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HUNT'S
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AND

COMMERCIAL REVIEW.

DECEMBER, 1859.

Art. I.—REVIEW, HISTORICAL AND CRITICAL, OF THE DIFFERENT SYSTEMS
OF SOCIAL PHILOSOPHY;*

OR, INTRODUCTION TO A MORE COMPREHENSIVE SYSTEM.

PART III.

THE SOCIOLOGY, SPECULATIVE AND PRACTICAL, OF DIFFERENT NATIONS CONSIDERED—CHINESE—JAPANESE—AZTEC—INCA—HISTORICAL GLANCE AT EGYPTIAN—CHALDEAN—PHENICIAN—CARTHAGINIAN—PERSIAN—HINDOO—HEBREW—GENERAL REMARKS ON THE EARLIER NATIONS OF THE CAUCASIAN RACE.

In all disquisitions on man, it will be found advantageous to observe the three grand and obvious divisions of the human family—the Ethiopian, Mongolian, and Caucasian; or black, yellow, and white races. As for the more particular and less obvious distinctions, taken by Blumenbach and others, which recognize five distinct types or species of the human genus, regarding the aboriginal American and the Malay as distinct types, in addition to the other three, while they tend to complexity they add little to discovery. