabitants are not systematically recorded. According to the computation there would appear to have been in Ireland, on the 1st January of the present year, 5,988,820 persons, being 563,565 less than at the time of the census of 1851. This estimate, however, should only be considered an approximation, as the immigrants who have settled permanently in this country since 1851 are not taken into account, and the number of births and deaths during the period has been obtained by using the English averages.

The emigration continues to be chiefly composed of persons between the ages of five and fifty five years; thus, in Leinster, 93.5; in Munster, 92.3; in Ulster, 91.4; and in Connaught, 95.3, in every one hundred persons who emigrated, were between these ages. The proportion who left the entire country at these ages was 92.2 per cent, while those aged from fifteen to forty-five included 80.9 for every one hundred emigrants. Of the entire number of emigrants, the largest proportion was from the county and city of Cork, which contributed more than 12 per cent of the total emigration. The other counties and cities in Munster also gave a large proportion, owing to which it would appear that this province lost a greater number of its inhabitants by emigration since 1851 than either Leinster, Ulster, or Connaught.

A country which is thus deserted by its laboring classes cannot be considered prosperous. Let us just examine the main fact in the above extract.

The population of Ireland appears to have been rapidly declining during the last fifteen years—that is, since the depopulating famine of 1846-7. We shall here show the population of Ireland at various periods during the last forty years:—

#### POPULATION OF IRELAND.

|           |           |           |           |
|-----------|-----------|-----------|-----------|
| 1821..... | 6,801,827 | 1851..... | 6,515,794 |
| 1831..... | 7,767,401 | 1856..... | 6,000,000 |
| 1841..... | 8,185,124 | 1859..... | 5,988,820 |

Thus, in the ten years between 1821 and 1831, the Irish population had an increase of nearly a million. Between 1831 and 1841, the increase was less than half a million, but, in the latter year, Ireland had over 8,000,000 inhabitants. Between 1841 and 1851, the Irish population fell off a million and a half. In the five years between 1851 and 1856, this reduction was increased by over

500,000 inhabitants, and, in the year 1859, the total population of Ireland is nearly 1,000,000 less than it was declared to have been, nearly forty years before, by the census of 1821, and more than 2,000,000 less than it had been in 1841. This is certainly going from bad to worse at a very rapid rate.

Emigration and starvation have united thus to depress and depopulate Ireland. We can show from Parliamentary returns, up to 1857, inclusive, and by the above quoted report of the Registrar-General of Ireland, what has been the emigration during the last thirteen years. Here are the figures:—

In the five years from the end of 1846 to the end of 1851, the emigration from Ireland amounted to 1,422,000 persons. In the eight succeeding years, that is, to the close of 1859, the account runs thus:—

| Years.                                  | Emigrants. | Years.     | Emigrants. |
|-----------------------------------------|------------|------------|------------|
| 1852 .....                              | 368,966    | 1856 ..... | 176,554    |
| 1853 .....                              | 329,987    | 1857 ..... | 212,875    |
| 1854 .....                              | 328,429    | 1858 ..... | 68,093     |
| 1855 .....                              | 176,807    | 1859 ..... | 84,599     |
| <hr/>                                   |            |            |            |
| Total .....                             |            |            | 1,741,260  |
| For previous five years.....            |            |            | 1,422,000  |
| <hr/>                                   |            |            |            |
| Total emigration in thirteen years..... |            |            | 3,163,260  |

Bear in mind, too, that emigrants are, for the most part, in the prime of life; four-fifths of them are under thirty; and see how the vital force of Ireland has been drawn away.

Nor must we here omit to mention the evils inflicted by the famine and sickness of 1846-7. It is calculated that the total deaths in Ireland from 1846, when the famine began, to the end of 1850, when its effects may be said to have ended, so far as mortality is concerned, were 985,000, from which, deducting 390,000 as the probable average mortality of the period, there will remain 595,000, which may fairly be attributed to the famine, or to the disease it engendered.

In Ireland, where the emigrants are numerically greater than the assumed excess of births over deaths, it is probable that the census of 1861 will show the population to be as low as 5,000,000, which will be nearly 2,000,000 less than in 1821, and 3,000,000 less than in 1841. But, had the famine and emigration not operated, the Irish population, which was 8,000,000 in 1841, ought to exceed 10,000,000 in 1861.

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THE COOLIE TRADE.

Over fifty thousand coolies had been shipped for Cuba alone in the past eight years from China. According to correct sources the following is a list of the vessels which brought Asiatic colonists to the island of Cuba, from the first importation in 1847 to the 16th of September, 1859, showing the points from whence they were taken, the length of each passage made, number shipped, and the mortality up to the moment of landing. The following is a summary:—

AVERAGE OF VESSELS AND EMIGRANTS.

Years.	No. of vessels.	Tonnage.	Chinese.		Died.
			Shipped.	Landed.	
1847	2	879	612	571	41
1853	15	8,349	5,150	4,307	843
1854	4	2,375	1,750	1,711	39
1855	6	6,544	3,130	2,985	145
1856	15	10,567	6,152	4,968	1,184
1857	28	18,310	10,116	8,547	1,509
1858	33	32,800	16,413	13,385	3,029
1859	13	10,283	6,799	6,027	772
<hr/>					
Total	116	90,216	50,123	42,501	7,622

The above footing, representing the total number shipped, does not include a cargo of 757 landed in Cuba lately, so that the total should be increased to 50,880 ; and 220 more should be added to the mortality. The total number of deaths, therefore, during the period named, was 7,842. This does not show the full extent of this deplorable trade. Thousands have been lost between China and foreign ports, whose departure was not recorded.

