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HUNT'S

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AND

COMMERCIAL REVIEW.

AUGUST, 1858.

Art. I.—THE MANUFACTURE, TRADE, AND CONSUMPTION OF TOBACCO.

HISTORICAL AND STATISTICAL ACCOUNT OF THE MANUFACTURE, TRADE, AND CONSUMPTION OF TOBACCO IN THE AUSTRIAN EMPIRE, UNDER THE OPERATION OF THE GOVERNMENT MONOPOLY SYSTEM, FROM THE PERIOD WHEN THE MONOPOLY BY GOVERNMENT WAS EXTENDED OVER THE WHOLE OF THE AUSTRIAN DOMINIONS—FROM THE ARCHIVES OF THE AUSTRIAN TOBACCO DEPARTMENT—FROM THE COMPILATION OF BARON VON PLENKER, CHIEF DIRECTOR OF THE IMPERIAL TOBACCO MANUFACTORIES OF AUSTRIA, COUNSELOR OF STATE, KNIGHT OF THE ORDER OF THE IRON CROWN, KNIGHT COMMANDER OF THE PAPAL ORDER OF GREGORY, ETC, ETC.

[The following interesting details and statistics, in relation to the trade and manufacture of tobacco in the dominions of Austria, not only deserve attention on account of the interest and novelty of the valuable information communicated, but also a new and important question is hereby opened to the view of the statesman, and to the inquiry of the political economist. The trade in tobacco is co-extensive with the use of the plant, and its use, as is well known, extends over the whole civilized world. The number of persons employed in the preparation and manufacture of the plant, if we commence with the capital and hands employed agriculturally in its first production, and carry our inquiries up to the last stage of its progress to the hands of the consumer, when it is dealt out by the ounce or the half-ounce to the retail customer, must be immense, and is perhaps greater than would be credited. In the United States and in England, and perhaps in all other countries of any extent, except in Austria, France, Spain, Portugal, and the Italian States, the trade in tobacco is free and open to every one who has the capital and means to embark in it. It becomes, therefore, a question of national importance—a question well deserving a strict and deliberate inquiry—which of the two systems is the best; whether greater advantages result to the public from the free and open trade as it is carried on in the United States and in England, or whether the assumption of the whole business, both of the manufacture and sale of tobacco, by the government, is the better system? This is a

question both novel and important, and is strongly presented and suggested by the following interesting information of the trade as carried on by the government exclusively. We do not mean, of course, to say that this question is propounded, or even adverted to, in the following history of the Austrian Monopoly, but we mean to say that after perusing the account of the trade and its results during many years in the dominions of Austria, the serious question must naturally be suggested to the intelligent reader, whether in our own country the Austrian system would not be much better than the free English system? Would not the public generally be spared a vast amount of direct and indirect taxation by collecting a large revenue from tobacco, instead of raising it by taxation? It is almost certain that if it be supposed that the State of New York, for example, were to take the manufacture and sale of tobacco into its own hands, the revenue derived from the trade would more than half defray the ordinary and extraordinary annual expenditures of the government; the people in the meantime would be benefited in a variety of ways—1st. They would be relieved from a very considerable amount of other direct and more onerous taxation. 2d. Not only the same number of persons and hands would be employed and obtain their livelihood by the trade, as now, but even a greater number would be employed. 3d. The article manufactured and sold would be of better quality, and consequently its use would be extended, etc., etc. This question and the inquiries it would lead to, as a mere matter of curiosity, is full of interest, and indeed it might at some future period become a subject of serious deliberation; for the spirit of the American people is essentially adverse to every system of direct taxation, and, at the same time, there is no system of indirect taxation so simple, light, and imperceptible as the system the results of which are given in the following pages. Before we form, however, any opinion on the subject of the comparative benefits and disadvantages of the two systems, it will be well first to make ourselves perfectly well acquainted with the subject. The following general and statistical account of the trade in tobacco, as carried on exclusively by the Austrian government as a system of indirect taxation, will throw much light on the subject. This is the first authentic history of the governmental monopoly of the tobacco trade which has appeared in this country, and we might even say in Europe; for hitherto France and Austria have not made known the details of this trade. The public generally in Europe know nothing more upon the subject than the too simple facts that the governments referred to derive a large revenue from their assumption into the hands of government of the manufacture and sale of tobacco, and the fact that they (the people) are supplied with a good and cheap article. On the other hand, in England, where the manufacture and trade is open and free to every speculator, all that is known is that the people are supplied with an article of necessary consumption, both very inferior in quality and very high in price. The following interesting details of the results of the governmental system have been obtained from official sources, from the Archives of the Austrian Tobacco Department, as compiled and published by M. Von Plenker, a gentleman high in rank in the Austrian Bureau, of whose rare work only two copies exist in the United States, viz., one in the Treasury Department in Washington, and the other in the private library of Ch. F. Loosey, Esq., the worthy and estimable Consul-General of Austria, at New York.]

AMONG all the various products which form articles of consumption by the human family, and which are luxuries and superfluities, rather than necessities of life, (not being indispensable for the nourishment or sustenance of the body,) there is none which has become so wide-spread and universal in its use as tobacco. It is grown in every part of the world, and is used by every race and nation of the globe.

Having first become known to Europe by the discovery of America, it soon became extensively used among Europeans; but strange as it may appear it met with opposition, and it may be said with persecution, both from ecclesiastical and secular powers—impediment such as has never befallen any other object of physical use and consumption. The severest punishments, however, which were enacted against those who used it, were unable to prevent its rapid spread, nor diminish its extensive use in every country of Europe, from North to South and from West to East. Even those governments which had been the foremost in enacting the severest penalties against its use soon found themselves willing to derive profits and revenue from the heavy duties imposed upon the persecuted weed.

In the first half of the seventeenth century tobacco had already become an article of government monopoly in several States. This monopoly was first established in England in the year 1625, by Charles I., but shortly afterwards, in the time of the Cromwellian civil wars, the royal system of monopoly was abolished in that country, and the trade and manufacture was left free and open to any who wished to engage in it. A heavy duty upon the article was then substituted in place of the State monopoly.

In 1657, tobacco was made a government monopoly at Venice, and about the same time in the Papal States. Portugal adopted the same policy in 1664, and then France in 1674, Spain in 1730, and Mexico in 1764, Tuscany in 1737, Sardinia at the beginning of the eighteenth century, and Austria took into its own hands the monopoly of the manufacture and sale of tobacco in 1670.

At the present day tobacco is an object of government monopoly in thirteen of the States of Europe, viz. :—

	With a population of		With a population of
1. In Austria.....	38,405,000	8. In Portugal.....	3,500,000
2. In France.....	35,782,000	9. In Tuscany.....	1,816,000
3. In Spain.....	14,300,000	10. In Modena.....	586,000
4. In Sicily.....	8,500,000	11. In Parma.....	508,000
5. In Sardinia.....	5,020,000	12. In San Marino.....	7,000
6. In Poland.....	4,860,000	13. In Lichtenstein.....	6,000
7. In the Papal States.....	3,700,000		

The aggregate population which is supplied with the article of tobacco in all its forms of manufacture, by their respective governments, amounts to 116,297,000 souls, being 43.7 per cent of the entire population of Europe.

In all the other States of Europe tobacco is subjected to a heavy taxation, both direct and indirect, and a very considerable revenue is thus obtained from it by all of them.

When we reflect upon the immense increase in the use of tobacco within the last ten years, both in Europe and America, and that its consumption goes on increasing in every State of Europe, the subject of to-

bacco is one which deserves the consideration and attention of every government and country, both in respect to its cultivation and to its use.

There is, in fact, no other object of general consumption more fitted for indirect taxation than tobacco, nor any which brings in so large a revenue with so little perceptible inconvenience to the consumer. This is a great advantage, of which statesmen are enabled to avail themselves for increasing the national revenue. The statistical accounts of the produce of the tobacco monopoly in the Austrian Empire afford abundant evidence of the fact that there is no other branch of revenue so productive as that of tobacco.

On the 29th of November, 1850, the Austrian tobacco monopoly was extended by Imperial Decree over Hungary, the military frontiers, and the coast districts, and went into effect on the 1st of March, 1850. By this measure the operation of the Austrian Imperial Tobacco Monopoly was extended over an additional extent of territory of 5,855 square geographical miles, containing a population of above fourteen millions of souls. The monopoly has, therefore, since then, been extended over all the lands and counties subject to the Austrian crown.

The introduction of the governmental tobacco monopoly into the kingdom of Hungary met with great opposition at first in several quarters. It was even said by a great number of persons that the measure was altogether impracticable, and that it could not be carried out successfully. The result, however, has proved that the difficulties were not so great as had been imagined. The system is now thoroughly established, and is in the most flourishing condition.

The principles applied by the government in relation to the compensation paid to the persons previously engaged in the trade and manufacture of tobacco, were such as exercised a very important influence in removing the difficulties which had been apprehended.

By the terms of the Imperial Decree of November 29th, 1850, those persons who held a stock of unmanufactured tobacco, as also all the manufacturers of tobacco, were at liberty either to sell their tobacco to the Imperial treasury within a specified time, at fair prices to be agreed upon, or on the other hand they were left at liberty to export their stock on hand to foreign countries. It was also furthermore provided, that those persons who could prove that they had, for at least five years, been regularly engaged in the tobacco business, should receive a compensation for their business, either in a yearly rent to be paid to them, or in the immediate payment of a fixed sum, or by other methods, according to the average net profits of their business. Others received compensation by being appointed to situations in the financial or other departments of the State Tobacco Manufactory. When the Imperial monopoly went into operation the stocks of every description in the hands of dealers were purchased by the treasury of the Imperial monopoly. The stock of raw tobacco in the hands of the manufacturers was paid for according to the price at which it had been purchased by them, with the addition of six per cent upon the cost price, reckoned from the day when the purchase had been made to the day of payment. Manufactured tobacco, in a state ready for sale, was paid for at the price which appeared by the tradesman's own books, to afford the same profit at wholesale prices which he had calculated upon.

According to these regulations, and on these principles, the sum of

1,942,508 florins was paid to the several manufacturers of, and dealers in, tobacco in Hungary, for tobacco amounting in the whole to 80,817 (cwt.,) of various kinds of tobacco, including cigars and snuff, as well as smoking tobacco.

Sixty persons received an indemnification by way of compensation for the loss of their business. Thirty-seven persons received a yearly rent on the same account, amounting in the whole to the sum of 35,600 florins. Sixteen persons received compensation in one capital sum paid to them at once in full, which amounted in the whole to the sum of 241,500 florins. Eighteen persons received situations in the Imperial manufactories and tobacco warehouses, with a yearly salary amounting to the sum of 21,159 florins. Six persons were paid 9,760 florins for the worth or good will of their business. An equal number of small dealers or manufacturers received employment, or obtained situations, in the different districts connected with the tobacco department.

Before the introduction of the State monopoly into Hungary a great number of persons were engaged in the tobacco business on their own individual account in a small way. There were, properly speaking, very few large manufactories; only one of these, viz., the manufactory of Fuchs, Phillips & Co., was of such an extent as to be fit to be at once converted into one of the smaller Imperial manufactories. All the other Imperial manufactories were obliged to be built and erected by the State, with the exception of the State manufactory of Temesvar, which was established before the full introduction of the monopoly into Hungary.

Every little dealer and tobacco leaf cutter was in the habit of having the tobacco leaf cut either at home or at some manufactory. Men who only employed from five to ten woman in the making of cigars dignified themselves with the title of manufacturers. The tobacco manufactory in general was in a very poor condition in Hungary before the introduction of the State monopoly, and tobacco sold at higher prices than it is sold at now from the State warehouses. Notwithstanding the opposition at first made to the State Monopoly, the consumers are gratified with the change, and show their appreciation by an increased consumption of tobacco.

OF THE CULTURE OF TOBACCO, AND OF THE RECEPTION AND PAYMENT
FOR THE CROP.

The cultivation and raising of tobacco in the Austrian States is subjected to certain restrictions, which are regulated according to the requirements of the Tobacco Monopoly Department. Tobacco can be grown only by farmers or land-possessors with the permission of the State authorities. The whole tobacco crop is required to be delivered up at the State tobacco warehouses at a fixed price, which, varying according to the different qualities of the leaf, has been fixed and published three years before, during which period the fixed price under no circumstance is ever lowered.

Even under these restrictions, however, the cultivation of tobacco is not generally permitted in any and in every part of the empire, but the permission to grow it is limited to certain special districts peculiarly adapted for the growth of the plant. These districts are situated in Hungary, and in Galicia, in the Tyrol, and in the Brenta, in the kingdom of Venice.

In South Tyrol, the cultivation is limited to the small amount of 3,000 or 4,000 centners of ordinary tobacco, and to about 4,000 or 6,000 centners of fine-scented leaf for snuff, which possesses a peculiar aroma, and grows only in those parts.

The permits for raising tobacco in the above places are issued every year, being regulated by the running wants of the Department, by which limitation the growth of an excessive and unnecessary quantity is prevented, even in seasons when the yield is most favorable. These permits are given in the above mentioned countries, not as in Hungary and Galicia, covering a certain number of acres, and a distinct area of land, but they limit the grower to the raising of a fixed number of plants.

In the Tyrol a peculiar practice is pursued at the receiving warehouses, which depends upon the handling which the leaves are obliged to undergo, on account of the special uses for which they are destined. The leaves of the plant in their green state, just as they have been broken off from the stem, are carried at once from the field to the receiving magazine. The subsequent management of them, which in that country is called the maceration, is undertaken by the State manufactory at Sacco, which is located in the center of the tobacco-raising country, or it is committed to the care of special hired macerators or tobacco steepers.

A greater extent of territory is allowed for the raising of tobacco in Galicia, where the chief production is in the eastern part of the province, viz., in the Tarnopoler, Brzezaner, Czortkower, Stanislawer, Kolomear districts.

During the last six years the planting of tobacco in Galicia has occupied from 3,000 to 6,000 acres (joche) of 1,600 square klafters each, which employed from 31,000 to 36,000 planters.

From this it will appear that the culture of tobacco in Galicia is, for the most part, only pursued by the small landholders.

Galicia produces two sorts of tobacco leaf, which differ greatly from each other in quality, and are used for quite different purposes. One of these sorts, which is called Zabruther, or the original Galician leaf, is the original tobacco plant which was first raised in Galicia. This plant only succeeds in the environs of the Pruth and Dniester under particular conditions of soil. This leaf is used for the well known and favorite snuff of Galicia, and it possesses that peculiar aroma by which the Galicia snuff of the Imperial manufacture is distinguished. This tobacco leaf is esteemed of great value in the Imperial manufactory, as it is used for the manufacture of the most esteemed and favorite kind of snuff, and because its peculiar aroma is proper to the leaf itself, and cannot be supplied by art, or by any other kind of tobacco leaf.

The constantly increasing use of this snuff has led quite recently to a more extended cultivation of the plant in Bucowina, and on the banks of the Pruth. The plants, however, of this kind, when grown upon a light, sandy soil, are not suited for the manufacture of snuff, and therefore are only used for the manufacture of an inferior sort of smoking tobacco.

The second sort of tobacco leaf raised in Galicia has been produced from the seed of the best kind of Hungarian tobacco; the seed is brought every year from Hungary, and is given out *gratis* by the Imperial manufactory department to the Galician tobacco grower according to his requirements.

Trials have lately been made in Galicia with foreign tobacco seed, es-

pecially with the Dutch, the Virginia, the Ohio, and Pennsylvania seeds, to improve, if possible, the culture of the plant in Galicia.

The plants raised in Galicia from foreign seeds, as well as from the Hungarian, are found excellent for the manufacture of cigars and smoking tobacco. The leaf from the foreign seed is not inferior to the Hungarian; it is fine, very elastic, of a good color, and makes excellent cigars.

No reliable statement can be made of the tobacco grown in Hungary, nor of the amount of consumption, previous to the introduction of the Imperial monopoly. Before this took place, the raising of, and the trade in, tobacco in Hungary was subject to no restrictions whatever. The Imperial manufactory was in the habit, however, of purchasing considerable quantities of the leaf from the Hungarian planters, who delivered it at the Imperial warehouses at the published fixed prices as they pleased.

Both the great as well as the small landholders in Hungary are engaged in raising tobacco, the former under quite peculiar circumstances. In a large extent of the country the small farmers raise tobacco on their own lands, with no other assistance than their own family. But the large landholders generally rent out their lands to cultivators, either for a money rent, or for a certain portion of the produce.

Sometimes a whole village, or the greater part of the people, unite together and hire large tracts of the great landlords for the purpose of raising tobacco.

Before the introduction of the monopoly into Hungary it was a common practice for the tobacco merchants to make an agreement with large companies, or a whole working community, for the tobacco to be raised by the latter. The merchants would agree upon a price to be paid for the tobacco when gathered, and, in return, made advances in money for the immediate support of the working people, and sometimes for payment of the rent to the great landowners.

But now these companies of tobacco raisers work in a similar manner for the Imperial manufactory, and are supplied with the necessary advances of money on stipulated conditions. Formerly the rent of tobacco land used to be paid in kind. From 80 to 100 pounds of tobacco leaf was the usual rent for an Hungarian acre (joch) of 1,200 klafters. The best leaf was always required to be given up for the rent, and sometimes the landowner would have the right of picking out and selecting the leaf himself for his rent.

In some places, viz., in the Banate, in the Arader, and other districts, the great landowners would let out large tracts of land to colonies of tobacco raisers for a number of years, generally from 15 to 30. Each family of the tobacco raisers received a certain quantity of land for their houses, garden, meadows, and pastures. They engaged to erect the proper and necessary buildings, and to plant a certain number of acres with tobacco. Of the tobacco raised, a fixed part—never less than the half—was paid to the landowner for his rent. Sometimes a certain weight of tobacco was agreed to be paid to the landowner, which, in unfavorable seasons, often fell out to be more than the whole crop which had been raised. Besides this, the tobacco-raising families had to pay rent either in money or in produce, and to do a certain quantity of work for the landlord, by way of rent for the other land which they required. After the expiration of the term of years agreed upon, the tobacco-raising families were required to take down their houses and carry away the materials, and place everything in

the condition in which they found it. On such occasions the landowners generally took the advantage of making a new bargain with these families on still harder conditions, to which they were generally ready to agree, not being willing to be turned adrift upon the world without means, which, under the old contract, it was not possible for them to save up. It was in this manner that most of the tobacco in Hungary was raised. In the county of Torontal, before the breaking out of the Hungarian revolution, it was calculated that the tobacco-working families amounted in number to 30,000 souls, which constituted nearly the whole native Hungarian population of that county.

In 1843, the government found itself obliged, in order to become more independent of the tobacco dealers, who also had the business of raising tobacco in their own hands, to farm out a part of the Imperial domains for the purpose of raising tobacco for the Imperial manufactories. For this purpose colonies of families were placed on various parts of these lands for the purpose of raising tobacco.

There are in Hungary tobacco planters of a singular and peculiar character. These people have no possessions nor property; they have no fixed home nor residence; they support themselves wholly by their work in raising tobacco, wandering about from place to place. This their profession of raising tobacco is kept up in their family from generation to generation. They form a kind of wandering or nomade population. They hire themselves out from year to year with their whole family. They receive from the landowner from four to five acres of tobacco land for each separate family. The landowner provides for the plowing and manuring of the land, and also gives them a few acres for the raising of vegetables and for pasture for their cattle, which generally consist of nothing more than a couple of horses, a couple of hogs, and perhaps, though very rarely, of a cow. They receive one-half of the tobacco which they raise, and pay in kind for the other land which they may cultivate. Until the tobacco harvest, and until the sale of the crop at the pay warehouses, these poor planters live on advances, either of money or food, which the landowner makes to them.

These wandering tribes of tobacco raisers are chiefly found in Solter, Szolnoker, Czongrader, and other districts in Hungary; also in Temesvarer, in the Gross, Becksereker County, and other locations in the Banate, and in Servia. There are also other companies of tobacco raisers, consisting of the whole communities with their families, by whom the large domains of the great landholders are worked for the raising of tobacco.

The origin of all these tobacco-working societies and families may be traced back to the time when the Turks reigned in the Banate. When the territory became crown land of the Austrian empire, and when a division of the land was being made from 1780 to 1786, (after the Turks were driven out,) these families of tobacco planters refused to take a division of land or a settlement, but they were left in the possession of the unclaimed lands which they had occupied during the disorders of the war between the Turks and Austrians. For these lands they were required to pay, besides the tithes upon the whole of their produce, a rent of 40 kreutzers per acre of plow land, 24 kreutzers for every acre of meadow and pasture land, and 6 kreutzers for every acre of swamp land. In addition to all which they were bound to devote a certain number of acres to the cultivation of tobacco.

Among all the various circumstances, under which the culture and raising of tobacco is carried on in Hungary, there are two of them especially which operate unfavorably upon the cultivation of the plant. One of these is the taking of one-half of the whole crop by the landowners by way of rent for the use of the land. This is much too high, when it is considered what a large amount of hand labor the attention to the crop requires. It is quite too oppressive upon the planters; for the expenses of cultivation alone, in a fair and proper cultivation of the plant, are generally, on an average of crops, equal to one-half of the whole crop. This demand, therefore, of half the crop leaves but very poor wages for the working families.

Another circumstance is, that the land parceled out to each of the working families for the raising of food, etc., is too much, as each family seldom, on an average, exceeds three or four heads; this causes an interruption to the cultivation of the tobacco. Under both of these conditions the tobacco culture suffers, and the consequence is that, where this system of cultivation is followed, the quantity of tobacco raised is less in proportion than that which is raised by the small farmers, who solely depend upon the labor of their own families to raise their little crops.

The events of the years 1848 and 1849 had exercised a highly disastrous effect upon the culture of tobacco in Hungary. The greater portion of the tobacco-growing districts became the theater of war and the field of battles. In the Banate and the Bacska, where the Hungarians and Servians were engaged against each other with all the bitterness of national hatred, whole districts of tobacco ground were laid waste and made desolate. Most of the people of these regions who were able to bear arms fell fighting on the battle field or left the country.

The necessary restrictions imposed by the Imperial monopoly were also, at its first introduction, owing to the opposition raised by the dealers and others, not calculated for a time to increase or extend the culture of the plant.

Since the perfect introduction of the new system, however, it is evident, from accurate statistics, that the cultivation of tobacco has gone on regularly, everywhere extending and increasing.

Many unfavorable circumstances, besides the weather and bad crops, have tended to retard and keep back the production of tobacco. Some of these unfavorable causes are to be found in old prejudices and customs, and partly also in the carelessness and indolence of some of the tobacco planters. These evils can only be gradually overcome by patience and perseverance, and by stimulating the planters by means of pecuniary advantages.

With this object in view, the prices paid for the best quality of tobacco at the monopoly receiving warehouses have been considerably raised at various periods. The object has been to induce the planter to pay more attention to the cultivation, by making it his interest to raise leaves of the finest quality.

Also, in order to encourage the growth of the plant, the Monopoly Bureau makes advances of money, without interest, to all the planters who ask for it, to the extent of the worth of a fourth part of their whole crop.

In the same manner liberal advances or loans are made, without interest, to those who establish new plantations on a large scale. These loans are made to such undertakers for several years in advance, on cer-

tain conditions as to the raising a fixed quantity, and putting under cultivation a certain number of acres.

The officers of the Monopoly Department are required, in the above view, to do all in their power to assist and instruct the tobacco planters, and to supply them with changes of seed, etc. Heads of corporations, and corporation notaries, who make themselves useful in aiding in the promotion of tobacco planting, receive suitable rewards for their services.

For the same purposes also, model plantations have been established, and put under the care of the servants of the monopoly, who have traveled in Holland and acquired a perfect experience in the best modes of cultivation in respect to every kind of plant, and the best method of handling and managing the leaf after its maturity.

It is intended to give a greater extension to these model plantations, in order to afford to the tobacco planters in every place the means of becoming acquainted with the best and most scientific mode of procedure, as also to educate workmen who may teach others, and thus a supply of good and competent workmen may always be at hand for the great tobacco planters on the large estates.

Next to the cultivation of tobacco, the prices paid come under consideration.

In South Tyrol, within the six years comprised between 1851 and 1856, 20,275 centners (or cwt.) of macerated or soaked tobacco leaf for snuff was raised, for which was paid by the Government Bureau to the planters and macerators the sum of 372,680 florins; which gives an average of 18.38 florins per cwt., or centner.

Out of 8,195 tobacco planters, the average production is 2.47 cwt. per individual head, and a money payment for the same to each individual of 45.47 florins.

Within the same period as above, 29,444 centners (or cwt.) of snuff leaf tobacco was raised in Brenta; for which was paid the sum of 407,273 florins.

In Galicia, within the same period of six years, the total production of leaf tobacco was 361,623 cwt.; for which was paid to the planters the sum of 3,214,623 florins.

In Hungary, within the same period of six years, the total production of leaf of all kinds was 2,564,751 cwt.; for which was paid the sum of 21,352,014 florins. The average price per cwt. in Hungary amounts to 8 florins, 13 kreutzers.

In all this period of six years, the year 1852 was the most unfavorable; in many places the crop was a total failure. The payments for tobacco in that year, for Hungarian tobacco, were, for a total production of 197,303 cwt., the sum of 1,617,199 florins.

The year of the most abundant crop was the year 1854. The total production of that year was 465,229 cwt.; the payments made for which were 3,961,951 florins.

In Croatia and Sclavonia, the production was 63,367 cwt.; for which was paid 458,041 florins.

In Transylvania, the production amounts to 55,686 cwt.; and the payments to 653,057 florins.

It remains to speak of the organization of the department, which is comprised under two divisions of the Art or Manufacture Administration Department, and the Order or Police Administration Department.

The first mentioned department has under its charge all that relates to the operation and manufactories of the Central Board of Tobacco Manufacture, and of the financial affairs relating to the same. It embraces the control and management of the tobacco plantations, of all that relates to the cultivation of the plant, of the payments made to the planters, etc. The second department relates to the management and efficiency of the Finance Department; it manages the preparation and distribution of the planting licenses or permits, the watching over the due observance of all the regulations and conditions connected with the trade, and the levying of the penalties imposed upon those who violate the Imperial monopoly.

The Hungarian crown lands are divided into six inspector and payment districts, which have their chief offices at the following places, viz., in Pest, Debreczin, Szegedin, Tolna, Temesvar, and Maros-Vasarhely. Galicia has an Inspectorship Bureau established at Zaleszczyk.

The time for purchasing and paying for the tobacco leaf commences in Hungary on the 1st of November of every year, and terminates at the end of April.

In Galicia the tobacco payments are confined to the two months of December and January of every year. Proper and skillful officers are appointed to decide upon the qualities of the tobacco, and to what class it may belong. Should the producer be dissatisfied with his decision, he can appeal to another officer, and even after that to another, and obtain a fair examination and comparison of his leaf with others.

OF THE BUSINESS DONE AT THE SEVERAL STATE MANUFACTORIES, AND OF THE QUANTITY OF MANUFACTURED ARTICLES PRODUCED, AND OF THE RAW MATERIAL EMPLOYED.

With the exception of two sorts of snuff, viz., the Paris Rappee and the Bahia Rappee, and also with the exception of Varinas-Knasters in rolls, and of Havana cigars, all the snuff and all the smoking tobacco consumed throughout the Austrian dominions are the production of the government manufactories.

In no other country in the world, where there is a monopoly by the State of the tobacco trade and manufacture, is the public supplied with such an extensive variety of all sorts and kinds of tobacco, whether for snuffing or smoking, as it is in Austria, where, ever since the gradual establishing of the monopoly in the different parts of the empire, attention has always been had to the old habits and customs, and to the peculiar requirements of the tobacco consumer.

In Austria proper, on the Enns and Salzburg, there are 25 different kinds of snuff on sale; 16 of cut and dry smoking tobacco, 4 of Cavendish or twist tobacco.

In Bohemia are manufactured and sold 23 different kinds of snuff; 16 of cut smoking tobacco, 4 of twist tobacco.

In Moravia and Silesia, 27 sorts of snuff; 16 of cut smoking tobacco, 4 of twist tobacco.

The varieties of manufactured tobacco sold in Galicia, Bucowina, Cracow, Tyrol, Dalmatia, Hungary, in the Venetian States, in Lombardy, and other parts of the Austrian empire, are equally numerous and various. Besides the great variety of tobacco manufactured by the State, thirteen different vitolas or classes of genuine imported Havana cigars are sold by the government to the consumers.

At the commencement of the year 1851, when first the State monopoly was established in Hungary, there have been seventeen State manufactories of tobacco in operation, employing 155 clerks, 216 servants, and 10,429 workmen. Of the above work people, 970 males and 6,699 females, forming a total of 7,669 persons, were employed exclusively in the manufacture of cigars.

In the year 1850 the total consumption of tobacco in the countries where the monopoly has been long established amounted to 344,575 cwt. (centners) of snuff and smoking tobacco. In this sum are included 322,443,976 cigars.

The total consumption of the whole empire in 1851, amounted to 452,175 cwt., including 476,035,140 cigars.

This great increase in consumption, which went on progressing in the countries newly subjected to the State monopoly, was such as to call for the utmost exertions to make the production correspond with the consumption. To effect this, new manufactories were established, and the old ones were enlarged and their manufacture augmented. In 1856, the number of persons employed in the manufacture of tobacco had increased to 258 clerks, 312 servants, and 18,658 workmen and women.

Machines are employed in all the manufactories; in some of them the machinery is set in motion by steam; in others, viz., in the Sacco, the Schwaz, and the Lombardy manufactories, water is the moving power.

The manufacture of cigars is performed wholly by hand; but in some manufactories, within the last year, successful efforts have been made to introduce machinery for some of the preparatory works of the cigar manufactory, such as for spreading out and polishing the leaves for wrappers, etc.

The total expenditures of the government for officers and servants amounts to 275,929 florins.

The expenditures of the central direction of the manufactories and receiving offices amounts to the sum of 75,152 florins.

OF THE CONSUMPTION OF TOBACCO AND THE REVENUE DERIVED THEREFROM.

In the Imperial Austrian States, within the period of six years, viz., from 1851 to 1856, there have been consumed 3,641,657 centners (cwt.) of tobacco, for which has been received 231,926,743 florins.

These amounts apportioned per head, amid a population of 38,405,357 souls, for the average of six years, gives 9.48 pounds of tobacco per head, and an expenditure of 6.03 florins per head; making an average of 1.58 pound and 1.005 florins per head, every year.

In the German Slavonian States, with an average population of 18,767,219 souls, the average consumption has been for each year per head, 1.99 pounds of tobacco, and 1.26 florins expenditure.

In Austrian Italy, with an average population of 5,326,953 souls, the yearly consumption per head, has been 0.885 pounds, and in money for the same 1.105 florins.

In Hungary, with an average population of 14,311,185, the average consumption per head per annum has been 1.30 pounds, at a cost of 0.633 florins.

The use of snuff is gradually diminishing, and may be expected to go on decreasing. The old generation of snuff-takers is gradually dying out, and is not renewed again by the rising generation. But the use of smoking tobacco is on the increase.



It is a remarkable fact that the greatest relative or comparative consumption of tobacco throughout all the Austrian dominions is in those places which border upon, or are adjacent to, foreign States, such as Trieste, Salzburg, and the Tyrol. Also in the other provinces which are near to foreign countries, or which are upon the sea coast, have a relative greater consumption than the inland provinces, such as, for example, Bohemia, Moravia, Istria, and Dalmatia.

From these facts the inference may fairly be drawn, that the government manufactured tobacco is exported for foreign consumption, and that notwithstanding the monopoly price, its quality is such as to give it a preference over foreign manufactured tobacco.

At every manufactory there are two prices, viz., the wholesale and retail prices. The wholesale dealers are required to supply the retail dealers at wholesale prices; for this they are allowed a certain percentage. The retail dealers on the other hand, supply the consumers regularly at the fixed retail price, which is from ten to fourteen per cent higher than the wholesale price. From this difference in price the retailer derives his profit, out of which, however, he has to defray all his expenses in the business.

This percentage is quite sufficient in the large cities and towns to afford a good income to the retailer, who generally carries on no other business; but in villages and small places in the country the retailing of tobacco is joined with other occupations, and is carried on generally as an auxiliary branch of business by small shopkeepers.

The wholesale dealers are also required to sell to any one at wholesale prices, when the quantity purchased is not less than one pound of tobacco or 100 cigars.

OF THE INCOME DERIVED FROM THE MONOPOLY.

Throughout the whole extent of country subject to the government tobacco monopoly, within the period of six years, viz., from 1851 to 1856, the receipts have been 241,716,205 florins; the expenses 114,641,977 florins.

Accordingly, the net income derived from the monopoly, within the above period, amounts to 127,074,228 florins.

This net income gives 110.8 per cent as interest upon the total sum expended; that is, upon the whole capital employed, consisting of 114,641,977 florins.

The income derived during these six years presents for each year the following results:—

For the year.	Capital employed in Gulden.	Income received in Gulden.	Amounting to interest upon the capital of. Per cent.
1851.....	14,821,204	13,926,703	93.9
1852.....	19,375,278	17,210,977	88.7
1853.....	17,320,513	21,382,625	123.4
1854.....	20,278,016	22,129,915	109.4
1855.....	20,361,034	25,866,491	127.4
1856.....	22,485,932	26,557,517	118.1

In the above table the year 1852 appears the least favorable. This is owing to a great increase of the expenses, occasioned by the erection of new buildings for manufactories, by the purchase of the necessary real estate for the above, by the damages and indemnities paid in Hungary to dealers and others on the introduction of the monopoly into that country, and also by the purchase of a great quantity of foreign tobacco leaf at high prices.

On comparing the income of the year 1856, amounting to 26,557,517, with that of 1851, amounting to 13,926,703, it will appear that within six years there has been an increase of 12,630,814 florins, amounting to 90.6 per cent.

It is true that within the same period of time the net income yielded by other branches of indirect taxation has also considerably increased in the same time. Thus, for example, the net yield of the consumption tax (*Verzehrungssteuer Gefälles*) increased 30.9 per cent, that of the customs 3.1 per cent, that of the Salt monopoly 3.6 per cent. But such a considerable increase in revenue, as that yielded by the tobacco monopoly, since its extension over every part of the empire, has certainly never before happened in any branch of indirect or direct taxation. Such a result fully justifies the assertion made in the commencement of this paper, viz., that there exists no other article of consumption so well adapted to the purposes of indirect taxation, and none other which can be taxed with so small a perceptible inconvenience to the consumer, as the article of tobacco.

Having thus given some account of the results obtained by the tobacco monopoly since it has been extended over the whole of the Austrian dominions and dependencies, it may be a matter of some interest to give an account of the results of the same since its first original and partial establishment in Austria, and also to make a comparison between the Austrian monopoly and the same system as it prevails in France.

The first monopoly by the State of the manufacture and sale of tobacco dates its origin from the year 1670. At the commencement of the system it was limited in its extent to the province of Upper Austria, and produced no great or direct effects on the State treasury. In the year 1679, the monopoly and privilege of manufacturing and selling tobacco, was, for the first time, farmed out to private persons and to companies, and then the treasury was benefited by the regular rents paid for the privilege by those to whom it was farmed out. In the year 1783, however, the government took upon itself the manufacture and sale of tobacco, leaving still to certain persons the farming privilege as before, under distinct control and regulations. This system has been continued ever since.

The total net income derived from the tobacco monopoly in Austria, within the period of 178 years, since its first creation, amounts to the sum of 593,298,125 florins; of this amount, the sum of 52,822,304 florins was the amount of revenue paid into the treasury by the farmers of the monopoly during the space of 104 years.

And of this amount, the other sum of 540,475,821 is the amount received during seventy-four years under the management of the monopoly by the government itself, after the abolition of the farming-out system.

The following table, giving the net receipts of the monopoly at different periods, will serve to show how the revenue from the monopoly has gone on gradually increasing.

The net receipts from the year 1679 to the year 1800, inclusive, being a period of 122 years, have amounted to the sum of.....florins	117,163,454
From 1801 to 1820 (20 years) they were	113,769,083
1821 to 1840 " "	113,846,824
1841 to 1850 (10 years) "	121,444,536
1851 to 1856 (6 years) "	127,074,228

The consumption of tobacco manufactured by the government within the period of seventy-three years of the State monopoly has been 16,600,519 cwt. or centners; for which the gross receipts were 1,044,860,576 florins.

The following table gives the quantity of tobacco manufactured, and the amounts of the gross and net receipts for the years mentioned, commencing from the year 1783:—

	Quantities of tobacco consumed in cwt.	Gross receipts in Gulden.	Net receipts in Gulden.
For 18 years, from 1783 to 1800.....	2,366,716	112,026,075	64,341,150
20 " 1801 to 1820.....	3,362,981	287,276,145	113,769,083
20 " 1821 to 1840.....	4,127,741	210,325,992	113,846,824
10 " 1841 to 1850.....	3,101,424	213,516,129	121,444,536
6 " 1851 to 1856.....	3,641,657	241,716,205	127,074,228

The large amount of gross receipts in the period comprised between 1801 and 1820, which is out of proportion with the consumption and same receipts in all the other periods, arises from the financial panics and consequent depreciation in the value of money, and necessary high selling prices. These financial disturbances occurred twice in the above named period.

The great increase of production and consumption within the period comprised between 1841 and 1850, is to be accounted for by the great increase in the use of cigars, the manufacture of which is more costly than that of smoking tobacco, both with respect to the employment of labor as also with respect to the cost of the raw material used.

The cigar manufacture was first commenced in the Austrian State manufactories in the year 1814.

The consumption of cigars has been to the following amounts in the years mentioned:—

From 1814 to 1820	pieces	12,502,980
1821 to 1840		149,816,511
1841 to 1850		1,434,243,165
1851 to 1856		4,465,214,014
Total in 43 years.....		6,061,776,670

In the above table the consumption of cigars in the Italian dominions of Austria is not included in the years preceding 1845, from which time it is comprised in the above table in the general consumption.

The above results of the tobacco monopoly manufacture in Austria, if compared for the period of six years, viz., from 1851 to 1856, with the results of the French tobacco monopoly manufacture, from the year 1850 to 1855, (inasmuch as the results of 1856 in the French manufacture have not yet been made known,) will show that the consumption in the two empires have been as follows:—In Austria, 3,641,657 cwt.; in France, 2,298,484 cwt. Hence it will appear that the consumption in Austria exceeded that in France by the amount of 1,343,173 centners, or 58.4 per cent.

The above comparison has been made after reducing French weight and money to an equivalent with Austrian (Vienna) weight and value.

This estimate of six years' consumption gives the average consumption per head of the population of both countries, as follows:—In Austria, 9.48 pounds, or 1.58 pound head annually; in France, 6.47 pounds, or

1.08 pound per head annually. Hence it appears that the average consumption in Austria is greater than that in France by 46.5 per cent.

The total receipts for the space of six years have been—in Austria, 241,716,205 florins; in France, 323,847,468 florins. Consequently the receipts by the treasury in Austria have been less than the same in France by 82,131,263 florins, or 33.9 per cent.

This gives a money payment per head, to each individual of the population of 6.29 florins in Austria, and 9.12 florins in France. Hence it appears that each person in Austria contributes, per head, 45 per cent less to the monopoly revenue than each person in France.

By the above it will also be seen that the average selling price of a cwt. or centner of tobacco is as follows, viz.:—In Austria, 66.3 florins per cwt.; in France, 140.8 florins per cwt. Hence it appears that a centner (or cwt.) of manufactured tobacco costs in Austria 74.5 florins, and is 112.3 per cent, cheaper than in France.

The total expenses of the departments in the two countries have been, in Austria, with a consumption of 3,641,657 centners—expenditure, 114,641,977 florins; in France, with a consumption of 2,298,484 centners—expenditure, 86,551,449 florins; making a difference of 28,090,528 florins of greater expenditure on the side of Austria, for a difference of 1,343,173 of greater consumption.

The average expenditure or cost of production to the government, of all kinds, in the tobacco monopoly, amounts in Austria to 34.4 florins per centner; in France, to 37.6 florins per centner. Hence the cost of production is in Austria 19.7 per cent less than it is France.

The net income or profits, during the period of six years, have amounted in Austria to 127,074,228 florins; in France, to 237,296,019 florins. Hence it appears that the monopoly profits in France have been 87.1 per cent greater than the same in Austria.

Hence it appears that the average gain or profit on every cwt. of tobacco sold, has been in Austria, 34.9 florins; in France, 103.2 florins; that is, 195.7 per cent less in Austria than in France.

From the preceding comparisons which have been made, the fact is demonstrated that the larger receipts of the French government from the tobacco monopoly are owing to the proportionate higher prices at which tobacco of all kinds is sold by the government in France. On the other hand, it is shown that the consumption is greater in Austria, the selling prices are less, and the costs of manufacture and production are less in Austria than in France.

If during the last six years the 3,641,657 cwt. of manufactured tobacco, in the circle of the Austrian monopoly, had been sold on an average at the same prices at which the same quantity has been sold in France within the same period, in such case, the net receipts of the Austrian treasury would have been 398,279,976 florins, or 271,205,748 florins more than they were; that is, 213.4 per cent greater.

From the preceding documents and history some idea may be formed of the working of the government monopoly in the tobacco trade, and we are furnished with certain fixed data by which a fair comparison may be made between the two systems. It appears from the preceding statements that since the assumption by the government into its own hands of the business of manufacturing and selling tobacco in the whole empire—1st. The consumption of tobacco has been greatly increased. 2d.

The quality of the manufactured tobacco is not only more uniform, but is considered to be superior to what was furnished by private traders. 3d. The price of the article to the consumer is less than it was when the trade was in private hands. 4th. A considerable revenue is derived to the government by this trade, in a manner not in the least burdensome or oppressive to the people, and saving the necessity of other more vexatious modes of taxation.

It will be observed that all these advantages have been attained without any injustice being done to those who were previously engaged in the trade before it was taken up by the government; all such persons were liberally paid for their stock in hand, and reimbursed for their surrender of a profitable business. The people, therefore, cannot complain, inasmuch as they are supplied with a cheaper and better article; nor can the trader complain since he has been reimbursed for whatever capital he has risked in the trade. If some should be inclined to complain that a few individuals in the community are prevented from making private fortunes, as is done in England, by this trade, a brief view of the real effect of this circumstance will at once, we think, remove every objection. The real effect is this, that instead of a few private fortunes being made by individuals for their own benefit, a large public fortune is in reality made for the benefit of the nation. The profits of the trade form a national revenue, which enures to the benefit of the people in every imaginable class of the community, for by its means the people are saved from a large amount of onerous taxation, which must otherwise be resorted to, to supply that revenue which by this means is supplied. We may even say that this public revenue is raised without any taxation whatever. On due consideration it may be affirmed that this system not only is in itself no taxation upon the people, but that, in an article of extensive use, it relieves them from a great amount of taxation which, without this system, they must otherwise pay. It does this in this way, viz., it supplies them with an article of daily use and necessity cheaper than they were formerly supplied by private traders. Consequently, it will be manifest that the government causes them to pay a less tax than they paid before. They formerly paid the tax of a higher price to private traders to build up private fortunes; but now they pay no longer that tax, so far as they obtain the article at a lower price, and also, by the lower price which they pay they build up not private fortunes, but it may be said their own, for they help to build up a public revenue which saves them from many other grievous taxes. We might enlarge on this subject, and call attention to many other interesting deductions and inferences which the valuable information in the above account naturally suggests, but we leave the reader to observe for himself the numerous and interesting facts brought to view, and to form out of them his own opinions and deductions.

ART. II.—GARBLINGS: OR, COMMERCIAL COMMODITIES CHARACTERIZED.

NUMBER VIII.*

ALCOHOLIC LIQUORS.

DISTILLED LIQUORS.

ALCOHOL PROPER—HOW TO ASCERTAIN ITS PURITY—PERCENTAGE OF WATER ALWAYS PRESENT—THE ALCOHOLMETER—PROOF SPIRITS—RECTIFIED SPIRIT—FRENCH VARIETIES OF SPIRIT—SPECIFIC GRAVITY OF DIFFERENT STRENGTHS OF ALCOHOLIC LIQUORS—ADULTERATIONS OF ALCOHOL PROPER, AND HOW TO DETECT THEM—PRETENDED CHEMISTS—LIKE ELEMENTS PRODUCE DIFFERENT COMPOUNDS—ISOMERIC BODIES—BRANDY, ITS QUALITY AND ADULTERATIONS—OIL OF COGNAC—CATAWBA BRANDY—ENANTHIC ACID—GIN, HOW MADE, PURE AND IMPURE—ADULTERATIONS DETECTED—RUM, WHEN ONLY GENUINE—IMPERITIES—WHISKY, ITS CHARACTERISTICS—FUSEL OIL—STOCK IN TRADE OF MODERN LIQUOR MANUFACTURERS—LIQUOR POISONS DETECTED, AND POISON LIQUOR DESCRIBED—CONSTITUTIONAL EFFECTS OF ALCOHOLIC LIQUOR, COMPARED WITH ADULTERATIONS.

HOWEVER different in relative proportion the various chemical constituents which compose the spirituous products obtained from fermented liquors by the ordinary process of distillation, *alcohol* is the essential principle of them all.

Alcohol, when chemically pure, consists of carbon 52, hydrogen 13, and oxygen 35 components. It is a limpid, colorless fluid, having a penetrating odor and burning taste. It is highly inflammable, and burns with a lambent, yellowish-blue flame. When diluted, the color of the flame varies according to the quantity of water present, the blue predominating in proportion to the strength in alcohol, and the yellow in proportion to the quantity of water. The combustion of alcohol is wholly unattended with smoke—the only products being water and carbonic acid.

Alcohol is specifically lighter than water, but has an unlimited affinity for it; and all the processes for determining the proportion of water in alcohol have, for their object, the means of ascertaining the specific gravity of the mixture. The alcohol of commerce is never chemically pure. The lightest that can be obtained by simple distillation has a specific gravity of 0.825, which contains 11 per cent of water, but by the intervention of substances that have a still greater affinity for water, it has been reduced to the specific gravity of 0.790. In this state it is highly volatile, boiling at the temperature of 168° F.

The usual method of ascertaining the specific gravity of alcohol, is by the *centesimal alcoholometer* of Gay Lussac. The scale of this instrument is divided into 100 equal parts, of which 0 corresponds to pure water, and 100 to absolute alcohol at the temperature of 59° F.; consequently, if it is introduced into a mixture of equal parts of alcohol and water at this temperature, it will sink to the line of 50. In like manner it will indicate the per cent of alcohol in any proportion by the line of level to which it sinks. Take, for example, a pipe of brandy containing 126 gallons, reduce it to the necessary temperature by outward applications; on intro-

* For No. 1, see *Merchants' Magazine* for July, 1857, (volume xxxvii., pp. 19-23;) for No. 2, see same for August, (pp. 166-171;) for No. 3, see same for September, (pp. 298-303;) for No. 4, see same for November, (pp. 542-554;) for No. 5, see same for January, 1858, (volume xxxviii., pp. 43-50;) for No. 6, see same for February, (pp. 175-183;) for No. 7, see same for March, (pp. 292-302.)

ducing the alcoholometer it sinks to the line of 55, then 100 : 55 : : 126 = 69.30 gallons of alcohol, and 57.70 of water.

Proof Spirit.—This term originated in an ancient custom of testing the strength of alcoholic liquors by means of gunpowder. The spirit to be tested was poured upon gunpowder in a vessel, and then set on fire. When the spirit was consumed, if the powder took fire, the spirit used was said to be *over proof*. But if the spirit contained much water, when the alcohol was consumed, the powder was rendered so wet that it would not inflame, and such spirit was deemed *under proof*. When the specific gravity method was established, it became necessary to establish a legal standard, and a convenient method of mixing equal weights of alcohol and water at the temperature of 60° F., was adopted for proof spirit. This mixture has the specific gravity of 0.917, but the excise of England established 0.920 as the legal standard. The United States standard is 0.930. Lighter than this is *over proof*; heavier, *under proof*.

Rectified spirit has, by English customs, a density of 0.725, United States 0.835. In France *alcohol rectifié* ranges from 66 to 70 per cent of alcohol, and has a density of 0.900 to 0.890.

Eau-de-vie preuve de Hollande, contains 47 per cent of alcohol, and has a density of 0.941. Spirit which contains less water than *eau-de-vie preuve de Hollande*, but more than *alcohol rectifié*, is known as *esprit*. That which contains 59 per cent of alcohol, and has a density of 0.917, is the *double cognac*; 61 per cent of alcohol and 0.911 density, is the *preuve de Londres*; 85 per cent of alcohol and 0.849 density, is the *esprit trois six*.

Trois six ($\frac{3}{8}$) contains, by volume, equal parts of water and *eau-de-vie preuve de Hollande*.

Trois-cing ($\frac{3}{5}$) contains two parts of water and three parts *eau-de-vie preuve de Hollande*.

Trois-sept ($\frac{3}{7}$) contains four parts of water and three parts *eau-de-vie preuve de Hollande*.

For ordinary purposes, the alcoholic strength of spirits may be known by weighing a sample in a phial which is known to hold exactly 500 grains of water at the temperature of 60° F. An equal bulk of rectified spirits weighs 418 grains, and of proof spirits 465 grains. Hence, the number of grains above or below these sums will indicate the relative strength of the sample.

The specific gravity of rectified spirits being (in the United States) 0.835, and proof spirits 0.93, it follows that nine parts of the former are nearly equal to ten of the latter.

French brandy is generally proof, containing about 50 per cent of alcohol; Scotch whisky contains 45.68 per cent of alcohol; Irish whisky contains 46.96; Jamaica rum 46.52; and gin 48.94 per cent of alcohol.

The following table shows the percentage of alcohol corresponding to the different degrees of the centesimal alcoholometer:—

Centesimal alcoholometer.	Density.	Centesimal alcoholometer.	Density.	Centesimal alcoholometer.	Density.
0	1.000	56	0.923	83	0.857
5	0.993	59	0.917	84	0.852
10	0.987	61	0.911	86	0.847
17	0.979	64	0.905	88	0.842
23	0.973	66	0.900	89	0.837
29	0.966	69	0.894	91	0.832

Contesimal alcoholometer.	Density.	Contesimal alcoholometer.	Density.	Contesimal alcoholometer.	Density.
34	0.953	71	0.888	92	0.827
39	0.947	73	0.883	93	0.823
43	0.941	75	0.878	94	0.818
47	0.935	77	0.872	96	0.813
50	0.929	79	0.867	97	0.809
53	0.923	81	0.862	98	0.804
..	....	..	....	99	0.800
..	....	..	....	100	0.795

But the accuracy of the alcoholometer depends upon the presence of nothing but water to influence the specific gravity of the mixture ; this being known to manufacturers, they are in the habit of introducing such substances as will impair the use of this instrument.

Adulterations.—*Chloride of lime* possesses the property of increasing the density of alcoholic liquors, and consequently of giving apparent weakness. The addition of this substance, therefore, is one of the most common adulterations in order to elude the legal rate of duty on proof spirits.

To detect this fraud, dilute a portion of the suspected liquor with pure water, and add to it a solution of oxalate of ammonia or nitrate of silver ; the former throws down a white precipitate, and the latter a curdled deposit. But as these tests are insoluble in alcohol, and will, on that account, produce a turbid appearance when no lime is present, the solubility of this precipitate in water will indicate the freedom of lime from the sample. When lime is present, the precipitate is not soluble in water. Another and absolutely certain means for the double purpose of ascertaining the per cent of alcohol and whether lime is present, is to distill off the alcohol, which may be measured, and apply the tests for lime to the aqueous solution which remains.

The *salts of lead, copper, and zinc, and acetic acid*, frequently find their way into alcoholic liquors by means of the material used in manufacturing, or the utensils in which the liquor is kept. The first of these substances is sometimes introduced for the purpose of clarification. It may be detected by adding a solution of carbonate of potash, which throws down a white precipitate, soluble in an excess of the alkali, or by sulphuretted hydrogen, which throws down a dark-colored precipitate.

The presence of *copper* is indicated by testing with carbonate of potash, by a bluish-green precipitate. Ammonia produces with this substance a handsome, bright blue. By adding a few drops of sulphuric acid to an alcoholic solution of the salts of copper, and afterwards plunging into it a polished iron plate, metallic copper will cover its surface.

Zinc.—The salts of this metal are also used sometimes for clarifying purposes. With these, carbonate of potash and sulphuretted hydrogen produce white precipitates, which are soluble in an excess of the alkali. The precipitates thus produced turn yellow if exposed to strong heat.

Acetic acid.—All alcoholic liquors contain more or less of this substance, which passes over during alcoholic distillation, but, generally speaking, the proportion from this source is very small. Its presence in larger quantities is chiefly due to the influence of the atmosphere on liquor which is not well protected, or which has been for a long time broached. When there is much present, on testing with litmus paper, it will be immediately reddened. By saturating the acetic acid in spirits with magnesia, and treating the residue with sulphuric acid, the peculiar

pungent odor of the acetic acid can always be detected. Such are the adulterations common to alcoholic liquors in general.

Unrectified distilled liquors possess an aroma characteristic of the substances from which they are obtained. Grapes, grain, sugar-cane, rye, rice, wheat, barley, cherries, peaches, apples, potatoes, all give their corresponding flavor, and it is with no little difficulty that the rectifier is able to drive off the essential oils from their natural combinations with alcohol. But this being done, *rectified spirit*, from whatever source, is essentially the same. The substances used for producing it, therefore, depend upon the differences in cost in the various places where it is made.

The essential oils of distilled liquor, on once being separated from their natural combination, are ever afterwards incapable of being again united with the same properties. Modern liquor manufacturers, it is true, pretend not only to imitate, but by means of the essential oil of one substance and the alcohol of another, to *make* a liquor equal in all respects to that which may be distilled from a source of natural combination! The author of the "Bourdeaux Wine and Liquor Dealers' Guide"—"after many years' practice," declares his ability to manufacture any kind of liquor out of the discordant materials obtained from various sources, equal in all respects to those produced from the same elements in a state of nature. On the same principle, the grape, the natural source of wine and brandy, could not only be formed out of the collected elements of its own destruction, but made, perhaps, with improvements, by arranging anew the elements of wheat, potatoes, turnips, and beets! And going a step further, such pretenders would conceive that it is only necessary, on the same principle, to nourish all vegetables and animals on their kind, in order to produce the highest degree of excellence. They have need to be taught that the *excreta* of the chemist's crucible are quite as unfit for, and incapable of, recomposing the substance from which they are obtained, as are those which result from the no less natural though slower decomposition constantly going on in the healthy growth of all vegetables and animals. In the infancy of chemistry, it was thought that the same elements, united in the same ratio, must always give rise to the same compound. Liquor manufacturers practice this plausible theory without caring to investigate its falsity. There are many examples in chemistry of *several* substances containing the same elements in the same ratio, yet having totally different properties; alcohol, indeed, being a compound of this nature. Compounds consisting of the same elements, but having different properties, are known in chemistry as *isomeric bodies*. When ardent spirit is prepared from grain, the first part of the process is similar to that in preparing it for brewing. The malt is mashed and fermented for the purpose of producing the alcohol, only it is not hopped, and from this the spirit is separated by distillation. *Whisky* is distilled from a wash of grain thus prepared. But for particular varieties of spirit, it is customary to mix the grains. In Holland the best *Geneva* is produced from a mixture of three parts of wheat to one of barley. In Scotland, one part of malted to nine parts of unmalted grain is the usual proportion for whisky.

BRANDY.

Brandy is the distilled product of fermented grape juice or wine only, and liquor purporting to be brandy produced from, or made of, any other substance, is a counterfeit. The flavor of brandy is that of the essential oil of grapes, *huile de Cognac*.

The general mode of manufacturing brandy in France is by distilling poor wine, or the fermented juice of bad grapes. Wines which have failed in maturing or become acid, are generally distilled into brandy. The flavor, however, is usually tainted according to the quality of the wine or grape juice used in the making. In the distillation of brandy, very great care is necessary to preserve a uniform temperature. The first which comes over is usually devoid of flavor, and is returned into the still ; what rises next is considered the best—containing the most of the essential oil of the grape—called *eau-de-vie premiere*, or first quality.

As distillation proceeds, the quality is impaired, and the last which comes out requires re-distillation with fresh wine or grape juice. The manufacturers frequently test the strength by various simple means—such as dropping it on the head of the still to see if it will take fire, or by letting a drop of oil fall into it, when, if it sinks to the bottom, it is taken to indicate a great degree of purity and strength. Such brandy is called *eau-de-vie double*.

The brandy for exportation is generally of second distillation, and flavored for the English market.

The aroma is increased or diminished by the rapidity of distillation. Brandy from inferior wines or must is usually carried through to save caskage, and when prepared for exportation, it is brought to the strength of $\frac{3}{4}$.

The best cognac is at first colorless, but if kept long in wood it acquires a slightly brown color, which is due to a solution of the tannin and extractive in the wood. It has an aromatic odor, a distinct warm taste, that is increased by time. Those most esteemed in France are produced in Languedoc, Saintonge, and Angoumois, and usually known under the name of *eau-de-vie Montpellier*, *eau-de-vie Cognac*, *eau-de-vie d'Armagnac*, or simply *Cognac*.

The dark brown color, supposed to be a character of “dark brandy,” is usually due to burnt sugar, oak chips, saffron, catechu, &c.

New brandy contains empyreumatic acid ; age softens and combines this with the essential oil of grapes, and it becomes *malic ether*.

When made from the *marc* of grapes, it is the nutty variety, so flavored by the *œnanthic acid* contained in grape stones. This is much admired by some drinkers, and is the cheap brandy of France.

A common sophistication is to add malt or other grain to the must or wine before distillation. Another means is to distill the product of fermentation from other substances, and then add some of that which has been produced from the grape product.

Genuine French brandy usually evinces an acid reaction with litmus paper, owing to the presence of a minute portion of vinegar. It contains besides some acetic ether, and when long kept in oaken casks, a little astringent matter. The oil of cognac has already been designated. The *Catawba* brandy of Messrs. Longworth & Zimman, is the best American brandy, yet a large portion of it contains *fusel oil*, the essential oil of *potato* and *corn* spirits, and is rarely to be found in *grape* spirits unless by distillation from the *marc*.

œnanthic acid is generally present on the same conditions. English brandy is also usually prolific in *fusel oil* and *œnanthic acid*.

G I N .

Gin is so called from the French name *genevree*, of the juniper berry. It has always been the custom of distillers to add aromatic substance to

the fermenting wort in order to cover the unpleasant flavor pertaining to decomposing substances which produce alcohol.

Juniper berries were first used for this purpose at Leyden, by Sylvius, a distinguished physician and chemist there about the middle of the 17th century. Sylvius found the liquor thus obtained to possess valuable medicinal properties, and it was for a long time used only as such, and confined to the apothecaries' shops. Spirit lovers, however, became very fond of it, and it was soon adopted as a beverage, and made an article of general trade, and received the name of the plant used to give it flavor. In Holland, the original "Geneva" was made by grinding the juniper berries with the malt, before fermentation, and subsequently fermenting the whole together, by which the flavor becomes perfectly disseminated from the beginning, and the spirit thus made is superior in flavor to any other.

The first imitations of "Geneva," in England, were very similar to the Holland, but they soon discovered that the flavor of the oil of turpentine was so near that of juniper as to be scarcely detectable, and as it cost much less than oil of juniper, it was chiefly used. English and American gin is only raw corn spirits and oil of turpentine distilled together by the rectifier; occasionally, to their best counterfeits, a little juniper is added, with various other ingredients.

In *Scheidam*, Geneva is made as follows:—A quantity of coarsely ground rye is mixed with about a third as much of barley malt. This is wet with cold water, and thoroughly mixed into a uniform mass; after which, water at the temperature of 98° is added, and the whole thoroughly stirred; after which, the yeast or ferment is added—fermentation usually begins in about six hours; if earlier, there is reason to fear that it will be too strong, and means are used to check it. If this process is well conducted, it ceases in about three days. When the liquor is transparent and has a hot, acid taste, it is then well stirred again, mixed with the corn, and the first distillation is at once proceeded with, but with very great care—slowness and regularity being of the utmost importance. On the completion of this, the liquor is rectified over juniper berries, once or oftener, according to the desired quality. For common use, once is deemed sufficient. "Double Geneva" has undergone several rectifications.

Some distillers mix the juniper berries with the wort and ferment them together, but such spirit is of inferior quality, and generally intended for the English market or the interior. The best juniper berries are the Italian.

The best English gin is made by mixing ten gallons of proof spirit with three of juniper berries and four gallons of water. This is slowly distilled over, and when complete, reduced to proof strength. It is called *royal gin*.

Common English gin is made by mixing five gallons corn spirits, one ounce oil turpentine, half pound juniper berries, two ounces sweet fennel and caraway seeds, and a handful of salt. This is distilled over, and the product reduced to the required strength by the addition of water.

Ten gallons of spirits is deemed sufficient to make fifteen gallons of gin, but owing to the resin of the turpentine, the addition of water alone to gin frequently renders it turbid, hence other means have to be used to "fine" it, or restore its limpidity. For this purpose, *acetate of lead*, *alum*, and *subcarbonate of potash* are the most common substances. These are

mixed and added as much as may be necessary to produce the desired appearance. Another compound, used for the same purpose, is a mixture of sulphuric acid, alum, carbonate of potash, almond oil, and alcohol. This not only clarifies it, but gives it desirable "beading" properties, which will enable it to bear more water; and in order that the taste may correspond with the beading, *tincture of Cayenne pepper*, and *grains of paradise* are added to produce pungency. Sulphate of zinc is also a common addition.

R U M .

The peculiar aroma of rum is due to the essential oil of sugar-cane. Molasses, scummings of hot cane juice, or raw cane juice, and lees called *dunder*, which consist of a ferment and the spent wash or *feculencies* from a former distillation, constitute the material for fermentation which produces *rum*.

The proportions of these substances are generally six gallons molasses, thirty-six gallons scummings from sugar pans, fifty gallons *dunder*, and eight gallons water. If the rum is required to be of finer quality, the proportion of *dunder* is lessened, as it contains a good deal of empyreumatic matter.

These substances are mixed and fermented about nine days, when they are put into a still, and the *low wines* carried over as long as it is inflammable; after which, it is *re-distilled* into rum of Jamaica proof.

New rum is very disagreeable and unwholesome on account of the excess of empyreumatic acid and oil. By time, these combine and produce the characteristic agreeable aroma and flavor of good old rum.

The best rum is of brown, transparent color, smooth, mellow, oily taste, strong and consistent body. That made in Jamaica is generally the finest quality.

Pineapple rum is made by adding this fruit to the cask. Spirit distilled from sugar and molasses is *sugar spirit*, but not rum.

WHISKY .

This liquor, of which Americans profess to know most, and make the best, is popularly deemed the most "healthy," because its source is so well known—it being *the* distilled corn spirit.

The peculiarity of whisky is that, wherever made, it usually contains a larger per cent of *fusel oil* than any other liquor, the flavor of this giving whisky its peculiar aroma.

Fusel oil stands in the same relation to alcoholic fermentation of corn and potatoes, as *oil cognac* to that from grapes, excepting only that it is much more abundant. In ordinary corn spirit or whisky, it constitutes about $\frac{1}{5000}$ part. In fermentation from potatoes, it is still more abundant; this is probably due to the more active decomposition of these substances than corn—*fusel oil* being abundant in proportion to the decayed condition of the substance producing it, thus giving appropriate signification to the vulgar name of whisky, *rot gut*.

Besides the principles, as above detailed, pertaining to the natural state of the elements which constitute the common varieties of alcoholic liquors, there are various other elementary compounds which tend to make up the *tout ensemble* that cannot be isolated by chemical tests, though present to the delicate sense of cultivated taste; and of these counterfeiters always take cognizance.

The *necessary* stock for a modern liquor manufacturer, comprises the following assortment:—Oranges, lemons, raisins, dried peaches, rose-water, oris-root, olive oil, almond oil, alspice, cloves, vinegar, fennel, spirits turpentine, oil of juniper, oil of cinnamon, common salt, pepper, grains of paradise, Guinea pepper, kino, catechu, rye, cream of tartar, carbonate of potash, lime, sulphate of zinc, sugar of lead, sulphate of copper, chloride of lime, butyric acid, cenanthic acid, sulphuric acid, acetic acid, kreosote, coculus indicus, acetic ether, spirits of nitre, oil of cognac, fusel oil, cherry laurel water, which contains prussic acid, and numerous other ingredients which are used in smaller quantities, and, therefore, not capable of being isolated, though their presence is recognized as being unnatural elements.

PROPERTIES AND CONSTITUTIONAL EFFECTS.

The properties of several of the above named substances have been already detailed in the previous papers on *bread*, *beer*, and *wine*; for the rest, several of them will be at once recognized as agreeable flavoring ingredients and coloring substances. The *oils of turpentine* and *juniper* are well known to give *gin* its diuretic properties, on account of which, because they stimulate a particular function, they are, by those who are ignorant of the deleterious effects of a constant drain upon particular organs, deemed to be "healthy." Such, however, is far from being the case.

Cenanthic acid is an odoriferous and exceedingly volatile ether which comes over during the latter stages in the distillation of brandy, which liquor usually contains it. By experiments on the lower animals, cenanthic acid is found to be a highly irritant poison.

Sulphuric acid or *oil of vitriol*, is well known to be a powerful corrosive and deadly poison. It is used to form "bead" compounds for weak liquors.

Acetic acid has properties similar to the sulphuric. It is chiefly found in brandy, and, as stated before, is generated by exposure to the air. But, besides this, it is frequently added to counterfeit brandy mixtures in order to give pungency. *Acetic* ether possesses the same properties in a greater degree.

Pepper, *grains of paradise*, &c., are powerful hot stimulants, used to give apparent strength to weak liquor.

Catechu and *kino* are well known astringents, producing constipation. They are mostly used to color brandy. Burnt rye, sugar, &c., are used for the same purpose.

Spirits of nitre is a powerful stimulant, with special action on the skin and kidneys. It has a pungent odor, and is a common ingredient of the "finest Monongahela."

Alum is an astringent. It is used, in connection with *sugar of lead*—a violent poison and powerful astringent—for clarifying purposes. When lead is taken for a long time in small doses, it causes paralysis.

Kreosote and *empyreumatic oil*, the products of the destructive distillation of wood, are acrid, narcotic poisons. They are used to give apparent strength to weak liquor, and increase the intoxicating properties of alcohol. They are generally present in rum. Employed in the production of "fine old" Irish and Scotch whiskeys.

Coculus indicus.—The intoxicating and poisonous qualities of this drug

are fully detailed under *beer*. It is a usual ingredient in counterfeit rum and gin.

Oil of cognac, the essential oil of grapes, and naturally peculiar to genuine brandy, is a powerful, deadly poison; a few drops having been taken by a man in Canada, by mistake, caused death in five minutes. It is added to all counterfeit brandies.

Fusel oil, the essential oil of corn and potatoes, and specially abundant when these substances are in a damaged condition, is also a deadly poison, only a little less potent than the oil of cognac. It is present in all corn and potato spirits, and added to all such as are made to imitate them. It is most abundant in "fine old" Bourbon whisky.

Fusel oil can generally be detected in these liquors by testing with a solution of nitrate of silver; on adding which to a portion, and exposing the mixture to a strong light, a black precipitate will be produced; or by carefully pouring pure sulphuric acid to a test-tube partially filled with the suspected liquor; if it contains fusel oil, it will turn dark colored in proportion to the quantity present. Sulphuric acid will not change the color of pure spirits.

Cherry laurel water is used to produce the smooth, soothing effect attributed to "old" Bourbon whisky, and other "old" spirits. These properties are due to the presence of *prussic acid* in cherry laurel water, well known to be one of the most deadly poisons in existence.

It now remains to show the constitutional effects of alcohol, according to its usual signification, comprising both its natural and artificial elements, as generally used.

Alcohol, on being introduced into the stomach, immediately enters the circulation, and being perfectly miscible with the blood, speedily pervades every part of the system. Its effects are first declared by a full, frequent, and strong pulse, a general exaltation of the organic functions, exhilaration of the spirits, excitation of the intellectual powers, and an increase of muscular strength. If the quantity is increased, or the dose soon repeated, the individual finds his powers of self-control weakened or entirely lost, gives way to the bent of his true character, and, "*in veno veritas*," becomes manifest in his displaying real traits.

No matter how small the quantity of alcohol introduced in the stomach, it enters the circulation, and is distributed over the entire system. It is, however, far from acting equally on all the tissues with which it comes in contact; but, on the contrary, it has specific influence on the brain and nervous substance, and it is owing to this that it produces that singular species of delirium, *drunkenness*, which is its peculiar characteristic. It constantly seeks out and fastens upon the most sensitive portion of the animal economy, and it is owing to this that the energies of the system are speedily roused into resisting and eliminating it. This contest of the system, with an unnatural impression which it strives to get rid of, constitutes the stimulating effect of alcohol. And though it may be kept up for a time by the repetition of the dose, it is always, sooner or later, followed by a proportionate degree of exhaustion, and in proportion to the frequency of the paroxysms, are the powers of the constitution lessened, and the susceptibility to disease increased.

The *tonic* effect frequently ascribed to alcohol is wholly due to the compounds associated with it in administration, or to the temporarily increased activity of the absorbents during the period of excitation. It has,

strictly speaking, no tonic virtues whatever, but purely a *stimulant with special tendency to the nervous system*. And it is in virtue of its stimulant qualities only, that in cases where the digestive powers have become much enfeebled, a small quantity of alcohol, associated with a tonic, such as exists in bitter tinctures, serves to excite the stomach to the performance of its functions. But even in these cases, it requires the greatest care, lest exhaustion come on from *forced* strength, and the stomach breaks down from over-excitement. At best, alcohol only *palliates*, and cannot, therefore, be relied on longer than such a period as may serve to give the timely application of other and surer means. If continued too long, injurious results are *certain* to ensue. The habitual use of alcohol, under such circumstances, has been well compared to the trader who bolsters up a failing credit with accommodation paper, to carry onward, from day to day, a heavy balance, which must, in the end, be accounted for.

Tonics are remedial agents for weakness and relaxation, which restore functional activity and bodily strength, by inducing a *continuous* sound and healthy elasticity. Stimulants are limited in their action, and followed by depression, just the reverse of a tonic effect, in proportion to the excitation; and to no agent of the class is this definition more clearly applicable than to alcohol. Whatever the *temporary* excitement, or increase of power, brought about by the agency of alcohol, the system never sustains it; so that, though we may be enabled by its use to exert a higher degree of intellectuality, or a greater amount of muscular strength within a given time, such exertion is necessarily followed by a corresponding want of normal strength to accomplish as much within a certain other given time without it. It is indeed true, however, that some of the greatest displays of intellectual genius have been made under the influence of alcohol. But such displays are exceptions to the general rule, and individuals who have habitually resorted to it for the excitement of their intellectual faculties, have, in all cases, prematurely exhausted their strength, and become sad examples of the man in the fable of the goose which laid the golden egg.

True talent needs no alcoholic stimulus for the augmentation of its powers. It is *perpetually* inconsistent with the spontaneous and brief wit which is due to morbid excitement. Indeed, in every avocation, whether intellectual or physical, both the perfection and the amount of labor performed has always been in favor of those who abstain from alcohol.

The presence of alcohol in the healthy organism obstructs the necessary oxygenation of the blood, and increases the necessity for eliminating carbonic acid, while it adds to the quantity to be eliminated. We may, indeed, by constant repetition, force the system to its utmost capacity, and so postpone for a time the *certain* depression which must follow, but in doing so, the utmost exercise of the energies of the constitution sap the foundation of health and life.

Every species of excitation, whether bodily or mental, involves the death, decay, and elimination of a certain amount of tissue. The possibility of continued exertion, therefore, depends upon the due supply of reproductive means, or nutrition, and an unimpaired facility of eliminating dead and useless matter. While alcohol exerts its influence on the nervous system, it can, under no circumstances, nourish it. Its presence, therefore, prevents the application of elements which are necessary to sustain a normal degree of health and strength. The *enduring* effect is,

consequently, debility instead of strength. Considering, then, the difference between the *immediate* and the *remote* effects of alcohol on the constitution of man, we are justified in the opinion that whether applied to individuals or to the masses of mankind, the habitual use of alcohol is never otherwise than deleterious and inconsistent with the highest degree of either intellectual or physical strength.

In proof of this, it would be an easy matter to cite individuals and communities, but the writer prefers to take an equally certain means of proof, viz. :—the reader's own unbiased observation.

The action of alcohol on the human constitution, being thus regular and well understood on true physiological principles, its use, under certain circumstances, is clearly indicated ; and its excessive injury, under certain other circumstances, equally clear.

Its primary effect being that of excitement to the nervous and circulatory systems, it follows that when there is such a demand for extraordinary exertion as will justify an endurance of the secondary effects, *at all hazards*, it may be used as a choice between evils. An Arctic navigator gives a case as follows :—“A ship, when sailing in the pack ice, is sometimes beset, or falls to leeward into the lee-ice. This takes *two or three minutes* ; but if there is much wind, it takes as many *hours to get her out*. Not being in command, the sails are of no use, and the ice prevents her moving in any way but with it to leeward. Under these circumstances, the only way to get her out is by fastening ropes from the ship to the larger masses of ice, and warping her out by main force against the wind. Now, I have seen every officer and man in the ship straining at the cap-stain for hours together, through snow and sleet, with the perspiration running down our faces and bodies like water. Towards the end of such a struggle, *at the mighty crowning effort*, I have seen a little grog work wonders. I could not have drank hot coffee without stopping to cool it, nor, if I had, do I think it would have supplied the *temporary* amount of strength which was called for *on the spot* under circumstances like this. These, however, are extreme cases, which do not affect the sailor in his ordinary condition, and which any ship might be well prepared for.”

A similar necessity may arise in intellectual pursuits, when the powers of the mind have become nearly exhausted by excessive exercise, a small quantity of alcohol re-awakens the energies of the system, and will, for a *short time*, serve to extend its powers. Every such resort, however, is followed by a *corresponding depression* in addition to the fatigue consequent on over-exertion. So that even in these cases it should be resorted to only with the greatest caution, and but rarely repeated. The powers of the system being already weakened, they are proportionately less able to withstand the certain depressing effects consequent on a forced excitement, and the worst results to the constitution are even more likely to occur.

The composition of alcohol most nearly approaches that of the oleaginous group of alimentary compounds, and it may, therefore, be considered as possessing heat-producing qualities. But in this regard it should be borne in mind, that, while alcohol is heat-producing, this quality chiefly consists in its own combustibility, or, in different words, in its quicker miscibility with, and circulation in, the blood than any other heat-producing substance. In virtue of this, carbonic acid and other injurious substances are retained until the alcohol is consumed or passes off. The

blood therefore loses its usual facility of decarbonization, and retains a dark venous aspect by the retention of carbon. Hence there can be no justification in the use of alcohol to maintain animal heat, unless there is a deficient supply from such other substances as will not hinder the elimination of carbon, the undue retention of which is always injurious. Such circumstances, however, do sometimes arise. Dr. Kane informs us, that when *short of oleaginous food*, in excessively low temperature, a small quantity of brandy, carefully served out in spoonful doses, was invaluable. This is the experience of others in similar emergencies, viz., *when unable to obtain food, under excessive fatigue, in severe cold*, alcohol becomes valuable as a temporary heat-producing agent; but as a reliance, or in continued exertion, it does harm by the consecutive depression.

In some persons there is a fixed constitutional debility, on account of the early habitual use of alcohol, which apparently deprives it of its usually stimulating qualities. And in such persons the continued use seems to be practiced with more impunity, and if it is left off serious results sometimes follow. When such persons are, by prison discipline or otherwise, denied an abuse which has to them become a necessity, their vitiated constitutions, incapable of sustaining any hardship, speedily sink, unless stimulated by alcohol. But these cases become the care of the physician, and the supply of *medicine* the sphere of the apothecary.

Making due allowance for the difference in, and habits of, individuals in ordinary health, a small dose of alcohol excites both the circulation and the brain, with a correspondingly slight depression below the healthy standard. A large dose excites both the nervous and circulatory systems, and secondly, the depression of the intellectual faculties becomes apparent before that of the circulation; while the excitement of the circulation frequently goes on without being followed by exhaustion, corresponding with the functions of the brain. But when the dose is larger, the depression of the nervous system comes on more rapidly; the exhaustion of the functions of the brain react upon the heart, and the circulation speedily gives place to a corresponding exhaustion.

When a large quantity is taken at one time, its influence is so speedy and powerful as to at once overwhelm all powers of resistance, and depression follows without any appreciable excitement. The secondary effect of a large quantity is that of a powerful narcotic, and the individual affected is incapable of self-control.

Delirium ebriosum, or drunken madness, when the individual ferociously attacks every one he meets, and madly rushes on to murder, or to commit suicide, is a condition to which any drunkard is liable, it being only a condition of common alcoholic delirium or drunkenness.

Delirium tremens, is the result to the nervous system of habitual drunkenness, or frequent intense excitement and exhaustion of the nervous system. Alcoholic insanity is one step further; the effect of alcohol on the brain carried so far as to exhaust the power of reaction.

Such are the outposts or most prominent features of indulgence in alcohol. Multitudes of other evils are lamentably familiar to every one; and were the use of alcoholic liquors to cease from the present day, the mental debility, insanity, and idiocy caused by it, would perpetuate the sins of the fathers upon the children unto the third and fourth generations. Indeed, we are obliged to conclude, that, however deleterious the effect of adulterations in distilled liquor, the effect of it alone in its natural combinations is more injurious than them all!

Art. III.—EXPLORATIONS OF THE AMOOR RIVER:

AND ITS IMPORTANCE ON THE FUTURE GREAT INTER-OCEANIC TRADE ACROSS
THE AMERICAN CONTINENT.

COLLINS' JOURNEY ACROSS THE RUSSIAN EMPIRE—RUSSIAN TRADE OF THE AMOOR—GREAT RESULTS—AMOOR RIVER—ITS COURSE—JAPANESE ISLANDS—DRAFT OF WATER—GOVERNMENT OF AMOOR—COMMERCE FREE—SEAT OF GOVERNMENT—TRADE OF THE PLACE—CLIMATE—SEA SHORE, RIVER NAVIGATION—PEKIN TRADE—POPULATION OF THE AMOOR REGION—SOCIETY OF THE AMOOR—ENGLISH TAUGHT IN SCHOOLS—CHINESE TRADE—KYAHTA—TEA—BRICK TEA—SILK WOOL—USE OF CAMELS—AMERICAN TRADE OF THE AMOOR—RUSSIAN PROJECTS—RAILROADS OF THE AMOOR—ENGLISH OPERATIONS—SAN FRANCISCO TO AMOOR—CAMELS.

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 exploration of the River Amoor from its source to its mouth, has been printed by order of the House of Representatives. This report, which is in the form of a series of letters to the Secretaries of State, Mr. Marey and Mr. Cass, gives much valuable information respecting the resources of a country hitherto but little known.

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 as great a revolution in the commercial world as did the discovery of the passage to India by the way of the Cape of Good Hope.

The Amoor River, or Sak-hah-lin, or river of the Black Dragon, enters the Straits of Tartary, or Bay of De Castries, in about latitude 54° north, and making a great sweep to the southwest, pierces the center of the Chinese State or Province of Manchooria, and, with its more southern branches, interlocks its waters with those that make off towards the southern portions of China, in the direction of Peking and Corea; then bending to the north and west, in its main channel, seeks the dividing waters of that gigantic system of rivers that find their way to the frozen ocean.

Opposite the mouth of the Amoor is an island of considerable extent, stretching along parallel to the main land of the Chinese coast, called Sak-hah-lin. This island, as a continuation of the Japanese group, shuts in the coast of Tartary from the ocean, covering a distance of eight degrees of latitude, from 46° to 54° north. The waters between this island and the main land form the Gulf of Tartary, making out of the northern extremity of the Sea of Japan.

The best entrance as yet discovered or surveyed into the Amoor is from the south, through the Straits of Tartary, stopping at De Castries for a pilot. The greatest depth of water possible at the most favorable state of the tide is seventeen feet; but for a sailing vessel without the as-

sistance of lighters, or any means in case of grounding, except her own crew, to draw more than thirteen feet is not safe; and square rigged vessels of that draft, from the narrowness of the channel and its tortuousness, with the prevalence of adverse winds, will frequently be detained many days. The best vessels to navigate the straits and ascend the river, in the absence of steam tugs, will be schooners drawing not more than ten feet.

As there are, however, steam tugs on the river, square rigged vessels of the proper draught can readily enter.

Several American vessels have entered the Amoor during 1856 and 1857.

The commercial system of the Amoor government is separate and distinct from the general system of Russia in Europe. The Governor-General of Eastern Siberia, by instructions from his government, has ordered that the commerce entering the Amoor or ports adjacent, *shall be free for the term of five years, from 1856.* There are no lighthouses in this district—no tonnage duties or port charges.

The principal settlement on entering the Amoor is Nicolavsky, the seat of government for the province of the eastern coast of Siberia. It is situated twenty miles from the mouth of the river on its left or north bank. Here resides a Governor and Captain of the Port, with such other officers as are necessary to the civil, military, and naval affairs of the government.

The trade at this port is, at present, confined to such supplies as are needed by the officers, soldiers, and settlers connected with the occupation of the Amoor, and among the native tribes. At present, most of the breadstuffs and provisions come from Siberia, as the settlements along the Amoor are too new and too sparse to produce much, while the settlements along the Okhotsk, at Kamschatka, or Sitka, produce only a few vegetables and forage for horses and cattle. The whole trade may be set down at about half a million of dollars annually; at present it is limited, and must remain so till an increase of steam navigation on the river will overcome distance and the force of the current, and bring the productions of the very heart of Siberia within a few days of the ocean, thus opening the country to a knowledge of the commercial world.

The left (north) bank of the Amoor from within fifty miles of its mouth, is, comparatively speaking, an even country, though the streams denote their mountain origin. In this region, from the fact that the upward course of the river is *nearly south*, the climate and productions rapidly change under a more genial climate and southern sun, while the harsh winds, and terrible fogs, and severe snow storms of the Okhotsk Sea and coast of Tartary, are broken and softened by the high range of coast mountains. The climate on the sea coast, and for three hundred miles up the Amoor from its mouth, is very severe in winter, the snow falling to a fabulous depth; and in fierce, blinding, and overpowering storms, called by the Russians, "*Poor-gah*," to distinguish their fierce severity and terrific grandeur. The shores of the sea coast are steep and rocky, hence, spots favorable to cultivation are few. The sea shore here spoken of may be considered as extending along the whole course of the Straits of Tartary to Emperor's Harbor, in north latitude 49°.

It has before been remarked that the Amoor, at a distance of some fifty miles from its mouth, makes a sudden bend towards the south; and to

obviate the great difficulties that present themselves during the winter months at the mouth of the river, it is probable that a commercial emporium will spring up at the bay of De Castries, about one hundred and fifty miles south, from which a short portage of five or six miles will reach the Amoor at Marin; or still further south, at Emperor's Harbor, from whence a short portage reaches the navigable waters of the Hongahree River, which empties into the Amoor two hundred and fifty miles from its mouth; but at present, and till the demands of commerce require a change, the head-quarters will be at Nicolaivsky. Passing up from Nicolaivsky, we cross the mouths of the Hongahree and Ousuree, and several smaller streams running in from the south, and heading far into the interior of the rich province of Manchooria, and at length reach the confluence of the Amoor with the Songahree, a noble stream stretching far away southwest into China, and heading up near the stockade, which is connected with the great wall of China. The commerce intended for the Amoor country concentrates at a point near where this stockade touches the river, being brought over land from Pekin, a distance of some four hundred miles, then placed in junks, and thus distributed at points most convenient to commerce. These junks are fifty to sixty feet long, capable of carrying fifty tons of merchandise. About fifty miles above the Songahree the Amoor turns a point of the Hingan Mountains, and continues its course in a northwesterly direction, which it keeps, as a general thing, till we reach Chetah, the head of navigation, at the base of the Stanovey Mountains, a distance of twenty-six hundred and sixty seven miles from the ocean, the whole of which can be navigated by steamboats. From Chetah down, the river is called the Ingodah, until it reaches Old Nerchinsk, where, having received the influent streams of the Onon and Nercha, it is called the Schilkah River, which name it retains till its junction with the Argoon River, at a place called Ouse Strelka, or the Arrow's Mouth, two thousand miles from the ocean, where it takes the name of Amoor, or Saghahlin, as it is usually called by the natives of Tartary. The whole of these rivers, Ingodah, Schilkah, and Amoor are navigable, free from ice six months in the year, from the 15th of May to the 15th of November—the middle or southern portion of the Amoor, longer. This corresponds with the term of navigation at St. Petersburg, and by adjusting the trade as it is there, ample time will be found to conduct it.

Of the trade of the immense region drained by the Amoor and its tributaries, it is impossible at present to form a just estimate, from a want of reliable statistics, but from the amount and variety of articles of foreign growth and manufacture seen, together with the well-known number of inhabitants, we may arrive at, perhaps a reasonable, though not a correct, estimate of consumption.

It is estimated that there are four millions of inhabitants in Siberia, including the natives of the country, and *not including* the provinces of Amoor, Mongolia, or Manchooria. It is safe to assume that this population would consume of foreign merchandise an average value of five dollars' worth each, which is about one-third the amount consumed in the United States. This would give twenty millions per annum.

The impetus that trade would receive with the opening of the Amoor, the advance in value of native products, a sure and speedy market, and cheap means of transport, will make it safe to say, that within five years after the first successful cargo of merchandise, by steam, should reach Chetah, the consumption of foreign merchandise would increase one hun-

dred per cent. The Russians, alive to the importance of the Amoor, have already inaugurated a company, called the "Society of the Amoor," (whose term of duration is fixed at twenty-five years,) founded by Messrs. Banardake and Roukavechnekoﬀ, which has received the sanction of the Emperor, January 11th, 1858, and which is under the especial care of the Governor-General of Eastern Siberia. The object of this society is to develop commercial and industrial activity in the basin of the Amoor. The capital is fixed at first at four millions of francs, and to be increased to twelve millions. The principal office or head-quarters of the company is to be at Irkoutsk, and it is authorized to found upon the coasts of the Amoor and upon its course, as well as upon the Schilkah, counting-houses, magazines, ship-yards of construction, in a word, all kinds of establishments necessary to its commercial and industrial operations. The whole of this movement, sanctioned, as it is, by the Russian government, is not only to develop the resources of the country, but to invite foreign trade, and particularly the American. To this end, the Emperor last year issued an ukase to the effect that the American (English) language should be taught in all the schools of the provinces of Siberia and the country of the Amoor, instead of the German language, which is taught in the schools of European Russia, for the purpose, as was stated, of enabling the inhabitants to become able to cultivate commercial relations with the Americans on the Pacific. The Society of the Amoor propose to establish commercial relations with the native inhabitants of the basin of the Amoor; to carry on commerce, interior and exterior, through the ports of the Pacific, except those reserved by grant to the Russian American Company; to found establishments and manufactures; to develop the indigenous products of the country; to undertake to furnish various articles to the local authorities throughout the whole of Eastern Siberia, and to keep on the Amoor and its affluent, the Schilkah, steamboats and sailing vessels. That we have not heretofore looked to the trade and commerce of these extensive countries, is only because we knew nothing of them, and, even if we had, we were too far removed, by the overland route of several thousand miles via St. Petersburg, to be much benefited. Now we know something of this commerce; that it amounts to many millions of dollars annually, and that, instead of its lying on the opposite side of the world to us, as it did, in effect, before the acquisition of California, it now, by the navigable waters of the Amoor, can be penetrated from our own Pacific seaports.

It is not deemed necessary to enumerate, minutely, all the different articles of commerce that find a market either in Siberia, or by way of Kyachta and Mai-mat-tschin into China, or the three Tartaries, Bucharina, and even Thibet. It will be sufficient to state that throughout Siberia, Mongolia, and Manchoorin, in all the shops and magazines, may be found as great a variety of foreign and domestic merchandise of every description, as can be seen in the stores of any of the principal towns throughout the United States. The great trade through Siberia, at present, is the Chinese Russian trade, which has its head-quarters at the two frontier towns of Kyachta, in Siberia, and Mai-mat-tschin, in China. These two places are situated about three hundred and sixty-seven miles south by east of Irkoutsk, in $50^{\circ} 21'$ north latitude, and $106^{\circ} 43'$ east longitude, four thousand four hundred and sixty-one miles east of St. Petersburg, three thousand miles west of the mouth of the Amoor River, four hundred miles from Chetah, the head of steamboat navigation on the Amoor, and about one thousand miles northwest of Peking. These places, by treaty stipulation,

are the two points at which all the legitimate trade and commerce between Russia and China must be conducted; and as it is now over one hundred years that this commerce has been carried on, it may readily be imagined that they are places of much wealth. The whole population engaged in the trade is about twenty thousand. In 1856, the amount of tea passed through the Custom-house was reported at one hundred and fifty thousand chests, or about twelve millions of pounds. This is certainly a small allowance for a population of eighty millions, who all drink tea, if they can afford it, from once to three times a day; and it may be inferred that much is smuggled on the frontier. The price of tea through Russia will average two rubles a pound, fine qualities sell from three to fifteen rubles the pound; the brick tea sells for one ruble in Irkoutsk, (the ruble is 75 cents.) This brick tea is made of the coarsest sort of tea leaves steeped in sheep's blood, and then worked into a dry paste shaped like bricks, and afterward boiled in milk into a sort of soup when used. The nomadic population of the Bouriates of Siberia, have long acquired the use of this tea, and are very fond of it. It used to be thought that the caravan tea was of a different and very superior quality to the Canton, and that to this circumstance its higher price was referable. The fact is, that the two sorts come from the same plant and the same plantations, and the difference in the quality are referable to the period at which the leaves are gathered. The picking generally takes place thrice a year; in May, June, and August, the leaves of the first crop being considered the finest. This is the sort usually purchased for Kyachta by the Schansi merchants, and costs fifteen to twenty kopecks higher than the other sorts. The other importations besides tea are sugar candy, rice, silk, tobacco, porcelain, cotton. A great variety of articles of fancy ware, rhubarb, Thibet musk, camels' hair, wool, hides, Japan-ware, paints, &c. The Russians exchange cloths of every color, furs and skins, copper and iron, tinsel lace, gold and silver lace, velvet, walrus teeth and fossil ivory, silver and gold, castings and steel, guns, swords, leather, dressed hides, skins, morocco, camlets and woolen goods, glass-ware, looking glasses, tin, talc, &c.

The duties collected in 1856 at Kyachta, amounted to over seven millions of rubles, and it is estimated that the trade amounts, annually, to twenty-eight millions of rubles, or twenty-one millions of dollars.

To transport this commerce, according to the mode pursued, from China, must take thirty-six thousand camels and bullocks, and thirty-six thousand horses in Siberia, admitting the same animals carried it the whole distance; but, inasmuch as there are in Siberia relays of horses on the route, it must employ largely over one hundred thousand in Siberia, to say nothing of Europe. These transports run in gangs with an average of one driver to three horses, so that the number of teamsters will amount to twelve thousand to each relay. This trade finds its way over a "post road," receiving and distributing both to and from Europe, the trade of Siberia, amounting certainly to as much as the Chinese trade, all of which finds its way to and from St. Petersburg, Moscow, Nijne-Novgorod, Kazan, to and across the Ural Mountains.

It is now proposed that this trade, or so much of it as may be profitable, shall find its way by the Amoor, and thus save millions in the expense of transportation, and by the facile mode of water conveyance to the ocean, open a market for such of their productions as will not bear the cost of land carriage for such a great distance.

To this trade must be added that which would soon spring up along

the Amoor and its tributaries, and incidentally with the Tartaries, Northern China, Bukaria, and Thibet, sufficient of themselves, with the growing influence of Russia, to swell the trade to many millions more.

The American trade on the Amoor, at present, is confined to three or four houses, whose interest does not prompt them to be very communicative; but as soon as the value and importance of the Amoor are better known and appreciated by American enterprise, it will be but a very few years before our trade will be counted in millions.

The government of Russia is not yet prepared to open the Amoor to indiscriminate commerce, or to European exploration; but by means of its colonies, its post roads, and projected railroads, it is fast advancing the time when an uninterrupted commerce will be carried on throughout the entire extent of their vast empire. Take the immense extent of territory now under the dominion of Russia, to which there is no parallel in the history of the world, and it presents a field in which the grandest ideas may be put practically into execution, where the sovereign power is in the hands of one man having the head to conceive vast designs, and the will to put them into practical operation. And now that he has expressed the determination to arouse Siberia from the trance in which it has slumbered for so many ages, and to open it to a knowledge of the commercial world, who can doubt of its being accomplished, or that it will prove of vast benefit to our country?

A railroad of three hundred miles will connect the navigable waters of the Amoor with the navigable waters of the Lena—the great river of the north. A railroad from Chetah to Kyachta will connect the head waters of the Amoor with that system of railroads extending to Moscow and thence to St. Petersburg; and a railroad from Pekin of four hundred miles to the navigable waters of the Songahree, will bring the teas and silks of China directly to the Amoor. These various railroads are not only talked of, but the Russian Government has now actually in the field a corps of engineers making the necessary surveys for the two first mentioned.

We now come to the consideration of the importance of this movement upon the great inter-oceanic route across our continent. While our members of Congress have been trifling about sectional differences of opinion relative to the Pacific Railroad, the English have been fully awake to the importance of securing to themselves the great carrying trade of the vast commerce destined to come down the Amoor and cross the American Continent; and already a company has been chartered in England, with a capital sufficient to construct a continuous line of railroad from Halifax to the Pacific Ocean. While the American people have been astonished at the peurile debates of grave Senators attempting to prove that it is too cold and sterile a country to construct a railroad on the line surveyed by Governor Stevens, the English have been quietly surveying a railroad route *north of the forty-ninth parallel*, and by a recent report of Professor Pallisser, who for two years has been engaged on the survey, we find that the country is "eminently adapted for railroad purposes." Vancouver's Island is the point designated as the western depot, and here it is announced, officially, by the colonial office, to be the determination of the English Government to found the "Liverpool of the Pacific." To the Straits of Fuca, therefore, may we look as the point where the commerce of the Amoor must eventually reach our Pacific shores, both on account of its being the nearest portion of our territory to the Amoor, and from the fact, before mentioned, of the determination of

the English to bring their great India and Chinese trade to their possessions contiguous.

The distance of San Francisco from the Amoor is four thousand two hundred miles, while the Straits of Fuca are but three thousand six hundred.

Although it is almost certain that the English will have a road opened before we can expect a majority of members of Congress to act upon the great subject of a road within our borders, still we have a means within our reach, which, if applied, will be certain to supersede, in part, the delay and expense of a railroad, and could be made available in less than a twelve-month; this is by the introduction of the camel. Mr. Collins states that they are in constant use between Pekin and Mai-mat-tschin, and are as hardy and tough as the horse; those that he saw in February, 1857, were standing in the open air with their saddles on, with the frost and icicles all about their faces and bodies, the thermometer at the time being 13° below zero. The fact that these camels are acclimated to a cold and mountainous region, and accustomed to traverse mountains, would be a great inducement to their introduction in our cold and mountainous districts between the Mississippi and the Pacific. These camels are capable of carrying a burthen of eight hundred to one thousand pounds, and perform a journey of eight hundred to one thousand miles. The dromedaries, the "swift ships of the desert," are also used for the saddle, and readily travel from one hundred to one hundred and thirty four miles in twenty-four hours. These camels are very cheap—the price being but thirty rubles each, (22½ dollars.) Mr. Collins says in reference to their transportation, that there is not the slightest impediment; they can be brought down the Amoor on rafts and taken to De Castries Bay, from whence they could be shipped direct to Pugets Sound in twenty or thirty days, and evidently at much less cost than the camels imported into Texas from Egypt by Lieutenant Beale.

The introduction of camels will be of incalculable benefit to the thousands of emigrants who desire to cross the rocky mountains for the more genial climate of the Pacific. And now that the great gold discovery in Washington Territory has turned the attention of emigrants to that region, it is not improbable that private enterprise may find it of profit to introduce the camel before our tardy government will turn their attention to the subject.

We have now a military road completed from Steilacoom, on Pugets Sound, to Walla Walla, on the Columbia River; and at this present time Lieutenant Mullan is engaged with a party constructing a military road from Walla Walla to Fort Benton, on the Missouri; and from Fort Benton to St. Pauls is a regular wagon road, used for many years by the American Fur Company.

By the time camels could be introduced, the route through will be opened, and nearly, if not quite, completed.

This whole subject is one of momentous interest to the commercial world, and one that commends itself to the earnest and careful consideration of American statesmen; and it is to be hoped that before the next session of Congress, our Senators and Representatives will have informed themselves by a purusal of Mr. Collins' valuable report, so as to be able to take some prompt measures to secure this vast commerce to our country, and not allow ourselves to be outstripped in the race of competition by our northern neighbors.

J. G. S.

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

NUMBER LVI.

PHILADELPHIA, PENNSYLVANIA.

LOCATION OF PHILADELPHIA—JUNCTION OF THE SCHUYLKILL AND DELAWARE—DEPTH OF WATER—MINING REGION—POPULATION COMPARED WITH NEW YORK—FOREIGN POPULATION—AGRICULTURAL AND MANUFACTURING PRODUCTS OF THE STATE—CAPITAL AND HANDS EMPLOYED, NEW YORK AND PHILADELPHIA—IMMIGRANTS—RAILROADS, COST OF—TRADE OF THE WEST—CANALS—COAL TRADE—ITS VALUE—INFLUENCE OF MANUFACTURES—INTERNAL EXPORTS OF PHILADELPHIA—EFFECT OF RAILROADS—CORN EXCHANGE REPORT—BUFFALO AND OSWEGO TRADE—BANKING IN PHILADELPHIA—SMALLNESS OF CAPITAL IN PHILADELPHIA—FACILITIES IN NEW YORK—BANKS ESSENTIAL TO TRADE—EVIL EFFECTS OF USURY LAWS—BOARD OF TRADE ON BANKS—ABOLITION OF USURY—THE FUTURE OF PHILADELPHIA.

IN a former number of this Magazine, (Jan., 1846,) we treated at some length of the history and position of this great commercial and manufacturing emporium. The city occupies a commanding position on the peninsula between the Schuylkill and the Delaware, which prolongs its course 100 miles to the sea, and gives depth of water for the largest merchant ships at the wharves, while the Schuylkill connects it with the mining region. Besides these natural advantages, the enterprise of the citizens has conferred upon it a number of canals and railroads, which feed its commerce, and facilitate its great mining and manufacturing industry. If New York is the first commercial city of the Union, it may be doubted whether it ranks before Philadelphia as a mining and manufacturing center. The construction of artificial means of communication gives to Philadelphia many advantages, as compared with New York, which the latter derived from nature. The cities of New York and Boston were settled some sixty years before Philadelphia; nevertheless, at the close of the seventeenth century, Philadelphia had 300 houses, Boston 900, and New York 384. The population of the three cities has progressed as follows:—

Years.	Boston.	New York.	Philadelphia.
1684.....	6,300	2,600	2,500
1730.....	13,000	....	10,000
1750.....	15,731	10,331	15,000
1770.....	15,520	.....	24,600
1790.....	18,028	33,191	42,520
1800.....	24,937	60,489	70,287
1810.....	33,787	96,373	96,664
1820.....	43,298	123,706	112,773
1830.....	61,392	202,589	161,410
1840.....	83,979	312,710	220,423
1850.....	138,788	515,547	340,045
1855.....	162,629	629,904	423,000

Thus Philadelphia has beaten Boston in the race, and if it has fallen behind New York in numbers, it must be ascribed, not so much to the greater growth of New York business, as to the agglomeration of immigrants in this great point of debarkation. The national census for 1850 gives the nativities of the State populations, and if we take the States of Massachusetts, New York, and Pennsylvania, we find the following proportion of foreign born citizens in each:—

	Massachusetts.	New York.	Pennsylvania.
Foreign born.....	163,598	655,224	303,105
Native	721,852	2,393,101	1,913,055
Total	985,450	3,048,325	2,258,160

Thus in Massachusetts nearly 17 per cent are foreign born; in New York, nearly 22 per cent; and in Pennsylvania but little over 13 per cent. In each State more than half the foreign population live in the leading cities, and the inhabitants of Boston and New York are more than half foreign born. These people do not by their numbers add much to the industrial or material wealth of the localities, forming, as they do, mostly the non-producing classes. Thus, of the New York foreigners, 175,735 are of Irish birth, and their occupations are mostly domestic. This socially gives a greater supply of house servants than in Philadelphia, but adds little to the real prosperity of the place. If we compare the State of New York with that of Pennsylvania, by the national census, we have results as follows:—

AGRICULTURAL AND MANUFACTURING PRODUCTIONS IN NEW YORK AND PENNSYLVANIA.

	New York.	Pennsylvania.
AGRICULTURE.		
Acres of improved land.....	12,403,971	8,628,619
Acres of unimproved land.....	6,705,992	6,294,728
Cash value of farms.....	\$454,526,792	\$407,876,099
Value of farming implements and machinery....	\$22,034,914	\$14,722,541
Number of horses.....	447,041	350,393
“ asses and mules.....	963	2,259
“ milch cows.....	931,314	530,224
“ working oxen.....	178,972	61,527
“ other cattle.....	760,356	562,195
“ sheep.....	3,454,400	1,822,357
“ swine.....	1,011,407	1,140,316
Value of live stock.....	\$74,520,829	\$41,500,053
Bushels of wheat.....	13,121,103	15,367,721
“ rye.....	4,150,182	4,805,160
“ Indian corn.....	17,869,606	19,845,214
“ oats.....	26,547,022	21,538,156
Pounds of tobacco.....	83,612	912,651
“ wool.....	10,043,660	4,481,570
Bushels of peas and beans.....	741,214	55,231
“ Irish potatoes.....	15,374,387	5,980,732
“ sweet potatoes.....	33,511	52,172
“ barley.....	3,582,378	165,584
“ buckwheat.....	3,181,777	2,193,692
Value of orchard produce.....	\$1,761,567	\$723,389
Gallons of wine.....	9,175	25,690
Value of produce of market gardens.....	\$906,127	\$688,714
Pounds of butter.....	81,408,167	39,878,418
“ cheese.....	49,290,744	2,505,034
Tons of hay.....	3,724,897	1,818,970
Bushels of cloverseed.....	88,206	125,430
“ other grass seeds.....	96,098	52,913
Pounds of hops.....	2,536,277	22,088
“ flax.....	940,637	523,079
Bushels of flaxseed.....	57,974	41,650
Pounds of silk cocoons.....	1,774	285
“ maple sugar.....	10,358,063	2,326,525
Gallons of molasses.....	56,538	50,652
Pounds of beeswax and honey.....	1,759,210	837,509
Value of home-made manufactures.....	\$1,282,351	\$749,136
Value of animals slaughtered.....	\$13,573,893	\$8,219,848
Tons of dew-rotted hemp.....	.....	282
“ water-rotted hemp.....	.....	2,000

MANUFACTURES.		
	New York.	Pennsylvania.
Cotton, capital.....	\$4,176,920	\$4,528,925
“ bales used.....	37,778	44,162
Coal, tons used.....	1,539	24,189
Raw material, value.....	\$1,985,973	\$3,152,530
Number of hands, male.....	2,708	3,564
“ female.....	3,478	4,099
Value of product.....	\$3,591,989	\$5,322,262
Sheeting, yards.....	44,901,475	45,746,790
Woolen, yards.....	7,030,604	5,322,866
“ cloth, yards.....	7,924,252	10,099,234
“ capital.....	\$4,459,370	\$3,005,064
Pounds of wool used.....	12,538,286	7,560,379
Value of materials.....	\$3,838,292	\$3,282,718
Pig iron, tons.....	23,022	285,702
“ value of.....	\$597,520	\$6,071,513
“ capital in.....	\$605,000	\$8,570,425
Castings, tons.....	104,588	57,810
“ value of.....	\$5,921,980	\$5,354,881
“ pigs used, tons.....	108,945	69,501
“ capital in.....	\$4,622,482	\$3,422,924
Wrought-iron, tons.....	13,636	182,506
“ value.....	\$1,423,968	\$8,902,907
“ pigs used, tons.....	8,530	163,702
“ raw material, value.....	\$838,314	\$5,488,391
Coal, tons.....	.....	3,500,000

These are the results by the national census of 1850. New York has since then declined in some of her resources, according to the State census of 1855. The number of sheep, and pounds of wool shorn, is less. It is to be borne in mind, however, that the State of New York is tapped at Albany by the Boston railroads, for the benefit of that city, while Philadelphia is the only center of a vast and growing back country, the connections of which stretch far to the West, with the same or greater facilities than New York enjoys, since the latter cannot reach the West with her railroads except through Pennsylvania. If we take the population of Philadelphia County and compare it with New York County, the results are as follows:—

	Philadelphia.	New York.
Population, 1850.....	408,762	515,547
Capital in manufacturing.....	\$31,884,245	\$34,232,822
Value produced.....	\$60,494,575	\$105,219,308
Hands employed, males.....	51,254	53,703
“ females.....	15,220	29,917

In proportion to population, the result is by much in favor of Philadelphia; in respect to capital invested and hands employed, these figures are more accurately ascertained than the annual value of products, which, more or less, is conjectural. It would, then, appear that the number of productive male operatives in Philadelphia is nearly as great as in New York, a fact which speaks loudly in favor of the progressive wealth of the former city, because in all labor there is a profit, which does not fail to react in a two-fold ratio upon the accumulation of wealth. This is evident in the fact to which we have alluded above, viz., that although New York had an immigration averaging 1,000 per day, of whom numbers remain, yet the number daily employed in producing wealth is as great in Philadelphia, where immigrants are far less numerous. The extension of the western connections of Philadelphia are illustrated, to some extent, by the movement of the emigrants.

During the year 1857, 22,253 emigrants were sent over the Pennsylvania Railroad. A large portion of them came on from New York, preferring this route to either the New York and Erie or the New York Central railroads. Of the entire number, 15,224 were for the Northwestern States and Territories. The extra baggage paid for amounted to 687,904 pounds.

During 1856, 21,624 passengers were dispatched from Philadelphia by emigrant trains. Of this number, 11,715½ were from New York; 6,361 were ticketed for Pittsburg and intermediate stations. The extra baggage paid for was 704,428 pounds.

In 1855, 20,217 emigrant passengers were sent from Philadelphia. Of this number, 11,049 arrived in that city from foreign ports, and 9,168 from New York; 11,003 were ticketed to Pittsburg, and 10,772 were destined for the extreme West; 824,570 pounds of extra baggage were paid for.

In 1854, 23,948 emigrants passed West; 6,357 were for points beyond Pittsburg—799,774 pounds of extra baggage were paid for.

The railroads centering in Philadelphia are as follows:—

PENNSYLVANIA RAILROADS.

	Miles.	Cost.		Miles.	Cost.
Reading.....	93	\$19,004,180	Westchester.....	33	\$1,348,812
Baltimore.....	98	7,979,466	Camden and Amboy..	63	4,950,592
Columbia.....	80	5,277,278	Philadelphia & Trenton	30	1,000,000
Media.....	13	600,000	West Jersey.....	9	200,000
Norristown.....	17	4,791,548	Camden and Atlantic..	60	1,738,171
Germantown.....	7	1,719,812			
Northern Pennsylvania	64½	5,106,342	Total.....	567½	\$53,716,201

These roads radiate from Philadelphia to almost every point of the compass, and the communication is prolonged by other roads to the remotest sections, placing the city in connection with all points of the Union on terms as feasible as are enjoyed by the most favored city. In relation to the influence of railroads, the Corn Exchange Report has made some judicious remarks.

The railroad system of Pennsylvania is still incomplete, and though progressing at a rapid rate, scarcely yet foreshadows the great future. A hiatus of a few unfinished miles of track impairs the usefulness of a long line of road. The absorption of capital and labor in these great undertakings is so vast that we cannot expect to stride at once from their conception to their execution. The railroad mileage of Pennsylvania shows an increase for 1856 of 426 miles, which is greater than that of any of her sister States. For 1857 it is supposed the increase will be 500 miles. New York constructed only 34 miles of road during 1856. She has nearly completed her railroad system, and is now receiving the benefit. She has kept before us with her roads, as she did with her canal, but we are sturdily struggling after. When the Pittsburg and Steubenville, and the Steubenville and Indiana roads shall have been completed and equipped, when our connections with the Southwest by the Hempfield, and with the Northwest by the Sunbury and Erie, and other routes now in progress, shall have been formed, we shall possess an access to the great interior, surpassed by none. Already we can boast of an admirable connection with the lakes, by means of the Catawissa, Williamsport, and Elmira railroads. Last year we welcomed in this hall a deputation of gentlemen from Rochester, who came to exchange congratulations with us upon the

union of the two cities by iron bands. "The city of Philadelphia is now as near in lineal distance to Buffalo as is New York, and freights from either city to that point are precisely the same." Indeed, to quote a case in point before this Association, the freight on a barrel of flour from Elmira, the point of junction of the New York and Erie Road with the route thence to Philadelphia, is but 50 cents per barrel, against 69 cents from the same point to the city of New York. Here is surely an inducement to enterprise. A present lake connection thus invites our efforts, whilst our own are in progress. It is the lake trade which builds up the palaces of New York, and fills her harbor with the ships of all nations.

Besides the railroads, the following canals minister directly to the trade of the place:—

Schuylkill Navigation	Philadelphia, Port Carbon.....	108
Lehigh Navigation.....	Easton, Stoddartsville.....	84
Union.....	Reading, Middletown.....	77
Branch.....	Junction, Pine Grove.....	22
Susquehanna and Tide-water, 13 m. in Md..	Columbia, Havre de Grace, Md..	45
Total length		miles 336

These canals cost about \$24,000,000, and minister mostly to the mining industry of Pennsylvania. The coal industry of Philadelphia has increased as follows:—

	Schuylkill.	Lehigh.	Other.	Total.
1820.....	.....	365	.....	365
1830.....	89,984	41,750	43,000	174,764
1840.....	452,291	225,318	165,275	865,464
1850.....	1,712,007	722,622	897,975	3,332,604
1857.....	2,948,533	1,342,549	2,473,515	6,764,587

Such has been the immense development of the Pennsylvania coal trade in thirty years. Since 1850, the Lackawanna and other regions have taken the greatest development, and the result gives a value of \$35,000,000 per annum in fuel supplied to other States, as well as Pennsylvania. Naturally, the prosperity which attends the development of so large an interest has been very marked, and has exhibited itself in those local manufactures, which in New York depend more upon the uncertain influence of the foreign trade. The following figures show the quantities of merchandise sent from Philadelphia to the West over the railroad in the last three years:—

STATEMENT SHOWING THE QUANTITIES OF THE DIFFERENT ARTICLES FORWARDED FROM PHILADELPHIA TO PITTSBURG OVER THE PENNSYLVANIA CENTRAL RAILROAD DURING THE PAST THREE YEARS.

	1855.	1856.	1857.
Dry goods.....lbs.	46,466,115	55,128,101	48,442,442
Groceries.....	8,987,326	13,385,475	18,755,092
Drugs and medicines.....	6,080,634	8,231,164	7,064,227
Coffee.....	7,926,766	9,000,354	5,729,353
Boots and shoes.....	6,086,425	5,321,451	4,480,376
Books and stationery.....	2,884,035	3,416,527	2,360,675
Sheeting and bagging.....	4,506,520	3,495,447	5,374,835
Confectionery and fruit.....	1,272,208	1,592,139	2,138,853
Copper, tin, and lead.....	1,404,681	2,229,324	2,373,751
Furniture.....	1,142,303	1,904,909	2,504,485
Glass and glassware.....	819,374	822,652	868,914
Hardware.....	8,167,291	11,154,308	10,008,923
Hemp and cordage.....	646,232	1,219,069	1,134,638

	1855.	1856.	1857.
Leather	1,784,107	2,063,589	2,428,264
Machinery and castings	3,772,182	4,356,458	6,796,718
Marble and cement.....	1,365,761	1,862,853	2,577,776
Oil.....	1,028,562	1,522,134	2,454,893
Paper.....	555,634	945,018	1,702,745
Pot, pearl, and soda ash.....	4,071,311	7,309,691	8,332,527
Queensware.....	3,586,431	5,517,006	4,928,353
Salt.....	49,268	140,025	73,665
Tobacco	1,569,399	2,008,225	1,830,837
Tar, pitch, and rosin	432,462	707,728	430,656
Foreign liquors.....	1,315,951	.....	2,974,461
Agricultural implements.....	236,587	1,352,718	1,391,797
Salt meats and fish.....	3,789,697	3,399,689	3,552,423
Miscellaneous.....	1,870,622	689,810	1,739,600
Total.....	130,099,331	152,903,718	154,336,606

The merchandise sent over the road, distinguishing the way stations from the through traffic, was as follows:—

	1853.	1854.	1855.	1856.
Way stations ... lbs.	21,305,281	26,632,018	26,921,180	31,583,267
Pittsburg	68,604,217	89,935,338	130,099,331	152,903,718
Total.	89,909,498	116,563,356	157,020,511	184,486,985

This gives a large increase in business, but mostly to the West. The new arrangement, by which the public works have passed into private hands, and reduced rates of freight, will, it is supposed, much enhance the quantities that go by these routes. In relation to this Western trade, and the means of reaching it, after showing the course of business through Buffalo and Oswego, the Committee of the Philadelphia Board of Trade on Inland Transportation remark:—"It will thus be seen that Oswego gained in 1856 all that Buffalo lost from the commerce of the previous year. The hides, bacon, pork, beef, lard, and other produce of the West, and the sugar, molasses, iron, steel, castings, coal, salt, leather, crockery, and other merchandise of the East, naturally sought the cheapest channel to their destination, which always lies in the shortest inland transportation from or to the lakes; and this advantage gave the trade to Oswego. It is a fact most encouraging to our friends at the port of Erie to observe how natural advantages of position have enabled Oswego to make such gigantic progress in competition with the vast capital and solid organizations of trade which the city of Buffalo has so long enjoyed. All the grain and produce of the bordering States of Lake Erie, which now find their true outlet at Buffalo, will, on the completion of the Sunbury and Erie Road, be nearer to New York or Philadelphia by that route, with its connections, than by any present channel of trade. The city of Erie will possess especial advantages for this return commerce of the lakes, as the shipping port of the vast deposits of bituminous and anthracite coal of our own State. Such being the facts of the case, is it not important to the citizens of Philadelphia and Baltimore to examine whether a port on Lake Ontario, affording equal or greater facilities than Oswego, may not be secured as a port of entry and outlet for the great lake commerce to our Southern cities? The molasses and sugar of the West Indies, the coffee of South America, the whole range of imported dry goods and merchandise of Europe and the Old World, are all equally accessible to

us as to New York or Boston. The leather, the coal, the iron, steel, and castings of our own State, the crockery and other manufactures of our own city, certainly should be exported directly to the point of demand; for the shortest transit to the consuming market, leaves, of course, the largest profit at the point of production. Why should the mineral wealth and industrial resources of Philadelphia and Pennsylvania be compelled to pay such a heavy tribute to the enterprise of her neighbors, and be forced to the Great West by a circuitous route, dropping golden profits all the way, which fairly belong to the original owner. Once more, therefore, would your Committee earnestly call the attention of the Board of Trade, and our citizens generally, to the importance of transacting directly, and by the nearest ports, our legitimate trade with the lakes. The total commerce of these vast inland seas reached, in 1856, the enormous aggregate of \$608,000,000, of which it is believed not one per cent was transacted directly with Philadelphia. Is this our fair representation among the Eastern cities in this shipping and distributing trade? With Kentucky, Tennessee, and the Southwest, we hold a very different position. Why not with the Northwest, to which we are equally near with New York, and nearer than Boston?"

The enterprise and resources of Philadelphia give her a strong hold upon that immensely developed Western trade.

In comparison with the business of the place, the amount of banking capital operating in Philadelphia has been smaller than in New York or Boston. Comparatively, the last returns were as follows:—

	Boston.	New York.	Philadelphia.
Capital stock.....	\$32,243,550	\$67,513,000	\$11,310,380
Loans and discounts.....	55,808,453	119,812,407	23,803,903
Specie in bank.....	9,104,461	33,830,232	6,873,971
Due from other banks.....	6,357,413	.....	1,552,673
Due to other banks.....	8,089,162	.....	3,504,300
Deposits.....	21,570,803	106,803,210	15,857,904
Circulation.....	6,313,049	7,458,190	2,345,435

In New York the deposits include the sums due banks. This great disparity of banking has attracted attention, and last year the Corn Exchange Association remarked in their annual report:—"The Board has to report that another effort will be made in our Legislature this winter to obtain a charter for the Corn Exchange Bank. The project has received the general sanction of the mercantile community of this city. This need excite no surprise, when we learn by a very recent publication, that the banking capital of New York alone is now \$56,000,000, which is more than twice that of the entire State of Pennsylvania. The capital thus invested in Philadelphia at the present time is about \$12,000,000. With such modest figures for our own city and State, there is certainly nothing extravagant in the attempt of the Corn Exchange to found a bank under its own auspices. If banking be of any value in facilitating commerce, it is clear that something should be done to lessen the disparity, in this particular, between our city and New York. If communities characterized by the highest degree of mercantile shrewdness and enterprise, freely avail themselves of the use of banks, why shall Pennsylvania and her metropolis be singular in rejecting them? Why must Pennsylvania confine herself to the use of a banking capital no greater than that of little Rhode Island, and Philadelphia seek in New York city banking facilities which cannot be obtained here? We surely stand in need of

all the aid we can command from whatever source, to hold our own amidst the keen rivalry which surrounds us. It is foolish to insist upon idly nursing abstract theories of finance, when present needs demand present aid. Banks have become an essential part of the machinery of modern trade, and we cannot afford the affectation of being superior to the use of them. How would New York city dispose of the great lake trade, now represented by \$600,000,000 annually, with a banking capital of \$12,000,000? or how would she have acquired and retained it, without multiplying those agencies which give celerity to business transactions? New York State makes use of \$100,000,000 of banking capital, variously located where the wants of her commerce demand it. We trust, then, our Legislature will heed the recommendation of Governor Pollock in his late message, wherein he advises a judicious increase in the number of our banks. It is mortifying to reflect upon impediments which needlessly oppose our progress. The fact that New York makes seven per cent a legal rate of interest, whilst we stop at six, operates to our prejudice. A difference of this kind tends to attract to New York capital which should remain here. It is with pleasure, however, the Board notices the recent introduction into the Senate of Pennsylvania of a bill which virtually repeals the usury laws of this State in their bearing upon mercantile transactions. The uselessness of continuing laws upon the statute book which are almost totally disregarded in daily business, or if observed, yielding no advantage to the trading community which they were designed to protect, is obvious."

The Philadelphia Board of Trade, in its late report, referring to the same subject, remarked as follows:—"In view of the serious financial revulsion which occurred in this country during the last summer, the subject of a reform in the currency and banking system of this State was made a special topic of inquiry and discussion by the association during several recent meetings. With a view to digest the various opinions of members, and arrive at some general, harmonious, and satisfactory plan for effecting the desired end, the different suggestions made were referred to a special committee of thirteen. The chairman of the committee, Mr. Buzby, subsequently presented the following recommendations, as expressing the views of a majority of his colleagues, to wit:— 1st. That a general banking law be enacted by the Legislature of the State. 2d. That there should be a right of vote for every share of stock. 3d. That State and United States government stocks be pledged as security for circulation. Other gentlemen of the committee submitted, individually, several distinct projects of reform. The whole matter, being again debated, was finally referred to a special committee of three, with instruction to prepare a memorial to the Legislature."

It is gratifying to remark that the Legislature of Pennsylvania has been the first to listen to the voice of her merchants in relation to the usury laws, and the law, as passed by the last Legislature and approved by the Governor, went into effect on the 1st of July. By this law, money can be borrowed and loaned according to the terms agreed upon by the parties. There is no restriction with regard to the rate.

The same measure was attempted in New York, and failed. It is not improbable that the recommendations of the Board of Trade, in relation to banking, will be listened to by the Legislature, and not only the price of money, but the right to use it in every employment, will be freely

conceded by that State. The future of Philadelphia cannot be mistaken. With a central and available location, she has a large, settled population trained in manufacturing; immense mineral resources; railroad connections which give her the command of all parts of the Union; large capital, with great skill, and entire freedom in its use, it is difficult to see why she should be second to any.

Art. V.—BANKING AND THE CURRENCY.

GENERAL PRINCIPLES NOT CARRIED OUT—CREDITS AND REVULSIONS—MONEY STANDARD—OPERATIONS OF BANKERS—ISSUE OF PAPER NOT BANKING—COINAGE A PREROGATIVE OF GOVERNMENT—ISSUERS OF PAPER OUGHT NOT TO PROFIT AT THE EXPENSE OF THE PUBLIC—ALL BANKING SCHEMES BASED UPON PAPER ISSUES—LIMITED LIABILITY IN NEW ENGLAND—CENTRAL REDEMPTION—BANKS OF NEW YORK SHOULD REDEEM AT PAR AT A BANK OF REDEMPTION—M'ULLOCH ON REDEMPTION—NEW ENGLAND BANKS SIMILAR TO CANADA—NEW YORK LAW UNSATISFACTORY—OHIO SYSTEM—INDIANA SYSTEM—BANKS OF SCOTLAND—BANKS OF ENGLAND AND FRANCE—FRENCH BANKS MUST USE GOVERNMENT MONEY ONLY—NO OBJECTION TO THE USE OF SMALL NOTES—FREE BANKING THE MOST PERFECT UNCONNECTED WITH THE ISSUE OF PAPER.

So much has been said and written on the subject of banking, money, and finance, that any attempt at further elucidation appears almost superfluous; and yet mankind are so apt to forget the lessons of experience, and in this telegraphic age so little used to consult the old authorities and experiences, and relying so exclusively upon the principles which their own personal observation teaches, that a little gleaning from opinions which have been held to be orthodox for many years, and applying them to the present position of affairs, may not be uninteresting.

It is remarkable that no one theoretical principle in monetary affairs, particularly in banking, has ever been fully carried into practice, either in England or America. The direct individual interests of influential men or States have prevented this adoption—and although it may be impossible, from these and other causes, to establish a distinct and perfect system of banking, yet we may continue to discuss the principles, and adopt as much as is practicable under the circumstances.

Although aware of the fondness of the commercial world generally for figures, and although it would be quite easy to substantiate any of the positions affirmed in this article, by references to former numbers of the *Merchants' Magazine*, for statistical facts, yet it will be conceded that figures and statistics are only of value in illustrating a principle, and demonstrating a fact, which may often as well be done by inductive reasoning as by reference to them.

The great and generally supposed unprecedented spectacle of a collapse in the commercial affairs of the world, while every element of wealth and prosperity is in unbounded plenty, has taken the great majority of men by surprise, and minds of the deepest thought and in the highest positions have been industriously employed in exemplifying solutions of it. To the general system of credit must be ascribed the periodical revulsions and panics in the commercial world. Banking, as part of that credit system, is responsible for its share of the evil, but ought not to be considered as the cause.

In order to a proper estimate of values of different commodities, we are forced to the adoption of a standard; either that an ounce of tin or silver shall be called a dollar, or an ounce of brass or gold be called a doubloon. A standard must exist, which shall be fixed in the legal estimation of its value, whatever its relative value may become. All civilized nations use gold and silver as standards of value for obvious reasons. Now, when credit will buy products instead of gold, the temptation is to increase the price, and by successive purchases and sales upon credits, bits of paper, whether promissory notes, bills of exchange, or bank notes, used instead of gold, the prices of all commodities gradually increase, till the proportion of real labor-value between them and gold has been carried beyond all reasonable limit. The return to a proper level of prices causes fright, panic, and commercial revulsion. It is unfair and unsound to charge these oft-recurring depressions and revulsions exclusively to the banks and a vicious banking system. The cause lies deeper than that system, be it good or bad, and yet it is doubtless very much increased and intensified by an improper system of banking and bank issues.

The general use and extended operations of banking institutions throughout the commercial world, sufficiently justifies their adoption, and the question of "banks or no banks" is set at rest by their apparent necessity. They are founded upon the system of credit, which commerce has established for its development, and upon the necessity of facilities for the interchange of commodities. Credit is the soul of commerce—it is that which gives life and vigor to the commercial character of men, and enables them to encompass results individually, which, without it, would require the efforts of States and empires to accomplish.

To the credit system the world owes the chief part of its progress during the past two centuries. Notwithstanding the losses which have been occasioned by the failure of many individuals and schemes by its abuse, the generally diffused impetus it has given to labor, thus employing for a practical use labor which otherwise would not have been employed at all, attest its paramount importance. The establishment of banks has had very much to do with the extension of this system, and they are a necessary consequence of it.

The business of banks and bankers is to borrow money from one class and lend it to another, and to transfer credits and moneys from one place and country to another. It ought not to be considered as any part of the business of banks to issue paper money. Credits they may issue, sight or time drafts, or any other means to accomplish the proper transfer of moneys or commodities from one place to another, but the issue of paper for the circulation of a country ought not to be connected with banks or banking privileges. It is the mixture of these powers and privileges which has caused the various *wars upon banks*, which have occasionally occurred, and will occur so long as such a system is continued. These wars upon banks are not justified in any way as against banks, or as against paper money; it is only when they are improperly combined that any justification can be offered for them.

The advantages of the use of paper money has been equally as well established as of banks. The great saving to a community by its use, and the facility of its interchange, render it one of the most important aids to commerce. It is, however, a distinct subject from banking, and ought not to be connected with it. The coinage of gold and silver or

other metals is in all countries held to be a prerogative of government, executed for the public benefit and the public good, and any infraction of this monopoly is treated as forgery. This should be the case also with paper money. The coinage of paper is of the same nature as the coinage of gold. Neither gold nor paper will pass as money till *coined*; when coined they equally pass as money—one as actual, the other as representative; and even here the distinction is not so clear, for the price of stamped gold is really a representative value,—representing the amount of labor necessary for its production, and of the amount of other commodities which it will purchase.

The profits of paper money ought to belong to the whole people. The profits or loss of a gold currency does so belong, and there is no reason why any individuals or corporations should have privileges obtained from the use of the circulating money of a country, which the public do not enjoy. It might be said that the borrower gets the advantage of the loan for aiding and using the circulation, but it is never the borrower who holds the circulation. It is held by those who use it as money, their own capital or means of daily use, precisely as they would use the gold coins it represents. This being the case, it appears evident that some parties monopolize a power and a profit rightfully belonging to the State and the people of the State, and which cannot with propriety be diverted from it.

The coinage of money, either of gold, silver, copper, leather, wood, or paper, rightfully and properly belongs in all countries to the sovereign power, and the increase or profit therefrom likewise belongs thereto, and cannot be diverted, without injury to the people and a derangement of commerce. This principle should ever be borne in mind by the inquirer into the subject of banking and the currency, and whenever it is not recognized, a labyrinth of difficulties is sure to be met with in arriving at proper conclusions. All the various schemes and systems of banking projected and established in America, have been based upon the connection of the issue of paper money with banking, and it is entirely regarding the circulation, that all the restrictions and regulations are required. Take away from the banks of the United States the power of issuing paper money, and the whole difficulty of banking vanishes. Banks would borrow and lend money as individuals, and be answerable to their shareholders and creditors as any other individuals or corporations. Attaching the public right of issue of paper money or coin to these institutions, has given rise to all the abuse of such issues, and to the various schemes which have been devised for their security. Hence, the various banking laws and systems of the different States and of other countries.

The banks of New England are each incorporated with limited liability, and no arrangement for a safety fund, but they have by law or common consent a central point of redemption, which appears by experience to be of much more importance even than a central point of issue. These banks, without any close restrictions, have sustained themselves generally better than those of other States.

The importance both to the public and to the banks of this plan of redemption has been somewhat overlooked. There does not appear any valid reason for the redemption of notes at the place of local issue, provided there is a certainty of redemption at the central point. Coin is seldom required at the outskirts of commerce, and when it is, it can be

obtained by the expense of carriage. There does not appear a good reason, therefore, for compelling the New York State banks to redeem its gold at their counters, while they possess bonds of the State in the Controller's office. If the New York laws relating to banks were so altered that every bank should redeem its issues at par at a bank of redemption, in Albany or New York, the bank of redemption being a branch of the Controller's department, or subject to his control, and should be relieved from the liability to redeem at their counters, it would be of great service to the banks, and a real benefit to the people. This principle of a central point of redemption is of the utmost value, in considering the question of circulation, and were all the banks of the United States compelled to redeem at one of eight or ten points, it would benefit the circulation of the country in a very great degree. Under the present circumstances, it is impossible to tell when the currency is inflated. The banks of the city of New York may be called upon for gold in consequence of a surcharged currency, while the banks of the State and of other States are expanding their issues. No control can be had—no barometer established, while many points of issue and redemption are permitted. The system of individual bank issues also leads to the troublesome practice of creating balances against each other on the part of country banks, picking up each other's circulation, and maintaining a constant war upon one another, to the detriment of the general commerce of the country.

Mr. McCulloch very clearly explains this principle of issue. In speaking of the effects of the commercial revulsion in England in 1837, when the merchants and manufacturers of Birmingham complained to the government, that "suddenly, with all the elements of prosperity remaining unimpaired, a state of things has succeeded which threatens the most alarming consequences to the community," Mr. McCulloch says:—"Certainly, the Legislature will most strangely neglect its duty if it allows a system productive of such fatal consequences to continue to spread its roots and scatter its seeds on all sides. As long as any individual, or set of individuals, may usurp the royal prerogative, and issue money without let or hinderance, so long will it be issued in excess in periods when prices are rising and confidence high, and be suddenly and improperly withdrawn when prices are falling and confidence shaken. All the causes of fluctuation inherent in the nature of industry, are aggravated a thousand fold by this vicious system, at the same time that it brings many new ones into existence. There is not, in fact, any reason for supposing that, if our currency had been metallic, or made to fluctuate exactly as it would have done had it been metallic, the difficulties in which we were involved in 1836 and 1837 would never have been heard of. The inordinate increase of banks, of money, and of facilities for obtaining money in the spring of 1836, contributed powerfully to the rapid and uncalled-for increase of prices, the multiplication of wild and absurd projects, and the excess of confidence which distinguished that period; at the same time that, by bringing on a fall of the exchange and a drain for bullion, they insured the subsequent revulsion. If it be wished that the country should be kept forever under an intermittent fever—now suffering from a hot, and then a cold fit, now in an unnatural state of excitement, leading to, and necessarily ending in, an unnatural state of depression—the present money system is the best possible. But we believe the reader will

agree with us in thinking that a fever of this sort is not more injurious to the animal than the political body. So dangerous a disorder is not to be trifled or tampered with. This is not a case in which palliations and anodynes can be of any real service. If a radical cure be not effected, it will go far to paralyze and destroy the patient. Now, to accomplish this radical cure, that is, to make sure that the fluctuations of the currency shall not exceed those which would occur were it wholly metallic, it is indispensable, as already stated, that all local notes should be suppressed, and the issue of paper confined entirely to one body. The exacting of security previously to the issue of notes would guaranty the holders from loss, and be in so far advantageous; but it would not hinder that competition among issuers, that is so very injurious, nor prevent the supply of paper being at one time in excess, and at another deficient. If we would provide for that unity of action, and that equality of value, that are so indispensable, we must make an end of a plurality of issuers. If one body only were intrusted with the issue of notes, it would be able immediately to narrow the currency when bullion began to be exported, and to expand it when it began to be imported. But nothing of the sort must be attempted so long as it is supplied by more than one source."

In the New England States the system upon which their banks are established is very much the same as in Canada—incorporated companies, with limited liability, with power to issue paper money under certain restrictions, but without any securities deposited with the public.

The State of New York boasts of a general banking law, which, when established, was thought to be the perfection of systems, but it has proved the most expensive and harrassing to the banks, and the most unsatisfactory to the public, of any in existence. The State bank system of Ohio, Indiana, &c, which has gained great favor throughout the Western States, is the nearest to sound principles of any yet established in the United States.

These State banks are banks of issue, issuing all the paper money circulating within the State to their various branches. The branches are the real banks, and furnish the bank of issue, called the State Bank, with a percentage of the issues received by them, in good State stocks, which are held by the State Bank as a safety fund for the redemption of the notes of any insolvent branch. This is an attempt to combine the advantages of the old New York Safety Fund System with the General Banking System.

The main feature in these systems, that appears objectionable, is the want of a central point of redemption. They have established the central point of issue, but have not foreseen the value of the central point of redemption, called in New England the Suffolk Bank System. What is required is some barometer by which to ascertain whether the currency is redundant or not, whether it is surcharged or depleted. It is impossible to do this with various points of issue and redemption, for while one is contracting its issues and depleting the circulation, another is expanding and surcharging it. By a central point of issue and redemption, the most perfect barometer is gained; when the currency is too great, it returns upon the issuer for gold; when it is not sufficient for the purposes of trade, gold is brought in for it, and thus a proper equilibrium is established.

The banks of Scotland are established, in respect of their powers of circulation, upon much the principle of the New England and Canada

banks, but the shareholders, being individually liable, gives them a character very different from any in America.

The great national banks of England and France combine the nearest approximate to a perfect banking system. The Bank of France, particularly, has delegated to it by the government the sole power of issuing paper money in that country. No other institution or individual is allowed to issue any paper in the shape of bank notes. Thus every vibration in the commerce of the country, and in the circulation of the currency, is immediately felt at the bank, where alone the bills are reduced, and its consequences provided for.

As many banks and banking establishments may be formed throughout the country as individuals or associations please, only they must use the gold coins furnished by government through the mint, or the paper money furnished also by it through the Bank of France, in their dealings. For this paper money they may lodge such securities as the bank may accept.

Under such an arrangement there does not appear to be any foundation for the objection to the use of small notes. Notes of one dollar or a thousand dollars will have like effects, and would be the cause of no more difficulty in times of pressure, one or the other. If no bills were allowed to be issued under twenty dollars, for instance, it is manifest that a sufficient sum *only* in gold will be kept to supply the daily wants of the community; all the rest will be turned into paper, and when a time of pressure arrives, the gold cannot be relieved from its daily purpose, without the issue of small notes to take its place; hence, the small notes would have been of as much advantage as the gold for daily use.

From the premises here laid down, it would appear that the most perfect form of banking is an entirely free one, unconnected with the issue of paper money. This should be confined to the government, or to a single agent employed for the purpose. This agent might be allowed to issue notes to circulate as money on specified terms to all banks or bankers in the country, accepting as security therefor such a proportion of stocks, bullion, and real estate as thought desirable, and reserving enough profit on the circulation to make up unavoidable losses, and paying the excess of profits of the circulation to the government to whom it properly belongs.

The principles here laid down have been, in their main features, fully and ably advocated by the leading political economists of the last fifty years. From the time of William Pitt downwards, in England and France, they have met the support of the ablest men; Lord Liverpool, Mr. Ricardo, Mr. Huskisson, Sir Robert Peel, C. P. Thomson, Lord Overstone, &c., &c., have fully vindicated their truth.

Mr. C. P. Thomson, (the late Lord Sydenham,) when Governor-General of Canada, finding the country new, and its financial affairs in an embryo state, recommended a bank of issue to the Legislature, in accordance with these theoretical principles, but found the interests of capitalists in the banks then in existence too strong for its adoption. Nothing at the present time would be more conducive to the permanent prosperity and regularity of the trade and commerce of this continent, than the establishment in the United States and Canada of a few central banks of issue to control, under proper regulations, the paper circulation of the whole northern part of the continent.

Suppose, for instance, that one point of issue and redemption be at

Montreal, and Boston, New York, Philadelphia, Cincinnati, Chicago, St. Louis, New Orleans, Charleston, and Baltimore, others. It is evident that a redundancy of paper currency, and an inflation of prices and of trade, would be felt at these ten points, and generally together, and by a comparison of their statements, each with the other, a regular and just opinion could be formed of the course of trade, and depressions and inflations provided against. Until some such plan is adopted, it will be in vain to look for any satisfactory results from the banking institutions of the United States or Canada. It may suit the policy of some of our statesmen to declaim against all paper money, but the advantages of its use will always insure its maintenance, and the rational way to treat it is to put it in its proper place, and regulate it by a proper barometer.

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LIBEL ON THE SCHOONER COERNINE.

In the United States District Court—May term. Before Judge Betts. William E. Collis and William Mitchell *vs.* the schooner Coernine, Fraley W. Moore, Simeon J. Lathan, and Lorenzo A. Webb, claimants.

The libelants, ship chandlers and traders, residents and doing business in New York, were in the habit of dealing on credit in the line of their trade with Gilbert L. Moore, a resident of Wilmington, in North Carolina, engaged in building and sailing vessels, and other transactions, in that State.

The correspondence between those parties proves that such course of dealing was in use between them anterior to the month of September, 1856, and was continued subsequently on open accounts of debit and credit. At that time, in an interview between them in New York, it was agreed that the libelants should supply the equipments and outfits necessary to complete the schooner Coernine, which Moore was about constructing at his residence in North Carolina; and that they should furnish whatever should be required to that end upon the written or verbal orders of Moore.

On the 5th of March, 1857, Moore wrote the libelants from Wilmington by Samuel D. Hines, introducing the latter as the intended master of the Coernine when completed, and requesting that his memoranda of materials and supplies should be filled by the libelants "at as low rates as possible," the large amounts of course on the regular times, "in order to give the vessel some time to make a part before it is due;" "the small memoranda of which I shall expect to pay between one and three months;" for instance "the bill for making sails, iron work, &c." The same letter had advised the libelants that Moore would, between July and September, pay them a considerable amount for the purchase of the sails and rigging for the Coernine; those, as it appears from the correspondence between the parties, being articles not dealt in by the libelants, but with some others were to be purchased by them in New York for Moore.

By letters of dates of March 14 and 20, the libelants advised Moore that they were hastening to fulfill all Capt. Hine's orders, that hemp, sails, blocks, &c., had been purchased by them. On the 28th of March they further wrote that all the goods were then ready, and requested a remittance of funds, as they had to make large purchases, and their payments for duck, &c., "then and for the next sixty days will be heavy."

By letter of April 8, the libelants informed Moore that the goods were all on board the vessel in New York for transportation to North Carolina, and that they inclose "bill of lading and amount of supplies, amounting in all to

\$4,074 35;" "the cash bills, amounting to \$916 77," they desired him to remit immediately.

On the 11th of July, 1857, Moore executed at North Carolina a promissory note to the libelants, or order for \$600, payable at ninety days, and on the 31st of July, at the same place, another note for the same amount, (\$600,) payable in ninety days thereafter to the libelants or order; and on the 24th of September following, another promissory note, dated at New York, payable to libelants or order for \$1,000, four months after date.

These several promissory notes were produced in open court by the counsel for the libelants on the hearing of the cause, as having been given for the debt in prosecution, and were delivered up to be canceled.

It appeared in proof that the materials supplied by the libelants were necessary for the construction and use of the schooner, and could not have been procured at the place where she was built and fitted out. They were supplied for her service, and after her completion she was dispatched by Moore, her owner, from Plymouth, North Carolina, her port of registry, upon a series of foreign voyages. June 2, 1857, she sailed for Guadaloupe, thence to Marie Galante, thence to St. Pierre, Martinique, thence to the Island of Nevis, on trading voyages; thence to St. Thomas, where she was chartered for Porto Rico and New York, at which last place she arrived in the month of August, remained in this port fifteen days at quarantine, and eight days afterward in discharging and reloading, and on the 22d day of September sailed again on round charters by the way of the West Indies back to New York, where she arrived January 26, 1858, and the libel in this cause was filed the next day. The libelants were personally apprized of the vessel being in this port within two or three days after her first arrival here, and also knew the whole period of her continuance in port. The libelants charged that the schooner being at Wilmington, North Carolina, and in want of ship chandlery, sails, rigging, materials, labor, and supplies, to render her seaworthy and fit to navigate the high seas and proceed upon a voyage to the West Indies, they furnished and delivered such articles to the vessel at that place, &c. These claimants intervened and set up a title to the vessel under an assignment of her in trust for the payment of debts made to them by Gilbert L. Moore, prior to the commencement of this action; and by formal answer they denied every material allegation in the libel upon which the action is based. They especially denied the jurisdiction of this court over the subject matter, and insisted on the argument upon an explicit judgment upon that branch of defence, because of its eminent importance to the interests of navigation and commerce in American vessels, and because it is supposed the law governing that subject is obscure or indefinite in its provisions, or has become seemingly so, under the rules by which it is interpreted and administered by the courts.

There was also a separate intervention and defence to the action in the name of James C. Willet, sheriff of the city and county of New York, who interposed and claimed the vessel by virtue of process of attachment out of a State court in favor of a creditor of Gilbert L. Moore, the alleged owner of the schooner. This branch of the defence was disposed of at the last May term of the court, on an issue in law, (24 vol., MSS. Decisions, 40.) and will not be further regarded in the report of this case.

The case was argued upon the pleadings and proofs by Messrs. N. Hoxie and E. C. Benedict, for libelants, and Messrs. J. Gerard, Jr., and B. D. Silliman, for claimants.

JUDGE BETTS—The libelants place their right of action in this cause upon the grounds that the transaction between them and Gilbert L. Moore, in relation to the outfit and supply of materials for building and equipping the schooner *Coernine*, was a maritime contract, concerning a foreign vessel and her employment in navigation and commerce, and that a debt was thereby created, which became by implication of law a lien upon the vessel, accompanying her wherever she went; or that by the local law of North Carolina, under which she was built, registered, and owned, and where the supplies were used, the schooner was made subject to a lien for that debt, which, by the principles of the general maritime law, is enforceable in this court.

The position on the part of the claimants is, that this court has no jurisdiction over the subject matter of the suit in any aspect of the case under which it is presented by the pleadings and proofs, and the cases of *Pratt vs. Reid*, (19 How. R., 359,) and the claimants of the steamboat *Jefferson vs. Beers, et al.*, (not yet published, but a copy of which has been furnished me,) are relied upon as having settled, by the solemn adjudications of the Supreme Court, the law definitively to that effect.

In view of the magnitude of interests depending upon the general question in this district, and its importance practically in the every-day business dealings within the port between mechanics and material men, and shipowners and masters, it is deemed desirable that this specific point should be made the prominent subject of consideration and decision; especially if those judgments of the Supreme Court have worked any change in the rules heretofore applied to this class of cases, and have diminished the securities formerly enforced in this court in behalf of that order of creditors.

In the first place, it is important to consider what were the special features in the case of *Pratt vs. Reed*, adjudged upon by the Supreme Court, and what character was affixed by that decision to the contract or credit in regard to necessities supplied a foreign vessel on a voyage, in order to give them a privilege or lien against the vessel.

The steamboat *Sultana* was employed on the Western lakes, in the transportation of passengers and freight. She was enrolled and owned at Buffalo, and a debt was contracted at Erie, in Pennsylvania, by her owner and master, for supplies of coal to her during the performance of a succession of trips for a period of about two years. It was assumed by the court to have been necessary for the navigation of the vessel that she should be furnished with coal on those occasions, although the proof on that head was held to be loose and indefinite. The libellant furnished her coal in that manner when demanded, from June, 1852, to May, 1854, and rendered a bill therefor, containing a running account of debits and credits. The owner of the boat usually navigated her as master, and was present when the supplies were furnished. When he was not present they were furnished at the request of the person in command. The answer denied that the supplies were furnished on the credit of the boat, and averred they were furnished on the credit of the master.

The court laid out of view the inadequacy of proof that the supply of coal was an actual necessity to the navigation of the vessel, within the Admiralty rule, at the time it was supplied her, because of the more serious difficulty in the case of the libellant, in the entire absence of any proof to show that there was also a necessity at the time of procuring the supplies for a credit upon the vessel, which was asserted by the court to be as essential as that of the necessity of the article itself. It seems to be supposed, the court remarks, "that circumstances of less pressing necessity for supplies or repairs, and an implied hypothecation of the vessel to procure them, will satisfy the rule, than in a case of a necessity sufficient to justify a loan of money on bottomry for the like purpose. We think this is a misapprehension."

The court proceeds to justify the position of law taken by them on those facts, by reasoning against the sufficiency of the facts to authorize an implication of a lien in the case, and by an intimation strongly disfavoring the increase of maritime liens of this class, upon the lakes and rivers, as tending to perplex and embarrass business rather than furnish facilities to carry it forward, and declaring that such liens should be strictly limited to the necessities of commerce which created them.

The jurisdiction of the court over the question is one and the same when it concerns the business of commerce and navigation between ports and places in different States and Territories upon the lakes and navigable waters connecting the lakes, as is possessed and exercised in case the vessels are employed in navigation and commerce upon the high seas or tide-waters within the Admiralty and maritime jurisdiction of the United States.—(Act of Congress, February 26, 1845, 5 statutes at large, 726.)

The similitude, and indeed identity, of the present case with that of *Pratt vs. Reed* in their leading features, appears thus to be nearly exact. In both instances the supplies and necessaries were obtained in ports of States foreign to those of which the vessels respectively belonged, and were procured through the direct contract and orders of the owner, who also in each case was master of the vessel at the time. In neither case was there any stipulation for direct payment of the purchase prices at the time of purchase, nor any terms of credit agreed upon between the parties. The decision in *Pratt vs. Reed*, therefore, in no way rested upon a question of implied authority in a master to pledge a vessel on such a credit, because the dealing was by the owner directly; but the controlling consideration which governed the case was, that however imminent the necessity of the vessel for the supplies might be, the case could not be brought within the cognizance of the Federal Court, unless it appeared that the necessity was equally urgent that the responsibility of the vessel should be pledged for payment.

It seems to me, therefore, that the case of *Pratt vs. Reed* is susceptible of no other interpretation than that an implied lien for stores, materials, supplies, or outfits of any kind, can never be raised against an American vessel in the courts of the United States upon the mere fact that they were furnished her on credit out of her home port and are necessary to her navigation and employment. The further fact must be shown that the supplies could not be obtained on the personal credit of her owners. That principle covers and negatives every claim to a hypothecation of the schooner in security of the debt in the present case. It is unnecessary to go further and say the doctrine of the decision significantly implies that the act of the owner of the vessel, in personally incurring the debt and obtaining the credit, has no higher effect in imparting a lien than the act of a master solely, for the entire dealing in that case appears to have been conducted or sanctioned personally by the owner himself.

The particulars in which the present case is distinguishable from that, weaken instead of strengthening the presumption that both parties contemplated, at the time of the sale and purchase of the materials furnished by the libelants, any lien therefor upon the schooner; but for the reasons before suggested, I do not recapitulate and press the considerations arising out of the pleadings and proofs tending to show that no liability against the vessel was in view of the parties at the time, and that the dealing was most probably on the footing of their accustomed transactions, and wholly one of personal credit. One distinction, however, ought not to be passed by, which is, that the materials, labor, &c., obtained in this case were not for the necessary repair of this schooner, but were for her original construction, she then being on the stocks in a course of building.

It is intended to dispose of this case in subordination to the judgment of the Supreme Court in the two recent cases referred to, and to restrain it carefully within the fair and plain import of the doctrines laid down in those decisions, without any inquiry into the correspondence or disaccord of those judgments, or either of them, with the rule of law antecedently prevailing in maritime courts, upon those subjects. It is not the province of this court to canvass the reasons upon which those decisions are founded, or attempt to measure their validity by any supposed inconsistency or incongruity with prior doctrines of the Supreme Court. They stand the final existing law which governs analogous facts coming within their just scope and meaning.

The People's Ferry Company of Boston, claimants of the steamboat *Jefferson*, appellants, *vs.* Joseph Beers and David Warner, assignees of B. C. Terry, was a case decided by the Supreme Court in December term, 1857. A vessel owned in New Jersey, was built and supplied with materials in that State by the libelants, residents in New York, on credit, and without any express pledge of the vessel for the debt.

The propositions of law determined by the court, and the facts to which they are applied, are specifically stated by the judge who delivered the opinion of the court.

"The only matter in controversy is (say the court) whether the district courts

of the United States have jurisdiction to proceed in Admiralty, to enforce liens for labor and materials furnished in constructing vessels to be employed in the navigation of waters to which the Admiralty jurisdiction extends.

"We have the simple case," continues the judge, "whether these ship carpenters had a lien for work and materials that can be enforced *in rem.* in Admiralty.

"The question presented involves a contest between the State and Federal Government. The latter has no power or jurisdiction beyond what the Constitution confers. The contest here is not so much between rival tribunals, as between distinct sovereignties, claiming to exercise power over contracts, property, and personal franchises.

"What were meant in 1789 by 'cases of Admiralty and maritime jurisdiction,' must be meant now. What was reserved to the States to be regulated by their own institutions, cannot be rightfully infringed by the General Government, either through its legislation or Judiciary Department.

"The contract (in the case) is simply for building the hull of a ship, and delivering it on the water. 'She was constructed and delivered according to the contract.' 'The Admiralty jurisdiction is limited to contracts, claims, and services purely maritime, and touching rights and duties appertaining to commerce and navigation.' Judge Hopkinson, in 1781, declared, as respects ship-builders, that the practice of former times doth not justify the Admiralty's taking cognizance of their suits. 'We feel warranted in saying that at no time since this has been an independent nation has such a practice been allowed.'"

The judge adds:—"It is proper, however, to notice the fact, that district courts have recognized the existence of Admiralty jurisdiction *in rem.* against a vessel to enforce a carpenter's bill for work and materials in constructing it, in cases where a lien had been created by the local law of the State where the vessel was built. Thus far, however, in our judicial history, no case of the kind has been sanctioned by this court."

This adjudication very explicitly determines that a contract in a port of one of the United States, to construct a vessel in a port of another State by actually building her, or supplying materials for such construction, is not a maritime contract creating a lien upon the vessel, for the value of labor or supplies, which can be enforced in a Federal Court. That the debt or contract does not make a case of Admiralty and maritime jurisdiction within the meaning of the Constitution and laws of the United States, and if it may be any way cognizable in those tribunals, it is only by force of State legislation imposing the debt as a lien on the vessel, which obligation the National Court executes and carries into effect; but the same judgment emphatically declares that no instance of such proceedings, which appear to have occurred in some of the inferior National Courts, has been sanctioned by the Supreme Court.

I had never supposed the jurisdiction of the United States District Courts over this class of liens was imparted by State legislation, or that those tribunals could in any way derive judicial competency or jurisdiction from State grant; and without being restrained by the significant intimation of the Supreme Court, I should not be anyway inclined to administer affirmatively, as the foundation of a right and remedy in Admiralty, any enactment by a State Legislature.

Considering that the decision last referred to withdraws from the cognizance of this court the subject matter of the present action, as not being one of Admiralty and maritime jurisdiction, I deem it wholly useless and extra judicial to inquire whether the statute of North Carolina, put in evidence in this cause, is applicable in its provisions to the contract and debt now in suit, or is of any force out of the territorial jurisdiction of that State. The labor claimed by the libelants to have been furnished this schooner in North Carolina must be understood to be the work of builders, personally or by their agents, and falls directly within the judgment of the court, as not a claim of a maritime character.

The latest decision of the Supreme Court upon a legal question within its jurisdiction, settles for the government of all inferior judicatories the practical meaning and force of the proposition so determined; and it is no part of the function of subordinate courts to adjudge, or even inquire, whether such determi-

nation comports with or subverts antecedent judgments of the same forum upon similar questions. The last decision is practically the final one.

Neither of the two cases last passed upon by the Supreme Court, in relation to implied liens in favor of material men and laborers, against American vessels in American ports, demanded the direct and broad answer to the inquiry whether those liens exist or can be enforced in the Federal courts in any form, by virtue of the general maritime law; but the principles announced by the court in those cases render it quite palpable that scarcely another advance remains to be made in order to abrogate that remedy absolutely, and reinstate and restrict the Admiralty powers of the judiciary in respect to those credits, in subordination to the rule of the common law as that was administered under the English jurisprudence at the time of the adoption of the United States Constitution.

It is my province to accept and pursue the law as declared by the Supreme Court; and in my opinion the rule established by that tribunal in those cases, determines that the claim put forth in this action, either for building or constructing, or outfitting, or providing materials, supplies, labor, rigging, or ship stores necessary to render this vessel seaworthy and fit for navigation at sea, is not within the jurisdiction of the court, and accordingly the libel must be dismissed with costs.

The amount in demand being sufficient to authorize an appeal of the case to the court of last resort, I put the decision specifically upon the question of jurisdiction, that being directly involved, and being a point of high practicable moment to the mercantile, manufacturing, and shipping interests of the country, and shall forbear discussing those other features in the case bearing strongly against the adequacy of the pleadings and proofs to sustain the action in this form, if the case of *Pratt vs. Reed*, and the *Ferry Company of Boston vs. Beers*, had interposed no legal impediment to the suit. Decree accordingly.

PLEADING—DENIAL OF KNOWLEDGE ON INFORMATION SUFFICIENT TO FORM A BELIEF
—CONFLICT OF LAWS.

In the Superior Court, city of New York. Before the Hon. Justices Bosworth, Hoffman, Slosson, Woodruff, and Pierrepont. *Duncan, Sherman & Co., vs. Smith, Lawrence & Co.*

The action was on a promissory note made by defendants. The plaintiffs alleged that they were copartners, and the note was duly transferred to them, and that they were the owners, &c. The answer set up that the defendant had no knowledge or information sufficient to form a belief as to these facts. The plaintiffs moved for judgment on frivolousness of the answer, which was granted. The defendant appealed, and the General Term reversed the order, allowing the answer to be sufficient.

BOSWORTH, J., rendered an oral opinion, in which he held:—1. An answer to a complaint on a promissory note is not frivolous, because it merely denies those allegations of the complaint which are employed to show the plaintiff's title to the note. 2. An averment in the answer that the defendant has no knowledge or information sufficient to form a belief as to such allegations of the complaint is a sufficient denial of them.

This is directly contrary to the decision in *Kamlah vs. Salter*, (6 *Abbott's Pr. R.*, 226,) rendered at the General Term of the Common Pleas, last month. In that case they hold the answer frivolous if it merely denies that the defendant ever indorsed or delivered, or in any way transferred the note to the plaintiff, and alleges that he has no knowledge or information sufficient to form a belief whether the note was ever delivered to the plaintiff, or in any way transferred to him by any one.

The weight of authority in the Supreme Court is in support of the decision of the Superior Court.

Ordered that the order appealed from be reversed, and \$10, the costs of this appeal, and the costs of opposing the motion for judgment, abide the event of the action.

COMMERCIAL CHRONICLE AND REVIEW.

STATE OF BUSINESS—HARVEST PROSPECTS—WOOL SALES—PRICES AT WEST—COTTON CROP—SALES OF GOODS—SHORT CREDITS—IMPORTS—BALANCE OF TRADE—EXCHANGE RATES—SPECIE MOVEMENT AT THE PORT—TREASURY—LOANS OF GOVERNMENT—CALIFORNIA RECEIPTS—EXPORT OF SPECIE—DESTINATION OF MONEY SHIPPED—SPECIE IN BANKS, EUROPE AND UNITED STATES—RATES OF INTEREST—DIVIDENDS OF BANKS FOR JULY—CLEARING-HOUSE—ASSOCIATION IN PHILADELPHIA—REDEMPTION OF NOTES—CLEARING-HOUSE IN CINCINNATI—NEW BANK IN PENNSYLVANIA, IN ST. LOUIS—BANK LAW OF IOWA—GENERAL STATE OF BANKING—MONEY ABROAD—SILVER AT HAMBURG—IMPORTS AND EXPORTS AT THE PORT—DRY GOODS.

THERE has been very little change during the month in the general conditions of the money market. Money has continued to accumulate in the central reservoirs, and its market price falls, in face of the continued inertness of all descriptions of business. There is still no prospect of such an immediate appreciation in the value of any articles of merchandise or investment as will attract money, and the harvests yet present no food for enterprise. The wool crop has indeed been sold at prices which stiffened under the operations, showing that the demand is, at least, equal to the crop, which is represented small. At the usual quantity, however, there may have been scattered \$20,000,000 through the country. Most farm crops are very abundant, but do not, partly in consequence of that abundance, attract money. Wheat keeps very low at the West—70 cents in Rochester, 45 at Dubuque, 40 at Des Moines, and similar rates in other localities, with equivalents for other grains, indicating but a small surplus profit for the farmers with which to make purchases. The foreign markets are also abundant in local supplies, and falling in value. Hence, the prospect of an export demand this season is limited. The cotton crop is full, with good prospects, notwithstanding the floods. It follows that raw produce affords little attraction to enterprise for the moment. The low prices and dull sales of the natural products, discourage the prospects of the goods markets, and induce a stricter adherence to the desire to shorten credits. Under these circumstances, it cannot be matter of surprise that money accumulates in the banks at the different centers of business. The wants of the Federal Government will be met for the present, and it is not improbable that the new loan may, to a considerable extent, be negotiated abroad, which might lead to a discontinuance of the export of specie hence, if not to an actual import from abroad, since the imports for the fiscal year, closed on the 30th June, show a balance in favor of the country. The details of the imports and exports of the port of New York, will, as usual, be found annexed to this article, as well for the month as for the six months and the previous six, embraced in the fiscal year. The imports at the port of New York are usually a large portion of the aggregate into the Union; while, on the other hand, the exports hence, exclusive of specie, are but a small proportion of the aggregate. If we estimate the business of the other ports to some extent, we have the following apparent value on the year's business:—

	1857.		1858.	
	Imports.	Exports.	Imports.	Exports.
At New York.....	\$219,741,000	\$75,929,000	\$162,159,000	\$55,932,000
Other ports.....	128,687,000	202,978,000	93,395,000	172,978,000
Total.....	\$348,428,000	\$278,907,000	\$255,554,000	\$228,910,000

Specie.....	12,462,000	62,137,000	16,000,000	51,000,000
Re-export.....	.....	14,905,000	.....	20,905,000
Grand total...	\$360,890,000	\$362,949,000	\$271,514,000	\$300,815,000
Excess exports....	.....	2,059,000	.....	29,261,000

Thus the last fiscal year closed with an apparent balance of over \$2,000,000 in favor of the Union; and the fiscal year, just closed, has left a balance of over \$29,000,000 in favor of the country. Exchanges are consequently dull. It is apparent that the sales of American produce abroad, with the exception of food, which declines under good crops, have not fallen off in proportion to the purchasing of goods by the United States. This fact would leave the inference that the panic was more effective in the Union than abroad. The rates of exchanges have been as follows:—

	June 22.	June 29.	July 13.
London	108 $\frac{3}{4}$ a 109 $\frac{1}{2}$	109 a 109 $\frac{3}{4}$	109 $\frac{3}{8}$ a 109 $\frac{3}{4}$
Paris	5.16 $\frac{1}{2}$ a 5.12 $\frac{1}{2}$	5.15 a 5.11 $\frac{1}{2}$	5.12 $\frac{1}{2}$ a 5.11 $\frac{1}{2}$
Bale and Zurich.....	5.13 $\frac{3}{4}$ a 5.12 $\frac{1}{2}$	5.13 $\frac{3}{4}$ a 5.11 $\frac{1}{2}$	5.12 $\frac{1}{2}$ a 5.11 $\frac{1}{2}$
Antwerp.....	5.15 a 5.12 $\frac{1}{2}$	5.13 $\frac{3}{4}$ a 5.12 $\frac{1}{2}$	5.12 $\frac{1}{2}$ a 5.11 $\frac{1}{2}$
Amsterdam.....	41 $\frac{1}{2}$ a 41 $\frac{3}{8}$	41 $\frac{1}{2}$ a 41 $\frac{3}{8}$	41 $\frac{3}{8}$ a 41 $\frac{3}{8}$
Frankfort.....	41 $\frac{1}{2}$ a 41 $\frac{3}{8}$	41 $\frac{1}{2}$ a 41 $\frac{3}{8}$	41 $\frac{3}{8}$ a 41 $\frac{3}{8}$
Bremen	79 a 79 $\frac{1}{2}$	79 $\frac{1}{2}$ a 79 $\frac{1}{2}$	79 $\frac{1}{2}$ a 79 $\frac{1}{2}$
Prus. thal'rs, on Berlin, Liepzig, Colo'ne	73 a 73 $\frac{1}{2}$	73 a 73 $\frac{1}{2}$	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
Hamburg.....	36 $\frac{3}{8}$ a 36 $\frac{3}{8}$	36 $\frac{3}{8}$ a 36 $\frac{3}{8}$	36 $\frac{3}{8}$ a 36 $\frac{3}{8}$

With these rates of bills, the movement of specie has been less than last year, and the comparative table of imports and exports, weekly, at New York, is as follows:—

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

	1857.		1858.		Specie in sub-treasury.	Total in the city.
	Received.	Exported.	Received.	Exported.		
Jan. 16.....	\$1,269,107	\$250,000	\$1,607,440	\$1,045,490	\$2,934,000	\$33,145,266
23.....	.....	781,295	.....	1,244,368	3,073,900	33,903,151
30.....	1,460,900	.....	1,565,779	57,075	3,288,500	34,561,500
Feb. 6.....	225,955	1,177,812	.....	2,928,271	3,168,787	33,821,735
13.....	1,097,186	348,216	1,348,507	48,850	3,384,800	33,611,075
20.....	.....	279,667	.....	641,688	3,360,000	34,776,076
27.....	1,296,108	26,708	1,640,430	128,114	3,420,900	35,079,294
Mar. 7.....	636,000	967,405	.....	297,898	2,996,700	35,736,431
13.....	.....	422,914	1,279,134	225,274	2,964,000	35,925,076
20.....	1,004,100	306,351	11,000	116,114	6,853,852	37,681,656
27.....	.....	38,784	1,403,949	83,120	6,141,594	37,071,066
April 3.....	1,487,128	742,233	.....	115,790	5,548,069	37,078,069
10.....	375,800	468,698	.....	250,246	4,875,975	36,912,411
17.....	1,229,238	779,892	1,325,198	203,163	3,841,577	37,035,026
24.....	140,075	106,200	41,208	15,850	3,695,071	37,808,806
May 1.....	1,800,000	1,711,390	1,550,000	136,873	3,145,400	38,209,613
8.....	.....	671,101	.....	106,110	2,874,200	38,327,346
15.....	1,929,527	1,826,629	1,626,171	720,710	6,853,590	41,586,300
22.....	198,000	353,166	.....	532,862	5,566,300	39,613,700
29.....	1,658,072	2,714,002	1,575,991	400,300	6,398,500	37,894,600
June 5.....	.....	489,668	.....	51,425	5,263,300	38,053,660
12.....	1,920,168	3,394,892	1,446,175	16,616	4,803,609	38,170,900
17.....	208,000	2,045,889	.....	68,318	7,773,108	38,011,251
26.....	.....	2,019,406	1,799,502	276,487	7,461,600	39,410,688
July 3.....	1,892,000	58,228	.....	317,110	5,820,000	39,650,000
10.....	.....	1,184,115	1,500,000	564,030	5,342,200	40,047,800
17.....	1,591,107	523,368	.....	637,240	5,157,600	40,485,000
	21,241,272	24,186,942	20,027,419	13,840,830	.....	.....

The exports at this time last year exceeded the receipts, and this year the latter are already \$7,000,000 in excess of the exports since January, during which period a portion of the gold received from Europe during the panic returned, swelling the exports beyond what they otherwise would have been. The amount in the treasury has fluctuated with the loans of the government. The issue of treasury notes carried the amount to \$7,773,108, January 17th, but the continued small imports did not allow of customs receipts equal to current expenditures, and the specie was speedily paid out. The receipts from California continue large, and the advices from Frazer's River continue to be of the most promising character. The description and distinction of the specie exports for the month have been as follows :—

SHIPMENTS OF SPECIE FROM THE PORT OF NEW YORK.

	American coin.	Bars.	American silver.	Sov'r'gns.	D'ublo'ns.	French gold.	Spanish silver.	Total.
Total for June..	217,712	1,086,346	20,496	218,050	89,793	25,135	6,050	1,638,566
Havre.....	265,826	263,286	.....	.....	.....	.....	.....	533,157
Havana.....	.....	.....	10,000	.....	1,565	.....	.....	1,165
Arroga.....	.....	.....	.....	.....	5,000	.....	.....	5,000
Port Lenha.....	.....	.....	.....	16,298	.....	.....	.....	16,298
Mayaguez.....	.....	.....	5,000	.....	15,750	.....	.....	20,750
Para.....	15,000	.....	.....	.....	.....	.....	.....	15,000
Liverpool.....	.....	661,060	.....	10,194	.....	.....	.....	651,254
Nuevitas.....	.....	.....	.....	.....	.....	3,000	.....	3,000
Ponce.....	1,000	.....	.....	.....	.....	.....	.....	1,000
Shanghai.....	.....	.....	.....	.....	.....	.....	1,966	1,966
Rio Grande.....	504	.....	.....	.....	.....	.....	.....	504
Belise.....	7,100	.....	.....	.....	.....	.....	.....	7,100
Total, July....	289,475	908,346	15,000	26,492	22,315	3,000	1,966	1,256,194
May 8 to July 12	507,187	1,944,692	35,496	244,542	112,108	28,135	2,616	2,894,760

The actual amount of "money," that is, American coin, shipped, has been quite small, only \$507,187 for the two months. The balance has been foreign coins and bar—which are the metals for money, but are not circulating coin. The business of the Assay-office for the month, was as follows :—

STATEMENT OF BUSINESS AT THE UNITED STATES ASSAY-OFFICE AT NEW YORK, FOR THE MONTH ENDING JUNE 30.

DEPOSITES.

	Gold.	Silver.	Total.
United States bullion.....	\$1,663,900	\$20,500	\$1,683,500
Foreign coins.....	20,000	81,000	101,000
“ bullion.....	17,000	3,500	20,500
Total.....	\$1,700,000	\$105,000	\$1,805,000
Total deposits payable in bars.....	\$435,000 00		
“ “ coins.....	1,370,000 00		
			\$1,805,000 00
Gold bars stamped.....			1,228,145 95
Transmitted to United States Mint, Philadelphia, for coinage.....			789,945 27

The weekly bank returns, in our Banking Department, show the extent of the accumulation of specie in the leading cities of the United States; and if we compare the aggregate with those of the Banks of France and England, we have results as follows :—

SPECIE IN BANKS.

	October.	February 10.	March 11.	April 8.	May 13.	June 13.
London.	\$35,850,110	\$82,870,101	\$88,532,091	\$88,627,166	\$86,940,942	\$86,530,188
Paris..	35,585,613	53,035,138	63,323,865	71,780,888	82,993,386	85,716,528
N. York	7,843,280	30,226,275	32,961,076	32,036,436	34,730,728	33,367,253
N. Orlns	3,230,370	11,187,398	10,978,759	10,808,605	10,615,535	10,312,237
Boston.	2,563,112	7,079,600	7,589,968	8,505,312	9,210,111	9,410,569
Philad.	2,071,434	4,823,989	5,448,514	6,183,289	7,019,204	7,055,188
Total	86,743,890	189,292,491	208,824,273	218,003,696	231,509,906	232,391,913

The month of June brought a slight reaction to the continued accumulation, but it has been since renewed. While there is little chance of a speedy demand for money for general investment, money in New York has continued to decline in value, and has been offered as low as 3 a 4 per cent on call, and good paper has been done at 3 per cent. The small amount of business paper made, while in the face of a very dull spring trade, a great deal of extended and renewed paper has been worked down, has left the banks, as well as private capitalists, short of good investments. Nevertheless, the banks have been unable, many of them, to pay their usual semi-annual dividends. There was paid, July 1st, on a capital of \$39,229,500, dividends to the amount of \$1,500,682, an average of 3.81 per cent. The large banks paid 3½, and others 4 a 5 per cent at the West. Money is yet collected with difficulty on account, but money accumulates gradually in the reservoirs, and is becoming cheaper.

The operation of the clearing-house in New York is gradually producing its results in other sections. The Philadelphia banks, and others adjacent, have entered into an arrangement for receiving all the notes of the banks of Pennsylvania, east of the Alleghany Mountains, on deposit and in payment of debts, on and after the 18th of September next. This arrangement will be very advantageous to the trading community, who have been compelled to take the notes of interior banks that are at a discount, in payment for their merchandise. We trust that all the banks in the State will see the propriety of keeping the issues at par in that city, which, if done, would save the business community a large sum, which annually they are compelled to expend to have their currency exchanged for bankable funds.

In Cincinnati the branches of the State Bank of Ohio, have made decided progress towards the establishment of a clearing-house in that city. The Indiana banks, and a portion of the Kentucky banks will co-operate with the Ohio banks, so as to make it, in fact, a clearing-house for the leading institutions whose circulation centers at Cincinnati. The capital has been fixed at half a million, a portion of which is left to be subscribed in that city. So much of it as has been apportioned to the country banks, being much the largest of the whole, has been subscribed, and the following gentlemen were chosen to represent this interest as directors, viz. :—Noah L. Wilson, V. Winters, of Dayton, and A. Stone, Jr., of Cleveland.

These arrangements for the prompt settlement of balances, preparatory to the renewed activity of business, will have a very beneficial effect. In Pennsylvania there is already a disposition to apply for new bank charters. There are now applications for seven, with an aggregate capital of \$1,000,000. But there is a strong movement for a general law, which would be far preferable to the charters. At St. Louis \$600,000 has been subscribed to the Farmers' Bank, of

Lexington, and \$445,000 paid in. The bank has paid 7½ per cent for the last six months. The people of Iowa have adopted, nearly unanimously, the project of banking laws laid before them for their approval. It is highly probable that a revival of general business will find banking affairs in a far better condition than formerly.

The advices from abroad are of continual cheapness in money, with little disposition to employ it while there is a progressive recovery. On the 17th an express train left Hamburg with 5,000,000 marks banco in silver bullion for Vienna—being the remaining half of ten millions borrowed by the Hamburg Senate, during the panic, of the Austrian Government.

The foreign imports at the port of New York for the fiscal year ending June 30, shows a very material decline as compared with the last year, which was one of great magnitude. The closing month of June, however, under the peculiar circumstances of the tariff last year, shows comparatively a large import for consumption, but greatly diminished for warehouse. The aggregates for the month show a smaller import than for any month of June for some years:—

FOREIGN IMPORTS AT NEW YORK IN JUNE.

	1855.	1856.	1857.	1858.
Entered for consumption.....	\$8,020,545	\$12,518,271	\$2,471,723	\$6,652,563
Entered for warehousing.....	2,716,245	3,936,633	11,540,136	2,408,733
Free goods.....	1,188,043	1,249,579	957,366	953,014
Specie and bullion.....	68,779	257,174	369,901	102,132
Total entered at the port....	\$11,993,612	\$17,961,657	\$15,339,126	\$10,116,442
Withdrawn from warehouse..	1,304,620	1,656,871	781,099	2,360,140

The imports at New York from foreign ports, for the six months beginning January 1st, are hardly more than one-half the amount entered for the corresponding period of last year, and is less than for any similar period of the previous four years:—

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

	1855.	1856.	1857.	1858.
Entered for consumption.....	\$45,897,795	\$80,300,885	\$65,237,874	\$36,320,520
Entered for warehousing.....	13,832,891	16,185,649	41,114,796	12,236,253
Free goods.....	7,762,627	11,090,793	9,224,745	11,449,498
Specie and bullion.....	454,116	724,582	5,352,012	1,778,363
Total entered at the port....	\$67,947,429	\$108,301,909	\$120,929,427	\$61,784,634
Withdrawn from warehouse..	12,241,070	10,917,867	13,145,261	21,911,964

The statement for the fiscal year 1857 was one of the most important on record. The total receipts of foreign goods at New York for twelve months ending June 30, were upwards of two hundred and twenty-six million dollars—being \$27,969,449 greater than for the previous year. The returns of the present year show an important decline:—

FOREIGN IMPORTS AT NEW YORK FOR FISCAL YEAR, ENDING JUNE 30.

	1855.	1856.	1857.	1858.
Entered for consumption....	\$107,029,210	\$150,088,112	\$141,430,109	\$94,019,659
Entered for warehousing....	32,022,396	29,568,397	62,275,672	44,463,806
Free goods.....	14,300,259	17,432,112	16,036,530	23,665,487
Specie and bullion.....	1,153,661	1,126,097	6,441,855	9,324,384
Total entered at the port....	\$154,505,526	\$198,214,718	\$226,184,167	\$171,473,336
Withdrawn from warehouse.	23,501,421	21,934,130	27,950,212	49,376,593

It will be observed that nearly all the decline was in the last six months. Indeed, the aggregate imports for the first six months were the largest for any similar period ever known. The dry goods trade has borne its full share of the depression as follows:—

DESCRIPTION OF IMPORTS FOR THE YEAR ENDING JUNE 30.

	1855.	1856.	1857.	1858.
Dry goods.....	\$62,918,443	\$85,898,690	\$92,699,088	\$67,317,736
General merchandise.....	91,587,083	112,316,028	133,485,079	104,155,600
Total imports.....	\$154,505,526	\$198,214,718	\$226,184,167	\$171,473,336

Our readers will of course all be interested to know the value of the stock which had accumulated in bonded warehouses, at New York, on the 1st of July, and we have carefully compiled a statement which may be relied on as correct. The total is, as compared with last year, much reduced under the circumstances of the tariff, and also of the scarcity of money last year, as compared with its abundance and the small imports this year:—

	1857.	1858.
The total value in bond June 1st, was.....	\$27,343,498	\$13,400,061
Entered warehouse from foreign ports in June.	11,540,136	2,408,733
Received in bond from domestic ports.....	116	32,770
	<u>\$38,883,750</u>	<u>\$15,841,564</u>
Withdrawn for consumption here... ..	\$781,099	\$2,329,889
Reshipped to foreign ports.....	573,077	294,039
Transported to other domestic ports.	591,306	420,617
	<u>\$1,945,482</u>	<u>3,044,545</u>
Leaves stock in warehouse July 1, 1857.....	\$36,938,268	\$12,797,109
“ “ “ 1856.....	12,612,631	
“ “ “ 1855.....	13,543,121	

This shows that the stock, on the 1st of July, was nearly thirteen million dollars, being a reduction of \$24,000,000.

We have given above the total imports at New York for various periods, but we also annex our comparative summary of the receipts of dry goods, all of which are included in the general total. The imports of dry goods at New York for the month of June, 1858, were \$2,154,000 more than than for June, 1857, as will appear from the following comparison:—

IMPORTS OF FOREIGN DRY GOODS AT NEW YORK FOR THE MONTH OF JUNE.
ENTERED FOR CONSUMPTION.

	1855.	1856.	1857.	1858.
Manufactures of wool.....	\$772,903	\$1,570,382	\$96,729	\$997,331
Manufactures of cotton.....	298,042	515,095	115,341	319,076
Manufactures of silk.....	1,269,212	1,639,150	74,356	903,870
Manufactures of flax.....	173,050	282,979	26,212	138,650
Miscellaneous dry goods.....	182,317	302,477	36,985	144,842
Total.....	\$2,695,524	\$4,310,083	\$349,623	\$2,503,769

WITHDRAWN FROM WAREHOUSE.

Manufactures of wool.....	\$124,910	\$56,424	\$61,669	\$164,018
Manufactures of cotton.....	39,068	29,847	39,504	90,404
Manufactures of silk.....	96,336	96,184	29,972	136,210
Manufactures of flax.....	40,848	12,094	23,060	97,513
Miscellaneous dry goods.....	29,700	14,108	4,447	44,021
Total.....	\$330,862	\$208,657	\$158,652	\$532,166
Add entered for consumption.....	2,695,524	4,310,083	349,623	2,503,769
Total thrown on the market..	\$3,026,386	\$4,518,740	\$508,275	\$3,035,935

ENTERED FOR WAREHOUSING.

	1855.	1856.	1857.	1858.
Manufactures of wool.....	\$245,468	\$482,603	\$1,345,199	\$172,274
Manufactures of cotton.....	54,527	139,019	471,360	41,082
Manufactures of silk.....	154,972	154,863	1,046,969	31,711
Manufactures of flax.....	36,430	31,412	159,012	35,098
Miscellaneous dry goods.....	28,122	57,278	331,963	16,744
Total.....	\$519,519	\$865,175	\$3,354,503	\$296,909
Add entered for consumption....	2,695,524	4,310,083	349,623	2,503,769
Total entered at the port....	\$3,215,043	\$5,175,258	\$3,704,126	\$2,800,678

It will be seen that a very large portion of the receipts for June have been entered for consumption, nearly all having been thrown upon the market to meet current wants. The total receipts of foreign dry goods at the port of New York, for the six months just ended, are \$23,216,493 less than for the first six months of 1857. We annex a comparative statement for the first six months of each of the last four years :—

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

ENTERED FOR CONSUMPTION.

	1855.	1856.	1857.	1858.
Manufactures of wool.....	\$5,181,553	\$11,111,464	\$7,408,256	\$4,975,813
Manufactures of cotton.....	3,660,275	8,290,974	8,948,436	3,820,264
Manufactures of silk.....	7,798,851	14,657,298	11,321,320	6,610,179
Manufactures of flax.....	2,224,598	4,318,058	3,070,348	1,539,516
Miscellaneous dry goods.....	2,118,642	3,541,705	3,232,375	1,365,178
Total.....	\$20,983,919	\$41,919,499	\$33,980,735	\$18,310,950

WITHDRAWN FROM WAREHOUSE.

	1855.	1856.	1857.	1858.
Manufactures of wool.....	\$1,191,673	\$801,861	\$1,043,840	\$2,197,129
Manufactures of cotton.....	1,651,176	1,453,496	1,762,481	2,815,359
Manufactures of silk.....	1,577,833	1,247,624	1,201,966	2,389,354
Manufactures of flax.....	782,268	706,026	735,999	1,455,823
Miscellaneous dry goods.....	535,587	227,675	343,984	853,326
Total withdrawn.....	\$5,738,587	\$4,436,682	\$5,088,270	\$9,710,991
Add entered for consumption....	20,983,919	41,919,499	33,980,735	18,310,950
Total thrown upon the market	\$26,722,506	\$46,356,181	\$39,069,005	\$28,021,941

ENTERED FOR WAREHOUSING.

	1855.	1856.	1857.	1858.
Manufactures of wool.....	\$1,037,636	\$1,326,025	\$4,114,827	\$1,121,271
Manufactures of cotton.....	993,786	1,084,091	2,094,350	1,378,428
Manufactures of silk.....	1,426,705	1,334,373	3,421,398	843,899
Manufactures of flax.....	622,606	444,584	1,294,094	540,508
Miscellaneous dry goods.....	491,237	371,945	881,308	375,263
Total.....	\$4,571,970	\$4,561,018	\$11,805,977	\$4,259,369
Add entered for consumption....	20,983,919	41,919,499	33,980,735	18,310,950
Total entered at the port....	\$25,555,889	\$46,480,417	\$45,786,712	\$22,570,319

The total for the fiscal year was \$25,351,352 less than for the year ending June 30, 1857, and also less than for any previous year except 1855 :—

IMPORTS OF FOREIGN DRY GOODS AT NEW YORK FOR THE FISCAL YEAR ENDING JUNE 30.

	ENTERED FOR CONSUMPTION.			
	1855.	1856.	1857.	1858.
Manufactures of wool.....	\$14,295,207	\$22,671,010	\$20,261,326	\$17,035,032
Manufactures of cotton.....	8,240,045	13,225,234	15,813,299	9,012,911
Manufactures of silk.....	18,814,441	27,738,080	25,192,465	17,581,099
Manufactures of flax.....	4,880,462	7,760,145	6,857,433	3,701,555
Miscellaneous dry goods.....	4,698,710	6,575,816	6,709,004	3,761,788
Total.....	\$50,928,845	\$77,970,285	\$74,833,527	\$51,092,385

	WITHDRAWN FROM WAREHOUSE.			
	1855.	1856.	1857.	1858.
Manufactures of wool.....	\$4,041,940	\$2,025,697	\$2,929,179	\$6,369,118
Manufactures of cotton.....	2,649,973	1,983,578	2,492,516	4,018,693
Manufactures of silk.....	3,075,368	2,241,785	2,004,190	5,394,970
Manufactures of flax.....	1,143,979	1,131,408	1,100,183	2,215,427
Miscellaneous dry goods.....	752,958	507,675	601,035	1,385,173
Total.....	\$11,664,218	\$7,890,143	\$9,127,103	\$19,383,381
Add entered for consumption....	50,928,845	77,970,285	74,833,527	51,092,385
Total thrown on market....	\$62,593,063	\$85,860,428	\$83,960,630	\$70,475,766

	ENTERED FOR WAREHOUSING.			
	1855.	1856.	1857.	1858.
Manufactures of wool.....	\$3,768,980	\$2,184,627	\$6,081,505	\$5,028,533
Manufactures of cotton.....	2,272,932	2,006,493	3,780,715	4,048,530
Manufactures of silk.....	3,544,225	2,225,515	4,447,447	3,667,521
Manufactures of flax.....	1,396,417	861,657	2,228,768	1,964,891
Miscellaneous dry goods.....	1,007,044	650,113	1,247,126	1,515,876
Total.....	\$11,989,598	\$7,928,405	\$17,835,561	\$16,225,351
Add entered for consumption....	50,928,845	77,970,285	74,833,527	51,092,385
Total entered at port.....	\$62,918,443	\$85,898,690	\$92,669,088	\$67,317,736

The course of the receipts of dry goods for the last year has not been as uniform as usual—all the increase taking place previous to July. The following table will show the comparative increase or decrease in each month of the last, as compared with the previous fiscal year:—

RECEIPTS OF DRY GOODS FOR TWELVE MONTHS ENDING JUNE 30, 1858, COMPARED WITH THE PREVIOUS YEAR, AND 1857 AS COMPARED WITH 1856.

	1856-7.		1857-8.	
	Decrease.	Increase.	Increase.	Decrease.
July.....		\$4,647,925	\$7,113,152	
August.....		3,390,845		\$2,227,368
September.....	\$424,334			703,698
October.....	1,753,050			746,533
November.....		403,869		1,999,013
December.....		1,198,948		3,571,499
January.....	300,295			7,520,332
February.....		5,092,007		6,948,409
March.....	1,545,519			3,600,170
April.....	1,204,926			4,287,470
May.....	1,263,940		43,436	
June.....	1,471,132			903,448
	\$7,963,196	\$14,733,594	\$7,156,588	\$32,507,940
Deduct decrease.....		7,963,196	Increase.	7,156,588
Total increase for the year.....		\$6,770,338	Decrease.	\$25,351,352

In order to distinguish the dry goods from the general imports, we have compiled a little table which gives at a single glance the whole imports of dry goods for the year, as compared with the preceding three years :—

IMPORTS OF DRY GOODS AT NEW YORK FOR THE YEAR ENDING JUNE 30.

	1855.	1856.	1857.	1858.
Manufactures of wool.....	\$18,064,187	\$24,855,637	\$26,342,831	\$22,063,565
Manufactures of cotton.....	10,512,957	15,231,727	19,594,014	13,061,441
Manufactures of silk.....	22,358,666	29,963,595	29,639,912	21,248,620
Manufactures of flax.....	6,276,879	8,621,802	9,086,201	5,666,446
Miscellaneous dry goods....	5,705,754	7,225,929	7,956,130	5,277,664
Total imports.....	\$62,918,443	\$85,893,690	\$92,669,088	\$67,317,736

All eyes are now directed to the future, but it is yet too soon to predict the course of trade for the ensuing year. From present indications it is not probable that the receipts for the next six months will be at all equal to the late years.

The following will show the total receipts for cash duties, at the port of New York, for the different periods named in our import statement :—

CASH DUTIES RECEIVED AT NEW YORK.

	1855.	1856.	1857.	1858.
In June.....	\$2,316,464 80	\$3,527,425 26	\$677,811 29	\$1,625,663 00
Previous 5 months.	11,983,480 91	19,013,720 49	18,615,710 02	9,403,449 00
Total, 6 months	\$14,299,945 71	\$22,541,145 75	\$19,293,521 31	\$11,029,112 00
Total fiscal year	32,658,873 03	42,628,508 03	42,271,645 74	27,434,667 00

The exports from New York to foreign ports for the month of June are larger in produce than the shipments for the same period of last year, or any previous one, except 1856. The exports of specie has been very small.

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

	1855.	1856.	1857.	1858.
Domestic produce.....	\$3,956,706	\$8,273,454	\$5,395,312	\$6,382,939
Foreign merchandise (free).....	547,632	148,206	732,123	158,769
Foreign merchandise (dutiable)..	736,306	450,482	512,349	350,990
Specie and bullion.....	3,862,393	1,806,573	7,939,354	594,174
Total exports.....	\$9,103,037	\$10,678,715	\$14,579,143	\$7,486,872
Total, exclusive of specie ..	5,240,694	8,872,142	6,639,789	6,892,689

The total exports from New York to foreign ports, exclusive of specie, since January 1st, are \$7,018,336 less than for the first six months of 1857. The exports, including specie, are larger than for any similar period :—

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

	1855.	1856.	1857.	1858.
Domestic produce.....	\$26,337,424	\$37,776,893	\$34,451,640	\$28,580,392
Foreign merchandise (free).....	3,102,557	570,085	1,908,177	782,561
Foreign merchandise (dutiable)...	2,989,852	1,724,051	2,301,897	2,280,425
Specie and bullion.....	17,074,795	15,268,360	22,398,062	12,359,959
Total exports.....	\$49,505,628	\$55,339,389	\$61,059,776	\$44,003,337
Total, exclusive of specie ..	32,430,333	40,071,029	38,661,714	31,643,378

The exports for the last fiscal year, 1857, were larger, both in specie and produce, than for any former year upon our record. A decline in both items is manifest this year; they, however, exceed those of 1855 :—

EXPORTS FROM NEW YORK TO FOREIGN PORTS FOR THE FISCAL YEAR ENDING JUNE 30.

	1855.	1856.	1857.	1858.
Domestic produce.....	\$52,602,406	\$75,026,244	\$75,928,942	\$55,931,987
Foreign merchandise (free).....	4,084,387	1,268,914	2,596,903	3,104,160
Foreign merchandise (dutiable)...	5,636,787	3,691,600	3,932,370	7,309,672
Specie and bullion.....	38,058,334	25,819,305	44,348,468	34,322,071
Total exports.....	100,381,914	105,806,063	126,606,683	100,667,890
Total, exclusive of specie...	62,323,580	79,986,758	82,258,215	66,345,819

The imports last year at this port were about \$100,000,000 in excess of the exports, a figure which was made up by a corresponding excess of exports from other ports of the Union. This year, the excess of imports over exports is but \$70,805,446, yet the exports of produce from the South, including the great staple, have been well maintained, and the result is seen in the low rate of exchanges and feeble movement of specie.

JOURNAL OF BANKING, CURRENCY, AND FINANCE.

NEW YORK BANK DIVIDENDS FOR JULY.

Some few of the banks of this city passed their dividends in November and January last. All have resumed, showing ample surplus profits. The following dividends are payable in July, 1858 :—

Names of banks.	Capital.	Rate.	Amount of dividend.
Seventh Ward Bank.....	\$500,000	5	\$25,000
Broadway Bank.....	1,000,000	5	50,000
Atlantic Bank.....	500,000	5	25,000
Butchers' and Drovers' Bank.....	600,000	5	30,000
Mercantile Bank.....	1,000,000	5	50,000
Chemical Bank.....	300,000	6	18,000
Metropolitan Bank.....	4,000,000	4	160,000
Mechanics' Bank.....	2,000,000	4	80,000
Phoenix Bank.....	1,800,000	4	72,000
Park Bank.....	2,000,000	4	80,000
Market Bank.....	1,000,000	4	40,000
Importers' and Traders' Bank.....	1,500,000	4	60,000
Tradesmen's Bank.....	800,000	4	32,000
New York Exchange Bank.....	130,000	4	5,200
Nassau Bank.....	1,000,000	3½	35,000
Dry Dock Bank.....	200,000	4	8,000
Bank of Commerce.....	8,602,000	3½	301,070
Bank of America.....	3,000,000	3½	105,000
Bank of New York.....	3,000,000	3½	105,000
Continental Bank.....	2,000,000	3½	70,000
Bank of North America.....	1,000,000	3½	35,000
Hanover Bank.....	1,000,000	3½	35,000
Merchants' Exchange Bank.....	1,235,000	3½	43,225
Bank of Commonwealth.....	750,000	3½	26,250
Irving Bank.....	500,000	3½	17,500
People's Bank.....	412,500	3½	14,437
Atlantic Bank.....	400,000	3½	14,000
New York County Bank.....	200,000	3½	7,000
Total, July, 1858.....	\$40,429,500	..	\$1,543,682

BANKS OF KENTUCKY, JUNE 30, 1858.

	Discounts.	Exchange.	Specie.	Circulation.	Deposits.	Due other banks.
Northern Bank..	\$1,254,706	\$2,311,437	\$699,632	\$1,482,723	\$374,138	\$941,316
Farmers' Bank..	999,346	1,911,583	773,086	1,978,339	346,455	45,340
People's Bank..	96,405	11,750	75,643	132,537	26,350	.....
B'k of Kentucky.	2,267,493	3,300,805	1,039,821	2,648,444	999,357	1,141,041
B'k of Louisville.	560,056	1,557,622	396,579	978,281	360,779	130,960
Southern Bank..	497,313	1,176,736	924,387	2,239,633	337,085	507,880
Mechanics'.....	165,844	.....	62,376	.....	138,150	1,084
Franklin Savings	355,356	.....	25,962	.....	104,512	25,964
Total	6,196,519	10,269,933	3,997,486	9,459,912	3,186,825	2,592,585
TENNESSEE.						
Union Bank....	\$1,345,671	\$2,149,658	\$371,340	\$6,237,701	\$601,243	\$135,864

CITY WEEKLY BANK RETURNS.

NEW YORK WEEKLY BANK RETURNS.

	Loans.	Specie.	Circulation.	Deposits.	Average clearings.	Actual deposits.
Jan. 2	\$98,649,983	\$28,561,946	\$6,490,403	\$78,635,225	\$13,601,357	\$65,033,867
9	98,792,757	29,176,838	6,625,464	79,841,362	13,899,078	63,942,284
16	99,473,762	30,211,266	6,349,325	81,790,321	14,066,412	67,723,909
23	101,172,642	30,829,151	6,336,042	82,598,348	13,074,762	69,523,836
30	102,180,089	31,273,023	6,369,678	83,997,081	13,519,330	70,477,751
Feb. 6	103,602,932	30,652,948	6,873,931	86,000,468	15,439,083	70,561,405
13	103,783,306	30,226,275	6,607,271	84,229,492	13,803,583	70,425,909
20	103,706,734	31,416,076	6,542,618	86,773,222	14,769,565	72,003,657
27	103,769,127	31,658,694	6,530,759	87,386,311	15,657,056	71,729,805
March 6	105,021,863	32,739,731	6,854,624	90,382,446	18,022,665	72,370,781
13	105,293,631	32,961,076	6,755,958	90,063,432	16,511,506	72,552,926
20	107,440,350	31,902,656	6,853,852	91,238,505	17,064,588	74,173,917
27	109,095,412	30,929,472	6,892,231	90,644,098	16,429,056	74,201,709
April 3	110,588,354	31,530,000	7,232,332	93,589,149	17,567,160	76,021,989
10	110,847,617	32,036,436	7,245,809	93,566,100	16,775,237	76,790,863
17	111,341,489	33,196,449	7,190,170	96,448,450	17,329,431	78,121,025
24	111,003,476	34,113,891	7,140,851	95,340,344	16,141,451	79,198,893
May 1	111,868,456	35,664,213	7,431,314	98,438,506	17,875,203	80,563,303
8	112,741,955	35,453,146	7,735,056	101,165,806	19,438,661	81,727,146
16	114,199,288	34,730,728	7,502,975	101,884,163	18,284,868	83,599,295
22	115,658,082	34,047,446	7,307,445	101,917,869	17,620,131	84,297,738
29	116,650,943	31,496,144	7,252,616	99,351,901	16,199,657	83,152,244
June 5	116,424,597	32,790,333	7,547,830	101,489,535	17,982,648	83,506,887
12	116,022,152	33,367,253	7,367,725	100,787,073	16,503,899	84,283,194
19	117,797,547	32,396,456	7,297,631	102,149,470	16,318,521	85,280,987
26	118,823,401	31,948,089	7,215,689	101,961,682	15,825,953	86,135,699
July 3	119,812,407	33,830,232	7,458,190	106,803,210	17,267,927	89,535,283
10	118,863,937	34,705,593	7,571,373	106,420,723	18,168,757	88,260,956
17	119,164,222	35,328,134	7,346,946	107,101,061	17,046,961	90,054,100

PROVIDENCE BANKS.

	Loans.	Specie.	Circulation.	Deposits.	Due oth. b'ks.
Sept. 28.....	\$18,480,161	\$241,906	\$1,959,385	\$1,925,122	\$1,194,967
Jan. 11.....	17,701,725	565,553	1,552,822	2,025,956	1,338,435
Mar. 15.....	16,925,349	520,328	1,310,787	1,903,082	1,043,930
Apr. 5.....	17,037,949	591,861	1,409,695	1,946,998	1,080,817
19.....	17,169,822	564,033	1,483,226	1,965,316	996,961
May 3.....	17,203,225	566,869	1,393,553	2,068,335	1,089,333
17.....	17,054,877	567,024	1,451,356	2,062,597	1,131,176
June 7.....	17,060,695	577,863	1,555,717	2,088,873	1,208,543
June 21.....	17,345,487	573,317	1,604,850	1,988,496	1,170,711
July 5.....	17,653,908	523,691	1,810,047	2,402,956	1,010,101

WEEKLY AVERAGE OF THE PHILADELPHIA BANKS.

Date.	Loans.	Specie.	Circulation.	Deposits.	Due banks.
Jan. 11, '58.	\$21,302,374	\$3,770,701	\$1,011,033	\$11,465,263	.....
Jan. 18....	21,068,652	4,018,295	1,046,545	11,512,765	.....
Jan. 25....	20,730,958	4,243,966	1,062,192	11,547,697	.....
Feb. 1....	20,423,704	4,465,693	1,096,462	12,195,126	.....
Feb. 8....	20,359,226	4,668,085	1,293,046	11,904,519	.....
Feb. 15....	20,071,474	4,858,983	1,559,218	11,889,342	.....
Feb. 22....	20,161,260	4,924,906	1,686,689	12,014,605	.....
Mar. 1....	20,251,066	4,903,936	1,808,734	11,830,532	.....
Mar. 9....	20,471,161	5,147,615	1,916,352	12,253,282	.....
Mar. 16....	20,522,936	5,448,514	2,077,967	12,691,547	.....
Mar. 23....	20,796,957	5,483,358	2,140,463	12,413,191	.....
Mar. 30....	21,020,198	5,661,782	2,296,444	13,201,599	.....
Apr. 6....	21,657,152	5,937,595	2,647,399	13,422,318	3,056,181
Apr. 12....	21,656,028	6,133,000	2,675,193	13,784,656	3,178,855
Apr. 19....	21,776,667	6,382,485	2,484,150	14,682,175	3,071,603
Apr. 26....	22,141,300	6,752,640	2,408,421	15,068,178	2,804,095
May 3....	22,243,824	7,027,712	2,329,617	15,589,713	2,610,000
May 10....	22,190,934	7,143,628	2,406,482	15,260,858	2,754,973
May 17....	22,592,841	7,019,204	2,351,709	15,548,237	3,055,076
May 24....	22,969,576	6,963,371	2,410,181	15,354,423	3,221,858
May 31....	23,103,418	7,031,756	2,436,527	15,726,640	3,211,889
June 7....	23,542,751	6,935,208	2,406,568	15,776,251	3,380,477
June 14....	23,796,085	7,055,188	2,387,886	15,883,306	3,565,213
June 21....	23,803,903	6,873,971	2,365,435	15,857,904	3,504,300
June 28....	24,060,708	6,664,681	2,389,252	16,356,129	3,101,201
July 5....	24,311,928	6,835,877	2,431,181	16,566,846	2,986,297
July 12....	23,783,792	6,399,754	2,422,411	15,898,464	3,369,430

NEW ORLEANS BANKS.

	Short loans.	Specie.	Circulation.	Deposits.	Exchange.	Distant balances.
Oct. 17...	\$19,200,583	\$3,230,320	\$6,196,459	\$7,442,142	\$2,297,348	.....
Dec. 12...	18,069,088	8,841,370	4,148,859	9,993,370	2,338,878	\$816,132
19....	17,818,222	9,942,880	4,224,042	10,996,494	3,526,929	1,266,660
26....	17,741,355	10,320,714	4,336,624	11,579,048	3,951,212	1,363,473
Jan. 2....	18,149,456	10,505,188	4,535,951	11,948,905	4,114,622	1,590,072
9....	.....	10,626,260	4,778,539	11,754,593	4,675,028	1,349,781
16....	14,804,320	10,592,617	4,797,746	12,323,508	5,095,771	1,552,855
23....	14,559,131	10,693,330	4,767,816	12,573,173	5,201,368	1,459,861
30....	14,674,217	10,844,246	4,803,071	12,678,696	5,249,136	1,379,908
Feb. 6....	14,490,001	11,187,398	5,037,906	14,539,408	5,934,781	1,256,815
13....	14,937,307	11,110,763	5,100,916	14,368,835	6,624,657	1,283,609
20....	14,890,351	11,065,597	5,254,181	14,640,976	7,124,477	1,274,034
27....	15,062,058	11,061,832	5,524,209	14,894,714	7,623,252	1,327,750
March 6....	15,832,181	10,967,225	6,005,769	15,201,909	7,919,605	1,378,846
13....	15,888,347	10,978,759	6,299,957	15,421,499	8,220,000	1,347,623
20....	15,937,924	10,897,866	6,654,434	15,765,084	8,776,621	1,172,552
27....	16,157,998	10,947,636	7,068,240	15,792,554	8,880,798	1,271,084
April 3....	16,641,554	10,848,605	7,572,094	15,453,850	9,147,709	1,664,614
10....	16,481,249	10,922,570	7,692,634	15,658,182	9,321,352	1,410,349
17....	16,480,547	10,854,012	7,685,539	15,640,948	9,035,522	1,381,527
24....	16,094,721	10,798,455	7,828,399	15,589,151	9,221,277	1,473,994
May 1....	15,933,046	10,892,453	7,945,334	16,681,593	8,754,140	1,263,882
8....	15,459,435	10,615,530	8,023,429	16,386,529	9,159,848	1,112,188
15....	14,958,401	10,478,675	7,972,599	15,035,182	9,418,151	1,429,660
22....	14,772,173	10,394,638	7,954,829	15,096,528	9,184,271	1,266,140
29....	14,250,529	10,299,135	7,916,853	14,648,164	8,899,170	1,368,531
June 5....	13,521,534	10,257,171	7,965,484	.....	8,269,260	1,102,648
12....	12,828,721	10,312,237	7,943,819	15,464,347	8,533,964	1,009,370
19....	12,374,123	10,208,900	7,645,844	15,714,302	8,720,257	1,119,317
26....	12,390,984	10,423,080	7,323,034	15,676,134	8,110,788	1,034,117
July 3....	12,291,555	10,676,674	7,962,959	16,013,100	7,890,863	1,061,242

BOSTON BANKS.

	Loans.	Specie.	Circulation.	Deposits.	Due to banks.	Due from banks.
Dec. 22....	\$50,209,500	\$4,579,000	\$5,627,000	\$15,606,000	\$4,054,800	\$5,888,000
29....	50,377,000	4,789,500	5,130,400	16,326,600	3,998,000	5,688,000
Jan. 5....	50,726,800	5,028,000	5,416,000	17,073,800	3,911,000	5,732,600
12....	51,221,000	5,449,000	5,938,400	17,226,700	4,368,000	5,969,500
18....	51,740,926	5,661,216	5,669,028	17,722,553	4,754,006	5,891,800
25....	51,772,412	6,073,680	5,494,721	18,129,649	3,531,721	1,949,031
Feb. 1....	51,854,178	6,402,460	5,251,006	18,395,692	5,111,278	5,725,337
8....	52,011,821	6,872,977	5,498,600	18,602,984	5,317,764	5,756,068
15....	52,137,972	7,079,606	5,898,660	18,429,945	5,568,464	5,523,012
22....	52,089,500	7,257,800	5,299,000	18,450,500	5,329,600	5,377,900
Mar. 1....	51,970,800	7,316,800	5,170,000	18,525,000	5,778,000	5,625,000
8....	52,251,300	7,497,700	5,182,400	19,031,682	5,764,000	6,137,000
15....	52,068,743	7,559,698	5,291,549	18,909,682	5,837,534	6,011,377
22....	51,999,451	7,235,531	5,163,492	19,029,251	.....	.....
29....	51,632,451	7,905,491	5,159,569	18,895,249	.....	.....
April 5....	51,918,000	8,259,500	5,477,500	20,136,400	6,576,900	6,386,000
12....	52,042,428	8,505,312	5,852,991	20,675,028	.....	.....
19....	51,752,500	9,007,000	6,224,500	20,657,500	6,110,000	7,259,400
26....	51,388,977	8,851,719	6,007,628	20,671,569	5,884,533	7,363,702
May 4....	51,499,700	9,243,000	5,903,600	21,257,900	5,925,900	7,444,000
10....	51,679,315	9,351,861	6,165,768	21,143,973	5,949,986	7,562,885
18....	52,622,000	9,210,000	6,117,000	21,527,700	7,187,800	6,263,000
25....	53,396,741	9,015,146	6,096,417	21,418,578	7,175,486	6,756,792
31....	53,469,179	9,120,846	5,903,020	20,846,860	6,530,828	6,929,062
June 7....	53,407,693	9,315,086	5,870,808	20,668,037	7,265,607	6,399,061
14....	53,951,032	9,410,569	5,732,900	20,815,560	7,532,900	5,755,262
21....	54,162,119	9,457,831	5,703,699	20,764,739	7,804,896	6,809,548
28....	54,780,644	9,119,604	5,633,176	20,833,942	7,827,075	5,674,795
July 5....	55,808,453	9,104,461	6,313,049	21,570,803	8,089,162	6,357,413
12....	56,200,929	9,000,663	6,533,325	21,075,247	8,526,510	6,299,019

PITTSBURG BANKS.

	Loans.	Specie.	Circulation.	Deposits.	Due banks
April 12.....	\$5,513,821	\$1,194,232	\$1,287,095	\$1,305,294	\$70,236
19.....	5,570,585	1,220,633	1,291,091	1,345,062	87,713
26.....	5,611,689	1,221,195	1,319,416	1,404,750	84,171
May 3.....	5,734,492	1,192,216	1,360,551	1,504,549	40,312
10.....	5,763,651	1,171,627	1,365,551	1,585,182	74,491
17.....	5,737,072	1,191,663	1,373,401	1,491,620	111,260
24.....	5,769,868	1,175,334	1,371,586	1,464,767	124,044
31.....	5,843,108	1,212,178	1,394,146	1,467,849	88,896
June 7.....	5,895,461	1,207,637	1,426,536	1,540,926	90,334
14.....	5,865,951	1,218,342	1,385,926	1,556,862	108,994
21.....	5,836,952	1,223,759	1,366,481	1,571,589	134,480
28.....	5,874,782	1,266,195	1,377,096	1,630,570	125,743
July 5.....	6,014,676	1,246,588	1,436,651	1,699,196	85,698
12.....	6,016,509	1,229,383	1,458,776	1,691,758	157,608

ST. LOUIS BANKS.

	Exchange.	Circulation.	Specie.
April 10.....	\$1,255,694	\$1,788,970	\$1,673,628
17.....	1,161,065	1,793,945	1,720,728
24.....	1,250,295	1,832,915	1,770,882
May 8.....	1,369,316	1,240,431	1,959,823
15.....	1,494,025	1,864,960	2,161,503
22.....	1,547,938	1,825,810	2,225,285
29.....	1,548,531	1,921,475	2,396,027
June 5.....	1,557,119	2,087,890	2,452,141
12.....	1,471,190	2,101,405	2,536,707
19.....	1,459,735	2,161,985	2,465,372
26.....	1,417,340	2,005,505	2,434,398
July 3.....	1,523,179	2,246,835	2,320,758
10.....	1,445,704	2,260,560	2,315,635

FINANCES OF THE CITY OF ST. LOUIS.

The Controller of St. Louis, under date of May 10, 1858, gives a return of the debt of that city as follows:—

	Amount.	Interest.
Water works.....	\$574,496 00	\$32,499 60
Renewed indebtedness.....	748,500 00	44,910 00
Purchasing ground.....	230,000 00	13,800 00
Wharf and harbor.....	451,000 00	27,060 00
Public Sewer.....	479,000 00	22,200 00
Improvement of old limits.....	290,000 00	17,400 00
General purposes.....	296,800 00	19,840 00
<hr/>		
Total for municipal purposes.....	\$2,969,796 00	\$175,707 60
Railroads.....	1,885,000 00	119,100 00
District sewers.....	211,000 00	12,660 00
<hr/>		
Total, 1856.....	\$5,156,796 00	\$307,467 60
Amount issued in 1857.....	516,500 00	30,990 00
<hr/>		
Total.....	\$5,673,296 00	\$338,457 60
Canceled by sinking fund.....	466,000 00	
<hr/>		
Debt at close of 1857.....	\$5,207,296 00	

The interest remains the same as above, (\$338,457 60.) from the fact that the Fund Commissioner retains ten years' coupons from each bond he returns. No bonds of any kind have been issued since the commencement of the present fiscal year. From the report of the Register of Lands, it appears that his estimate of the value of real estate belonging to the city is \$16,000,000; to which may be added stocks in railroads, \$1,500,000, (in this amount the stock in the Ohio and Mississippi Railroad is not included;) the accumulated sinking fund, say \$1,000,000; notes and obligations in the city treasury, say \$186,000; delinquent tax list, say \$310,000; total, \$18,996,000.

This statement is presented simply to show that, come what may, St. Louis is, and ever intends to be, a paying city, and claims to peer with any city of her magnitude on this continent in energy, ability, and determination to meet her obligations. We can point with pride to the fact that the city of St. Louis has never been protested on her bonds or interest. Whenever it becomes a settled policy, and a principle rigidly to be adhered to, that we make no contract for labor or money unless we have the means of payment at hand to meet our engagements, then will our bonds become favorite stocks, and sell for something like their real value. The estimates of revenue for 1858 are as follows:—

Taxes on real and personal property.....	\$600,000
Other taxes.....	259,885
<hr/>	
Total.....	\$859,885
Expenses—interest.....	\$863,000
other.....	675,000
<hr/>	
Excess of expenditure.....	\$178,115

In addition to this, Mayor FIlLEY remarks:—

Our taxes are already the subject of great complaint, and should not be increased. Our predecessors for years past have gone too far and too fast in the improvement of our city—though not too far nor too fast provided the means of payment existed. In a city growing as rapidly as ours, it should cause no sur-

prise that, under the influence of the expansive state of things that have existed, we should now find ourselves at a point where contraction becomes inevitable. In this position we are not unlike most of our large commercial cities, and it will be wise in us now to appreciate our situation, and devise the ways and means necessary to restore our finances to a healthy condition. We may be justified in the issue of bonds to a certain extent for expenditures of a permanent character, but in no case for administrative or current expenses. The fact that the corporation owns real property to the amount of over \$15,000,000, and that the sinking fund is an active agent in reducing our bonded indebtedness, together with the adoption of the principle now recommended, of limiting our current expenditures to our current receipts, should, and no doubt will, at once enhance the value of our bonds, and render them still more desirable as an investment.

FINANCES OF SACRAMENTO.

It appears that the rates of taxation (municipal and aggregate) in Sacramento, California, are much higher than in any other city in the United States. The rate on the hundred dollars of valuation in 1856-7 in Boston was \$0 90; in New York, \$1 38; in Philadelphia, \$1 90; and in some of the Southern and Western cities it is frequently more than \$2. However, it is well known that there is considerable difference in the method of assessing property in different cities. The *Union*, of Sacramento, states the rate on the \$100 in that city for 1857 at \$4 90, consisting of—State tax, \$0 70; county tax, \$1 45; and city tax, \$2 75. The road tax upon property outside the city limits is five cents. This burthensome taxation has resulted from the calamities of fire and flood, which have at three different periods nearly destroyed the city, and from the public works which it has constructed for its protection and improvement. The levee, nine miles long, with a surface breadth of ten feet, and a base varying from fifty to seventy feet, has a grade of twenty-two-and-a-half feet above low-water mark, and cost \$600,000. The water works cost \$300,000; improvement of the streets, \$185,000; fire department, etc., \$100,000; aggregate of these items, \$1,185,000. Gas works were established by a company in 1855, with expected cost of \$250,000. Four-fifths of the gold which is exported from California passes through the city; and thus, with other advantages, its trade is extensive and permanent. We annex the assessment of property in the city during 1854, 1855, and 1856, with the totals for the entire county in 1856:—

	1854.	1855.	1856.	1856.
Real estate.....	\$3,587,524	\$3,589,825	\$3,510,698	\$4,210,905
Improvements.....	1,125,515	1,380,090	1,880,156	2,766,560
Personal....	2,468,988	2,647,870	2,194,914	3,608,356
Total.....	\$7,182,027	\$7,617,785	\$7,585,768	\$10,585,821

Under the recent act of the California Legislature, relative to the debt of Sacramento city and county, the amount of new bonds to be issued is \$1,600,000 by the city, and \$600,000 by the county. A revenue is created and set apart for the payment of these bonds. No provision is made for the old indebtedness of city or county, except such as is surrendered under this law. All the bonds are to be dated 1st January next, and are to mature—one-fourth 1st February, 1888; one-fourth 1st February, 1893; one-fourth 1st February, 1898; and one-fourth 1st February, 1903; interest annually at 6 per cent, payable on the first day of each year at the office of the Treasurer—claims to be registered, and to be entitled to the shortest time in the order of presentation.

FINANCES OF THE CITY OF ST. PAUL, MINNESOTA.

The immediate liabilities of the city of St. Paul are \$53,357, and the bonds running in sums of \$9,000 due annually from 1868 to 1873, \$75,350, making \$128,737. The debts due the city are \$111,311, comprising \$44,259 delinquent taxes, of which \$31,435 were delinquent for 1857. These assets do not include the real estate, embracing the City Hall, but simply those items which are due or to become due in money, and will be collected from time to time; the sums owing for delinquent taxes, being assessed upon real estate, is, of course, abundantly secured, and is bearing the heavy interest of 25 per cent per annum. The amounts due from the first and second wards are amply guaranteed by the ward tax provided for in the charter. The debt due by the St. Paul Bridge Company, which accrues by reason of the loan to that company of the bonds of the city in aid of the construction of the bridge, is carefully provided for in the act of the Legislature authorizing this loan, and secured by a mortgage on the bridge, and there is little fear but that the principal and interest upon these bonds will be promptly paid out of the large profits which that enterprise promises to furnish.

MILWAUKEE FINANCES.

The Mayor of Milwaukee has recently communicated a statement of the finances of that city for the year ending March 31, 1858, from which we learn that the amount of bonds issued for municipal purposes is \$756,850; expenses of schools, \$23,480; expenses of fire department, \$24,397 27; expenses of police, \$18,000. Bonds have been issued to aid in the construction of railroads to the amount of \$1,614,000, as follows:—

Fond du Lac and Milwaukee.	\$114,000	Milwaukee and Mississippi..	\$534,000
G. Bay, Milwaukee, & Chicago	200,000	Milwaukee and Beloit.....	100,000
La Crosse and Milwaukee...	200,000	Milwaukee and Superior....	100,000
Milwaukee and Watertown..	200,000		
Milwaukee and Horicon.....	166,000	Total.....	\$1,614,000

Of the above mentioned bonds the sum of \$35,500 dollars of the principal, and \$7,675 of interest thereon, is past due, and \$38,870 of principal and interest to become due in the course of the fiscal year ending March 31st, 1859.

FINANCES OF DETROIT, MICHIGAN.

In Detroit the assessed valuation for purposes of taxation is now \$16,360,000, with a city debt of less than \$300,000. A loan for the water works has been proposed. The works cost \$650,000. The city now contains 70,000 population, and notwithstanding the pressure of the hard times for the past year, during which time many have gone into the country for cheaper living, the population has steadily increased, to the extent of from eight hundred to one thousand families. The revenues of the water works have increased from some \$11,000, in 1842, to \$50,000; not from an increase of rates, but from the natural growth of the city, and the extension of the works and increased consumption. The annual report of the Controller of the city of Detroit gives the receipts and expenditures as follows, for the fiscal year ending March, 1857:—

Aggregate receipts from all sources during the year.....	\$200,445 92
Balance in the treasury, March 1, 1857.....	39,797 00
Total	\$240,242 92
The disbursements during same period were	212,742 39
Leaving a balance in the treasury of.....	\$27,500 53
The total receipts during the year 1856 were	\$264,797 04
“ “ “ “ 1857 were	200,445 92
Decrease	\$64,351 12

The funded debt of the city of Detroit was as follows:—

	Interest.	Amount.
Bonds due May 1, 1858.....	7	\$50,000 00
“ September 1, 1859	7	60,000 00
“ October 1, 1865.....	7	50,000 00
“ at various dates in 1869	7	8,660 00
“ “ 1870.....	7	30,163 53
“ “ 1871.....	7 & 8	19,270 20
“ “ 1872.....	7	10,450 00
“ “ 1873.....	7	22,000 00
“ “ 1875	7	45,000 00
Bonds payable at the option of the Common Council.....	7	1,000 00
Total bonds		\$296,543 73
Amount of unpaid claims at date.....		4,656 99
Amount of old claims outstanding		1,129 96
Total liabilities at date		\$302,330 68
Deduct bonds and mortgages held by the Commissioners of the Sinking Fund.....	\$4,830 00	
Also amount to the credit of Sinking Fund.....	15,643 45	
		<u>20,473 45</u>
Amount unprovided for at date.		\$281,857 23
Amount of debt unprovided for, March 1, 1857, was		289,252 52
Decrease as compared with 1857		\$7,395 29

The interest fund account is given as follows:—

To interest paid on bonds, and reported by the city Treasurer	\$22,162 28
To amount of interest due on bonds held by the Commissioners of the Sinking Fund, and transferred.....	3,227 43
To balance carried to new account.....	7,563 18
Total	\$32,952 89
By balance reported March 1, 1857.....	\$9,569 89
By tax of 1857.....	23,383 00
	<u>32,952 89</u>

The operations of the sinking fund was as follows:—

To bonds purchased as follows:—	
Washington Market bonds, Nos. 9, 21, 22, 25, 26, 27, 28, and 29, is- sued March 1, 1857.....	\$800 00
First and fifth ward sewer bonds, Nos. 4, 18, and 27, issued in July, September, and December, 1848.....	290 20
First and fifth ward sewer bonds, Nos. 23, 31, 32, and 39, issued in June and October, 1847.....	400 00
Randolph-street sewer bonds, Nos. 21 and 23, issued Nov. 29, 1847.....	50 00
Riopelle-street sewer bonds, Nos. 11, 14, 15, 16, 19, 54, and 60, is- sued in September, October, and November, 1847.....	700 00
Interest paid on Controller's account at the Peninsular Bank.....	18 37
To balance carried to new account.....	15,643 45
Total	\$17,902 02

FINANCES OF THE CITY OF PITTSBURG, PENNSYLVANIA.

The City Controller of Pittsburg has submitted to the Councils of that city a statement of the real estate and personal property of the city, together with the funded and floating debt, &c., of the corporation. The following are the total amounts :—

Real estate.....	\$1,083,486 00	Floating debt.....	\$33,310 29
Personal property.....	102,852 77	Amount of bonds issued to	
Funded debt.....	1,135,879 92	railroad companies.....	1,800,000 00

In lieu of which last the city holds shares of stocks in railroads as follows :—

Pittsburg, Fort Wayne, and Chi-		Alleghany Valley.....	8,000
cago Railroad.....	shares 4,800	Pittsburg and Connellsville.....	10,000
Pittsburg and Steubenville.....	11,000	Chartiers Valley.....	3,000

MUTILATED NOTES.

The following report upon the subject of mutilated notes was recently adopted by the New York Clearing-house :—

NEW YORK, July 8, 1858.

At a meeting of the New York Clearing-house Association, held this day, the Committee on Mutilated Bills made the following report, which was ordered to be printed, and sent to the members of the association.

GEORGE D. LYMAN, Secretary pro tem.

The Committee on Mutilated Notes, to whom was referred the subject of applying to the Legislature for further protection in relation to the fraudulent mutilation of bank notes, beg leave to report :—

That, after a careful examination of the subject, they deem it inexpedient to ask for any legislative aid, believing that the existing laws are quite sufficient when the offenders can be detected.

The Committee would recommend to the members of the Clearing-house Association to refuse payment of all notes mutilated with *evident intent* to defraud, and in case any suit should be brought against any member for such refusal, that the defence be conducted under the direction of a committee, and that the expense of such suit be paid by the members of the association in the same manner as other expenses of the Clearing-house.

B. F. WHEELWRIGHT, }
JOHN THOMSON, } Committe.
J. C. BEACH, }

FINANCIAL ACCOUNTS OF THE STATES OF THE UNION.

OHIO VALUATION AND TAXATION, 1855-57.

Governor S. P. CHASE, in his annual message, gives some interesting statistics in relation to the finances of that State, which we here extract. The tables exhibit the taxable property of the State as valued for taxation; the respective amounts of State, county, and local taxes; and the total amount of taxes levied in each of the last three years. It will be seen that the taxable valuation of the State was greater in 1857 than in 1856, but less than in 1855, according to Governor Chase.

The difference was occasioned in part by the exemption from taxation of the excess of credits over debts, by the act of April 1st, 1856, and in part by the rule prescribed in the same law for ascertaining the taxable property of banks and bankers. This rule requires two statements, one of the amount of notes and bills discounted, and all other property and dues of every description belonging to the bank; and another of the property employed in banking; and provides

that a ratio shall be charged upon the property of individuals, if levied on the property embraced in the second. This rule has been found very inconvenient in application, and has afforded opportunity for withdrawing considerable property from its just proportion of the public burdens. It is clear that property employed in banking should be assessed equally with other property. The decision of the Supreme Court of the State supplies a satisfactory rule for ascertaining what this property is. The Governor, therefore, repeats his previous recommendation, "that the law be so amended as to require all property employed in banking to be embraced in one schedule, and entered on the duplicate for taxation, at the same rate as is impressed on other property."

I. TAXABLE PROPERTY VALUATION.

	1855.	1856.	1857.
Number of acres.....	25,220,088	25,191,639	25,329,620
Value of lands.....	\$432,261,735	\$433,245,177	\$435,602,655
Town and city lots.....	145,596,754	147,389,310	149,924,623
Value of chattels.....	233,018,815	240,024,550	263,631,303
Total valuation.....	\$860,877,354	\$820,661,035	\$849,329,081

II. STATE TAXES.

For Sinking fund.....	\$860,877 35	\$574,456 33	\$752,543 62
General revenue fund.....	516,526 41	820,669 37	535,407 54
State common school fund.....	1,291,316 02	1,231,007 13	1,254,312 39
District school library fund.....	86,087 72	.....	.....
Total State taxes.....	\$2,754,807 50	\$2,626,132 83	\$2,592,263 55

III. COUNTY TAXES.

For County expenses.....	\$1,138,568 28	\$903,303 36	\$987,752 63
Bridge purposes.....	332,073 65	229,065 07	267,297 54
P. or purposes.....	238,332 84	212,213 33	221,589 15
Building purposes.....	272,533 05	276,552 99	292,541 50
Road purposes.....	364,715 12	243,070 49	185,778 88
Railroad purposes.....	366,072 06	367,586 76	431,639 12
Total county taxes.....	\$2,762,305 02	\$2,232,294 00	\$2,386,508 82

IV. OTHER LOCAL TAXES.

For Township expenses.....	\$302,841 50	\$278,009 63	\$297,207 42
Schools and school-houses.....	1,246,346 00	1,285,933 95	1,403,197 96
Special taxes.....	200,336 91	184,917 26	231,625 89
City and town expenses.....	1,194,093 57	1,090,076 84	1,315,314 78
Total Township & City Special Taxes	\$2,943,618 00	\$2,838,942 68	\$3,247,406 05
Delinquencies and forfeitures.....	493,781 35	312,144 41	392,944 51
Total local taxes, inc. county taxes..	\$6,199,704 88	\$5,383,381 09	\$6,028,659 38

RECAPITULATION.

Total county taxes.....	\$2,762,305 02	\$2,232,294 00	\$2,386,508 82
" township, city, & special taxes	2,943,608 06	2,838,942 68	3,247,400 05
Delinquencies and forfeitures.....	493,781 35	312,144 41	392,944 51
Total local taxes.....	\$6,199,704 88	\$5,383,381 09	\$6,028,659 38
" State taxes.....	2,754,807 51	2,626,132 83	2,592,263 55
Excess of local.....	\$3,444,896 86	\$2,757,248 26	\$3,434,595 83
Total taxes on duplicate.....	8,954,511 88	8,009,513 92	8,619,122 93

The foregoing schedules show that while the amount of State taxes has been steadily reduced during the last two years, the amount of county and municipal taxes, largely reduced in 1856 from 1855, have increased, though not so largely in 1857 from 1856.

The Governor, therefore, remarks :—" It is worthy of consideration whether some further limitation upon the taxing power of county and municipal authorities may not be usefully imposed. I respectfully recommend, also, that provision be made by law for the collection of taxes semi-annually, instead of annually, as at present. In that case there need be no accumulations in the State or county treasuries, but the money of the people will remain in their own hands till actually wanted for public purposes."

NEW JERSEY.

The official returns of the revenues of the State of New Jersey for the year 1857, show the amount to have been, including the balance on hand, January 1, 1857, and \$40,000 extra dividends of joint-stock companies, \$240,270; disbursements, \$237,212; balance in the treasury, January 1, 1858, \$3,058. Of the expenses, \$130,296 are classed as ordinary. The balance of unpaid appropriations is \$38,000, and, including that sum, the whole indebtedness of the State is \$191,277, although the constitution of the State forbids the contraction of a debt of more than \$100,000. The State's available assets are, including 2,000 shares railroad stock, \$246,300. In the operation for 1858, it is estimated that the expenses will exceed the revenue \$28,000. The amount of school fund drawing interest is \$416,648.

NORTH CAROLINA.

The gross amount of taxes for 1856 was \$380,437 49, and for 1857 it was \$490,168 34. To this is to be added the tax on bank stock, which, in 1856, was \$14,182 33, and in 1857, \$33,988 75. The total gross taxes was, therefore, for 1856, \$394,619 82, and for 1857, \$524,157 09, showing a difference in favor of 1857 of \$129,537 27. The net public tax for 1856 was \$341,833 84, exclusive of the bank tax; and the net public tax for 1857, exclusive of the bank tax, is \$457,442 46. The difference between the gross and net amounts given is accounted for by the commissions allowed the sheriffs. The total net income, therefore, from public taxes for the year 1857, is \$491,411 21, or \$135,365 01 more than in 1856. We have not included, however, in the net tax for 1857 several items which go to the literary fund—\$8,570, for example, on retailers of spirituous liquors, and smaller sums, making in all \$8,933 08. Add these to the above amount of \$491,411 21, and the total amount of net public tax for 1857 will be \$500,344 29.

MARYLAND.

The report of the State Controller of Maryland shows receipts for the year ending September 30, 1857, (including a balance of nearly \$600,000 previously on hand.) \$1,977,461, and disbursements \$1,259,164. Of the balance left in the treasury, \$476,477 is subject charges, leaving a balance applicable to further demands of \$242,090. The estimated receipts of the current year are \$1,132,150, and the estimated expenses, \$938,144. The total funded debt of the State is \$14,920,000, and the assessed value of real and personal property in the State is \$251,664,790.

STATISTICS OF TRADE AND COMMERCE.

CHINA AND EUROPE—CANAL OF SUEZ.

The progress of affairs in the East is of daily increasing interest, inasmuch as that the vast empire of China is being brought more into contact with the Western World through California, and its internal resources opening up to the command of commerce. Europe seeks closer alliance through the Isthmus of Suez. Until now, the greatest obstacle to an extension of commercial relations has been the spirit of exclusiveness of the Chinese. But the testimony of those who have traveled in China within the last few years, is of an encouraging nature on this point, for they all state that the whole nation will be delighted to trade with foreigners as soon as they can be made to understand that such intercourse will be for their advantage.

The importance of the Chinese trade can best be estimated from the following statement, showing the value of importation and exportation in the various articles made by the maritime nations in one year, from July 1st, 1856, to July 1st, 1857 :—

	Imports.	Exports.	Total.
English trade, legalfrancs.	71,346,540	273,995,388	536,812,703
“ opium	191,470,775		
Trade of the United States	17,836,635	82,198,615	100,035,250
All other nations	5,945,544	27,399,539	33,345,083
Grand total	286,599,494	383,593,542	670,193,036

The general trade may be calculated from the following schedule :—

IMPORTS FROM ENGLAND.

Cotton goodsfrancs.	33,270,975
Thread	5,025,700
Woolens	6,716,000
Colonial produce	10,491,335
Total	55,403,000

IMPORTS FROM ALL OTHER NATIONS.

Cotton and woolfrancs.	8,000,000
Woven cotton goods	41,000,000
Thread	1,000,000
Woolen goods	7,250,000
Colonial produce from Europe and America	14,878,719
Ammunition of war	2,000,000
Metals	6,000,000
Opium	191,470,775
Produce of the sea	2,000,000
Rice and grains	13,000,000
Total	286,599,494

	Exports to England.	All other nations.
Tea, black and greenfrancs.	128,977,000	211,804,731
Silk and silk goods	103,505,850	135,576,712
Alum, Chinese varnish, wax, cinnamon, cotton, wool, medicines, copper coins, china, paints, &c	3,958,505	36,212,100
Total	235,531,200	383,593,543

These exports and imports have been effected by means of 4,013 vessels, of 1,247,656 tons; and of these vessels the following trade to each of the Chinese ports mentioned :—

	Vessels.	Tonnage.		Vessels.	Tonnage.
Macao	308	47,227	Amoy..	317	89,738
Hong Kong.....	1,813	612,875	Foe-tschoe	164	56,312
Canton	520	210,878	Ning-po.....	285	39,578
Soeatoe.....	65	20,468	Shanghai.....	541	172,585
Total.....				4,013	1,247,656

The whole of the commerce of China is carried on by English capital, with the single exception, perhaps, of the United States; for, although Bremen, Hamburg, and Holland send every year a number of vessels there, these are more than two-thirds freighted with coal by English houses.

The large size of the American vessels is an obstacle to the greatest extension of their trade—they average 710 tons. This is by far too large for many of the Chinese ports, where, consequently, the English vessels carry the day, as they are, in general, only about 310 tons. Even the Portuguese vessels and lorchas from Macao, can do them but little damage.

The following statement shows the number of vessels belonging to the different maritime nations :—

	Vessels.	Tonnage.		Vessels.	Tonnage.
France	37	13,665	Hanover.....	1	154
Austria.....	3	710	Norwegian.....	1	857
Belgium	1	600	Holland.....	178	71,883
Bremen.....	26	6,158	Peru.....	80	29,336
England	1,391	481,308	Portugal { vessels ..	43	11,115
Chili	15	3,802	{ lorchas... }	500	45,860
Denmark	101	22,625	Prussia.....	3	772
Spain.....	142	37,517	Sardinia	4	1,564
United States	457	322,946	Siam	25	10,611
New Granada	5	2,160	Sweden.....	18	3,624
Hamburg.....	133	35,757	Steam vessels.....	849	185,578
Total.....				4,013	1,247,656

The coasting trade in China, as carried on by European vessels, has acquired a remarkable importance. The following statement will show its extent :—

1. The colony of Hong Kong has 46 sailing vessels, measuring 4,306 tons.
2. In Ning-po the resident English subjects own 16 vessels, measuring 957 tons.
3. The foreign houses in the Chinese ports own 26 vessels, out of which, 22 carry on a legal trade or the opium traffic, according to circumstances. One of these, the Spark, cost her owners in Canton £10,000 sterling, which she twice repaid in the course of a single year.

4. Macao owns 186 vessels, measuring 13,430 tons, and carrying 1,032 guns.

These vessels, amounting to 274, are, with the exception of the steamers, all built in China, which they never leave. All the coasting trade is carried on by them, to the entire ruin of the native coasters, which cannot shelter the goods they carry under a foreign flag, and thereby protect them against official marauders.

The advantage of foreign over native vessels in China, is still more evident, if we consider carefully the elements of the import and export trade, since the treaty of Nankin, 1855, drove it to the five stipulated ports.

1. There arrived in Canton, from Chinese ports, excepting Hong Kong and Macao, 49 vessels, measuring 17,607 tons. There sailed from Canton for Chinese ports, excepting Hong Kong and Macao, 57 vessels, measuring 18,689 tons.

2. Cleared at Amoy for the same places, 106 vessels, of 31,685 tons; entrances 103 vessels, of 28,137 tons.

3. In Foe-tschoe there entered 62 vessels, with 14,206 tons; cleared 54 vessels, with 8,168 tons.

4. In Ning-po, independent of the Portuguese lorchas, there entered 166 vessels, measuring 12,262 tons; clearances, 141 vessels, of 10,889 tons.

5. In Shanghae there were 136 entrances, of 31,164 tons, and clearances 145, of 30,123 tons.

It would be entirely incorrect if we were to consider this the entire coast trade of China, inasmuch as it is only the British part of it.

How can we explain the high number of 4,013 vessels, measuring 1,247,656 tons, of the external Chinese commerce, unless we take for granted (what the English by no means do) that the treaty of Nankin, in regard to the five ports, is not strictly kept, and that many a vessel goes to Soeatoe, Cum-sin-moon, Tehin-schoe, Taivan, Wen-schoe, and Lockong, without counting the beautiful Pearl River, where English and Portuguese coasters find always well-paying cargoes?

We have included Hong Kong and Macao in our statements, notwithstanding that the one belongs to England and the other Portugal, for both, Hong Kong especially, have become general markets for foreign articles; besides, both serve as natural starting points for the coasting trade—the one for the north, the other for southwest.

It is, therefore, only reasonable to take from the whole commerce, as carried on by the 4,013 vessels, about one-half for the coasting trade, one-fourth for China and Europe, and the other fourth for China and America and Australia.

The long protracted struggle in China between the two dynasties, only tends to increase the commercial influence of foreigners. The state of martial law which reigned in Canton during the last eighteen months, has made Hong Kong the center of the commerce with the coast population of Konang-Tong, Konang-Si, Youn-Nan, and Hou-Nan. The foreign vessels, everywhere present, and affording the Chinese merchant both security and quickness of dispatch, could not but take possession of the whole commerce of the country, and lay the foundations for an immense amount of coasting trade for foreign vessels.

WHEAT TRADE.

The following table shows the imports and exports of wheat into France and England for many years, with the exports from the United States in a corresponding period. The general result is an increasing trade between the United States and Europe in breadstuffs:—

IMPORT AND EXPORT OF WHEAT INTO AND FROM FRANCE AND THE UNITED STATES, AND IMPORT OF WHEAT AND WHEAT FLOUR INTO GREAT BRITAIN.

Years.	Great Britain.		France.		United States.	
	Flour. Cwt.	Wheat. Bush.	Wheat. Bush.	Exports. Wheat. Bush.	Wheat. Bush.	Flour. Bbls.
1841	1,263,126	19,278,032	3,754,982	5,077,233	.....	.....
1842	1,130,754	21,777,440	4,514,543	6,462,949	.....	.....
1843	436,878	7,520,990	9,093,692	3,388,212	311,685	841,474
1844	980,645	8,792,616	5,172,060	5,768,207	558,917	1,436,575
1845	945,864	6,973,680	6,900,238	3,654,585	389,716	1,195,230
1846	3,198,876	11,460,728	16,624,422	3,467,833	1,613,795	2,289,476
1847	6,329,058	21,251,232	28,754,658	4,154,427	4,399,951	4,382,496
1848	1,765,475	20,752,104	3,494,199	3,576,546	2,034,704	2,119,083
1849	3,349,830	32,763,024	1,364,217	5,002,152	1,527,534	2,108,013
1850	3,855,059	30,036,744	2,772,081	6,919,398	608,661	1,385,448
1851	5,314,414	30,496,072	2,003,943	6,327,735	1,026,725	2,202,335
1852	3,889,583	25,551,136	4,126,640	4,014,107	2,694,540	2,799,339
1853	4,646,400	35,595,512	10,103,107	2,101,206	3,890,141	2,920,918
1854	3,646,505	26,448,816	18,972,988	1,053,132	8,036,665	4,022,386
1855	1,904,224	21,342,608	12,165,022	822,256	798,844	1,204,540
1856	3,970,100	32,582,664	28,769,782	572,168	8,154,877	3,510,626
1857	2,178,148	27,503,656	15,865,574	1,344,063	14,570,331	3,712,053

PENNSYLVANIA LUMBER TRADE.

The lumber trade of this region has been very unsuccessful during the past year, in consequence of low prices. The amount of lumber sent to market is much below the average, as the following figures, taken from the books of the collector's office, showing the number of feet for which clearances have already been issued this year at Williamsport and Lock Haven, will demonstrate :—

Amount cleared at Williamsport.....feet	18,935,500
Amount cleared at Lock Haven.....	8,559,000
	<hr/>
	27,534,500
To which add amount shipped by railroad.....	1,900,300
	<hr/>
Making a total of.....	29,434,800

To avoid calamitous results to themselves hereafter, the lumber manufacturers of this region have, with commendable prudence, made arrangements to materially contract their operations the present year. The following reliable figures, giving the amount of stock in the West Branch booms in the years 1856, 1857, and 1858, will show pretty clearly the extent of the contraction :—

Years.	Susquehanna Boom.	Lock Haven Boom.	Loyal Sock Boom.	Total for the year.
1856.....	41,000,000	27,000,000	5,000,000	73,000,000
1857.....	32,000,000	21,000,000	8,000,000	61,000,000
1858.....	27,000,000	9,000,000	.....	36,000,000

The decrease of stock from last year, it will be seen, amounts to twenty-five million feet—or nearly one-half—and something more than half from that of 1856. The shipments during the next year will probably fall considerably below one-half what they were for the last.

OYSTER TRADE.

Mr. Paxton, of Rockbridge, a member of the Virginia House of Delegates, values the Chesapeake oyster trade at twenty millions annually, viz. :—

	No. bushels.	Value.
Virginia cities.....	1,050,000	\$1,050,000
Baltimore.....	3,500,000	3,500,000
Philadelphia.....	2,500,000	2,500,000
New York city.....	6,950,000	6,950,000
Fair Haven.....	2,000,000	2,000,000
	<hr/>	<hr/>
Add for other cities & towns, Providence, Boston, &c.	16,000,000	\$16,000,000
	4,000,000	4,000,000
	<hr/>	<hr/>
Total.....	20,000,000	\$20,000,000

IMPORTS OF TURKEY IN 1857.

From England, cotton goods, hardware, sugar, and coals.....francs.	160,000,000
Germany, woollens, furniture, metals.....	38,000,000
France, clothing, candles, jewelry, furniture, silks, linens.....	30,000,000
Switzerland, cloths, watches, glassware, sugar, nails, weapons..	12,000,000
Holland, sugar, snuff.....	8,000,000
Italy, satin, candles, clothing, white-lead.....	2,000,000

STATE DUES.

The receipts of the Elbe dues in 1857 were \$469,224 gross, and \$410,178 net.

BRITISH COMMERCE.

The annual customs report, just published by the British Commissioners of Customs, contains some interesting and instructive statistics. The following figures represent the real value of the imports and exports during the last four years :—

	Imports.	Exports.	Excess of imports.
1854.....	£252,389,053	£115,821,092	£36,567,961
1855	143,542,850	116,691,300	26,851,550
1856	172,544,154	139,220,353	33,323,801
1857	187,646,336	145,419,872	42,226,463

Allowing a reasonable sum for profits on trade, and remittances on account of foreign loans, etc., the above figures would show that a serious balance still remains against England. The excess of imports for the past year was doubtless due to the rise in the value of the raw material, as well as to the continuous imports of breadstuffs, which could not have been less than £14,000,000. This cause of difficulty is likely to be removed this year.

WOOL—IMPORT, VALUE, AND DUTIES.

The quantities and values imported annually for the last eleven years were as follows :—

	Imports.	Value.	Price.	Duties.
1847.....lbs.	8,460,005	\$556,622	7	\$166,986
1848.....	11,381,429	857,034	7½	257,110
1849.....	17,869,022	1,117,347	6½	335,204
1850.....	18,669,794	1,681,691	9	484,507
1851.....	32,548,495	3,833,157	11½	1,149,947
1852.....	18,341,298	1,930,711	10½	578,213
1853.....	21,595,079	2,669,717	12½	800,915
1854.....	20,200,110	2,822,185	14	846,655
1855.....	18,354,415	2,072,139	11½	621,641
1856.....	14,737,393	1,665,064	12	399,519
1857.....	16,502,060	2,125,744	13	637,723

BANGOR LUMBER MARKET.