In the year 1856, the percentage of loss, according to the above table, was 19.24 per cent, (nearly one in five ;) in 1857, 15.50 per cent ; in 1858, 18.45 per cent ; in 1859, 11.35 per cent.

This list does not embrace the terrible disaster to the ship *Flora Temple*, last summer.

The United States consuls in and near China, are fully aware of the extent, cruelty, injustice, and criminal character of the coolie trade. In a recent official communication from our Consul at Amoy, to the Department of State, he says :—

Acting under the instructions of His Excellency Mr. REED, the United States Envoy Extraordinary and Minister Plenipotentiary, I have concerted with the local authorities in adopting measures to end, if possible, the so-called "coolie trade," especially as regards American vessels, but generally so.

Since I brought the subject definitely before them by personal interview and correspondence, the local authorities have been acting with an apparent hearty determination. One coolie depot on the mainland, some miles from Amoy, has been broken up, the victims of deception liberated, and a seizure made of one or more coolie collectors. But the most decisive and telling transaction took place on the 6th instant, when a lorcha, used as a coolie depot, (report says, employed by a coolie dealing firm here, F. D. SYMO & Co.,) and anchored off from Amoy, near the mainland, and out of harbor, was seized, with about one hundred victims on board, and brought to Amoy. Eight of the coolie collectors were also taken. I hear that the coolies have been set at liberty, the vessel confiscated, and, in accordance with Chinese law, four of the collectors have been found guilty of death. These acts of the local authorities are incident upon proclamation issued by His Excellency the Prefect of Amoy, and myself, in concerted action.

THE CARTMEN OF NEW YORK.

The following interesting table shows the gradual increase in the number of licenses granted at the mayor's office for public carts and dirt carts during the last twenty years :—

	Public carts.	Dirt carts.	Total.
1840.....	2,523	Not found :	....
1841... ..	2,610	books	....
1842.....	2,665	burned.	....
1843.....	2,713	do.	....
1844.....	2,727	do.	....
1845.....	2,818	do.	....
1846.....	2,824	do.	....
1847.....	3,013	400	3,413
1848.....	3,055	505	3,560
1849.....	3,066	532	3,598
1850.....	3,572	1,017	4,582
1851.....	3,871	1,056	4,927
1852.....	4,033	1,119	5,152
1853.....	4,359	1,107	5,466
1854.....	5,258	797	6,055
1855.....	5,419	585	6,004
1856.....	5,463	800	6,278
1857.....	5,509	682	6,191
1858.....	5,603	648	6,251
1859.....	5,836	1,160	7,026

MERCANTILE MISCELLANIES.

MERCANTILE HONOR.

A Boston merchant, in a communication to the *Daily Advertiser* of that city, makes some interesting remarks upon the progress of mercantile honor. He says:—

After all that is said, it can probably be shown that we really have a high standard among us, and that all must conform to it who mean to enjoy favor and respect. While some persons, few in number if counted, are found to have been criminal though previously supposed to be upright, the great multitude are daily performing their toilsome duties, through all the vicissitudes of life, without reproach and without cause for it, so far as the truth can be gathered from their habitual conduct, and from its results. While a dozen cases of fraud may be detected among those who had before stood respectably, the history of all our transactions from week to week for a year would show that thousands, probably millions, of engagements are faithfully met, a large portion of them resting merely on verbal agreements which could not be enforced by law if the contracting parties were inclined to avoid honest performance, the word of a man once given being in most cases sufficiently binding, as is proved by habitual reliance upon it. We hear it asserted that people are suffered to walk about among us, who, if they had their deserts, would be in prison. As to any persons who have been convicted of crime, it is unnecessary to say that they are regarded as convicts. It is urged that we have had instances even of forgery here never yet punished. True, where are the forgers? Absconded and dead; or living in obscurity if the evidence be clear. Any man among us who has had crime imputed to him and failed to clear himself of the charge, has found his influence essentially destroyed. Whatever his qualifications for office may be, however desirable it might be to secure his services for a public station, he has little chance of obtaining any place by election unless after a long course of altered conduct. And so through all grades of misdemeanor or unfairness, even in exciting reasonable expectations and disappointing them, just in proportion to the deviation from strict right, there is a blot or a shade resting on the character, which is indicated by "winks and finger ends," and by blushes that rise on the cheeks of relatives and children at occasional allusions, where the evidence justifies the imputation. There is no power to exclude even those who rest under serious charges from the streets or public places, but their altered manner in seeking recognition, and the way in which they are met, gives ample proof of melancholy change in public esteem.

It is often remarked that we must be growing worse because there are more cases now than formerly of criminal misconduct. Alarms of fire are more frequent in a great city than a small one, because there are more buildings, but without increase of danger to any one of the houses. Several hundred millions of dollars have been invested in railroads within twenty-five years past, of which we have our full share, thus making it necessary to seek for an unprecedented number of persons suited to fill places of trust, and men have been called to fill them suddenly without previous training, and without the provision of any proper system of checks and safeguards to keep the new officeholders in a steady course. The misconduct and crimes that have ensued in such cases are not altogether peculiar to America. But while the number of such cases is thus increased with the general growth of affairs, the difference in degree between those of the present day and the past, is not so remarkable. Those of us who have retentive memories can match any of them with astounding incidents long gone by and generally forgotten.