Statement of the amount of lumber surveyed from January 1st to June 1st, 1858, compared with the amount surveyed during the corresponding periods of 1856 and 1857 :—

	1856.	1857.	1858.
Green pine.....feet	9,550,801	7,216,212	7,534,530
Dry pine.....	5,473,473	5,385,327	3,794,633
Spruce.....	13,614,672	11,478,519	15,419,407
Hemlock.....	2,666,257	3,044,675	4,375,928
Total.....	31,305,204	27,124,733	31,124,498

EXPORTS FROM MARSEILLES TO NEW YORK.

Years.	Lead, pgs.	Madder, casks.	Olive oil, baskets and cases.	Soap, boxes.	Cream tartar, casks.	Flor sulphur.	Verdi gris.	Almonds, bales.	Walnuts.
1854	50,705	2,353	29,150	28,322	471	502	41	2,181	592
1855	56,283	5,858	42,118	43,448	1,210	193	95	5,299	1,606
1856	46,087	3,527	60,357	37,692	447	...	40	1,046	676
1857	85,092	2,374	37,496	11,655	590	709	47	1,098	305
1858	11,897	494	15,988	19,564	330	300	1	1,400	270

COMMERCIAL REGULATIONS.

BALE ROPE.

TREASURY DEPARTMENT, April 21, 1858.

SIR:—I acknowledge the receipt of your report, under date of the 8th ultimo, on the appeal of Messrs. Newman & Co. from your decision assessing duty at the rate of 19 per cent on an article described as "bale rope," under the classification in schedule D of the tariff of 1857, of "cables and cordage, tarred or untarred;" the importers claiming to enter it at the rate of 15 per cent, under the classification of "manufactures of hemp, not otherwise provided for," in schedule E of the tariff of 1857. It is presumed from the statements before the Department in this case, that the article in question is composed of hemp, loosely manufactured, and of an inferior material, and that it is unfitted for the rigging of vessels, but is used, as its name indicates, for securing bales of merchandise. The only provisions of the tariff which seem applicable to the article in question, are the classification in schedule D of "cables or cordage, tarred or untarred," and that in schedule E of "manufactures of hemp, not otherwise provided for." The term "cordage," as defined by lexicographers, is confined to cords of whatever size used in the rigging of vessels. The term is used in the same sense, it is believed, in commercial and common parlance. The qualification of the expressions "cables and cordage" in schedule D as "tarred or untarred," confirms this view of the scope and meaning of that term. The article in question cannot, therefore, be held as falling within the classification of "cables and cordage, tarred or untarred" in schedule D, but is to be treated as a "manufacture of hemp, not otherwise provided for," in schedule E, and liable to duty at the rate of 15 per cent. Such was the decision of this Department under the tariff of 1846, and the tariff of 1857 makes no change in the classification of the article. I am, very respectfully,

HOWELL COBB, Secretary of the Treasury.

AUGUSTUS SCHELL, Esq., Collector, New York.

JAPAN WAX.

TREASURY DEPARTMENT, April 21, 1858.

SIR:—I acknowledge the receipt of your report, under date of the 9th inst. on the appeal of Messrs. Robinson, Wiggins, and Co. from your assessment of duties on an article imported by them into your port, and invoiced as "Japan wax." It appears that you decided the article in question to be non-enumerated in the tariff of 1857, and because of its similitude in qualities and use to beeswax, specified in schedule E of that tariff, you assessed the rate of duty levied on that article, by force of the 20th section of the tariff act of 1842. The importers contend that, by virtue of the same legal provision, the article in question should be subjected to the duty of 8 per cent, by assimilation in quality and use to the articles embraced in the classification in schedule G, of "tallow, marrow, and all other grease and soap stocks and soap stuffs, not otherwise provided for." The article known as "Japan or Chinese wax" is of vegetable origin, and is shown by chemical analysis to be wanting in one of the distinctive elements of "tallow," (oleine), and is not known commercially under that name, or believed to be generally used, if at all, for any of the purposes specified in the classification in schedule G, to which it is referred by the importers. But such analysis shows that it more nearly resembles "beeswax," and may be used for many of the purposes to which that article is applied. In the opinion of the Department, therefore, it was properly charged by you with the duty of 15 per cent, as unenumerated, and assimilated by force of the 20th section of the act of 1842 in quality and use to "beeswax," specified in schedule E of the tariff of 1857. I am, very respectfully,

HOWELL COBB, Secretary of the Treasury.

A. W. AUSTIN, Esq., Collector, Boston, Mass.

MANUFACTURES OF CORAL.

TREASURY DEPARTMENT, April 23, 1858.

SIR:—The Department has had under consideration the appeal of William Ruhl, Esq., of New York, from the decision of the collector at Boston, assessing duty at the rate of 24 per cent on certain manufactures of coral under the classification in schedule C of the tariff of 1857, of "coral, cut or manufactured," the importer claiming to enter them as "cameos" at a duty of four per cent, under the classification in schedule H of that tariff, of "cameos and mosaics, diamonds, gems, pearls, rubies, and other precious stones, not set." The articles in question are returned by the appraiser as "heads, with more or less ornament, cut from coral, and designed, without doubt, for breastpins." It is not stated that they resemble the "cameo" in any other respect than that the figures are carved in relief. The "cameo" is manufactured of a material composed of various colored layers, and so carved in relief as to exhibit different colors in the several parts or elevations of the work. The "cameo," generally known as such in commerce and the arts, is manufactured either of stone or shell, but always exhibiting those characteristics of relief and colors. The coral ornaments in question cannot be regarded as the articles recognized under the designation of "cameos" in the language of commerce or the arts. Nor are they embraced within the classification of "cameos and mosaics, imitations thereof, not set," in schedule G of the tariff of 1857, having no other characteristics of the "cameo" except the carving in relief; and the articles designated "imitations of cameos," as known in the trade, are believed to be usually formed of porcelain or some other plastic material, by moulding or pressure. But if the articles in question could properly be regarded in some sense as "cameos" or "imitations of cameos" in popular parlance, there is, nevertheless, special provision made for them, if manufactured of coral, under the classification in schedule C of the tariff of 1857, of "coral, cut or manufactured." This provision is broad and unqualified, and embraces the articles in question, being of "coral, cut or manufactured," by whatever name they may be designated, or for whatever use they may be intended. The decision of the collector, assessing duty on the articles in question at the rate of 24 per cent, as "coral, cut or manufactured," under schedule C of the tariff of 1857, is hereby affirmed. I am, very respectfully,

HOWELL COBB, Secretary of the Treasury.

A. W. AUSTIN, Esq., Collector, Boston, Mass.

 LINEN AND COTTON.

TREASURY DEPARTMENT, April 24, 1858.

SIR:—I acknowledge the receipt of your report in regard to the letter of Messrs. Spaulding, Vail, and Fuller, which purports to be an appeal from your decision as to the rate of duty assessed on certain fabrics composed of linen and cotton, upon which, as they allege, you exacted a duty of 24 per cent. The rate of duty to be assessed on articles composed of linen and cotton was determined by the Department in its decisions, under date of the 6th and 12th of October last, on the appeal of Messrs. Paton & Co. and Messrs. Butt, Black, & Guild, from your decision in their respective cases, and the principles established in those decisions dispose of the case now submitted to the Department by the appellants. For the reasons therein stated at large, the fabrics composed of linen and cotton are subject, under the operation of the provisions of the 20th section of the tariff act of 1842, to the duty at the rate of 19 per cent, imposed on "manufactures composed wholly of cotton, not otherwise provided for" in schedule D of the tariff of 1857. The appellants suggest that the 20th section of the tariff act of 1842, which, among other things, imposes on all unenumerated articles manufactured of two or more materials "the highest rates at which any of its component materials may be chargeable," is no longer in force under the tariff of 1857, inasmuch as it conflicts, in their opinion, with the 1st section of that act, which provides that all articles not enumerated in any of its several schedules shall pay a duty of 15 per cent. It must be borne in mind, however, that the tariff act of 1842, in which this provision is found, prescribes also the

rate of duty to be assessed on the articles unenumerated in that act. The tariff acts of 1846 and 1857 prescribe the rate at which duties shall be assessed on articles not enumerated in the several schedules of these acts. The 20th section of the act of 1842 is not more inconsistent with these provisions in the acts of 1846 and 1857 than with a similar one in the law in which it was originally enacted, and the Department is not aware that its legal force and applicability to imports under that act were ever called in question. Under the tariff of 1846, the 20th section of the act of 1842 was always regarded as in force, and there is no provision in the tariff of 1857 which expressly repeals it, or with which it is inconsistent. If it was rightfully regarded as unrepealed, either expressly or by implication, by the tariff law of 1846, it must be held to be still in force under the tariff of 1857, for the provisions of the two acts, so far as they affect the question, are substantially the same. To the appellants' suggestion, therefore, that the courts would probably decide the 20th section of the tariff act of 1842 as no longer in force, in view of the provisions of the 1st section of the tariff act of 1857, which imposes a duty of 15 per cent on all articles not enumerated in that tariff, I have merely to observe that the Supreme Court of the United States has decided that the 20th section of the tariff act of 1842 was not repealed, either expressly or by implication, by the tariff act of 1846, as will be seen by reference to the case of John Stuart and others against Hugh Maxwell, reported in the 16th volume of Howard. If not repealed by the act of 1846, it cannot, of course, be held to be repealed by a similar provision in the act of 1857. It so happens, too, that, in that case, as in the present, the collector assessed the duty imposed on "manufactures wholly of cotton, not otherwise provided for," in schedule D, on fabrics composed of cotton and linen, by applying the provision of the 20th section of the tariff act of 1842. I am, very respectfully,

HOWELL COBB, Secretary of the Treasury.

AUGUSTUS SCHELL, Esq., Collector, New York.

LAVA GAS BURNERS.

TREASURY DEPARTMENT, JUNE 15, 1853.

SIR:—Your report on the appeal of William W. Warren, Esq., from your decision subjecting to duty at the rate of 24 per cent, under schedule C of the tariff of 1857, an article imported by him in the steamer "Canada" from Liverpool, and described in the entry as "lava gas burners," and the statement filed by the importers, have been carefully considered. The import in question, it is understood, is not composed of "lava," as might be inferred from its designation in the entry, but of clay or earthy matter found only in certain localities in Bavaria, and is fitted by a chemical process for the purposes indicated by its name. Being composed of earthy or mineral substances, it cannot, as claimed by the appellant, be held to be unenumerated in the tariff, but is clearly embraced in the classification in schedule C, of "earthen, China and stone ware, and all other wares composed of earthy or mineral substances, not otherwise provided for," to which it was referred by the collector, whose decision is hereby affirmed. I am, very respectfully,

HOWELL COBB, Secretary of the Treasury.

A. W. AUSTIN, Esq., Collector, &c., Boston, Mass.

JUTE CARPETING.

TREASURY DEPARTMENT, JUNE 16, 1853.

SIR:—This Department has had under consideration an appeal of Messrs. Wild & Julian from your decision subjecting to duty of 24 per cent, under schedule C of the tariff of 1857, an article described by them as "hemp or jute carpeting," which they claim to enter at a duty of 15 per cent, either as embraced in the classification of "manufactures of hemp not otherwise provided for" in schedule E, or as unenumerated in any schedule of the tariff. Schedule D of the tariff of 1857 provides for "jute, sisal grass, and other vegetable substances unmanufactured, not otherwise provided for," and for "matting, China and

other floor matting, and mats made of flags, jute, or grass." These are the only provisions in the tariff for "jute" by name, manufactured or unmanufactured. The article in question is not, in point of fact, "matting or mat," nor known in the trade under that denomination, and is not, therefore, embraced in schedule D of the tariff of 1857 under that classification. If the fabric in question is composed wholly of "jute," it must be held to be an unenumerated article, and, as such, liable to duty of 15 per cent under the provisions of the 1st section of the tariff act of 1857, there being, in the opinion of the Department, no classification in any schedule of the tariff with which it could be assimilated, under the 20th section of the act of 1842, that would impose upon it any other rate of duty. If, however, as it is intimated, the article in question is composed of jute and cotton, it will be classified under the 20th section of the act of 1842, which provides that, "on all articles manufactured from two or more materials, the duty should be assessed at the highest rates at which any of its component parts may be chargeable." This would take it (cotton being the material paying the highest rate of duty) into the classification of "manufactures composed wholly of cotton, not otherwise provided for," in schedule D of the tariff of 1857, subject to the duty of 19 per cent. The decision of the collector is therefore overruled. I am, very respectfully,

HOWELL COBB, Secretary of the Treasury.

AUGUSTUS SCHELL, Esq., Collector, &c., New York.

CAST-STEEL IN COILS.

TREASURY DEPARTMENT, June 19, 1858.

SIR:—I acknowledge receipt of your report, under date of 17th ultimo, on the appeal of Messrs. Naylor & Co. from your decision assessing duties on an importation of "cast-steel in coils," per Kangaroo, from Liverpool. The article in question, it appears, is described in the entry as "cast-steel in bars," and the importers claim admission at a duty of 12 per cent under the classification in schedule F of the tariff of 1857, of "steel in bars, cast, shear, or German," alleging that it is manufactured in the same manner as cast-steel in bars, and is coiled instead of being extended merely for the convenience of transportation. Being of the opinion that cast-steel must be imported "in bars" in order to entitle it to entry under the above cited classification in schedule F, and the article in this case not being in that form, but in "coils," you assessed a duty of 15 per cent under the classification in schedule E, of "steel not otherwise provided for." It is understood that the article in question is reduced from the ordinary steel in bars into the form and size fitted for being drawn into wire, and perhaps for other special purposes; but if, as alleged, it is manufactured by a similar process as cast-steel "in bars," and is applicable to the same general purposes, yet the form in which it is imported is not that which the law has made a prerequisite to entry at a duty of 12 per cent in the classification in schedule F of "steel in bars, cast, shear, or German." Your decision, assessing duty at 15 per cent under the classification in schedule E of "steel not otherwise provided for," is affirmed. I am, very respectfully,

HOWELL COBB, Secretary of the Treasury.

AUGUSTUS SCHELL, Esq., Collector, New York.

PREPARED OPIUM FOR SMOKING.

A question as to the classification of a preparation of opium, imported from China into San Francisco, having been presented by the collector at that port, it is decided by the Department that the article in question not being employed as a medicine, nor in the composition of medicinal preparations, nor recognized in any of the standard pharmacopœias or dispensaries referred to in the act of 1848, prohibiting the importation of spurious or adulterated drugs and medicines, but used exclusively for smoking by the Chinese population of California, cannot be considered as a drug or medicine within the meaning of that act, but must be regarded as an ordinary article of commerce, unenumerated in the tariff of 1857, and liable, as such, to duty at the rate of 15 per cent under the 1st section of that act.

FABRICS OF COTTON—COTTON VELVETS.

Question—the rate of duty to be assessed on an importation of cotton velvets ; and also, an appeal from the same collector as to the rate of duty chargeable on the same description of merchandise imported by Mr. George D. Parrish. The article in these cases is a fabric composed entirely of cotton, dyed, and known as “cotton velvet” in the trade, and described in schedule E of the tariff of 1846, as “velvet in the piece, composed wholly of cotton,” and subject to duty, under that act, at the rate of 15 per cent. The collector assessed upon the fabric in question a duty of 24 per cent, it being, in his opinion, placed in schedule C, and made subject to that duty by force of the 2d section of the tariff act of the 3d of March, 1857, which transfers to that schedule “all manufactures composed wholly of cotton, which are bleached, printed, painted, or dyed.” It is true, as alleged by the appellants, that “velvet in the piece, composed wholly of cotton,” was provided for in schedule E, in the tariff of 1846 ; that the tariff of 1857 has reduced the rate of duty on articles embraced in that schedule to 15 per cent, and that the fabric in question is “velvet in the piece.” Whether it still remains in that schedule is the question of issue between the importers and the collector. The 1st section of the act of 3d March, 1857, reduces the duties upon the articles enumerated in the several schedules in the tariff of 1846, with certain “exceptions ;” and the first of these exceptions is contained in the 2d section of that act, which provides that “all manufactures composed wholly of cotton, which are bleached, printed, painted, or dyed,” shall be transferred to schedule C. The language of this provision is very comprehensive and unambiguous. There is no reservation or limitation imposed in the law itself, and the Department can impose none. In view of the positive direction of the statute, the only points to be determined in the cases under consideration are, is the fabric in question a “manufacture composed wholly of cotton?” and is it “bleached, printed, painted, or dyed?” It being a manufacture wholly of cotton, and dyed, it must be held to be transferred, by the 2d section of the act of 1857, to schedule C, and subject to duty at the rate of 24 per cent. The decision of the collector is affirmed.

FABRICS OF COTTON—COTTON HOSIERY.

Question—the rate of duty to be assessed on bleached and colored cotton hosiery. The articles in question are composed wholly of cotton, and bleached or dyed. The collector assessed upon them a duty of 24 per cent, as embraced within the designation of “all manufactures composed wholly of cotton, which are bleached, printed, painted, or dyed,” as transferred, by force of the 2d section of the tariff act of 3d March, 1857, to schedule C. It is contended by the appellants that manufactured articles of this description have not been removed by the act of 1857 from schedule E, in which they were placed in the tariff of 1846, under the classification of “caps, gloves, leggings, mits, socks, stockings, wove shirts, and drawers, made on frames, composed wholly of cotton, worn by men, women, and children,” and that they become liable, under the reduction of duties by that act, to duty at the rate of 15 per cent. The articles in question, under the tariff act of 1846, fell within that classification in schedule E, of the tariff of 1846, and they still remain in that schedule, subject to the reduced rate of duty of 15 per cent, unless they have been transferred to some other schedule by the tariff act of 3d March, 1857. The 2d section of that act provides, “that all manufactures composed wholly of cotton, which are bleached, printed, painted, or dyed, shall be transferred to schedule C.” The Department can give no other construction to the very comprehensive language of this provision than as intended to transfer the articles above enumerated, and known as hosiery manufactured wholly of cotton, and “bleached, printed, painted, or dyed,” to schedule C, subject to duty at the rate of 24 per cent, leaving in schedule E, dutiable at the rate of 15 per cent, articles of hosiery, if any, composed wholly of cotton, upon which none of those processes have been performed. The decision of the collector is affirmed.

FABRICS OF WOOL—GENTIONELLA BLANKETS.

Question—the rate of duties to be assessed upon an importation of certain fabrics invoiced and entered as “gentionella blankets.” The collector not regarding the fabrics in question as “blankets,” within the meaning of that term as used in commerce at the date of the passage of the tariff act of 1846, assessed duty upon them at the rate of 24 per cent, under the classification in schedule C in the tariff of 1857, of “manufactures of wool not otherwise provided for.” The importers claim to enter them as “blankets,” at a duty of 15 per cent, under the classification in schedule E of the tariff of 1857, of “blankets of all kinds.” The views of this Department on the general subject of “blankets,” will be found in the “General Regulations,” issued on the 1st of February last, on pages 555 and 556. Those regulations are still in force, and will govern collectors in deciding to what class of articles the term “blankets” should be applied. The fabrics in question, not having the texture of blankets, being closely woven, sheared and pressed, and partaking of the character of petersham or pilot cloth, and not appearing to have been known in commerce as a blanket prior to the passage of the tariff act of 1846, but used almost exclusively for coating and wrappers, cannot be considered “blankets,” within the meaning of the law, and were properly charged by the collector with duty at the rate of 24 per cent, as “manufactures of wool not otherwise provided for,” in schedule C of the tariff of 1857. The decision of the collector in this case is affirmed.

FABRICS OF FLAX—FANCY PACK-THREAD OR TWINE.

Question—the rate of duty on an article claimed to be entitled to entry as “linen thread,” under the classification in schedule E of the tariff of 1857, of “manufactures of flax, not otherwise provided for,” and subjected to duty at the rate of 15 per cent, duty having been assessed by you on the article in question as a “twine,” at the rate of 24 per cent, under the classification in schedule C in the tariff of 1857, of “twines and pack-thread, of whatever material composed.” The article proves on examination to be a blue and white or fancy “twine or pack-thread,” in common use in the shops for tying up packages, and imported mainly, if not exclusively, for that purpose. The article was rightfully charged with a duty of 24 per cent, under schedule C, as a “twine or pack-thread,” and your decision is affirmed.

ADDITIONAL REGULATIONS.

As some additional safeguard is believed to be required to prevent substitution of fabricated for genuine papers in cases where invoices are verified at one port to be used at another port by the agent of the importer, the following regulation on the subject is promulgated for the information and government of officers of the customs and other persons interested:—

All invoices presented for verification where such invoices are to be used at other ports or to be entered by agents, must be permanently attached to the oath and authentication, and be stamped or marked with the name of the port where verified, the date of verification, and be signed by the officer receiving the same. Each invoice (where several are presented for verification) must be stamped or marked, and an oath attached to each invoice. No invoice deficient in these proofs of genuineness will be admitted to entry, except such as are verified by the oath of the owner or owners at places where there is no collector of the customs, the oath being taken before a public officer duly authorized to administer oaths.

FLOUR MANUFACTURED OF AMERICAN WHEAT IMPORTED FROM CANADA.

Flour manufactured in the British North American Provinces out of wheat, the product of the United States, cannot be imported into the United States free of duty, not being imported in the same condition as when exported. Neither can such flour be imported into the United States free of duty under the reciprocity treaty, as it is not an article of the “growth or produce” of said provinces, being manufactured of wheat, the produce of the United States.

CHANGE IN THE HAMBURG POUND.

CONSULATE OF HAMBURG, NEW YORK, 15th July, 1858.

SIR :—I am authorized officially to bring to the knowledge of the commercial community of this consular district, that the former commercial pound of Hamburg was put out of use on the 1st of January last, and that in its stead the metrical or the German Customs weight, which is 3.1759 heavier, and equal to a half kilogramme, has been adopted. Accordingly, all quotations of prices given in the "*Hamburger Allgemeinen Preis Courant*" have since that date already been calculated for the metrical weight. By bringing this fact to the notice of your readers, you will oblige your obedient servant,

FERDINAND KARCK, Consul.

NAUTICAL INTELLIGENCE.

LIGHTS IN THE DARDANELLES—MEDITERRANEAN.

Official information has been received at this office, that the Turkish government has given notice, that the following lights have been established in the Dardanelles :—

FIXED GREEN LIGHTS AT KILID BAHR.—Two harbor lights at the fort of Namazieh, on the point close to the southward of Kilid Bahr, or the Inner Castle of Europe, in the narrows of the Dardanelles. The lights are fixed green lights, placed vertically at the respective heights of 36 feet and 20 feet above the sea, and should be visible in clear weather from a distance of four miles.

FIXED RED LIGHTS AT CHANAK KALEH SI.—Two harbor lights on the low battery of Chanak Kaleh-si or the Inner Castle of Asia, on the western side of the town of Chanak or Dardanelles. These are fixed red lights, vertical, the higher at an elevation of 66 feet and the lower 46 feet above the sea, and visible at a distance of 4 miles in clear weather.

FIXED LIGHT WITH FLASHES AT POINT NAGARA.—A light on the tower of Nagara Kaleh-si, or castle, on the point of the same name, on the Asiatic shore of the strait, and 3 miles to the northward of Chanak. The light is a fixed red light, varied by flashes, preceded and followed by short eclipses, placed at an elevation of 39 feet above the sea, and should be visible in clear weather at the distance of 10 miles; but the eclipses do not become total within a distance of 5 miles.

FIXED GREEN LIGHTS AT BOVALI KALEH-SI.—Two harbor lights at fort of Bovali, near the water's edge, on the European shore of the strait, N. N. W. $\frac{2}{3}$ W. $1\frac{1}{4}$ mile from Nagara Kaleh-si. These lights are fixed green lights, vertical, placed respectively at an elevation of 46 feet and 26 feet above the sea, and they should be seen in clear weather from a distance of 4 miles.

FIXED GREEN LIGHTS AT GALATA.—Two harbor lights at a point near the mouth of a stream, $1\frac{1}{4}$ mile to the southeast of the village of Galata, on the European shore. They are fixed green lights, exhibited vertically at the respective heights of 62 feet and 42 feet above the sea, and visible 4 miles distant in clear weather. The bank fronting the above mentioned stream has been found to extend 2 cables' length farther out than hitherto indicated by the charts, or one-third of a mile off the shore.

FIXED RED LIGHTS AT POINT CHARDAKH.—Two harbor lights, on the low sandy point of Chardakh or Khardi, N. N. E., $2\frac{3}{8}$ miles from the town of Lamp-saki, on the Asiatic coast. The lights are fixed red, and placed vertically, the higher 59 feet and the lower 39 feet above the sea, and they should be visible in clear weather at a distance of 4 miles. All bearings magnetic—variation 8° W. in 1858. By order of the Lighthouse Board,

THORNTON A. JENKINS, Secretary.

TREASURY DEPARTMENT, Office Lighthouse Board, May 22, 1858.

LIGHTS ON THE NORTHWEST COAST OF SCOTLAND.

FIXED RED LIGHT AT RU USHENISH, SOUTH UIST.—Ru Ushenish light-tower stands on the easternmost headland on the east side of the Island of South Uist, in the Hebrides, and would exhibit a dioptric or refracting *fixed red* light of the first order, at an elevation of 176 feet above high water, which should be visible from the deck of a vessel in clear weather at a distance of 18 miles. The tower is 39 feet high from the base to the top of the lantern, and colored white.

FLASHING LIGHT AT SOUTH RONA.—South Rona lighthouse is a tower of masonry, 41½ feet high, and painted white, erected on a peak at northeast point of the Island of South Rona, between the west coast of Ross-shire and the Isle of Skye. The light is a catadioptric or reflecting holopotal *white* light of the second order, emitting a *flash* every 12 seconds, at an elevation of 222 feet above high water, and which may be seen in clear weather at a distance of about 20 miles.

FIXED LIGHT AT KYLE AKIN, LOCH ALSH.—A lighthouse has been erected on a point of rock covered at high water spring tides, projecting from the western extremity of Gillean Island or Eilean Dool, at the western entrance of the narrows leading to Loch Alsh. The light is an azimuthal condensing *fixed* light, appearing *white* in the fairway of the inner sound or Sound of Applecross to the southward as far as Paba Island, and also in the fairway of Loch Alsh. Paba Island to the southward, and eastward along the shore of Skye to the south of the fairway of Loch Alsh, and to the northeastward of the fairway of the inner sound, it appears as a *red* light. To the northward of the fairway of Loch Alsh the light is not to be seen. The light is at an elevation of 53 feet above high water, and visible in clear weather 10 miles distant. The light-tower stands at about 53 yards seaward of high water mark, spring tides, and is connected with Gillean Island by a bridge of five spans. It is built of masonry, 69½ feet in height, and colored white. By order of the Lighthouse Board.

THORNTON A. JENKINS, Secretary.

LIGHTS ON THE NORTH AND WEST COASTS OF SCOTLAND.

BEACON ON STROMA SKERRIES, PENTLAND FIRTH.—A beacon has recently been erected on the southwest extremity of the Skerries of Stroma, which extends from the southeastern side of Mallit Head on the Island of Stroma, in the Pentland Firth, and are covered by the sea at high water. The beacon consists of an open frame work of iron, surmounted by a cylindrical cage; in all 40 feet above high water, and painted red.

BEACON ON BO CAOLAS, LOCH INVER.—A beacon has been erected on Bo Caolas, a rock which is covered at high water, and lies at the entrance to Loch Inver, on the west coast of Sutherlandshire. The beacon is composed of cast iron pillars, surmounted by a cylindrical cage; it is elevated about 30 feet above high water, and painted red.

BEACON ON SCREEN ROCKS, WHITHORN.—A beacon has also been placed on the Screen Rocks, at the entrance to the port of Whithorn, on the southeastern coast of Wigtonshire. This beacon is of iron, with a barrel top, and painted red. By order of the Lighthouse Board,

THORNTON A. JENKINS, Secretary.

LIGHT AT ISLE ORNSAY, SLEAT SOUND—SCOTLAND, NORTHWEST COAST.

Ornsay light-tower stands on a low point at the southeastern extremity of the Island of Ornsay, in Sleat Sound, or Sound of Skye, and from it would be exhibited an azimuthal condensing light, white, fixed, 58 feet above the sea at high water, and visible in clear weather at a distance of 12 miles. The tower is of masonry, 63 feet in height, and colored white.

FIXED LIGHT IN THE SOUND OF MULL.—A lighthouse has been erected on a small rock at Ru na Gall, on the south shore of the Sound of Mull, Argyllshire, and about a mile to the northward of Tobermory. The light is an azimuthal condensing fixed light, appearing red to the northward out to sea, green towards

the New Rocks, Red Rocks, and Stirk Rocks, and white to the southward in the Sound of Mull. It is at an elevation of about 55 feet above high water, and should be seen from the deck of a small vessel in clear weather at a distance of about 12 miles. The light-tower is 63 feet high, built of masonry, and painted white. It stands at about 50 yards seaward of high water mark, and is connected with the shore by a bridge of two spans. By order of the Lighthouse Board,

THORNTON A. JENKINS, Secretary.

LIGHT ON MUCKLE FLUGGA—SHETLAND ISLES, NORTH UNST.

On the 1st day of January, 1858, a permanent light was established in the light-tower erected on the holm or islet called Muckle Flugga, at the north end of the Island of Unst, forming the northwestern extremity of the Shetland Isles. The light is a fixed white light, placed at an elevation of about 230 feet above the mean level of the sea, and should be visible from the deck of a ship, in ordinary weather, at a distance of 21 miles all round the horizon, excepting for an arc of 31 degrees between S. S. E. $\frac{1}{4}$ E. and S. E. by E. $\frac{1}{4}$ E., within which arc the light will be red. Southeastward of the Scaw the red light will be masked by the high land of Unst. The illuminating apparatus is dioptric, or by a lens of the first order. The light-tower is of masonry, 64 feet in height, and painted white. It stands in latitude 60° 51' N., longitude 0° 53' W. of Greenwich nearly. Vessels in rounding the Scaw of Unst should avoid seeing the red light, by keeping the white light in sight. Mariners are reminded that the small rock called the Out Stack, which is the most northern rock of the Shetland Isles, bears from the lighthouse about E. by N. $\frac{1}{4}$ N., and is distant about half a nautical mile. Bearings magnetics—variation 25° west in 1857. By order of the Lighthouse Board,

THORNTON A. JENKINS, Secretary.

ALTERATION IN COLOR OF BUOYS—SCOTLAND, EAST COAST.

Arrangements have been made by which vessels entering a harbor should keep red buoys on the starboard hand, and black buoys on the port hand, while chequered buoys indicate center patches. The following changes have been made in the color of the undermentioned buoys:—

DORNOCH FIRTH.—Tain bar inner buoy, north side, from black to red; Tain bar inner buoy, south side, from red to black.

CROMARTY FIRTH.—Nigg sand buoys, from black to red; Newhall buoy, from red to black.

MORAY FIRTH.—Whiten Ness sandhead buoy, from red to black.

INVERNESS FIRTH.—Craig Mee buoy, from red to black; Skate Bank buoy, from black to red; Munloch buoy, from black to chequered red and white; Petty Bank buoy, from red to black; Middle Bank buoy, from black to red; Meikle Mee buoy, from black to red. By order of the Lighthouse Board,

THORNTON A. JENKINS, Secretary.

NEWLY INVENTED LIFE-BUOY.

A London paper gives the following account of an experiment in the river Seine, which seems to indicate the discovery of an improved life-preserver, in cases of shipwreck:—

Some experiments with a new life-belt, to be used in cases of shipwreck or similar disaster, have been made opposite the Quai d'Orsay, Paris. The apparatus consists of a small waist-belt stuffed with cotton which has undergone a special preparation. It was first tried by a man who jumped into the water near the Pont Royal, and floated down the stream very quietly as far as the Pont de la Concorde. The author of the invention then put on the belt and went into the river, and proceeded for some distance, having two men hanging to

his shoulders. After these two experiments, which were perfectly successful, had terminated, the next point to be ascertained was whether the belt would retain its useful properties if torn. In order to test this, the belt was cut in several places with a knife, and the cotton thus exposed to the action of the water. In this state it was put on by a man, who proceeded down the stream with perfect safety, thus showing the superiority of this invention over the air-belts, which are frequently rendered useless by an accident, and become rather an embarrassment than a means of safety to those who use them.

MARINE LOSSES FOR SIX MONTHS.

The marine losses for the month of June show an aggregate of twenty-two vessels, of which five were ships, one a bark, five were brigs, ten were schooners, and one a steamship. The total value of property lost was eight hundred and fourteen thousand four hundred and one dollars. As compared with the month of June, 1857, the above shows a decrease in the value of property lost of five thousand and ninety-nine dollars.

The vessels reported in this list are chiefly American, although some foreign are included—when bound to or from any United States port, or known to be insured in this country:—

	Vessels.	Value.
Total losses for January.....	15	\$443,500
“ for February.....	33	1,182,300
“ for March.....	33	813,500
“ for April (corrected).....	33	951,040
“ for May.....	33	714,000
“ for June.....	22	814,401
Total for six months.....	169	\$4,818,741
Same period in 1857.....	368	10,232,600

GENERAL DESCRIPTION OF THE GULF STREAM.

The *Edinburgh Review* furnishes a graphic and comprehensive description of the mighty “river of the ocean”—the Gulf Stream:—

The general description of the Gulf Stream, apart from any present question as to its sources, is that of a vast and rapid ocean current, issuing from the basin of the Mexican Gulf and Caribbean Sea, doubling the Southern Cape of Florida, pressing forward to the northeast, in a line almost parallel to the American coast; touching on the southern borders of the Grand Banks of Newfoundland, and at some seasons partially passing over them; thence, with increasing width and diffusion, traversing the whole breadth of the Atlantic, with a central direction towards the British Isles; and finally losing itself, by still wider diffusion, in the Bay of Biscay on our own shores, and upon the long line of the Norwegian coast. Its identity in physical characters is preserved throughout the many thousand miles of its continuous flow—the only change undergone is that of degree. As its waters gradually commingle with those of the surrounding sea, their deep blue tint declines, their high temperature diminishes, the speed with which they press forward abates. But taking the stream in its total course, it well warrants the vivid description of our author, and the name he bestows upon it, of “a river in the ocean.” This epithet is, in truth, singularly appropriate to this vast current, so constant and continuous in its course, and so strangely detached from the great mass of ocean waters, which, while seemingly cleft asunder to give path to its first impulse, are yet ever pressing upon it, gradually impairing its force, and destroying its individuality.

The maximum of velocity, where the stream quits the narrow channel of Bemini, which compresses its egress from the gulf, is about four miles an hour; off Cape Hatteras, in North Carolina, where it has gained a breadth of seventy-five

miles, the velocity is reduced to three miles. On the parallel of the Newfoundland Banks, it is further reduced to one-and-a-half miles an hour, and this gradual abatement of force is continued across the Atlantic. The temperature of the current undergoes a similar change. The highest observed is about 85° Fah. Between Cape Hatteras and Newfoundland, though lessened in amount, the warmth of the stream in winter is still twenty-five or thirty degrees above that of the ocean through which it flows. Nor is this heat wholly lost when it reaches and is spread over the coasts of Northern Europe. The waters thus constantly flowing to us from the tropical regions, bring warmth, as well as abundant moisture, to our islands; and Ireland especially, upon which they more directly infringe, doubtless derives much of its peculiarity of climate, its moisture, its verdure, and abundant vegetation, from this source. But the influence of the Gulf Stream does not stop even here. The climate it may be said to convey is diffused over the whole Norwegian coast, the aspects and produce of which singularly contrasts with those of the corresponding latitudes in North America, Greenland, and Siberia. Other causes, doubtless, contribute to this effect, but none, we apprehend, so largely or unceasingly.

JOURNAL OF INSURANCE.

IOWA INSURANCE LAW.

AN ACT TO AMEND AN ACT ENTITLED "AN ACT IN RELATION TO INSURANCE COMPANIES," APPROVED JANUARY 28, 1857; PASSED FEBRUARY 9, 1858.

SECTION 1. Be it enacted by the General Assembly of the State of Iowa, if any insurance company, association, firm, or individual, or their agent or agents, having filed its or their statements and evidences of investments as required by the act to which this is amendatory, and conformed to the requirements of that act, shall have on deposit in any other State or territory, or elsewhere than in this State, any portion of its capital or earnings as a guaranty fund for the exclusive benefit or security of persons insured in such State, territory, or other place, it shall be the duty of the Auditor of State to withhold from such body or individual, so alienating any such portion of their capital and resources, the certificate and authority in said acts provided for, until such body or individual shall file with the Auditor of State a statement, duly verified by the oath or affirmation of the president or secretary of such incorporated company, or member of such incorporated company, association, partnership, or firm, or by such individual, showing the amount of premium received in this State by such company during the year ending on the first of January next preceding the filing of said statement, and shall deposit in this State, in such manner as the Auditor of State shall direct, five per cent of the amount so received in money or solvent State or United States stocks, of at least par value, or mortgages on real estate, situated in this State, of at least double the value for which the same is mortgaged—which statements and deposits shall be so made, from year to year, at the time of each renewal or original grant of authority by said Auditor, until the sum of forty thousand dollars is deposited as aforesaid; which said sum, and every yearly part thereof deposited as aforesaid, shall be held under the control of such Auditor of State, as a guaranty fund for the benefit of such persons as may be in any manner insured in their property by such company within this State, and the same, or any part of the sum so deposited, shall not be drawn out by the depositors until all claims for losses or premiums, or risks unexpired, shall be fully paid and discharged, or until all deposits made in other States, territories, and other places not within this State, shall be withdrawn. And in case of the insolvency of any such company, the sums so deposited as aforesaid shall be applied by the Auditor of State, *pro tanto*, toward the payment of all claims against such body or individual, filed in his office duly liquidated and authenticated, and to losses and premiums on risks unpaid or policies issued within six months after

such insolvency may occur. Any such body or individual shall be deemed insolvent upon failure to pay any undisputed loss insured against, within this State, for the space of ninety days after final judgment for the amount of any loss so insured against. When no appeal shall have been taken from such judgment by either party, or other proceedings begun to vacate, modify, reverse, or review such judgment, or to arrest the same, or to obtain a new trial, such body or individual shall be entitled to receive the interests or dividends on such stocks so deposited from time to time as the same may become due.

This section shall not apply to any of the aforesaid bodies or individuals who have made no such deposit as in this section mentioned, elsewhere than in this State.

SEC. 2. Mutual insurance companies incorporated by any other State than the State of Iowa, upon filing in the office of the Auditor the act of incorporation of said company, together with a written instrument under seal of said company, signed by the president and secretary of said company under oath, certifying that said company is possessed of a capital of at least one hundred thousand dollars, secured by lien on real estate, worth at cash valuation at least five times the amount of said capital, and not encumbered to more than one-half of said cash valuation, shall be entitled to a certificate from said Auditor, with authority to transact business of insurance in this State, and said company shall be exempt from the provisions of an act to which this is amendatory, with the exception of the publication of statement and certificate of the Auditor.

SEC. 3. It shall be the duty of the agent or agents in either of the foregoing sections mentioned, before taking any risks or transacting any business of insurance in this State, to file in the office of the Clerk of the District Court of the county of which he or they may desire to establish an agency for any such company, a copy of the statement required to be filed with the Auditor of State as aforesaid, together with a certificate of said Auditor, which shall be carefully preserved for public inspection by said clerk, and said statement and certificate shall be published one week in three daily, and three weeks in five weekly, newspapers of general circulation in the State of Iowa.

SEC. 4. Section seven of the act to which this is amendatory, and all other acts that conflict with the provisions of this act, are hereby repealed.

SEC. 5. This act to take effect and be in force from and after its publication in the *Iowa Weekly Citizen* and *Iowa State Journal*, without expense to the State.

STEPHEN B. SHELEDY, Speaker of the House of Representatives.
ORAN FAYVILLE, President of the Senate.

Approved February 9th, 1858.

RALPH P. LOWE.

OFFICE OF THE SECRETARY OF STATE, DES MOINES, February 9th, 1858.

I hereby certify that the foregoing is a true copy from the original roll on file in my office.

ELIJAH SELLS, Secretary of State.

FIRES IN THE CITY OF BROOKLYN FOR SIX MONTHS.

The whole number of fires and alarms during the past six months was 99, of which 16 was in November, 23 in December, 12 in January, 19 in February, 15 in March, 14 in April.

The amount of loss and insurance, as near as could be ascertained, is as follows:—

	Loss.	Insurance.
November.....	\$3,907	\$8,050
December.....	27,880	60,100
January.....	29,325	30,800
February.....	20,220	32,050
March.....	22,720	29,900
April.....	21,470	39,000
Total.....	\$135,522	\$189,900

MARINE INSURANCE.

Nearly all of the great marine insurance companies together, representing a heavy amount of capital, have made their annual statement of operations, according to legal requirement, and are almost uniformly shown to be in a sound and prosperous condition. Nearly all have declared handsome dividends, and have on hand a large available surplus. Compared with the previous year, which was replete with disasters, the year just expired has been exceedingly favorable. The following shows some of the principal items in the transactions of last year in marine risks :—

	Premiums earned.	Losses paid.	Total assets.	Unearned premiums brought forward.
Atlantic	\$3,682,583	\$2,616,984	\$4,071,305	\$1,178,160
Great Western.....	2,451,451	1,337,089	2,276,828	320,151
Sun.....	1,383,070	1,007,345	1,730,794	314,850
Mercantile.....	769,480	365,955	931,151	244,454
Pacific.....	730,841	457,180	670,442	97,244
Union.....	587,079	336,318	1,271,836	286,830
Ocean	137,843	129,349	636,617	55,980
	<u>\$9,742,347</u>	<u>\$6,250,220</u>	<u>\$11,488,937</u>	<u>\$2,497,678</u>

This statement is exclusive of fire insurance, in which some of these companies are more or less engaged. Reports have not as yet been received from the Orient, Commercial, and New York Companies.

RATES FOR CANAL AND RIVER INSURANCE IN THE STATE OF NEW YORK.

From Buffalo to New York, on all kinds of property.....	per cent.	
“ Albany.....		
“ Syracuse and intermediate places below Rochester.....		
“ Rochester and below Lockport.....		
“ Lockport and intermediate places.....		
From Rochester, Syracuse, and intermediate places to New York.....		
“ all places east of Syracuse to New York.....		
From Oswego to New York.....		
“ Albany.....		
“ Rome, Utica, and intermediate places.....		
“ Syracuse.....		
From New York to Danville, & oth. plac's on collateral canal, exc'pt Oswego canal		
From Buffalo to places on the Genesee Valley Canal		
Hudson River, on all property, to October 1st		
“ after “		
From New York to ports on Lake Champlain, to November 1st.....		
To ports on Lake Champlain, after November 1st.....		1
Deck loads on the river, to be specially insured at special rates, otherwise not covered.		
Ten per cent return allowed, in lieu of script and interest.		

INSURANCE FRAUDS.

R. R. BELKNAP, Fire Marshal for the city of Brooklyn, in his semi-annual report, remarks as follows :—

In my experience, there is not enough attention paid in searching the titles of property—it can be done at a trifling cost. One case has come under my observation, where the party has sold his premises several months before the fire, and came forward after the fire for his insurance, and it was only by an accident it was discovered. The too common practice of insuring property in different offices, without the knowledge of either company as to the insurance being effected, is very objectionable. I have seen a number of cases where this has

been carried out. I have examined the parties on that particular point, and they have sworn positively that they were insured in one certain office, and no other insurance on the premises; and, after my examination, they made out separate proofs of loss, and presented them to the respective offices—each proof of loss having the necessary affidavit attached, setting forth in each case that no other insurance was on the premises. It was ascertained in time to prevent the fraudulent transaction; and, I may say, it was partly ascertained by accident. These cases I may refer to in some future report, and give the full particulars. I merely mention them at this time to show the necessity of reducing these matters to a complete system. I would suggest that each company send me a line when they meet with a loss. In Brooklyn it will be but a small tax on their time. It would require much more time for me to call on all the different offices than I can possibly spare. It may be said by some, that you can get your information from the party who has sustained a loss. True, I can; and I do in many cases visit the insurance companies. But you will see by the above that there are cases where they have sworn falsely, not only before me, but in their sworn statements to the companies; and, above all, do not settle the loss (unless you know the parties) immediately after the fire, as is often done, for a few days cannot make much difference with the parties sustaining a loss.

POSTAL DEPARTMENT.

LAW RELATIVE TO OCEAN STEAMERS.

The following is the act recently passed by Congress relative to ocean steamers :—

AN ACT MAKING APPROPRIATIONS FOR THE TRANSPORTATION OF THE UNITED STATES MAIL BY OCEAN STEAMERS AND OTHERWISE DURING THE FISCAL YEAR ENDING THE THIRTIETH OF JUNE, EIGHTEEN HUNDRED AND FIFTY-NINE.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby appropriated, to be paid out of any money in the treasury not otherwise appropriated, for the year ending the thirtieth of June, eighteen hundred and fifty-nine :—

For transportation of the mails from New York to Liverpool, and back, three hundred and forty-six thousand five hundred dollars; and it is hereby provided that there be paid to the Post-office Department, out of said appropriation, such sums as may be required to procure the transportation of the mails from New York to Liverpool, and back, on such days as the Collins line may fail to take them from New York.

For transportation of the mails from New York to New Orleans, Charleston, Savannah, Havana, and Chagres, and back, two hundred and sixty-one thousand dollars.

For transportation of the mails from Panama to California and Oregon, and back, three hundred and twenty-eight thousand three hundred and fifty dollars.

For transportation of the mails between San Francisco, California, and Olympia, Washington Territory, one hundred and twenty-two thousand five hundred dollars.

For transportation of the mails on Puget's Sound, twenty-two thousand four hundred dollars.

Sec. 2. *And be it further enacted,* That there be paid to the Post-office Department, out of the appropriation of three hundred and forty-six thousand five hundred dollars, granted by the first section of the act of third March, eighteen hundred and fifty-seven, "for transportation of the mails from New York to Liverpool, and back," the sum of sixteen thousand seven hundred and fifty-seven dollars and seventy cents, for five outward trips from New York to Liverpool,

to wit :—on fourteenth February and eleventh April, eighteen hundred and fifty-seven, and thirteenth February, thirteenth March, and tenth April, eighteen hundred and fifty-eight, when the Collins line failed to perform service ; and that the further sum of thirty-five thousand dollars, or so much thereof as may be necessary, be paid to the Post-office Department, out of the appropriation aforesaid, to enable the Postmaster-General to procure the transportation of the mails from New York to Liverpool, and back, on the twenty-fourth April, the eighth and twenty-second May, and the fifth and nineteenth June, eighteen hundred and fifty-eight, if the Collins line should fail to perform service on those days.

SEC. 3. *And be it further enacted*, That the following sums be, and the same are hereby appropriated, for the service of the Post-office Department for the year ending the thirtieth June, eighteen hundred and fifty-nine, out of any money in the treasury arising from the revenues of said department, in conformity to the act of the second of July, eighteen hundred and thirty-six :—

For transportation of the mails from New York, by Southampton or Cowes, to Havre, two hundred and thirty thousand dollars.

For transportation of the mails between Charleston and Havana, fifty thousand dollars.

For transportation of the mails across the Isthmus of Panama, one hundred thousand dollars.

SEC. 4. *And be it further enacted*, That it shall not be lawful for the Postmaster-General to make any steamship or other new contract for carrying the mails on the sea for a longer period than two years, nor for any other compensation than the sea and inland postage on the mails so transported.

SEC. 5. *And be it further enacted*, That the Postmaster-General be, and he is hereby authorized to cause the mails to be transported between the United States and any foreign port or ports, by steamship, allowing and paying therefor out of any money in the treasury not otherwise appropriated, if by an American vessel, the sea and United States inland postage, and if by any foreign vessel, the sea postage only, on the mails so conveyed ; provided, that the preference shall always be given to an American over a foreign steamship, when departing from the same port for the same destination, within three days of each other.

Approved 14 June, 1858.

OCEAN TELEGRAPHS.

After a season of some anxiety the news at last reached us of the failure of the attempt to lay the ocean cable after three trials, by which, in the whole, some four hundred miles of the cable had been lost. The failure is not definite, but has inflicted an immense disappointment upon the public mind. Hopes had been entertained that ere this we should be in communication with the cities of Europe by telegraph, but these anticipations are postponed for the present. The causes of failure, as far as known, are not such as to induce despair of final success, and the company may renew its efforts on some newly-devised plan. If it should be firmly determined that water communication is not practicable, the land route is still open, and offers increasing facilities, since the discoveries of gold on Frazer's River have attracted thither the enterprise of the world ; and simultaneously Russian enterprise on the opposite Asiatic coast is producing a similar state of things. These circumstances not only facilitate a communication across the Fox or Aleutian Islands, but make one, in some degree, necessary. The water passage by that route will give but two or three hundred miles at most. If the world has yet to wait it will not be long before it is encircled by the wires. It is one of those events that the mind regards as certain, although it cannot quite be convinced of the mode of arriving at it.

TELEGRAPH LINES.

To show the progress which has been made throughout the world in building telegraph lines, we give a summary of the existing lines in the world :—

	Miles.
America.....	45,000
England.....	10,000
France.....	8,000
Germany and Austria.....	10,000
Prussia.....	4,000
Russia.....	5,000
The rest of Europe.....	7,650
India.....	5,000
Australia.....	12,000
Other parts of the world.....	500
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Total length of telegraph lines, 1858	96,350

The number of messages passing over all lines in the United States is estimated at about 4,000,000 per annum.

Until the year 1850, the submarine cable was practically unknown. In that year the first submarine cable was laid from Dover, England, to Calais, France. The cable was twenty-four miles long, and has since been in operation, with one interruption, with complete success. Since that period the following submarine lines have been laid, and are now in operation :—

RECAPITULATION OF THE EXISTING LINES OF SUBMARINE TELEGRAPHS.

Cables.	Miles.	Wires.	Date.
Dover and Calais.....	24	4	1851
Dover and Ostend.....	75	6	1852
Holyhead and Howth.....	65	1	1852
England and Holland.....	115	3	1853
Port Patrick and Donaghadee.....	13	6	1853
“ “ second cable.....	13	6	1853
Italy and Corsica.....	65	6	1854
Corsica and Sardinia.....	10	6	1854
Denmark, across the Great Belt.....	15	3	1854
Denmark, across the Little Belt.....	5	3	1854
Denmark, across the Sound.....	12	3	1855
Across the Frith of Forth (Scotland).....	4	4	1855
Varna and Balaklava (across the Black Sea).....	340	1	1855
Balaklava and Eupatoria.....	60	1	1855
Across the Danube, at Shumla.....	1	1	1855
Across the Hoogly River.....	2½	..	....
Messina to Reggio.....	5	1	1856
Across the Gulf of St. Lawrence.....	74	1	1856
Across the Straits of Northumberland, Prince Edward's Island.....	10½	1	1856
Across the Bosphorus, at Kandili.....	1	1	1856
Across the Gut of Kanso, Nova Scotia.....	..	3	1856
Six cables across the mouth of the Danube, at the Isle of Serpents, each one mile long, and having one conductor.....	6	6	1857
Across the Mississippi, at Paducah.....	1	1	1851
From Petersburg to Constradt.....	10	1	1856
Across the St. Lawrence, at Quebec.....	..	1	1855
Across the Soland, Isle of Wight (England).....	3	4	1855
Small river crossings.....	20	..	....
<hr/>			
Total length of submarine cables.....	950	..	....

Taking the security of submarine cables when properly laid into account, they are preferable on long routes to the ordinary line, except when through a country particularly favorable. The cost is greater, but not beyond the limit of good

dividends. It is estimated that a telegraph could be put round the world at a cost in round numbers of five hundred dollars a mile, or twelve-and-a-half millions of dollars for the whole, which is about one-third of the cost of the Erie Railroad. It is, therefore, obvious that the Atlantic cable will be, ere long, but one division of the electric band that shall gird the globe.

RAILROAD, CANAL, AND STEAMBOAT STATISTICS.

BRITISH RAILWAYS.

At the present time nearly 9,000 miles of railway have been completed in the British Isles, and it may be assumed that about 21,000 miles are open for traffic in the rest of Europe, and 25,000 in America. Some idea of the relative accommodation afforded by railways to the population of different countries is afforded by dividing the amount of money expended on railways in each country by the number of its inhabitants. Thus, in 1855, the money expended per inhabitant amounted to 195 shillings in Great Britain; 43s. in Belgium; 36s. in France; 83s. in Prussia; 25s. in Germany; and 8s. in Austria. At the beginning of the present year, the money expended upon railways in Great Britain and Ireland amounted probably to £313,000,000.

Taking, at an average, 70,000 cubic yards to a mile, the earthwork will measure 550,000,000 cubic yards. It is computed that no less than 80,000,000 of miles are annually traversed on these railways. Now, to run 80,000,000 miles per annum, 2½ miles of railway at least must be covered by trains during every second of time throughout the entire year. To work these railways, there must be, at present, at least 5,000 locomotive engines. The number of vehicles of every sort employed cannot be less than 150,000. Taking the length of each vehicle at 20 feet, 150,000 linked together in one train would reach from London to Aberdeen, a distance of 500 miles.

Some 111,000,000 passengers travel yearly on these railways at an average of 12 miles each. They perform the journey in half an-hour. At the average speed of the stage coach, a journey of 12 miles would take an hour-and-a-half. Here is a direct saving of one hour upon every average journey performed by 111,000,000 persons annually. These 111,000,000 of hours saved are equal to 14,000,000 days, or 38,000 years. In the life of a working man, supposing him to work eight hours a day, and allowing at the rate of 3s. per day for his labor, the annual saving to the nation, on this low average scale, would be not less than £2,000,000 per annum.

The average rate of interest upon capital earned by railway shareholders has been in England 3.5 per cent; Scotland, 2.7 per cent; Ireland, 4 per cent. Such a return as this cannot be considered a fair remuneration for capital expended on property subject to such deterioration. In all European countries, the passenger traffic is divided into three classes, of which the proportionate number travelling by each class is nearly as follows:—

	First.	Second.	Third.	Total.
British Isles.....	13	32	55	100
France.....	9	33	68	100
Germany.....	1.5	2.15	77	100
Austria.....	2	24	74	100

On the German and Austrian railways the first and second classes are nearly identical with the first class on English railways. On the French railways the first, second, and third class carriages are used very much by the same classes as on English railways. In the United States, with the exception of the emigrant class, there is only one class of passengers.

CINCINNATI, HAMILTON, AND DAYTON RAILROAD COMPANY.

At the annual meeting of the stockholders of the Cincinnati, Hamilton, and Dayton Railroad Company, held at the office of the company, the first business was the presentation of the reports of the heads of the several departments. The president's report contains the following facts with reference to the finances of the company :—

RECEIPTS FOR THE YEAR.

From Passengers	\$232,596 90
Mails and express	18,868 93
Freights.....	214,272 31
Rent of machinery.....	21,683 08
Total	\$487,421 27
Expenses of transportation, &c.....	226,658 15
Leaving for interest, taxes, and dividends.....	260,763 12

Passengers carried, 1858, 370,951 ; 1857, 362,630. The transportation expenses were reduced during the year, chiefly since the 1st of January, \$33,443 42. The earnings, after paying expenses, interest, interest on bonds, and taxes, were applied as follows :—

Scrip dividend issued in 1854.....	\$111,346 70
Ohio and Mississippi connection.....	6,687 00
Real estate for same	9,796 00
Purchase of first mortgage bonds on account of sinking fund	5,400 00
Total.....	\$133,229 70
Present floating debt.....	145,453 01
Assets.....	107,998 82
Excess of debt	\$37,454 19

The report states that no passenger was injured, or property damaged to any extent worthy of notice during the year.

WELLAND CANAL TOLLS.

We have obtained an official copy of the rates of toll on the Welland Canal since the reduction, of which the following is a correct transcript. All articles enumerated in " Class No. 4," have been reduced from 30 cents to 25 per ton weight, and in " Class No. 5," from 45 to 30 per ton :—

CLASS NO. I.

Vessels of all kinds	per ton \$0 02½
Passengers 21 years and over, each.....	0 10
Passengers under 21 years, each.....	0 05

CLASS NO. III.

Apples, bark, bricks, cement, clay, coal, corn, gypsum, hemp, iron, (pig, scrap, railroad, bloom, and broken castings,) lime, manganese, manures, marble, onions, ores, (other than iron ore,) potatoes, salt, sand, slate, stones, (wrought or unwrought,) tobacco, (unmanufactured).....	0 20
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CLASS NO. IV.

Ashes, (pot and pearl,) bacon, barley, beer, bran and ship stuffs, broom corn, butter, cider, bones, cattle, cotton, (raw,) flax, hay, (pressed,) hogs, hoofs, horns, junk, lard, lard oil, meals, (of barley, rye, corn, and oats.) nails, oats, oil cake, oil meal, pork, rags, rye, seed of flax and clover, sheep, spikes, stoves and other iron castings, and all other iron not otherwise described, tallow, vinegar, and window glass.....per ton weight	0 25
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CLASS NO. V.

Beef, beeswax, biscuits, carts, charcoal, cheese, coffee, copperas, earthenware, fish, furniture and baggage of settlers, flour, glassware, hams, hides and skins, (raw,) horses, manila, mechanics' tools, molasses, oakum, plows, sleighs, steel, stoneware, sugar, tin, wagons, wheat, and all other agricultural produce not enumerated, and not being merchandise, whisky, and wool.....per ton weight	0 30
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CLASS NO. VI.

All goods and merchandise not enumerated.....per ton weight	1 00
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CLASS NO. VII.

Barrels, empty, each.....	0 02
Barrel hoops.....per M.	0 03
Boards, planks, scantling, and other sawed timber, reduced to inch measure, in vessels.....per M. superficial feet	0 30
Siding lath and other sawed stuff, less than 1 inch thick...per M. superficial feet	0 30
Do., do., on rafts.....	0 60
Boat knees, each.....	0 05
Fire wood.....per cord, in rafts	0 12½
Floats, per 100.....for each lock passed	0 03
Saw logs 12 feet long, if longer in proportion, entering the canal, each.....	0 03
Do., leaving the canal.....	0 17
Shingles.....per M.	0 07
Split posts and fence rails in vessels.....	0 40
“ “ “ raft.....	0 80
Staves and headings, (barrel).....	0 40
“ “ (pipe).....	2 00
“ “ (West India).....	0 75
Timber, (oak, pine, or other,) square (or round above 12 by 12) in vessels, per M. c. feet.....	5 00
Do., do., in raft, when permitted to pass through the canal...per M. c. feet	8 00
Do., round or flattened under 12 by 12, railroad ties in vessels per M. lineal ft.	4 00
Do., do., in raft, when permitted to pass through the canal...per M. lineal ft.	7 00
Traverses, per 100.....for each lock passed	0 01
Ax-handles, bedsteads, and blind stuff, broom and brush handles, brush backs, chair stuff, door stuff, felloes, fence pickets, gun stocks, handspikes, hoop and hop poles, hubs, lasts, looking-glass backs, oars, plane stocks, plow handles, sash stuff, spokes, treenails, and turned ware, per ton measure of 40 cubic feet.....	0 40

PRUSSIAN RAILWAYS.

The budget (government) of the administration of telegraphs shows that the receipts exceeded the expenses by 244,200 thalers; and 200,000 of them are to be employed in completing the telegraph lines, the length of which, at the end of the present year, will be 4,625 English miles. Prussia is the first country on the continent which established telegraphic lines, and opened them to the public; and it was she who formed the Austro-German Telegraphic Union. The sum she has disbursed for the construction of her lines is 1,700,000 thalers. A thaler is about 64 cents of our money.

TRADE OF THE DISMAL SWAMP CANAL.

TRADE OF THE DISMAL SWAMP CANAL IN THE ARTICLES ENUMERATED UNDER THE SEVERAL HEADS, FROM THE YEAR 1841 to 1857, INCLUSIVE.

Years.	Bales cotton.	Barrels fish.	Bbls. naval stores.	Spirits turp'ne.	Cwt. bacon.	Kegs lard.	Bushels corn.	Bushels flax-seed.	Bushels wheat.
1841...	3,127	39,213	23,002	555	2,805	812	291,164	2,787	31,585
1842...	3,932	35,571	17,768	473	1,600	635	228,851	2,375	30,073
1843...	736	25,526	28,066	587	819	258	9,941	3,267	81,612
1844...	2,768	38,708	24,511	724	569	456	543,082	6,219	91,216
1845...	6,523	43,864	29,526	807	1,664	842	1,007,036	7,795	58,817
1846...	4,490	48,053	20,286	551	4,305	1,251	806,628	5,658	106,394
1847...	3,723	47,415	34,686	820	4,496	1,328	1,266,908	3,004	41,619
1848...	2,570	33,154	27,054	...	1,512	1,263	824,016	3,145	71,059
1849...	2,384	43,470	25,576	788	1,259	792	1,315,507	2,621	38,872
1850...	2,096	38,884	24,950	705	2,068	1,221	1,315,142	2,117	47,598
1851...	3,298	30,149	32,883	206	1,799	855	841,632	5,913	113,497
1852...	4,947	24,395	31,633	94	2,668	522	837,748	6,235	117,613
1853...	5,733	24,777	32,760	479	2,234	841	1,560,845	2,975	63,364
1854...	4,921	30,821	53,332	179	2,979	1,050	1,176,069	4,067	113,804
1855...	6,062	20,057	31,101	50	2,351	766	1,165,146	1,112	74,099
1856...	4,603	16,456	21,945	17	1,977	754	1,300,206	2,751	115,938
1857...	4,690	14,761	19,969	1,039	1,050	532	745,058	1,594	176,564

Years.	Bushels peas.	Bushels potatoes.	Cubic feet merchant timber.	Superficial feet plank scantling.	Pipe staves.	Hhd. staves.	Barrel staves.
1841.....	6,909	18,314	121,463	2,977,936	881,520	3,514,610	495,310
1842.....	19,977	15,212	195,335	2,462,196	603,700	5,904,760	382,850
1843.....	9,378	8,826	115,492	2,029,380	298,290	7,512,460	236,540
1844.....	25,842	12,650	100,743	2,173,704	394,040	4,831,570	362,700
1845.....	26,611	19,445	86,415	3,380,304	711,670	6,002,260	219,110
1846.....	27,333	*8,496	107,374	2,319,360	186,120	5,531,070	321,480
1847.....	31,963	11,597	49,182	1,761,654	92,470	5,219,980	284,620
1848.....	24,060	7,272	125,995	2,317,848	139,620	6,961,130	183,260
1849.....	18,389	9,429	122,193	2,957,352	398,170	7,336,500	298,690
1850.....	19,468	8,470	138,268	3,444,864	513,320	7,833,060	237,370
1851.....	22,346	8,788	199,911	4,605,144	564,030	8,834,660	460,800
1852.....	9,859	12,918	152,134	5,658,684	574,800	7,398,280	277,540
1853.....	20,695	28,044	100,049	5,368,644	177,450	5,376,330	147,000
1854.....	17,428	10,374	164,089	5,945,186	117,350	6,928,980	118,160
1855.....	23,375	14,948	264,189	3,795,860	12,800	9,541,370	88,700
1856.....	14,463	31,029	212,356	3,426,700	12,500	5,789,220	61,400
1857.....	12,978	21,640	444,533	2,788,188	141,262	4,036,240	115,860

Years.	Long shingles.	Two-foot shingles.	Bunch shingles.	Coopers' staves.	Fence rails.	Fire-wood.
1841...	4,575,190	3,144,510	28,413,790	337,960	10,773	4,426
1842...	3,484,480	2,386,960	23,710,630	237,680	39,330	4,865
1843...	2,291,370	1,553,920	26,611,650	94,160	39,202	9,128
1844...	2,903,064	2,344,210	24,588,110	207,070	29,160	8,496
1845...	2,652,500	1,378,510	26,943,880	284,730	14,710	8,076
1846...	1,591,500	1,152,510	22,625,160	315,140	13,900	6,164
1847...	1,116,540	1,052,800	22,455,840	301,340	13,406	4,943
1848...	2,085,290	1,889,690	28,018,200	340,130	17,098	6,439
1849...	1,311,170	1,743,920	26,143,030	202,410	9,560	4,264
1850...	2,751,750	2,272,570	25,045,740	198,610	14,380	5,541
1851...	3,514,540	4,449,610	35,945,610	204,930	25,800	4,988
1852...	3,596,060	5,125,750	46,503,360	150,470	25,460	5,296
1853...	2,985,970	3,327,230	37,234,270	167,480	5,380	3,840
1854...	2,547,370	3,912,430	37,904,620	91,930	11,410	5,623
1855...	1,924,499	4,123,850	34,208,020	60,589	200	4,417
1856...	1,730,920	3,063,530	36,951,050	169,500	13,350	4,281
1857...	1,660,940	4,027,340	46,915,150	312,310	14,520	5,439

RAILROAD STATISTICS, &c.

The following statistical table, prepared on a rainy day by an intelligent and careful observer, will be interesting to all readers :—

There are in the United States one hundred and seventy-four railroads, of which twenty-two are in progress of construction. Fifty-eight only of this number pay dividends from 2½ to 22 per cent per annum, viz. :—

1..... per cent	22	2..... per cent	7½
1.....	20	6.....	7
1.....	15	15.....	6
8.....	12	5.....	4
10.....	10	1.....	3½
5.....	9	3.....	3
4.....	8	1.....	2½

The longest road is the New York Central, 556 miles; total cost and equipment, thirty millions, and last dividend eight per cent. The shortest is the Erie and Northeast, 20 miles; cost and equipment seven hundred and fifty thousand, and last dividend ten per cent. The largest dividend is made by the Galena and Chicago Road, and the smallest by the Raleigh and Gaston. It therefore appears from this statement (abbreviated from the American *Railroad Journal*, May 22,) that ninety-four completed roads make no dividend at all. Of the whole number, only eight have not contracted debts. The debts are enormous, the lowest \$3,242, and the highest \$28,081,468; and it also appears that twenty of the companies have borrowed the round sum of *two hundred millions of dollars!*

That the construction of such a long line of railways has contributed immensely to the general wealth of the country there can be no question, yet the pockets of a large majority of the stockholders have suffered considerably. It is high time that railroads should be built with funds contributed by stockholders only. It is well established that the crisis, from which we have but recently recovered, was partly precipitated by the financial condition of many of the extensive railroad companies, and this should be a warning to new concerns.

CAMDEN AND AMBOY RAILROAD AND DELAWARE AND RARITAN CANAL.

The following are the returns of the joint companies of the Camden and Amboy Railroad and the Raritan Canal. The capital and debts are—

	Capital.	Funded debt.	Floating debt.
Camden and Amboy	\$1,500,000	\$10,000,000	\$400,000
Delaware and Raritan.....	1,500,000	.....	.....

CAMDEN AND AMBOY RAILROAD COMPANY.

	Cost.	Receipts.	Expenses.	Net.	Dividends.
1853....	\$4,523,509 74	\$1,744,207 02	\$1,145,473 14	\$598,734 88	12 p. cent cash.*
1854....	4,763,184 58	1,682,486 23	1,130,029 10	552,457 13	12 p. cent cash.
1855....	4,877,981 23	1,501,787 57	870,557 89	631,229 68	12 p. cent cash.
1856....	4,950,592 36	1,640,787 52	1,046,673 41	594,114 11	12 p. cent cash.†
1857....	5,563,580 11	1,611,303 05	943,491 26	667,811 79	7 p. cent cash.‡

DELAWARE AND RARITAN CANAL COMPANY.

1853....	\$3,623,052 81	\$332,248 33	\$154,654 93	\$227,493 40	12 p. cent cash.§
1854....	3,707,915 90	474,940 39	171,753 98	303,186 41	12 p. cent cash.
1855....	3,758,542 32	515,939 59	184,628 35	331,311 24	12 p. cent cash.
1856....	3,843,504 05	511,331 44	179,190 64	332,140 80	12 p. cent cash.
1857....	3,863,908 59	484,981 75	195,079 87	239,901 88	7 p. cent cash.¶

* And 12 per cent bonds.

† The report says :—“Five dividends have been paid in cash during the year, of six per cent on the capital stock of the joint companies.

‡ And 20 per cent in stock.

§ And 12 per cent bonds.

¶ And 20 per cent in stocks.

RAILROADS OF INDIA.

A Parliamentary paper has just been issued, which contains some interesting particulars of the amount of capital and interest subscribed and paid on account of the railways in India. The total amount of capital amounts to £28,314,300, divided as follows :—

East India Railway	£10,731,000
East India Peninsula	8,333,300
Madras	4,000,000
Scinde and Punjab	2,500,000
Bombay, Baroda, and Central India.....	1,750,000
Eastern Bengal	1,000,000
Total.....	£28,314,300

The total amount of interest paid on the above capitals to the 31st March was £1,881,426 17s. 9d. Of this amount, £1,800,748 was paid in England, and £80,678 in India. The capital actually paid up is £16,073,584. Of this amount, £15,496,605 has been paid in England to March 31st, 1858, and £576,979 in India. To the above sum must be added £100,000 paid to the East India Company by the Scinde Railway Company on account of the Punjab Railway.

ACCIDENTS ON ENGLISH RAILROADS.

The Board of Trade Report, by Captain Galton, on railway accidents for the year 1857, has just been issued, says *Herapath's Railway Journal*, and from it we learn that in the year 25 passengers were killed, and 631 injured, "from causes beyond their own control."

These are all the real railway accidents in the year. There were others, such as from suicide, trespassing, &c., but they cannot properly be placed against the account of railways.

The 25 fatal railway accidents in 1857 occurred mostly on English railways. Of the 25, as many as 24 occurred in England; and of these 25 exactly half—12—were killed in one accident, namely, the Lewisham accident on the South Eastern Railway. One passenger was killed on Scotch railways. "In Ireland, (reports Captain Galton,) there were no passengers killed or injured from causes beyond their own control." On most of our railways in England no fatal accidents have occurred.

The South Eastern have had to pay a pretty penny for the Lewisham accident, for Captain Galton informs us that "the compensation alone in the case of the Lewisham accident on the South Eastern Railway amounted to £25,000;" £25,000 in compensation for one accident!

The figures following will show how infinitesimally small is the number of fatal accidents to passengers in relation to the number of passengers carried :—

Years.	Number of miles railway open.	Number of passengers conveyed.	Number of passengers killed.	Proportion of killed to carried.
1850	6,326	72,854,422	12	1 in 6,071,202
1851.....	6,755	85,391,095	19	1 in 4,494,268
1852.....	7,113	89,135,729	10	1 in 8,913,572
1853.....	7,488	102,286,660	36	1 in 2,841,296
1854.....	7,842	114,358,888	12	1 in 9,529,907
1855.....	8,175	118,595,134	10	1 in 11,859,513
1856.....	8,499	129,347,592	8	1 in 16,168,449
1857.....	8,900	{ returns not complete. }	25	{ can not be calculated. }

The proportion of passengers killed to passengers carried will probably be found to be, when the calculation can be made, about one in 5,200,000 in last year; one passenger killed for every 5,200,000 carried.

Bad, therefore, as 1857 has been for accidents, it is better than 1851 and 1853.

COAL-BURNING LOCOMOTIVES.

The Illinois Central Railroad has successfully introduced coal-burning engines, thereby effecting a great saving. There are also eight coal-burning locomotives now in use on the Hudson River Railroad, six between this city and Poughkeepsie, and two between Poughkeepsie and Albany. According to the statistics furnished by Mr. A. F. Smith, Superintendent, it appears that the cost of fuel for motive power, where coal is used, is very little more than one-fourth what it is when using wood. To make a round trip from New York to Poughkeepsie and back, 144 miles, with a freight train, averaging twenty-one cars, it requires 6½ cords of the best Virginia pine wood, which cut and put on the tender, costs \$6 06 per cord, or \$40 15 for trip, while it requires only 4,193 pounds of coal at ¼ cent per pound, or \$10 48 to perform the same work. And the express passenger train makes the round trip from this city to Poughkeepsie and back with 3,604 pounds of coal, being an expense only of \$9 04 for fuel.

JOURNAL OF MINING, MANUFACTURES, AND ART.

MANUFACTURES IN MASSACHUSETTS.

The Massachusetts State census for 1855, contains the following figures in relation to the leading industries of that State :—

COTTON.			WOOLEN.		
	Quantity.	Value.	No. of mills	Quantity.	Value.
No. of mills.....	294	.....	No. of mills	146	.....
Spindles.....	1,519,527	.....	Setts.....	695	.....
Cotton used..lbs.	105,851,749	.....	Wool used .. lbs.	18,786,298	.....
Y'ds cloth made	314,996,567	\$24,359,212	Broadcloth...y'ds.	759,627	\$837,650
Yarn.... lbs.	3,321,146	830,546	Cassimeres.....	6,444,585	5,015,441
Cotton thread..	534,393	285,934	Satinets.....	6,736,082	2,708,935
Batting.... lbs.	4,825,686	395,374	Jeans.....	1,948,609	31,000
Pelisse wadding	370,000	139,865	Flan'l or bl'neting	10,279,227	3,125,949
Cott'n flan'l y'ds.	3,227,620	120,056	Woolen yarn..lbs.	689,957	386,537
“ wicking lbs.	15,000	9,550			
Total value.....		\$26,140,537	Total value.....		12,405,512
Capital invested.....		31,961,000	Capital.....		7,305,500
Males employed	11,937	.....	Hands.....	10,190	.....
Females “	22,850	.....	Carpeting mills..	13	.....
Calico print'd y'ds.	61,040,000	5,143,000	Cotton used.. lbs.	53,000	.....
Goods bleached.	1,000,000	70,000	Wool used.....	2,880,974	.....
			Carpets....y'ds.	1,988,460	1,362,819
Total.....		\$5,213,000	Capital.....		1,236,000
Capital.....		1,980,000	Linen factories...	4	.....
Bl'ch'd & col'd y'ds.	66,400,000	5,111,200	Linen.....y'ds.	2,600,000	1,240,000
“ “ lbs.	483,400		Linen thread..lbs.	1,150,000	200,000
Capital.....		659,000	Capital.....		550,000
Hands.....	644	.....		

The aggregates of these figures, as compared with 1845, show results as follows :—

	1845.	1855.		1845.	1855.
Cottons.....	\$12,193,449	\$26,140,538	Worsted.....	\$654,566	\$1,448,740
Calico.....	4,779,817	5,213,000	Hose.....	94,892	207,160
Bleached.....	2,264,700	5,111,200	Linen.....	145,000	1,440,000
Woolen.....	8,877,878	12,105,514	Silk.....	150,477	300,000
Carpeting.....	834,322	1,362,819			
				\$29,995,131	\$53,328,971

This gives a very satisfactory increase in the value produced in the State, and shows a different state of affairs from that which the census of the State of New York shows in regard to the affairs of this State. It is undoubtedly the case that the impulse given to business in the last few years of gold excitement, and the gradual extension of credits, have since collapsed.

LOWELL MANUFACTURES.

The summary of the Lowell factories for January, 1858, was as follows :--

	1858.	1852.
Capital.....	\$13,900,000	\$13,900,000
No. of mills.....	52	51
Spindles.....	396,064	342,722
Looms.....	12,085	9,909
Females employed.....	9,023	8,476
Males.....	4,247	4,163
Cotton cloth made per week.....yards.	2,309,000	2,550,000
Woolen " " ".....	30,000	27,000
Carpets.....	25,000	25,000
Rugs.....No.	50	.....
Cotton consumed per week.....lbs.	810,000	810,000
Wool " " ".....	91,000	100,000
Printed and dyed.....yards.	470,000	16,575,000
Coal used.....tons.	29,600	30,575
Charcoal.....bush.	25,150	68,350
Wood.....cords.	1,340	3,220
Oil.....gals.	61,517	69,677
Lard oil.....	20,000	47,000
Starch.....lbs.	1,585,000	1,409,000
Flour.....bbls.	1,245	1,565
Average wages females per week.....	\$2 00	\$2 00
" " males ".....	\$4 80	\$4 80
Average of a loom, 14 yarn.....yards per day.	45	45
" " " 30 ".....	33	33
" " spindle per day.....	1½	1½

STEAM BOILERS.

A new kind of steam boiler is announced as among the recent mechanic inventions of the day. This boiler is of cylindrical form, and is terminated by hemispherical, or nearly hemispherical, ends. The boiler is set in its casing of brick work in a vertical position, and the hot air and the fire are made to circulate about and through the boiler in the following manner:—The fire is conducted from a couple of puddling or mill furnaces through two flues, and delivered near the bottom of the boiler. After being made to circulate about the vertical sides of the cylindrical boiler, the fire enters a horizontal flue, passing through the boiler at a point a little higher than its middle. The fire enters the horizontal flue at both ends, and passes up a vertical flue or chimney, which is situated in the axis of the boiler, and opens into the horizontal flue. A damper is situated at each end of the horizontal flue, and by the dampers the draught may be regulated. That part of the vertical chimney which is within the boiler is surmounted with an air space, that is, there is an annular layer of air between the chimney and the boiler, the chimney being isolated, so far as its temperature is concerned, from the upper part of the boiler. The isolating air space descends to a point below the water level of the boiler, and any tendency which would otherwise attend the overheating of the chimney is avoided.

MANUFACTURE OF LUMBER IN ST. ANTHONY.

As an item of the progress of St. Anthony, notwithstanding the "hard times," we have thought proper to give an estimate of the amount of lumber which is now manufactured and consumed at this point, together with the number of hands in employ. We commence with the mill of the Water Power Company. This mill is now run by E. S. Brown, and the following is the daily estimate as he has given it to us. It is low, as any one will see who is at all acquainted with the capacity of the mill:—3 gangs, cutting 12 hours, 60,000 feet; 8 single saws, cutting 12 hours, 32,000 feet; 2 lath machines, cutting 12 hours, 50,000 lath; 2 shingle machines, cutting 12 hours, 20,000 shingles.

This gives a sum total of 92,000 feet long lumber, 50,000 lath, and 20,000 shingles every twelve hours. Mr. Brown informs us that his sales range about as follows:—sales per day 50,000 long lumber, 20,000 shingles, 25,000 lath. This mill employs about 150 men.

Mars' mill, in upper town, cut about 2,700,000 feet last season. We presume it is now cutting on an average, at a low estimate, at least 70,000 feet per day; and from the amount of building in upper town we should judge that there is full as large a sale.

Rogers, Stimson, & Kent, now manufacture about 30,000 feet of long lumber, 8,000 lath, and 7,000 shingles per day, and have a full demand for everything. They employ over 50 men.

The furniture establishment of W. L. Pingree manufactures about 5,000 feet of lumber, principally hard wood, per week, with twelve hands in employ. Their home market, until the hard times came on, was at the rate of about \$20,000 per year.

Of the old logs now in the pond of the Water Power Company, there are now about 1,500,000 feet; in Coon Creek Boom about 2,500,000, in Dunham Island Boom, 1,500,000, and about 5,000,000 in Rum River. These quantities, added to the contents of the side booms at Mars' and Bassetts' mills, which now contain about a million, makes a total of 11,500,000 feet of old logs yet above. Besides these there are about 8,000,000 now lying in Lake Pepin, and between here and there. These will be rafted through to find a market below, while not one of them should have gone over the falls. About 35,000,000 feet of new logs are coming down this spring. This is hardly a third of the amount which has sometimes been cut. But start the railroads and then we will show you.

MANUFACTURING STOCKS.

The following is an interesting statement from Messrs. Dupee, Beck & Sayles' circular, of the market prices of several leading manufacturing companies. In order to make absolutely fair comparisons, there should be given the respective conditions of each, on the several dates, as regards capital and amount of machinery in operation.

In the absence of printed annual statements, this desirable information cannot be given. The lowest prices for 1842 are taken for the first column, as showing the extremes of period of a great depression. The following year witnessed considerable improvement. Then came 1844 to 1847, inclusively, a time of unprecedented prosperity. The second column gives the highest prices of 1847. From that time, manufacturing corporations, through a variety of influences, but mainly

from an increase of production in far greater ratio than consumption, have gradually declined in value. Executor's sales in October, 1854, and in May, 1856, determined the prices given for those years. Recent sales are the bases for most of those in the last column.

Essex and Hadley Falls, although land and water power companies, are included on account of their entire dependence on manufacturing interests.

The figures in the first two columns are taken from Mr. J. G. Martin's valuable tables :—

	Par.	1842.	1847.	1854.	1856.	1858.
Amoskeag.....	\$1,000	\$1,035	\$1,510	\$1,070	\$960	\$860
Atlantic.....	1,000	....	910	800	800	575
Bay State.....	1,000	....	933	640	375	Failed.
Boott.....	1,000	930	1,090	850	750	455
Boston.....	750	600	845	500	525	500
Chicopee.....	1,000	650	990	500	300	135
Cochecho.....	650	500	530	500	445	430
Dwight.....	1,000	....	980	600	560	400
Essex.....	100	....	....	69	60	35
Great Falls.....	200	185	230	204	206	145
Hadley Falls.....	100	....	....	32	25	....
Hamilton.....	1,000	800	982	900	920	800
Jackson.....	800	885	850	415	*500	500
Laconia.....	1,000	....	1,028	700	660	535
Lawrence.....	1,000	800	1,150	865	870	650
Lawrence Machine.....	50	....	....	20	11	1
Lowell.....	1,000	795	1,000	†400	425	475
Lowell Bleachery.....	200	....	....	220	240	230
Lyman.....	100	....	....	66	76	45
Manchester Print Works.....	1,000	....	900	750	650	750
Middlesex.....	1,000	1,030	1,250	540	500	137
Merrimac.....	1,000	1,000	1,375	1,200	1,220	1,175
Nashua.....	500	475	631	300	320	302
Pacific.....	1,000	....	....	770	350	173
Pepperell.....	500	....	....	515	542	520
Stark.....	1,000	980	1,000	762	800	700
Salmon Falls.....	500	....	550	370	345	225
Suffolk.....	1,000	1,050	1,250	752	825	650
Tremont.....	1,000	920	1,100	745	795	600
York.....	1,000	963	1,275	600	565	700

WEALTH OF THE MEXICAN MINES.

According to the official custom-house report the exports of the precious metals from the port of Vera Cruz for the first five months of the past year, were as follows, in round numbers :—

	Gold coin.	Silver coin.	Silver manuf.	Total value.
January.....	\$55,370	\$2,389,227	....	\$2,444,597
February.....	17,007	366,775	\$371	384,133
March.....	17,956	654,130	454	672,540
April.....	54,799	1,657,009	1,088	1,712,896
May.....	16,149	546,881	130	563,160
Total.....	\$161,281	\$5,614,003	\$2,043	\$5,777,326

As to the exports of the last two months we have at hand no means of ascertaining the exact amount. They were, however, undoubtedly large; during the month of June larger, probably, than any other month of the year, certainly not less than \$2,000,000. Adding this to the above we have a sum total for the ex-

* Par \$1,000.

† Average par \$690.

ports from Vera Cruz alone, during the first half of the past year, of \$7,777,327. Those from Tampico, Acapulco, Mazatlan, etc., would swell the amount to not less than \$10,000,000.

In connection with this subject it would be curious to inquire what has been the amount of precious metals realized from the Mexican mines since their first discovery, or even since the conquest by the Spaniards, now going on three centuries and a half. It would be almost fabulous. For the period of 27 years, from 1825, when the present form of government was adopted, to 1851, during which time Senor Lerdo de Tejada has furnished us reliable statistics, the average annual exports were \$9,481,042. We add his figures—the fluctuations were chiefly attributable to the unsettled political state of the country:—

1825.....	\$3,702,441	1834.....	\$8,062,213	1844.....	\$11,661,296
1826.....	5,847,795	1835.....	12,705,471	1845.....	11,380,901
1827.....	9,669,428	1836.....	8,471,826	1846.....	9,637,829
1828.....	12,387,288	1837.....	4,459,745	1847.....	888,195
1829.....	12,022,312	1838.....	11,625,141	1848.....	10,994,738
1830.....	10,534,974	1840.....	6,402,135	1849.....	12,166,806
1831.....	7,280,803	1841.....	11,671,491	1850.....	8,608,081
1832.....	14,160,140	1842.....	8,511,556		
1833.....	13,537,759	1843.....	10,645,633	Total....	\$237,026,061

Add the exports of the last seven years, estimated on the same average, and we have a sum total of more than \$300,000,000 since the foundation of the Republic, now, alas! bankrupt.

But these, it will be borne in mind, are but the legally ascertained exports from the country alone, and but a small portion of the actual products of all the mines, which are set down by the best writers at upwards of thirty-five millions annually; and not unreasonably, when we consider the vast amount of unproductive wealth in the precious metals accumulated in the country. Assuming this as an average, the total product of the Mexican mines, since the conquest of Cortez, would amount to not less than \$11,760,000,000, a sum in comparison with which any of the incredible stories told of the wealth of the ancient Aztecs seems probable.

MANUFACTURE OF THIMBLES.

Notwithstanding the facility with which the manufacture of these small but essential implements is carried on by means of molds in the stamping machine, few processes can compare, in ingenuity and effective adaptation, with the contrivance originated by MM. Ruoy and Berthier, of Paris. Sheet iron, one-twenty-fourth of an inch thick, is cut into strips of dimensions suited to the intended size of the thimbles. These strips are passed under a punch press, whereby they are cut into disks of about two inches diameter tugged together by a tail. Each strip contains one dozen of these blanks, and these are made red hot, and laid upon a mandrel nicely fitted to their size.

The workman now strikes the middle of each with a round-faced punch, about the thickness of his finger, and thus sinks it into the concavity of the first mandrel. It is then struck successively to another mandrel, which has five hollows of successively increasing depth, and by striking it into them, it is brought to the proper shape. This rude thimble is then struck into the chuck of a lathe, in order to polish it within; it is then turned outside, the circles marked for the gold ornament, and the pits indented with a kind of milling tool. They are next

annealed, brightened, and gilded inside with a very thin cone of gold leaf, which is firmly united to the surface of the iron by the strong pressure of a smooth steel mandrel. A gold fillet is applied to the outside, in an annular space turned to receive it, being fixed by pressure at the edges, into a minute groove formed on the lathe.

STATISTICS OF AGRICULTURE, &c.

SEASONS FOR CROPS.

The successions of good and bad harvests present phenomena which have at times attracted the attention of scientific men, and from the time of the seven years of famine and seven years of plenty indicated by Joseph in his administration of Egypt, intelligent farmers have recognized the fact, that a course of deficient crops is pretty sure to follow a course of abundant ones, but in how far the succession is regular or of determinate length, appears not to have been definitely fixed. In 1855, M. Becquerel read to the Academy of Sciences a paper on the wheat culture of France, which has much interest in this relation. The internal system of tariffs in France—the want of agricultural enterprise and means of prompt communication—cause the prices to depend there upon the local crops almost altogether. Indeed, the tariff seems devised to enhance famine and increase abundance, since if one section of France has a short crop, it can import only at a high duty grain from sections where the crops are superabundant. The result is, however, that the aggregate prices vary with the production. In our number for January, 1854, we gave from the paper of M. Becquerel the following table quoted from Count Hugo, showing the movement in France for every five years :—

SEASONS AND PRICES IN FRANCE.

	Seasons.	Excess of imports. Hectolitres.	Exports.	Per hecto.		Shillings, per qr.	
				f. c.	f. c.	s. d.	s. d.
Scarcity	1816 a 1821	6,247,000	.....	23 67	.....	54 6	
Plenty	1822 a 1827	.....	1,258,000	.....	15 80	36 4	
Scarcity	1828 a 1832	9,528,000	.....	22 00	.....	50 7	
Plenty	1833 a 1837	.....	944,000	.....	16 16	37 2	
Mixed	1838 a 1842	1,126,000	.....	20 31	.....	46 8	
Scarcity	1843 a 1847	18,697,000	.....	25 68	.....	59 0	
Plenty	1848 a 1852	.....	13,188,000	.....	16 68	38 4	

This is a very remarkable table, and we before remarked upon it :—

“The five years, 1847 to 1852, were years of abundance both in France and Great Britain. Supposing, then, the change takes place quinquennially, we should now be at the commencement of a period of scarcity, and that the present year fulfills this character, is manifest from the state of the markets on both sides of the British channel.”

Let us now add the line embraced in the five years since elapsed, 1853 to 1857, from official sources as follows :—

	Seasons.	Hectolitres.	Per hecto.	Per qr.
Scarcity	1853 a 1857	22,099,792	28 01	64 1

These figures for the last five years show that scarcity has been greater than ever in France, and that the cycle fulfilled its limit. We may observe the leading events which have marked the close of each of these cycles in France. The

first period of scarcity, ending in 1821, was complicated with the settlement of France after the fall of the empire, and was marked by the Spanish war. The cycle of low prices, plenty having imparted courage to government, ended with the battle of Navarino in 1827. The dear cycle that succeeded ended in the revolution and crisis. When the restoration fell, and Louis Philippe succeeded, a season of plenty followed, ending in the United States revulsion of 1837. There was no marked failure up to 1842, but food rose, producing uneasiness; when the famine cycle followed, ending with the revolution of 1848. Plenty succeeded, and the cycle closed with the establishment of the "Empire." An adverse cycle has now passed, ending with a "crisis." We are now again at the commencement of a season of plenty, without political changes in Europe. The question here is for American interests. The want of food abroad has always caused an active demand for American products. If we take a table of the value of breadstuffs and provisions exported from the United States, according to the above cycles, the results are as follows:—

Cycle.	Prices in France.		End of cycle.	Exports food from United States.
	s.	d.		
1822 a 1827	36	4	Plenty—Navarino	\$63,450,432
1828 a 1832	50	7	Scarcity—Revolution....	66,631,362
1833 a 1837	37	2	Plenty—Crisis	57,945,040
1838 a 1842	46	8	Mixed—Crisis	76,950,942
1843 a 1847	59	0	Scarcity—Revolution....	143,320,721
1848 a 1852	38	4	Plenty—Empire	149,486,009
1853 a 1857	60	1	Scarcity—Crisis	290,078,926

The crisis of 1842 produced the quintuple treaty, and the fall of M. Thiers. In the last cycle the exports from the United States would have been much larger but for the short crop of 1854, which sent prices to an exorbitant level, and stopped the exports of 1855. The following table gives the quantities of grain sent from the United States to France in each year of the last cycle, also the aggregate exports, and average export prices of flour in each year:—

	EXPORTS FROM UNITED STATES.						Price flour in U. S.
	Wheat.		Flour.		Corn.		
	To France.	To all countries.	To France.	To all countries.	To France.	To all countries.	
1852... bush.	....	2,694,540	2,700	2,799,733	....	2,627,075	\$4 24
1853.....	6,100	3,890,141	8,784	2,920,918	100	2,274,909	5 60
1854.....	1,041,086	8,036,665	728,279	4,022,383	39,400	7,768,816	7 88
1855.....	.....	798,884	8,557	1,024,540	302,740	7,807,383	10 12
1856.....	1,923,732	8,154,877	3,943,499	3,510,626	50,082	10,292,280	8 30
1857.....	1,527,128	14,570,331	184,803	3,712,053	207,580	7,505,318	7 00
1858—8 mos.	201,101	4,073,234	171,101	1,511,101	11,681	2,948,101	4 50

The highest point of flour here was in 1855, when the supply was not equal to the home demand, heightened by railroads and emigration, and the exportation was cut off. In that year, however, France took more corn than ever. This fact has begun to attract attention there, and may become very important. It has been generally supposed in France, as formerly in England, that there are countries other than France so prolific in grain, that if it were not for the corn laws they would so overwhelm the country with wheat at low prices, as to compel the abandonment of the culture there. The experience of the past few years, when stern necessity has compelled the removal of duties, has excited other fears, since it has demonstrated that when the crops are very short, there is great difficulty of getting a sufficient supply at any price. In 1855, wheat was at 75s.

per quarter in England, and 70s. in France, yet the United States, which had been looked to for an inexhaustible supply, was unable to furnish any, even at these exorbitant rates. The capacity of Russia, it is now ascertained, is very much overrated, and the supplies of the basin of the Baltic are annually growing less. At this point, intelligent French inquire what can America furnish? The response is, that corn is an inexhaustible and indispensable crop. It furnishes a large portion of the food for man and beast in the Union, and was the mainstay of Ireland in the famine of 1847. The grain is already largely used in the southern and southwestern departments. Introduced in the northern departments, and a steady market opened, the United States could supply 80,000,000 bushels per annum at low prices. If it served no other purpose than as food for animals, it would relieve the pressure in times of scarcity very materially, and greatly promote the extension of French trade.

The import, export, and prices of wheat in France for each of the five years embraced in the cycle ending with 1857 were as follows :—

	Import.	Export.	Ave. per hecto.
	l.	l.	l. c.
1852.....	251,064	2,043,700	17 23
1853.....	3,850,255	3,183,701	22 39
1854.....	4,743,247	285,738	28 82
1855.....	3,041,258	208,664	29 32
1856.....	7,197,483	193,042	32 46
1857.....	4,231,953	355,750	27 09
Total, hectolitres.....	23,315,653	7,099,991	28 01
Do. in bush.....	64,442,092	19,524,977	\$1 90

Thus France purchased over 44 million bushels wheat at 114 million of dollars, a sum which she, in all probability, will save during the present cycle.

The idea of the capabilities of the United States to supply food, has been drawn from the great quantity of lands, and of emigrants who go on to them. It is not, however, sufficiently borne in mind, that the surplus which those occupiers can raise is very small for want of assistance. Labor is not to be had, and the unaided industry of the farmer enables him now only to supply his own wants. It is only to the machinery introduced that we are indebted for any surplus. Every farmer must raise corn, because it is indispensable food for man and cattle, and a little labor will procure a great deal. It is also most easily harvested. It can, therefore, be supplied cheaper and more abundantly than most other articles. Since corn was introduced into Great Britain in 1846, she has not ceased to be a large customer, annually taking a larger quantity.

We have now before us clearly a "cycle" of cheap food, when the demands of Europe will be less, and it is to be expected that the exports will fall off. It is to be borne in mind, however, that the great elements of internal consumption have ceased, viz., railroad expenditure, and migration, while, on the other hand, great tracts of land have been settled, and enjoy cheap avenues to market. A larger surplus at lower prices may therefore tempt purchasers from Europe, and still serve to equalize prices.

LIVE STOCK IN ILLINOIS.

The State census of Illinois gives the following number of cattle :—

Horses.....	253,838	Neat cattle.....	1,136,908
Sheep.....	649,872	Mules and asses.....	28,682
Swine.....	1,876,296		

AGRICULTURE OF MASSACHUSETTS.