A few years ago, a man who was long distinguished among us for intelligence, for energy, and for conduct scrupulously upright under severe trials, and who

has now gone to his grave, leaving behind him lasting proofs of public spirit and skill in business, took part in some discussions on the relative character of the community in our day as compared with former times. The present state of things was distasteful to him. In his opinion, we suffered greatly by comparison, in most matters, with the old school. At length the subject of integrity and fair dealing among men of business was introduced. "As to commercial integrity," he said, "I will freely admit at once that there is improvement. Things were done formerly which would not be tolerated now;" an important admission this, from one whose prepossessions were so strong and so unfavorable to our age in most respects.

The *Advertiser's* correspondent made this remark in conversation with an old Boston merchant, then living in London, *appropos* of the latter's reminiscences of Boston. The reply was substantially "that his own observation tended to confirm it. He added, that for more than forty years he had been in a position to observe how our business is conducted in connection with the extensive credits given from Europe, and that it was surprising, in a review of the past, to find how uniformly there had been good faith in these transactions. He stated that in the multitude of instances, through so many years, in which he had authorized such credits as a banker, he remembered only three where there had been fraud."

The question whether we are always sufficiently prompt in prosecuting accused persons, or in deciding to refuse them any further notice as friends or acquaintance, might require some reference to individual cases in which the facts would not be readily agreed on.

To speak as if we might as well give up all self-respect at once, denouncing those who are accused with little discrimination or discernment, seems to be thought necessary "in order to deter the young from error." It should be remembered, on the other hand, that great mischief may be done to the young by familiarizing them with the thought that we have no standard of right by which their delinquencies, if they err, are to be strictly judged. That the difference between fraud and honesty, or even between insincerity and fair dealing, is readily appreciated among us, and in the main, justly requited at the bar of public opinion.

THE SOURCES OF PERFUME.

Fair readers may be interested to learn, where, for the most part, the flowers grow, the sweet perfume of which is found in those pretty *flacons* on their dressing-tables. The chief places of their growth are the south of France and Piedmont, namely, Montpellier, Grasse, Nimes, Cannes, and Nice; the two last, especially, are the paradise of violets, and furnish a yearly produce of about 13,000 lbs. of violet blossoms. Nice produces a harvest of 100,000 lbs. of orange blossoms, and Cannes as much again, and of a finer odor; 500 lbs. of orange blossoms yield about 2 lbs. of pure Neroly oil. At Cannes the acacia thrives particularly well, and produces yearly about 9,000 lbs. of acacia blossoms. One great perfumery distillery at Cannes uses yearly about 140,000 lbs. of orange blossoms, 20,000 lbs. of acacia blossoms, (*acacia farnesiana*), 140,000 lbs. of rose leaves, 32,000 lbs. of jessamine blossoms, 20,000 lbs. of violets, and 8,000 lbs. of tuberoses, together with a great many other sweet herbs. The extraction of the ethereal oils, the small quantities of which are mixed in the flowers with such large quantities of other vegetable juices that it requires about 600 lbs. of rose leaves to win one ounce of otto of roses, demands a very careful treatment. The French, favored by their climate, are the most active, although not always the most careful, preparers of perfume; half the world is furnished by this branch of their industry.

BORROWING.

The Boston *Transcript* has the following amusing remarks upon the degree of communism which prevails in respect of some very useful descriptions of property:—

When a man borrows money of another, or from a corporation, he is required to give a written acknowledgment of his indebtedness, and a promise to pay at a definite time, or on demand. But in the case of ordinary borrowing, it is the integrity, the honor of the borrower, which gives confidence to the lender, that his property, or an equivalent, will be duly returned.

Perhaps one of the most memorable instances of the latter description was that of the woodman, recorded in the Old Testament, who, in felling a tree near the banks of the Jordan, lost an axe head in the river. His lamentation at the loss was explained, when he cried out to the Prophet ELISHA, who was near by, "Alas, Master! for it was borrowed." The Prophet, touched by this beautiful instance of scrupulousness, was pleased to cause the axe head to swim, that it might be returned to the owner.

There is in society a sorry lack of moral sensitiveness in respect to the rights of others, about little as about great things. Take, for instance, the great indifference concerning borrowed books. If I lend to a neighbor a valuable book, I feel that I have rendered him a good service, which should secure to me in due time the repossession of my rightful property. A man whose soul has been refreshed at the fountain of pure literature is increasingly delighted, whenever he is permitted to be instrumental in causing a thirst in other minds for the same boon. But no one ever becomes reconciled to the loss of a book, to which he has been in the habit of paying court for many years.

It is no uncommon thing for a book to be kept, until the length of possession reconciles the borrower to the belief that the property is his own. The lender is perplexed. He knows that he has incurred a loss. He kept no record of the loan; and he dare not question any one about it, as that might cause an unfortunate implication. Still, it is an abominable neglect which subjects the lender to so much inconvenience. In the course of his reading he may be prompted to consult one of the members of the MILTON or the SHAKSPEARE family, and finds to his cost that they have gone visiting. Is not this misappropriation of others' property something more than an infirmity?

A friend of mine, with whom I was conversing, related his experience concerning book borrowing, as follows:—"I shall never forget what I thought and how I felt when, one day, I stood in front of an elegant library. Running mine eye over the titles, I stumbled, as I thought, upon an old acquaintance; and to make sure of the fact, I took the book from the shelf, and ascertained by my own autograph upon the fly leaf that the volume was mine. So many years had elapsed since the loan, that it reminded me of the legal quibble, 'Possession is more than nine points of the law,' and I hesitated what was best to be done. I longed to renew my acquaintance with a favorite author, and so concluded to ask the loan of the book. I actually borrowed my own book! I forgot to return it. It was never asked for; and so the matter dropped."