The agricultural products of Massachusetts, according to the State census of 1855, was as follows :—

Counties.	Corn.	Wheat.	Rye.	Barley.	Oats.	Bushels of potatoes.
Barnstable....	70,480	526	17,301	1,935	7,380	66,337
Berkshire....	293,072	8,721	70,483	9,735	239,515	435,380
Bristol.....	210,236	479	22,587	3,168	49,056	212,808
Dukes.....	16,023	0	1,379	34	3,024	11,526
Essex.....	186,031	1,260	16,192	18,139	28,022	294,376
Franklin.....	253,616	8,030	57,551	6,607	79,547	257,211
Hampden....	220,412	1,495	102,272	924	78,744	309,648
Hampshire....	291,189	5,558	83,985	3,288	64,516	318,756
Middlesex....	331,934	2,613	46,823	8,217	76,672	560,373
Nantucket....	7,980	25	117	552	1,254	7,776
Norfolk.....	150,465	172	15,872	6,943	12,782	281,586
Plymouth....	139,611	510	13,497	2,048	19,333	221,905
Suffolk.....	3,256	30	2,160	529	0	8,910
Worcester....	585,565	9,754	51,577	27,800	268,110	900,911
Total.....	2,759,870	39,273	501,796	89,919	978,005	3,887,303
“ 1845..	1,985,215	47,986	446,925	121,931	1,238,159	4,700,005

Counties.	Acres of millet.	Tons of hay.	Pounds of butter.	Pounds of cheese.	Pounds of honey.	Pounds of beeswax.
Barnstable....	0	13,833	194,327	1,325	0	0
Berkshire....	0	81,190	1,262,845	2,658,192	23,033	509
Bristol.....	107	36,004	303,853	79,633	5,477	165
Dukes.....	0	2,821	28,382	3,987	0	0
Essex.....	10	57,940	533,853	80,063	3,223	39
Franklin.....	4	49,349	884,307	233,337	4,039	99
Hampden....	31	45,924	729,637	381,721	7,900	169
Hampshire....	14	48,197	931,295	336,015	5,937	209
Middlesex....	72	89,526	838,748	72,695	5,839	87
Nantucket....	0	2,851	24,152	0	0	0
Norfolk.....	27	42,621	316,254	42,277	5,073	543
Plymouth....	2	33,347	399,878	82,501	5,046	350
Suffolk.....	0	2,219	500	0	100	0
Worcester....	33	162,309	1,637,978	1,791,030	7,910	153
Total.....	303	668,131	8,116,009	5,762,776	73,677	2,324
“ 1845..	1,339	603,482	7,688,556	7,262,637	92,055	3,118

For 1845, the returns are made so many bushels of the several kinds of grain to a county; in 1855, so many bushels per acre, thus showing a want of uniformity, which is exceedingly desirable in a series of statistical returns. There would probably be a difference between the returns made by the same county, whether the estimate be made in the aggregate, or by the acre, the latter, most likely, giving a greater amount than the former.

According to the returns, the number of bushels of corn in 1855, exceeded that of 1845, 774,655; wheat decreased 8,713 bushels; rye increased 54,871 bushels; barley decreased 32,012 bushels; oats decreased 260,154 bushels. Corn and rye show an increase, while all the other grains show a falling off. In 1845, 32,274 bushels of buckwheat were returned. In 1855, none.

The falling off of the potato crop from 1845 to 1855, 880,812 bushels; tons of millet in 1845, 1,339; in 1855, 303 acres, thus showing again a want of uniformity; tons of hay, increase, 64,649; pounds of flax in 1845, 5,896; in 1855, none.

Increase of butter in 1855, over that returned in 1845, 427,453 pounds; de-

crease of cheese, 1,499,861 pounds; increase of honey, 18,378 pounds; decrease of beeswax, 794 pounds. This shows an increase of butter and honey, but a great falling off of cheese.

Milk, increase over 1845, 450,504 gallons; decrease of maple sugar, 53,607 pounds; increase in value of poultry and eggs, \$26,797; increase of broom-seed and brush, \$155,511.

VALUE OF AGRICULTURAL PRODUCTS.

The Hon. N. P. Banks, of Massachusetts, in a recent address remarked:—

In Holland, in 1841, the product of agricultural industry was \$181,000,000; that of manufacturing industry, \$144,000,000; and the estimated products of commerce, \$65,000,000; thus of \$390,000,000, commercial industry gave but little more than a sixth part, while manufactures and mechanics afforded 37 per cent of the entire wealth of the State. In France, in the same year, the product of agriculture was \$800,000,000; manufactures, \$400,000,000; commerce and navigation, \$268,000,000. Of an industrial product of \$1,466,000,000, that of commerce is but 18 per cent, while the mechanic arts furnish a third of the amount. The industrial product of England in 1840, was \$630,000,000, and of all other pursuits, \$855,000,000. Allowing to commerce a fifth of the aggregate, as in the case of Holland or France, or even a quarter part, it is still far below that of manufactures and the mechanic arts.

GRAIN TRADE.

The question of a market for grain is that which is now of great interest to the country at large, chiefly because agricultural products are in great abundance, and on the ability to sell them hangs the power of collecting debts, selling new goods, and restoring railroad revenues. The purchases of grain in England have been small for the past, as compared with the previous year, and at falling prices. The year commenced at a price of 60s. in England, general average, against 80s. per quarter in January, 1856. The price, as usual, continued to decline until May, when it again advanced to 62s. at the close of July, when a good harvest became pretty certain, accompanied by a loss of the potato crop. The effect of that seems to have been to press the market with potatoes, causing falling rates for food during a severe money panic, and discharge of factory hands. The price of wheat fell from 62s. 5d. to 49s. 3d., at the close of December, 1857. The sales of wheat weekly at the towns which regulate the prices in England, and the weekly imports into England, with the average prices each week for three years, are given in an annexed table, compiled from official reports; the prices are the six weeks' averages. The actual average price of wheat in England for the last week in 1857 was 47s. 7d. The whole quantities of British wheat sold were rather more than for the previous year, although at much lower prices, a fact corroborating the estimates of better crops. The quantities were also less than last year, and the proportion derived from the United States was also less than half that of the previous year. At this season prices continue uniformly to decline, because the threshing out is more active and the supplies greater. This operation the money pressure of the present year is likely to assist; but the failure of the potato crop is of a nature to cause the supply of food from May to harvest to be shorter than usual, and consequently the demand for that of foreign growth more considerable. The United States were never in a better condition to supply food than in the present year, not only by reason of its abundance, but of the abundant means of transportation—internal and ex-

ternal. There is, therefore, no reason to doubt but that at least the usual market for food will be found abroad:—

WEEKLY IMPORT AND SALES OF WHEAT IN GREAT BRITAIN FOR THREE YEARS.

Weeks.	1855.			1856.			1857.					
	Wheat im- ported. Qrs.	Wheat sold. Qrs.	Price. s. d.	Wheat im- ported. Qrs.	Wheat sold. Qrs.	Price. s. d.	Wheat im- ported. Qrs.	Wheat sold. Qrs.	Price. s. d.			
Jan. 4.	59,133	90,641	73 04	88,002	89,604	79 06	100,749	85,768	60 02			
11.	46,552	99,928	73 03	.....	88,649	78 05	106,832	92,519	59 08		
18.	37,789	77,711	78 01	23,945	101,406	77 06	105,620	103,358	59 05			
25.	63,771	64,202	72 08	45,240	111,243	77 00	78,389	108,532	59 02			
Feb. 1.	90,202	93,879	72 05	57,244	80,398	76 06	69,691	104,611	58 09			
8.	36,460	91,223	72 00	30,407	88,686	75 11	37,036	91,420	58 03			
15.	10,372	85,873	70 03	62,018	87,591	75 01	49,552	100,932	53 00			
22.	7,224	94,612	70 06	53,124	90,365	73 11	26,193	108,890	57 06			
Mar. 1.	15,204	89,402	69 11	39,887	112,949	72 09	29,131	108,805	56 10			
8.	52,721	92,079	69 08	38,888	102,894	71 07	26,570	112,007	56 03			
15.	10,275	80,337	66 11	40,952	68,661	70 04	35,830	109,123	55 10			
22.	15,571	82,905	68 02	31,515	77,410	69 03	35,651	106,868	55 09			
29.	14,252	100,301	67 11	73,927	98,307	68 00	27,848	98,234	55 07			
April 5.	15,875	98,982	68 05	50,077	88,099	69 00	39,636	85,665	55 05			
12.	23,530	96,342	68 04	103,837	93,772	68 10	45,284	93,845	55 02			
19.	26,839	98,446	68 08	78,118	114,384	68 08	30,565	84,689	54 09			
26.	31,250	92,190	68 02	49,205	97,938	68 08	37,874	98,343	54 04			
May 3.	29,978	102,082	69 05	58,853	101,850	68 07	28,296	109,809	54 01			
10.	66,328	96,727	69 05	62,328	119,673	68 02	21,739	114,930	54 02			
17.	73,607	97,879	70 08	45,117	126,236	68 01	28,181	110,811	54 07			
24.	95,138	110,379	76 10	70,016	112,285	68 02	73,217	112,302	55 02			
31.	93,689	108,928	73 07	36,891	100,580	68 00	44,042	119,039	56 00			
June 7.	81,885	89,297	75 01	47,651	100,683	68 00	77,036	128,552	56 11			
14.	67,373	87,314	76 05	63,489	104,901	68 03	54,925	115,102	57 11			
21.	59,935	68,925	77 00	59,209	105,378	68 08	38,508	102,780	58 07			
28.	76,090	84,791	75 11	89,411	93,654	69 03	45,378	120,368	59 03			
July 5.	60,851	88,195	77 02	44,776	91,314	70 02	38,966	83,096	60 03			
12.	52,104	85,365	76 10	60,596	70,243	71 06	52,405	81,764	61 08			
19.	91,156	95,103	76 04	134,214	75,360	72 11	57,659	75,992	62 01			
26.	86,174	109,891	76 05	181,958	90,623	74 06	67,341	74,017	62 06			
Aug. 2.	72,795	99,758	76 08	120,641	81,072	74 07	60,848	64,567	62 05			
9.	70,524	84,584	76 11	100,523	60,404	75 07	42,479	79,912	62 00			
16.	45,101	75,681	76 11	122,177	44,802	75 04	59,023	78,060	61 03			
23.	28,575	71,104	76 06	178,000	40,895	74 04	61,631	81,149	60 07			
30.	40,783	72,088	75 11	113,439	65,735	74 03	52,855	92,646	60 01			
Sept. 6.	39,742	79,282	74 10	145,044	80,300	72 11	62,955	105,841	59 04			
13.	38,490	97,377	75 02	147,811	90,282	71 06	51,925	118,385	58 08			
20.	20,838	124,510	75 02	107,445	106,313	69 07	43,426	135,244	58 04			
27.	18,902	146,137	75 05	75,160	128,906	68 06	54,063	127,412	58 01			
Oct. 4.	19,796	155,921	75 11	112,533	132,996	67 10	53,398	125,691	57 06			
11.	28,331	152,443	76 07	94,979	144,135	64 10	28,734	124,295	56 08			
18.	24,379	144,869	76 10	85,390	137,286	65 07	150,000	122,132	56 04			
25.	37,423	141,208	77 02	108,199	116,277	65 01	157,929	103,644	56 03			
Nov. 1.	36,406	224,463	77 08	82,109	103,404	65 04	79,942	102,058	55 10			
8.	12,912	118,730	78 02	80,102	108,180	65 06	133,579	91,219	55 00			
15.	107,246	126,465	78 04	102,901	109,942	65 05	84,682	91,010	54 02			
22.	36,409	134,952	79 10	97,848	97,983	65 02	135,003	94,988	52 06			
29.	30,175	117,405	80 10	85,936	109,106	64 06	68,832	76,725	52 05			
Dec. 6.	40,196	114,853	81 04	132,388	99,673	63 07	104,356	84,923	51 03			
13.	70,170	112,716	81 04	104,574	107,808	62 08	115,331	100,416	50 06			
20.	.....	108,115	81 00	137,887	108,645	61 10	140,993	101,379	49 11		
27.	42,782	96,964	80 05	120,987	92,296	61 05	99,295	95,634	49 03			
Years.				Wheat imported. Qrs.			Wheat sold. Qrs.			Average price. s. d.		
1855			3,211,786			5,245,000				
1856			4,104,045			5,046,736			70 06		
1857			3,449,048			5,343,629				

AGRICULTURAL STATE FAIRS.

Agricultural State Fairs are to be held this year as follows :—

- CALIFORNIA, at Maysville, August 23d to 28th.
- MISSOURI, at St. Louis, September 6th to 10th.
- ILLINOIS, at Centralia, September 14th to 18th.
- VERMONT, at Burlington, September 14th to 17th.
- OHIO, at Sandusky, September 14th to 17th.
- NEW JERSEY, at Trenton, September 15th to 17th.
- RHODE ISLAND, at Providence, September 15th to 18th.
- KENTUCKY, at Louisville, September 27th to October 1st.
- IOWA, at Oskaloosa, September 28th to October 1st.
- PENNSYLVANIA, at Pittsburg, September 28th to October 1st.
- INDIANA, at Indianapolis, October 4th to 9th.
- WISCONSIN, at Madison, October 4th to 7th.
- NEW HAMPSHIRE, at Dover, October 6th to 8th.
- NEW YORK, at Syracuse, October 5th to 8th.
- CONNECTICUT, at Hartford, October 12th to 15th.
- UNITED STATES, at Richmond, Virginia, October 25th to 30th.

STATISTICS OF POPULATION, &c.

POPULATION OF NEW YORK.

The population of the city of New York has been by wards as follows :—

Wards.	1830.	1835.	1840.	1845.	1850.	1855.
1.....	11,331	10,380	10,629	12,230	19,755	13,486
2.....	8,203	7,549	6,394	6,962	6,616	3,249
3.....	9,599	10,884	11,581	11,900	10,356	7,909
4.....	12,705	15,439	15,770	21,000	23,250	22,895
5.....	17,722	18,495	19,159	20,362	22,691	21,617
6.....	13,570	16,827	17,198	19,343	24,699	25,562
7.....	15,873	21,481	22,982	25,556	32,697	34,422
8.....	20,729	28,570	29,073	30,900	34,413	34,452
9.....	22,810	20,618	24,795	30,907	40,675	39,982
10.....	16,438	20,926	29,026	29,993	23,316	26,378
11.....	14,915	26,845	17,052	27,259	43,772	52,970
12.....	11,808	24,437	11,658	13,378	10,453	17,656
13.....	12,598	17,130	18,517	22,411	28,244	26,597
14.....	14,288	17,306	20,235	21,103	25,206	24,740
15.....	.....	13,202	17,765	19,422	22,564	24,046
16.....	.....	.....	22,273	40,350	52,887	39,823
17.....	.....	.....	18,619	27,147	43,280	59,548
18.....	.....	.....	.....	.....	31,557	39,415
19.....	.....	.....	.....	.....	18,467	17,866
20.....	.....	.....	.....	.....	.....	47,055
21.....	.....	.....	.....	.....	.....	27,914
22.....	.....	.....	.....	.....	.....	22,605
Total	202,589	270,089	312,710	371,223	515,394	629,810
Immigration ..	.....	.....	227,552	306,387	790,490	1,210,302

The large immigration has gone far towards swelling the numbers in the upper wards. The 11th and 17th wards hold 34,000 Germans, or one-third of the Germans in the city. The 17th also holds the largest number of Irish. The 16th, 17th, and 18th wards hold 40,000 Irish. The increase in the city bears, however, a very small proportion to the numbers who have arrived. These have, however, increased faster than the property, taking all the facts into consideration.

POPULATION OF MINNESOTA.

The Marshal of Minnesota has recently completed the census of that State. The following table exhibits the population of each county in the State, the number of square miles contained in it, and the number of dwellings in each county of the State:—

Counties.	Inhabitants.	Square miles.	Dwell-ings.	Counties.	Inhabitants.	Square miles.	Dwell-ings.
Houston.....	5,264	576	938	Wright.....	2,243	724	504
Winona.....	8,203	540	1,608	Sherburne....	506	444	99
Dodge.....	3,680	432	432	Benton.....	688	522	156
Mower.....	2,856	708	538	Stearns.....	2,840	1,139	724
Freeborn.....	2,486	720	578	Meeker.....	1,025	720	200
Faribault....	689	720	137	Morrison....	751	644	120
Waseca.....	2,366	432	438	Manomin....	514	18	67
Steele.....	2,597	432	463	Washington...	6,183	400	1,039
Blue Earth...	3,629	750	599	Chisago.....	1,765	354	542
Wabashaw...	5,109	659	918	Pine.....	102	1,160	21
Goodhue.....	6,952	864	1,290	St. Louis.....	1,560	6,300	810
Rice.....	6,440	516	1,179	Isanti.....	184	528	76
Le Seuer....	3,610	468	893	Pierce.....	493	1,700	316
Nicollet....	3,437	430	683	Cass.....	195	3,600	32
Brown.....	1,629	960	430	Crow Wing...	176	558	32
Sibley.....	4,147	600	1,035	Todd.....	86	1,900	21
Scott.....	5,302	360	1,401	Buchanan....	120	890	62
Carver.....	3,117	373	736	Carlton.....	239	892	133
Renville....	245	260	68	Lake.....	1,212	4,050	260
McLeod.....	822	720	214	Itasca.....	630	5,400	260
Dakotah....	8,158	575	1,667	Cottonwood...	173	720	52
Ramsey.....	12,747	122	3,311	Murray.....	91	720	16
Hennepin...	13,065	593	2,286	Nobles.....	16	820	6
Fillmore....	9,893	864	1,822	Rock.....	52	720	17
Pembina*....	1,909	21,678	77	Jackson.....	50	720	17
Olmsted....	8,458	648	1,714	Martin.....	56	720	19
Mille Lac...	....	1,540	....	Pipe Stone...	24	864	5
Anoka.....	1,559	426	321				
Total.....					153,332	75,465	31,730

The first census of Minnesota was taken on the 30th June, 1849, and exhibited the following result:—

Counties.	Males.	Females.	Counties.	Males.	Females
Ramsey.....	976	564	Itasca.....	21	9
Washington...	821	291	Mankato.....	..	..
Benton.....	249	108			
Dakotah.....	301	167	Total.....	3,253	1,687
Wahnatah...	344	182	Add females.....	1,637	
Wabashaw...	246	84			
Pembina.....	295	342	Total population..	4,940	

MIXED RACES IN SPANISH AMERICA—THE BEAUTIES OF AMALGAMATION.

Dr. TSCHUDI, a distinguished German naturalist, has recently published his "Travels in Peru," a work of great interest and value, in which, among other matters of curious information, he gives a list of the crosses resulting from the intermixture of the Spanish with the Indian and negro races in that country. As the same effect in Mexico, it may gratify some of our readers to see this list, so that they may judge of the quality of the fellow-citizens they will have if the present policy of some people is persisted in and carried out. The settlement of

* The population of Pembina County, and the figures in the table, are merely the estimates of the marshal.

Mexico by the Spaniards took place at the same time, and the intermixture of races has been perhaps greater in that country than in Peru. The Mexican soldiers are said to present the most unequal characters that can be met with anywhere in the world. Some are brave, and many others quite the reverse, and possessing the basest and most barbarous qualities. This, doubtless, is the result in part of the crossings of the races.

The following is Tschudi's list of the crossing in Peru :—

White father and negro mother	Mulatto.
White father and Indian mother	Mestizo.
Indian father and negro mother	Chino.
White father and mulatto mother	Cuarterou.
White father and chino mother	Chino-blanco.
White father and cuarterena mother	Quintero.
White father and quintero mother	White.
Negro father and Indian mother	Zambo.
Negro father and mulatto mother	Zambo-negro.
Negro father and mestizo mother	Mulatto-oscura.
Negro father and chino mother	Zambo-chino.
Negro father and zambo mother	Zambo-negro, perfectly black.
Negro father and quintero mother	Mulatto, rather dark.
Indian father and mulatto mother	Chino-oscura.
Indian father and mestizo mother	Mestizo-claro, frequently very beautiful.
Indian father and chino mother	Chino-oscura.
Indian father and zambo mother	Zambo-claro.
Indian father and chino-cholar mother	Indian, with frizzly hair.
Indian father and quintero mother	Mestizo, rather brown.
Mulatto father and zambo mother	Zambo, a miserable race.
Mulatto father and mestizo mother	Chino, rather clear complexion.
Mulatto father and chino mother	Chino, rather dark.

The effect of such intermixture upon the character is thus stated by Dr. Tschudi :—"To define their characteristics correctly would be impossible, for their minds partake of the mixture of their blood. As a general rule, it may be fairly said that they unite in themselves all the faults, without any of the virtues, of their progenitors ; as men they are generally inferior to the pure races, and as members of society they are the worst class of citizens.

POPULATION OF PARIS.

In reply to a correspondent, we may state that before 1817 the returns of Parisian population are not very exact, since what is known of them does not suffice to fix the data comprised in the numbers given. Nevertheless, the official returns are as follows :—

CENSUSES OF PARIS.

1789	524,186	1817	713,966	1850	1,034,196
1801	546,856	1836	882,262	1851	996,067
1806	580,609	1841	912,033	1855	1,151,978
1811	622,636	1846	1,029,582	1857	1,246,767

From 1789 to 1800, the population of Paris increased very slowly. The political troubles caused great numbers to emigrate, but they also drew numbers to Paris from the provinces. From 1801 to 1806, under the government of Bonaparte, a considerable increase took place, and continued up to 1817 apparently. The last epoch was that of the Moscow defeat, the two invasions of Paris, and the call for 300,000 conscripts, all of which affected the census. The next census, that of 1836, was carefully taken, and the increase of numbers

shows the progress of peace. From 1836 to 1841, was a period of great depression all over the world. In the following five years the increase was very large. The period from 1846 to 1851, was of famine and distress, and the decrease in the population was corroborated by the diminution in marriages and births, and by an increase in deaths. The first decreased for the first time since 1800—334 in the year; the births decreased 2,441; and the deaths increased 5,937, in the period over the previous similar period. From 1851 to 1857, an immense increase took place in the population of Paris. The whole increase for France took place there. The effects of imperial government, developing business and speculation, drew numbers from the rural districts to the metropolis. A great dearness of rents and food marked this concentration, and aided in producing the crisis there. Large crops have now once more reduced prices, and ameliorated the condition of the city population.

The population of Paris in 1855, compared with London, New York, and Boston, was as follows:—

Years.	London.	Paris.	New York.	Boston.
1850.....	2,362,236	1,084,196	515,547	136,884
1855.....	2,421,111	1,151,978	629,810	161,429
Increase	58,875	117,782	114,263	24,545

WHERE DO THE EMIGRANTS SETTLE?

The following table shows the avowed destination of the emigrants landing at Castle Garden, New York, during the year 1857. It will be seen that nearly one-half of the emigrants remained in the State of New York, while Pennsylvania, Illinois, Wisconsin, and Ohio, received respectively the next higher numbers. The bulk of the emigrants have gone into the Western States, comparatively few having gone East, (and of these Massachusetts received the largest part,) and scarcely any South:—

Destination.	Passengers.	Destination.	Passengers.
Maine.....	186	Alabama.....	21
New Hampshire.....	179	Louisiana.....	206
Vermont.....	297	Texas.....	55
Massachusetts.....	6,904	Arkansas.....	9
Rhode Island.....	1,389	Missouri.....	2,366
Connecticut.....	2,974	Mississippi.....	62
New York.....	78,585	Tennessee.....	127
New Jersey.....	3,800	Kentucky.....	660
Pennsylvania.....	16,660	District of Columbia.....	532
Ohio.....	10,054	Kansas Territory.....	25
Indiana.....	2,474	Nebraska Territory.....	27
Illinois.....	15,750	New Mexico Territory.....	5
Michigan.....	4,108	Utah Territory.....	14
Wisconsin.....	12,704	Oregon Territory.....	7
Iowa.....	3,775	Canada West.....	9,673
California.....	877	New Brunswick.....	97
Minnesota.....	1,253	Nova Scotia.....	42
Delaware.....	113	Mexico.....	1
Maryland.....	1,535	South America.....	18
Virginia.....	702	Cuba.....	25
North Carolina.....	41	Uncertain.....	2,014
South Carolina.....	157	Unknown.....	4,395
Georgia.....	167		
Florida.....	5	Total.....	185,186

SERFDOM IN RUSSIA.

A report lately presented to the Emperor Alexander contains the following statistical returns relative to the landed property and serfs in Russia:—The number of families who are landowners amounts to 127,000. Out of these, 2,000 possess from 1,000 to 10,000 serfs; 2,000 from 500 to 1,000; 18,000 from 100 to 500; 30,000 from 21 to 100; and 75,000 have less than 21. The total number of peasant serfs of the nobility amounts to 11,750,000, and those of the crown to 9,000,000. There are, therefore, 20,750,000 persons anxiously waiting for emancipation.

MERCANTILE MISCELLANIES.

EDUCATION A SOURCE OF WEALTH.

How is a nation to grow rich and powerful? Every one will answer—by cultivating and making productive what nature has given them. So long as their lands remain uncultivated, no matter how rich by nature, they are still no source of wealth; but when they bestow labor upon them, and begin to plow and sow the fertile earth, they then become a source of profit. Now is it not precisely the same case with the natural powers of the mind? So long as they remain uncultivated, are they not valueless? Nature gives, it is true, to the mind talent, but she does not give learning or skill—just as she gives to the soil fertility, but not wheat or corn. In both cases the labor of man must make them productive. Now, this labor, applied to the mind, is what we call education; a word derived from the Latin, which means educating or bringing forth the hidden powers of that to which it is applied. In the same sense, also, when we use the word cultivation, we say, “cultivate the mind,” just as we say, cultivate the soil.

From all this, we conclude that a nation has two natural sources of wealth, one the soil of the nation, and the other the mind of the nation. So long as these remain uncultivated, they add little or nothing to wealth or power. Agriculture makes one productive, education the other. Brought under cultivation, the soil brings forth wheat and corn, and good grass, while the weeds and briars and poisonous plants are all rooted out; so mind, brought under cultivation, brings forth skill, and learning, and sound knowledge, and good principles; while ignorance and prejudice, and bad passions, and evil habits, which are the weeds, and briars, and poisonous plants of the mind, are rooted out and destroyed.

An ignorant man, therefore, adds little or nothing to the wealth of a country; an educated man adds a great deal. An ignorant man is worth little in the market; his wages are low, because he has got no knowledge or skill to sell. Thus, in a common factory, a skillful workman may get \$10 or \$15 a week, while an unskillful workman must be contented with \$2 or \$3. In the store or counting-house, one clerk gets \$1,000 salary because he understands book-keeping or the value of goods; while another, who is ignorant, gets nothing but his board. * * * We see this difference, too, when we look at nations. Thus, China has ten times as many inhabitants as England, but England has an hundred times as much skill; therefore, England is the more powerful of the two, and frightens the government of China by a single ship of war.

Thus, too, among the nations of Europe, Prussia is more powerful and prosperous than any other of the same size on the continent, because all her people are educated, and that education is a Christian one, making them moral and industrious as well as skillful. If, then, the education of the people be necessary to the prosperity of the nation, it is the duty of the government or nation to provide for it; that is, to see that no child grows up in ignorance or vice, because that is wasting the productive capital of the country. This education, too, should be a Christian education, in order that children when they grow up should be honest, faithful, and temperate; for if a man be a liar or a drunkard, his knowledge and skill is worth little to his country, because he will be neither trusted nor employed.

None know the value of education but those who have received it. It is therefore the duty of every child who has been well educated himself, to use his influence, when he grows up, to extend it to others; and if he be a legislator, to make it national and universal in his country.

PRICES IN 1857.

At a recent meeting of the Statistical Society, London, Mr. Newmarch read a paper "on the history of prices in 1857." The author commenced by observing that his object was to trace the causes of the recent commercial derangement, which was greater than any on record, bearing a remarkable similarity to that of 1792. The peculiarity of the recent crisis was, that it had not been preceded by any of those events which had produced the other commercial panics of the present century. There had been no bad harvest, but, on the contrary, a very good one; there was no great dearth of commodities used in manufacture; there was no drain on the bank; and no political disturbance to derange public credit; yet all at once the fabric of seeming prosperity, which had been built upon borrowed capital, fell to the ground. For the complete illustration of the subject Mr. Newmarch referred to the prices of the different articles used as food and in manufactures during the last seven years; and he exhibited a large diagram on which the prices were marked in tabular form, as compared with the year 1855, which he placed at par. The author said that the years 1848-49 had been cheap years; and 1851, with which the table commenced, was also remarkable for low prices. In 1852 and 1853 the effect of the gold discoveries began to operate on prices, which rose considerably in 1853. For the closing months of 1853 the prospect of war with Russia tended to increase prices; and through the two following years there was a general tendency to advance. At the commencement of 1857 there was generally a range of high prices, with strong indications of their rising higher. This state of things strengthened commercial credit, and those who had goods to sell were more readily enabled to increase their borrowed capital, and were tempted to embark in speculation; but when autumn came there was a sudden blow given to the trading on borrowed capital, firms fell, credit could no longer be obtained, and then the false system of trade, which had been carried on for five or six years, without capital to support it, fell to the ground.

The table showed that in the middle of last year there had been a great rise in the prices of most commodities; but that in the course of seven years, after many fluctuations, generally with an advancing tendency, prices have settled down at the present time to even a lower scale than in 1851. During the lapse of seven years, in which these fluctuations in prices had occurred, the quantity of gold and silver that had been introduced into the commercial world amounted to £200,000,000, which was an increase of 40 per cent on the total quantity of gold in the commercial world in 1848. The introduction of such a large amount of gold, it might have been supposed, would have produced a permanent effect in raising prices, and yet the fact is otherwise. That, the author said, was his

first proposition. His second was, that the cause of the fall in the range of prices, in opposition to the natural effect of so large an influx of gold, is to be accounted for by the operations of capital and credit. He then alluded to the facilities given to adventurers for carrying on their speculations, by the readiness with which they obtained discounts, as a cause of the recent panic. The alleged fluctuations in the circulation of bank notes, which had been assumed as one of the disturbing causes, was shown to be fallacious by reference to the average circulation during the last seven years, which exhibited remarkable steadiness. Exclusive of Ireland, the note circulation of 1851 amounted to 29.8 millions; in 1854, to 31.7 millions; from which time the amount has scarcely varied. The rates of discount, however, during the seven years exhibited great changes. In 1851, the average rate was £2 15 per cent; in 1855, £5 per cent; in 1856, £6 per cent; in January, 1857, £6 10s. per cent; in December £8 per cent. The cause of the late commercial crisis, Mr. Newmarch said, was to be found in these variations in the rate of discount. So long as adventurers could get their bills discounted all went well; but when prices were falling difficulties arose in the process of accommodation, and then the system of false trading came to an end. Why it had continued so long he attributed to the gold discoveries in Australia, which had given so great a stimulus to speculation, and had enabled adventurers to carry on the process of borrowing in spite of the war and other discouraging influences. Mr. Newmarch noticed the opinion expressed by some political economists, that the gold discoveries of Australia did not add to the wealth of the world, from which opinion he entirely dissented; for the influx of gold had given a stimulus to enterprise, had promoted invention, and fostered improvements, which had been the means of greatly adding to the stock of wealth. Alluding to America, and to the opinion that the crisis there had been occasioned by the excess of note circulation, the author said that it appeared from documents that could be relied on that the circulation of the banks at New York had not varied more than the banks of this country, and that the notes issued bore but a small proportion to the deposits and investments. Looking to the future, Mr. Newmarch expressed the opinion that the arrival of gold from Australia would continue to be equally advantageous as it had hitherto been, and that it would promote the cultivation of the extensive fields for enterprise which are now opening in India, Russia, and other parts of the world.

THE SHOE BUSINESS OF LYNN.

We are indebted to the politeness of HENRY A. BREED, Esq., the efficient Secretary of the Shoe and Leather Board of Trade, for the following statement exhibiting the number of workmen employed, the number of pairs of shoes made, and amount of capital, for the years 1856 and 1857. These statistics were carefully gathered by Mr. Breed, and may be relied upon as very nearly correct. Thus, in 1856, the number of workmen employed was 5,384; pairs shoes made, 5,404,493; amount of capital, \$4,330,349; in 1857, workmen employed, 4,991; pairs shoes made, 5,496,813; amount of capital, \$4,105,000.

It has been erroneously stated in one of the Lynn papers that the Board of Trade, at "a recent session, voted to dissolve." We learn from the best authority that such is not the fact. It still keeps up its organization, and will yet prove, we believe, an important institution for the benefit of the manufacturers. The Board now numbers 104 members, and the officers are as follows:—President, Hon. John B. Alley. Vice-Presidents, Nathan D. Chase, George W. Keene, John Woodredge. Examining Committee, S. Oliver, Jr., P. P. Tapley, Charles Buffum, Thomas P. Richardson, James Purinton, Jr., A. S. Moore, Andrews Breed, Harmon Hall, Saugus; Samuel Sparhawk, Marblehead. Treasurer, Nathan D. Chase. Secretary, Henry A. Breed.

GOD'S COFFER: A SHORT SERMON FOR MERCHANTS.

[FROM THE GERMAN OF KRUMMACHER.]

There was once a respectable wealthy man, whose name was Benedict—that means “blessed.” And he had a good right to bear such a name; for God had blessed him richly with all good things, and all who knew him blessed him too; and he always sought to make others happy—the stranger as well as the neighbor—particularly the poor and needy. But he did it in this way:—When he had passed a joyous day with his friends, he would go into his chamber, and think:—“There are many who have not had such a day of enjoyment. How would it have been, if I had invited as many more guests?” Then he would lay by of his money, as much as the feast had cost him, in a chest, which he called God’s Coffers. In the same way, if he heard that there had been a fire anywhere, he would give largely for the relief of the unhappy sufferers; and then he would behold his own house, and go into his own chamber, and think, “All here is safe and unhurt,” and immediately he would lay up some gold in God’s Coffers. Whenever he heard of any destruction of property from thunder or hail, or drought or other mischances, he would lay up gold on account of it, in God’s Coffers. Also, if he had occasion to buy wine, or costly furniture, he would purchase it but moderately, only to enable him the better to entertain his friends; and then go into his chamber, and say, “So much more mightest thou have bought, and have enriched thy stores,” and lay up the value in God’s Coffers. Besides which, he would willingly give of his best wine, if a sick person needed it. And as he lay on his dying bed, and death was approaching, the poor, the widows, and the orphans lamented and wept, and said, “Who will take pity on us when Benedict is taken from us? As long as he lived we wanted for nothing; but what will now become of us?” But he said, “A good householder takes care that when he is away his children should not want. Take God’s Coffers, with all that is in it. It belongs to the poor, the widows, and the orphans; divide it, and use it well and wisely.” And so God’s Coffers has remained for hundreds of years, to the comfort of the needy, and the man is remembered with grateful blessings.

PRODUCTION OF STEEL IN EUROPE.

The production of steel in Europe is chiefly limited to four countries—England, France, Austria, and Prussia. Sweden, which yields the greater part of the material for the production of steel in England, produces but an inconsiderable amount of steel. The iron exported from that country to England, France, and some other countries, is all melted with wood charcoal, and the white pig iron is refined with the same kind of fuel. The only iron that is able to compete with this is the Russian iron from the Ural district. Thus, in England, the production of steel is entirely dependent upon Sweden or Russia for the supply of raw material, and in France, also, this is for the most part the case; while, on the contrary, Austria possesses in Styria, the Tyrol, Krain, and Corinthia; Prussia in the governmental districts, Coblenz and Armberg, immense deposits of spathic iron ore—carbonate of iron—a mineral especially adapted for the production of native steel. Considerable progress in the production of steel has been made in Prussia, and various kinds of pig iron have been converted by puddling with coal into steel, which is sold at a very low price, and is suitable for the use of locomotives. At the Seraing Works, in Belgium, and at Creuzot, in France, it has been produced by puddling pig iron smelted with coke, and from this puddling steel cast-steel has been obtained. In Austria, the production of puddled steel does not seem to have been carried out on a large scale. But with the rich deposits of ore that are so well adapted for yielding steel, it is believed that when the use of brown coal in gas furnaces, for puddling and melting steel, has once been established in that country, it will become an important competitor with other steel-producing countries, since there will be a sufficiency of charcoal at the disposal of the smelters for the production of pig iron fit for conversion into steel. In France, the process of steel puddling has been practiced for some time by M. Holzer, at Unleux, in the same manner as in Prussia.

GIRARD, THE MERCHANT, AND THE MAN WHO MINDED HIS BUSINESS.

Stephen Girard, the merchant and banker, who flourished in Philadelphia not many years ago, was one of the best friends of the working classes that ever lived. He admired industry as much as he despised sloth, and there has never been known an instance where he did not furnish employment or money to an industrious man in distress.

Early one morning, while Mr. G. was walking around the square where the mechanics' houses now stand, John Smith, who had worked on his buildings in the humble capacity of a laborer, and who Mr. G. had noted for his unusual activity, applied to him for assistance, when something like the following dialogue took place:—

"Assistance—work—ha? You want to work?"

"Yes, sir; it's a long time since I've had anything to do."

"Very well; I shall give you some. You see dem stone yondare?"

"Yes, sir."

"Very well; you shall fetch and put him in this place. You see?"

"Yes, sir."

"And when you done, come to me at my bank."

Smith diligently performed his task, which he accomplished about one o'clock, when he repaired to Mr. G., and informed him that it was finished, at the same time asking if he could not give him some more work.

"Ah, ha! oui. You want more work? Very well; you shall go place dem stone where you got him. Understandez? You take him back."

"Yes, sir."

Away went Smith to his work, which having got through with about sunset, he waited on Mr. G. for his pay.

"Ah, ha! you all finish?"

"Yes, sir."

"Very well. How much money shall I give you?"

"One dollar, sir."

"Dat is honest. You take no advantage. Dare is your dollar."

"Can I do anything else for you?"

"Oui. Come here when you get up to-morrow. You shall have some work."

Next morning, on calling, Smith was not a little astonished when told that he must "take dem stone back again," nor was his astonishment diminished when the order was repeated for the fourth and last time. However, he was one of those happy kind of persons who minded his own business, and he went on with his job with all the indifference imaginable. When he called on Mr. G. in the evening, and informed him that the stones "were as they were," he was saluted thus in the most cordial manner:—

"Ah, Monsieur Smith, you shall be my man; you mind your own business; you do what is told you; you ask no questions; you no interfere. You got one wife?"

"Yes, sir."

"Ah, dat is bad. Von wife is bad. Any de little chicks?"

"Yes, sir; five living."

"Five? dat is good; I like five; I like you, Monsieur Smith; you like to work; you mind your business. Now I do something for your five little chicks. There, take these five pieces of paper for your five little chicks; you shall work for them; you shall mind your business, and your little chicks shall never want five more. Good bye."

The feelings of the grateful man being too much overcome to allow him to reply, he departed in silence; and by minding his own business, he is now one of the wealthiest of the name in Philadelphia.

 WOOLEN MILLS ON THE PACIFIC COAST.

The first woolen mill on the Pacific Coast has been set in operation in Salem, Oregon. It runs four hundred and eighty spindles.

THE BOOK TRADE.

1.—*The Life of Thomas Jefferson.* By HENRY S. RANDALL, LL. D. In 3 vols. Vol. III., 8vo., pp. 581. New York: Derby & Jackson.

This, the third volume, closes Mr. Randall's voluminous life of Thomas Jefferson. We have before reviewed the work at some length, but a work of so much interest as this, we are ever ready to talk about. The author has shown a very commendable zeal in writing the life of this estimable man by dealing in those generalities which most biographers pass hastily over as minor points, but which, in such a man as Thomas Jefferson, whose whole life and every-day thought was the nation's, is an industry which cannot but be appreciated by the American people, and we commend it as giving a clearer insight into his views and private character on almost every topic, than can be arrived at in debate, or in his more ministerial capacity as the head of the nation. As a specimen of one of these, and inasmuch as the question of non-intervention is still at times being agitated in connection with our South American neighbors, we give below detached portions of a letter of his to Mr. Monroe, then President, dated Monticello, October 24th, 1823, on that famous "Monroe doctrine" which has so often filled the councils of our people, and the whole nation, with the ring of a battle shout:—

"The question presented by the letters you have sent me, is the most momentous which has ever been offered to my contemplation since that of independence. That made us a nation; this sets our compass, and points the course we are to steer through the ocean of time opening on us. Our first fundamental maxim should be, never to entangle ourselves in the broils of Europe; our second, never to suffer Europe to intermeddle with cis-atlantic affairs. America, North and South, has a set of interests distinct from those of Europe, and peculiarly her own; she should, therefore, have a system of her own, separate and apart from that of Europe. While the last is laboring to become the domicil of despotism, our endeavor should surely be, to make our hemisphere that of freedom. One nation, most of all, could disturb us in this pursuit; she now offers to lead, aid, and accompany us in it. By acceding to her proposition, we detach her from the band of despots, bring her mighty weight into the scale of free government, and emancipate a continent, at one stroke, which might otherwise linger long in doubt and difficulty. Great Britain is the nation which can do us the most harm if any one, or all, on earth; and with her on our side, we need not fear the whole world. With her, then, we should most sedulously cherish a cordial friendship; and nothing would tend more to knit our affections than to be fighting once more, side by side, in the same cause. Not that I would purchase even her amity at the price of taking part in her wars; but the war in which the present proposition might engage us, should that be its consequence, is not her war, but ours. Its object is to introduce and establish the American system, of keeping out of our land all foreign powers, and never permitting those of Europe to intermeddle with the affairs of our nation. It is to maintain our own principle, not to depart from it. And, if to facilitate this, we can effect a division in the body of the European powers, and draw over to our side its most powerful member, surely we should do it. But I am clearly of Mr. Canning's opinion, that it will prevent instead of provoking war. With Great Britain

withdrawn from their scale, and shifted into that of our two continents, all Europe combined would not undertake such a war. Nor is the occasion to be slighted which this proposition offers of declaring our protest against the atrocious violations of the rights of nations, by the interference of any one in the internal affairs of another, so flagitiously begun by Bonaparte, and now continued by the equally lawless alliance calling itself holy. But we have first to ask ourselves a question. Do we wish to acquire to our own confederacy any one or more of the Spanish provinces? I candidly confess that I have ever looked on Cuba as the most interesting addition which could ever be made to our system of States. The control which, with Florida Point, this island would give us over the Gulf of Mexico, and the countries and isthmus bordering on it, as well as all those whose waters flow into it, would fill up the measure of our political well-being. Yet as I am sensible this can never be obtained, even with her own consent, but by war; and its independence, which is our second interest, (and especially its independence of England,) can be secured without it, I have no hesitation in abandoning my first wish to future chances, and accepting its independence, with peace and the friendship of England, rather than its association, at the expense of war and her enmity. I could honestly, therefore, join in the declaration proposed, that we aim not at the acquisition of any of those possessions, that we will not stand in the way of any amicable arrangement between them and the mother country; but that we will oppose, with all our means, the forcible interposition of any other power, as auxiliary, stipendiary, or under any other form or pretext, and most especially their transfer to any power by conquest, cession, or acquisition in any other way. I should think it, therefore, advisable, that the executive should encourage the British government to a continuance in the dispositions expressed in these letters, by an assurance of his concurrence with them as far as his authority goes; and that, as it may lead to war, the declaration of which requires an act of Congress, the case shall be laid before them for consideration at their first meeting, and under the reasonable aspect in which it is seen by himself."

2.—*The Family Aquarium*; or, *Aquavivarium*. Being a familiar and complete Instructor upon the subject of the Construction, Fitting-up, Stocking, and Maintenance of the Fluvial and Marine Aquaria, or River and Ocean Gardens. By HENRY D. BUTLER. 12mo., pp. 121. New York: Dick & Fitzgerald.

The Aquarium has become, within a recent period, very fashionable, and almost a necessary luxury in every well-appointed household, and is fast superseding the old-fashioned fish-globe in the estimation of all those given to kaleidoscopic novelty. The author of the little volume, we believe, has the charge of that superb specimen of Aquaria now on exhibition in Barnum's (American) Museum, and is, therefore, fully entitled to the consideration of being authority on the subject of which he treats, and seems hugely in love with his profession, if we judge from the earnestness and spirit with which he enters into it. To all who would witness the grand spectacle of life, as being performed "below stairs," as we may term it—in that other theater of being to which we have, till recently, been excluded—as well as to all lovers of natural history, this is an innocent and beautiful study, serving as an introduction to the expansion of thought in contemplative minds, as well as showing how important a part the smallest atom of animal life enacts in the wise and wonderful economy of nature, and as such we recommend it.

3.—*Lord Montague's Page*; an Historical Romance of the Seventeenth Century. By G. P. R. JAMES, author of "Richelieu," "Mary of Burgundy," &c., &c. 1 vol., 12mo., pp. 456. Philadelphia: Childs and Peterson.

The high qualities, excellent taste, prolific conception, and extensive knowledge which distinguish G. P. R. James as a novel writer, are well known. His productions now number full two hundred volumes, and there are few authors whose works have been more generally read than his, imbued, as they are, with a vein of cheerfulness, and chivalrous, and heroic sentiment, and appealing strongly, as they do, to that which is elevated and noble, while not a word or thought which can give pain to the purest heart or most sensitive mind ever escapes from his pen. It is for these qualities we admire Mr. James as a writer, although there are not wanting those who are ready to call him prosy, and say that a sameness pervades all his productions; yet we have ever considered him an artisan in the world of fiction of the highest grade. The present volume may be considered, although the hero is an Englishman, a picture of the times of Louis XIII., and has much to do with the character he has ever seemed so much in love with—the Cardinal de Richelieu, whom we here meet, not as a silver-headed sire, but as a young man, ere the finer feelings of his nature had been absorbed and swallowed up by the hard duties of the statesman, or the galling cares of the politician. The book contains a noble portrait of the author, as well as a biographical sketch of his life, and will be found every way worthy of a perusal.

4.—*The American Debater*; being a Plain Exposition of the Principles and Practice of Public Debate. By JAMES McELLIOTT, LL. D., author of the "Analytical Manual," "Young Analyzer," &c. 12mo., pp. 323. New York: Ivison & Phinney.

This volume will be found to supply a vacuum long felt by the public, as a guide to those of inexperience, who would acquit themselves at least decently, if not advantageously, while mingling in the proceedings of public assemblies and legislative bodies. "The endowments, both natural and acquired," says the author, "essential to the formation of a finished debater, are rare and various." This being the case, it becomes the interest, as well as the duty, of every American youth to prepare himself, as best he can, to figure advantageously in deliberative bodies. This he intends as a guide to render the reader familiar with the common code of Parliamentary law, and in this he is successful, as it will be found to cover the whole ground, and is written in such a practical demonstrative manner, as to render it perfectly comprehensible to the most inexperienced, while at the same time it gives evidence of careful and enlightened thought, and a minute understanding of the subject treated of. The work is accompanied with an elaborate index, by which any fact or desideratum can be readily arrived at, and may be considered, on the whole, to fill the place for which it is designed—a complete text-book for lyceums and all those aspiring to forensic honors.

5.—*George Melville*. An American Novel. 12mo., pp. 386. New York: W. R. C. Clark & Co.

This, judging from the hasty manner in which we have sketched it, appears to be a very spirited story of the times, exceedingly *conge* in its style, and partaking largely of that pseudo flippancy now so current in the present day—a good companion for a steamboat or rail-car just at this season, to be placed in your traveling-bag along with that indispensable accompaniment, the "Dreamer's Manual."