When you borrow a book, no matter its value, whether much or little; or how printed, whether on vellum, hot press, or foolscap; or how bound, whether in calf or sheep; make it a "golden rule" with you, never to retain it after its perusal. If you are not perfectly sure of having sufficient time for such a study, independent of your usual avocations, then omit the borrowing, until time and circumstances warrant it.

Can any one explain why borrowed umbrellas are so thoughtlessly appropriated to one's use, and carried about in open day, until they are fairly worn out? Once, I recollect, when the same question was put to a very strict moralist, his reply was—that the almost universal custom of keeping borrowed books and umbrellas have rendered the misappropriation excusable. Notwithstanding this current veniality, one sturdy old moralist insisted upon it that keeping anything borrowed was an equivalent to stealing; and therefore to guard his property, and other

men's consciences, he had painted all over his umbrella, "Stolen from JAMES AUGMUTY." He was never asked the loan of it.

There is an improvement, an application, as the old sermonizers used to call it, appropriate to this discourse. "Gentle reader, look into thy library, examine its treasures, richer than gold, it may be; and see if you have not a volume, perhaps more than one, which you have had the use of for an unreasonable time; and which is none of thine. Look, also, in thine entry, and ascertain if some neighbor or friend's umbrella, lent to you in your extreme need, and when you were threatened with a shower bath, is not remaining there for your future use, and not for his. If you shall ascertain such to be the case; if your book shelf and entry shall discover to you your delinquency, then return what is thy neighbor's, and with thy own hand too, under the pressure of, thy self rebuking spirit; and resolve to sin no more."

LONG CREDITS.

The evils of long credits, more particularly when granted by those who have no capital of their own, are very generally bewailed, and the *Louisville Price Current* thus complains of the course of affairs there:—

Long credit has always been one of the chief characteristics of the Louisville trade. No stringency of the money market prevents the sale of good Southern bills; when the immense capital of the banks is exhausted, private citizens invest in these "pets of brokers." The sale of a good six or nine months' bill on the South, with the tacit assurance of a renewal, if the convenience of the maker requires it, has come to be one of the regular features of the city's trade—coloring every transaction, and influencing, to a material extent, current prices. To so great an extent is this true, that it has nearly passed into a proverb, that people who have cash go to Cincinnati and St. Louis, while the needy and careless come here; the small advance in price which they pay being, in fact, the fee to the hidden usurer.

Our dealers are too rich. We have too much capital. We are too independent. Some of the characteristics of the miser seem to govern our merchants, who, while they will move heaven and earth to save a loss, will make no venture to make a profit. There is hardly a wholesale grocer in the city who is not able, on his own credit and capital, to hold over for at least two years. Forced sales, in order to meet liabilities, are of rare occurrence; because parties who, by any possibility, could come to such a crisis, are unable to obtain accommodation. The rich dealer will have his price. Cash is no object. A good bill with interest and exchange added suits him better. In commercial circles here, he is not the best merchant whose warehouse is crowded with customers, and who shares his profits by giving employment to drays and steamboats, and who every day is active and ready to meet the market, let prices current be what they may. He is the best merchant who is stiffest in the back; who will never cut under; who will let the natural trade of the city go elsewhere rather than sell at rates which the exigencies of legitimate business make compulsory in other places; *who will have his profit or keep his goods.*

The result of such a system is most certainly ruin to the general prosperity of the community, and a blight on the growth of the city. Persons who wish to buy for cash, coming once and failing to find a demand for their ware, (silver and gold, and bank notes,) except from hackmen, and hotels, and sharpers, do not return; and that most useful business man whom his trade drives, and who depends entirely on his sales to meet his expenses, is crushed out. He can't exist without the cash customer, whom we are so effectually driving away.

We have but few retired merchants, though many who are abundantly rich to justify them in giving up active life, are every day busy in the counting-houses of the city, oftener, however, in counting accumulations of interest and rates of exchange, than attending to the legitimate details of business. These men should withdraw. They complain of the worthlessness of sons and nephews, when it is notorious that their own manner of doing business places an effectual barrier

against the efforts of young men, unless supplied with a credit and capital which the fogies would never think of furnishing.

Short credit is the rule of other cities, and popular opinion makes the rule imperative on banks, buyers, and sellers. Why should not the same rule work here?

We are the wealthiest commercial community in the West; but for all practical purposes which tend to the growth of the city and the advancement of the general prosperity of the people, we are the poorest. We have no money to spare to aid the industrious mechanic or manufacturer in the exigencies of his business. During the summer time, when great manufacturing enterprises are discussed, and when it is the time for building them, we have no money. We have time bills which in the fall will come back to us with usury; but our money is scattered over the country, enabling the planter to improve his plantation, or play the gentlemen at the springs; building shops in southern towns; doing its generous and noble work everywhere but at home.

INDUSTRY AND ECONOMY.

The record of the wealthy citizens of the United States, says the Baltimore *Prices Current*—those who have become "solid men," of influences and means—reveals the significant fact that, in the large majority of instances, they are self-made. The life and story of Franklin are re-enacted a thousand times. Born to no proud patrimonies, their earlier years were thickly strewn with those difficulties, single-handed struggles, temptations, and discouragements which but strengthen and elevate the moral and intellectual character. The world affords no nobler heroes than its eminent self-made men. Who, in the memorable "Continental Congress," stood forth more prominently or defiantly as the foes of tyranny and the trumpet-tongued champions of freedom?—and every American Congress, since the days of those venerated fathers, has counted, among its ablest and best members, not a few who were the architects and builders of their own fame and fortune. But the self-made men who toil in the counting-room, who send forth our ships and steam engines, and lay out our cities and build them, and those before the march of whose untiring energy the dark forests flee away and give place to broad acres of fruit and golden grain—but especially the merchant, who more than all the rest, perhaps, contributes to the spread of civilization in the once unknown quarters of the globe—it is of these we would now speak.

There is to be seen, at the Merchants' Exchange Reading Rooms, an unique but very suggestive memoir of the shipping merchants of Baltimore who lived, and planned, and flourished, and failed some eighty years ago. A neat and accurate miniature copy of their private signals accompanies this little history; but their colors, alas! have some time since been struck, and their gallant barks have doubtless long ago been turned adrift to the winds and waves of time and fortune, and have "gone down" with their owners. From this record, it appears that out of some forty houses in existence in the year 1780, only three or four escaped the fate which seems to be so closely linked to the mercantile profession. The lesson taught is one well worthy our serious attention. What, then, must be the peculiar dangers which merchants encounter? First, the credit system appears to us fraught with peculiar hazard, especially of late years, liable as it is to great abuses. Second, the habit of lending and indorsing. Third, what is doubtless the most dangerous of all, the constant and multiform temptations

presented to men of ambitious and sanguine temperaments, as nearly all business men are, to enter into (either "outside" or "inside") speculations. They become wearied with the slow and sure system. "Industry and economy," they say, "are excellent precepts so far as they go, but the times in which we live especially demand occasional bold and daring ventures—the spirit of enterprise and progress—the brilliant displays of mercantile talent, by which fortunes are often made in a single day—point to the necessity of wide ranges of calculation and consequent risk." The laws of trading require adventure, we admit, and in some departments much more risk than in others, as commensurate with promised returns; but it is easy to see the point where true enterprise ceases and speculation begins. Let us confine ourselves strictly within the compass of our *specialite*, be that whatever branch of the mercantile profession it may. Thousands of merchants fail who need never to have failed had they adhered to this rule. They should have preferred, to ensure ultimate success, the gradual but unceasing accumulations which attend a life of undeviating application and justness—industry and *economy*—for—

"A penny saved is two-pence clear,"

and has lifted many a note which would else have gone to protest. By the rule we have named, the majority of our richest and most respectable men have "paid their way" from comparative indigence to positions of commanding influence and usefulness. Through many years of quiet, patient, and unobtrusive toil and application—but never without the unfailing modicum of sweet content which steady industry and wise economy are sure to bring—did they pursue the—

"Noiseless tenor of their way"—

whilst amid the wild excitements of the stock exchange, gold fevers, tulip and silk-worm manias, South Sea and Mississippi schemes, and other grand will-o'-the-wisp devices, thousands were swept away to bankruptcy, dependence, the alms-house, or the insane asylum. How often do men become infatuated by such empty but alluring projects, ever disguised though they be in new dazzling finery? Wise is he, then, whose patience is equal to his ambition—whose industry cannot be diverted by the most extraordinary schemes for fortune-making, and whose simplicity of life, pervaded as it must be by a consciousness of temporal and eternal accountability, is never put to the blush by the vain parade of ostentation, than which, he is well convinced, nothing is more shallow, pitiful, or transitory.

REAL ESTATE IN RICHMOND.

The Richmond *Whig* remarks that the amount of real estate, within the corporate limits of Richmond, sold at auction, during the past three years have been \$213,400 for 1857; \$419,357 for 1858; \$518,327 for 1859. These figures represent but a small proportion of the value of real estate which changes owners, in this city, as many of the important sales are made privately, and of these we keep no record, nor of sales of suburban property. But our table serves to prove what was before obvious, that the demand for city property is steadily increasing, and that the value of the same is enhancing. The market for the past two months has been rather dull.

PARISIAN OMNIBUS SYSTEM.

The omnibus system of Paris, says a correspondent of the New York *Express*, is one of the very best of those improvements which add to the comforts and even the luxuries of our immense population, the majority being composed, as is always the case in large cities, of business people, who require to be frequently transported from point to point, and could not possibly afford the outlay of a carriage. The omnibuses of Paris are, at present, about four hundred and thirty in number, and are owned by a single company, governed as minutely as a joint stock bank or any important association. The whole is under the supervision of the Prefect of the Seine, or Governor of the Department of France, in which Paris is situated, and the Prefect of Police. The routes traveled over by these vehicles intersect every part of the city and the suburbs.

The omnibuses are so painted as to be easily distinguishable from each other by day, and at night any one accustomed to employing them can recognize the line he desires by the large colored lights, carried both in front and behind. Upon both sides of each is also painted the names of the two points from which it alternately starts, together with the principal localities passed on the route. Each omnibus contains, in the interior, fourteen seats, and *no more*. The vehicle is both longer and wider than the ordinary two-horse American omnibus. Of the interior seats there are seven on each side, four of which are divided from each other by bars or arms, the three places nearest the door not being separated. On the roof there are ten more places, at half price. Neither women, children, nor infirm persons are permitted to ride on the top. Every omnibus has a driver, who occupies himself exclusively with his horses; and a conductor, whose business it is to receive the fares. The conductor wears a neat uniform, suited to his calling, and most of the men employed in this capacity have served the army, and are hardened to the fatigue they are obliged to undergo.

As each passenger enters, the conductor moves a spring, which rings a bell and at the same time registers the new arrival. The price per seat in the interior is six sous. The passenger is entitled, in addition, to a ticket from the conductor which will enable him to pursue his route by another line without extra charge. By this ingenious and excellent plan, termed the "correspondence," you may ride from any given point of Paris to any other within the city walls for six sous. Numerous omnibus offices are established at intervals throughout the city. These serve several useful purposes. In the first place, they are points at which people may wait for the passing stage. Every one takes his turn. Upon entering, you name the desired line, whereupon the clerk in charge gives you a printed number. Sometimes a large crowd assembles at these bureaux, particularly should the weather be stormy. Under such circumstances, the necessity of a fixed system of order and precedent is evident. When the omnibus arrives, should there be any seats vacant, number one is first called, then number two, and so on. This plan is perfectly fair to all alike, and prevents quarreling.

When the omnibus is once full, it is *full*, and stops no more until somebody descends. A signboard indicates that the seats are all occupied. There is no squeezing in of "just one more;" no sitting double; no opportunity for a gallant gentleman to "allow the lady to sit on his knee," or timid fellows to give up their places altogether and bundle out into the rain, to oblige the driver and

an unprotected female with a large basket of soiled linen and a dripping cotton umbrella.

The French are marvellously polite, certainly; but when they have paid for a thing, they manifest a strong determination to enjoy it, and are remarkably pig-headed on the subject of doing themselves a bodily injury, or wetting their feet to accommodate strange women, who seldom think it worth while to say "thank you," and look upon the sacrifice as entirely a matter of course.

CONSCIENTIOUSNESS.

The following is a beautiful illustration of conscientiousness, full developed, and of the old adage, "that honesty is the best policy":—How simple and beautifully has ABD-EL-KADIR of Ghilon, impressed us with the love of truth in a story of his childhood. After stating the vision which made him entreat of his mother to go to Bagdad, and devote himself to God, he thus proceeds:—

I informed her of what I had seen, and she wept, then taking out eighty dinars, she told me I had a brother, half of that was all my inheritance; she made me swear, when she gave it to me, *never to tell a lie*, and afterward bade me farewell, exclaiming—"Go, my son, I consign thee to God; we shall not meet until the Day of Judgment."

I went on well till I came near Hamandzai, when our Kafillah was plundered by sixty horsemen. One fellow asked me what I had got? "Forty dinars," said I, "are sewed under my garments." The fellow laughed, thinking, no doubt, I was joking with him. "What have you got?" said another; I gave him the same answer. When they were dividing the spoil, I was called to an eminence where the chief stood.

"What property have you got, my little fellow?" said he.

"I have told two of your people already," I replied; "I have forty dinars sewed in my garments."

He ordered them to be ripped open, and found my money.

"And how came you," said he, in surprise, "to declare so openly, what had been so carefully concealed?"

"Because," I replied, "I will not be false to my mother, to whom I have promised *I never will tell a lie!*"

"Child," said the robber, "hast thou such a sense of duty to thy mother at thy years, and am I insensible at my age, of the duty I owe to my God? Give me thy hand, innocent boy," he continued, "that I may swear repentance upon it." He did so. His followers were all alike struck with the scene.

"You have been our leader in guilt," said they to their chief; "be the same in the path of virtue." And they instantly, at his order, made restitution of their spoil, and vowed repentance on his hand.

CUSTOMS OF TRADE.

Our cotemporary, the Baltimore *Prices Current*, remarks:—

There is nowhere to be met, in the whole range of mercantile experience, a single imperative necessity, in order to command success, for the slightest departure from the strictest integrity, honor, or conscience. And the moment a man begins to act out the idea that duplicity and artifice—even in their mildest forms—can more readily and surely lead to gains, than and there he falls into an error, which, uncorrected, will immeasurably defer his golden hopes and baffle his

shrewdest calculations. Show us the mass of most respected, intelligent, and successful merchants, and we will point you those who have held this as a fundamental principle, first and last. Sad is it, then, to see, in this panting age of greed and gain, so many "customs of trade," altogether unworthy the lofty character of some who assent to their observance. Truth is, they "have not thought of it." They have done well themselves—the infant years of *their* business lives have been unswayed by any act to which the veriest moralist could object—and as "the house" became known and respected, the new generation succeeded as active partners, and with these were introduced, alas! the train of modern "customs" which were unthought of in the simplicity of former times. But what was pure and honorable then is none the less so now.

Much as it is against our general inclination to refer to such "unpalatable" things, may we be permitted here to declare, that the morals, as well as the interests, of commerce, are most sadly depressed by an especial "custom" which, now-a-days, drags or drives many very promising men into a series of habits as disreputable as they are injurious to health, business, and character? Let us lay down our proposition. There is a system which has of late years become, what Dr. ADAM SMITH would call, one of the "artificial necessities of trade"—that of sending young clerks and partners out through the country, to "drum up custom." To this, of course, there can be no demur; indeed we would be glad to know that Baltimore had "cultivated" this system as thoroughly as her rivals. That they may become well initiated in the mysteries of Frogtown, however, these young men must be "shown around," and as "good fellows" always ought to be, they are "put through" both by daylight and darkness. So, as a matter of course, when SMITH and JONES come East, in the spring and fall, to buy their goods, the junior partners, the drummer, and the book-keeper, all feel the necessity of entertaining their friends in "right royal style"—firstly, because the representatives of the firm was so capitally well treated in Frogtown; secondly, it being given out that SMITH and JONES must not, by any possibility, fall into the hands of the young men of the rival concern of BLOWHARD, SWEARER & Co. during their (S. and J.'s) stay in the city. All this, of course, is graduated according to the size and standing of the country customer. But we will not ask the reader to follow these gentlemen from their hotels to the various establishments patronized by the young men of the city firm; for, to speak plainly, the recital would exhibit a degree of licentiousness by far too disgusting for ears polite. This, then, in brief, is "the custom"—a custom, we believe, more extensively practiced by the younger and winked at by the older members and clerks of many of the most respectable commercial houses in the Atlantic cities than is at first conceivable. To these we appeal for reform. When the unsophisticated youth enters upon the mercantile profession, let him become versed in all the rules and mysteries of honorable success; let his feet be placed in the sure path to integrity, eminence, and wealth.

BIRD TRADE OF NEW YORK.

There are twenty thousand song birds of different kinds sold yearly in the city of New York. Most of these are canaries. The bird merchants go to Europe about the first of August, and buy their stock of canaries, linnets, finches, black-birds, and thrushes, of the Germans, who raise them for sale. They come back in September and October. The pure golden-yellow canary takes the highest price, and they are sometimes sold as high as twenty-five and fifty dollars a pair. How many homes are made happier by their cheerful notes!

RISE EARLY.

In a recent conversation with one of our most distinguished citizens, he remarked that he never knew a successful man in business who was not an early riser. This hint should not be lost on the new beginner.

THE CHINESE AS BRANDY DRINKERS.

The San Francisco *Times*, remarking upon the Chinese population of that State, says that they consume great quantities of cheap American brandy. Until recently, we were not aware of the fact, supposing that they, as a class, were remarkably abstemious in the use of liquors, but a reliable wholesale dealer says that they buy largely, and drink it among themselves. At all events, Chinamen are seldom if ever seen in a state of intoxication. Their method of buying has been to go round to every place where "Mexican" brandy is for sale, and whoever offers to sell the cheapest gets their custom. This, of course, induces many persons to compete for the trade, to be able to offer the fluid at a low rate enough to suit their ideas of economy, some of the dealers add a large quantity of water, thus reducing what was before nothing but alcohol and pure spirit to an even weaker consistency. But gradually JOHN began to smell the rat in this operation, and latterly the Chinese, when they go to buy brandy, proceed in couples, bearing a saucer and a box of matches. Into the first is poured a quantity of "Mexican" brandy, and while one holds this, the other applies a lighted match, and if it produces no blue flame, he pronounces the liquor "no good" and refuses to purchase except at a reduced rate. This testing proof of liquor by fire is a novel idea, and might be imitated with advantage by other dealers in the article.

AFRICAN SLAVE TRADE.

A letter published in a London paper says that at Lagos, the greatest slave market in Africa, the supply of slaves is obtained by the king from the Jaboo country, where all prisoners of war are considered as slaves. The price paid by him is a roll of tobacco for two, the cost of the tobacco being from twenty-five to thirty dollars. The dealer pays the king about sixty dollars for each slave—a young and well grown man bringing seventy five dollars, while an inferior "piece of goods" brings from thirty to forty dollars. The writer states that in 1853 the cost of importation to Havana, was computed at about seventy-five dollars each, and that they brought in that city about one thousand dollars each, while in Brazil they would bring only five hundred dollars. He furnishes a tabular statement, showing that eight hundred slaves in Havana realized above eight hundred thousand dollars—the expenses being computed at sixty-three thousand and seventy-five dollars, and the clear profit at seven hundred and thirty-six thousand nine hundred and twenty-five dollars.

LOBSTER FISHING.

The season for taking these crustacea (says the New Bedford *Mercury*) has just begun, and will continue till July. In the cold weather they strike off into deep water, where it is probably warmer than near the shore. As the warm weather approaches they leave their deep-sea retreats, and coming near the land, immense quantities are caught in traps made for the purpose, with a self-acting door, which opens as they pass through and immediately closes, leaving the lobsters in "durance vile." Lobsters are caught on the coast of North America, from the St. Lawrence River to the Gulf of Mexico. They have been known to live without any sustenance, after being caught, for six months. It is estimated that not less than 1,200,000 lobsters are carried into Boston during each season. They are sent from that place, boiled, to every part of the State.

 THE BOOK TRADE.

- 1.—*A Voyage down the Amoor*; with a Land Journey through Siberia, and Incidental Notices of Manchooria, Kamschatka, and Japan. By PERRY McDONOUGH COLLINS, U. S. Commercial Agent at the Amoor River. 12mo., pp. 390. New York: D. Appleton & Co.

This neat volume constitutes the report of Mr. Perry McDonough Collins, the United States Commercial Agent for the Amoor River, relative to his journey across the Russian Empire from St. Petersburg to the Pacific, and his explorations of the River Amoor from its source to its mouth. Prior to the settlement of California, we were accustomed to look upon the great regions of Siberia, Manchooria, and Mongolia, as too remote and valueless to be ever made worthy of investigation as points for commercial development. But now that our ports on the Pacific are within thirty days' sail of the ports of Asia, and since it is well known that the Russians are determined to settle and open to trade the immense region drained by the Amoor, the subject has engaged the serious attention of statesmen of Russia and America, and far-seeing men predict that the development of this great commerce must produce a sort of revolution in the commercial world, as did the discovery of the passage to India by the way of the Cape of Good Hope. Of the trade likely to grow up from the opening of the region drained by the Amoor, it is estimated that there are four millions of inhabitants in Siberia, including the natives of the country, without including the provinces of Amoor, Mongolia, or Manchooria. Assuming that the population would consume of foreign merchandise an average value of five dollars' worth each, which we believe is about one-third the amount consumed in the United States, it would give twenty millions per annum. Aside from the commercial importance of this hitherto unexplored region, there is much that is novel and curious pervading the book, in the author's sketches of traveling and life in Russian Tartary which will well repay perusal.

- 2.—*Critical and Miscellaneous Essays*; collected and republished by THOMAS CARLYLE. In four vols. 12mo., pp. 490, 490, 480, 524. Boston: Brown & Taggard.

In these four superb volumes, just issued by Messrs. Brown & Taggard, of Boston, which have been revised by the author and printed on the finest tinted paper, rendering them equal to any specimen of book-making yet produced in this country, we have a collection of essays, both biographical and critical, running a long time back, of such personages as Goethe, Shiller, Voltaire, Richter, Mirabeau, Werner, Sir Walter Scott, Johnson, Madame de Stael, and others, beside critical conclusions on German literature, the character of German play-rights, the Nibelungen Lied, including many other fragments of literature considered jewels in their time, and including as well that conglomeration or chaos of romance and lies—"The Diamond Necklace." These volumes comprise material that cannot fail to attract the attention of all real lovers of literature, reflecting, as they do, the better minds of so many countries, viewed by the profound, critical, and erudite pen of Carlyle, than whom, when dealing with matters of this sort, there is no superior. We regard it as a new and happy feature of literature, that we have come to see such volumes as these, combining so many of its excellencies, and we heartily wish the enterprise of Messrs. Brown & Taggard the success it deserves.

- 3.—*The Semi-Detached House*. By LADY THERESA LEWIS. 12mo., pp. 311. Boston: Ticknor & Fields.

Appears to be a story of English life, exceedingly well written, and far above the average of the novelettes which have become so popular of late.

- 4.—*Milch Cows and Dairy Farming*; comprising the Breeds, Breeding, and Management of Dairy and other Stock; the Selection of Milch Cows, with a full Explanation of Guenon's Method; the Culture of Forage Plants, and the Production of Milk, Butter, and Cheese, embodying the most recent Improvements, and adapted to Farming in the United States and British Provinces. By CHARLES L. FLINT, Secretary of the Massachusetts State Board of Agriculture. Illustrated. 8vo., pp. 426. Boston: Crosby, Nichols, & Co.

This work is designed to embody the most recent and practical information on the subject of dairy farming. With this view the author treats elaborately of the several breeds of stock, the diseases to which they are subject, the established principles of breeding, the feeding and management of milch cows, the raising of calves, and the culture of grasses and plants to be used as fodder, to which is added a lengthy chapter on the Dutch dairy management, translated from the German, as also a full and complete explanation of Guenon's method of judging and selecting milch cows—a method always regarded as theoretical, but now generally admitted to be very useful in practice. The author's position, as the secretary of one of the best State boards of agriculture in the country, as well as his long experience in the management of a cheese and butter dairy, eminently qualify him for a work of this kind, and his treatise will be found full of accurate details, alike comprehensible to the farmer as the scientific student. As a standard American dairy book, it cannot but rank high, and as such we take pleasure in commending it.

- 5.—*Mademoiselle Mori*; a Tale of Modern Rome. 12mo., pp. 526. Boston: Ticknor & Fields.

Italy, more than ever, continues the dream-land of fiction writers. It was only yesterday we were treated with that singularly eloquent and fanciful creation—"The Marble Faun," by Hawthorne. Now we have in *dramatis personis* Mademoiselle Mori. This Irene Mori, the author tells us, is an ideal, who arose before the mind of the writer among the same fair scenes as Hawthorne's Hilda of the Dove Cote. Although, like the Marble Faun, a purely speculative romance, it has more to do with the pictures of every-day life in the Eternal City, and a portrayal of the thoughts and feelings that stirred the modern Romans during the revolution of '48; and although in all seriousness, were we called upon to give our opinion, we should say it can have little effect on the dead past, or the future fortunes of the Roman people, yet it is not without its merits, as some of its incidents, such as the murder of two supposed spies by the populace, the attendance of the Roman ladies upon scenes of blood, the existence of the child regiment, called *la Speranza*, the flight and pursuit of the traitor, and his rescue by the priest, we conceive to be true and lifelike sketches of the way in which private lives are affected by convulsions of the body politic.

- 6.—*El Fureidis*; an Oriental Romance. By the author of the "Lamplighter" and "Mabel Vaughan." 12mo., pp. 379. Boston: Ticknor & Fields.

Lovers of fiction, whose cravings for improbabilities were at home in the richness of invention and vigorous delineations displayed in the "Lamplighter" and "Mabel Vaughan," have spread before them a feast in this new tale by the same graphic hand. This new region of romance appears to be well chosen, for no other land seems so well to harmonize with the sweet and flowing fancies of the authoress as this same region of the rising sun. In richness of invention, power of characterization, and freshness of incident, it appears to compare well with those earlier productions which won for the authoress so much *eclat*, and placed her at once in a prominent position as an American novelist.

- 7.—*History of the Cemetery of Mount Auburn*. By JACOB BIGELOW, President of the Corporation. 12mo., pp. 263. Boston: James Munroe & Co.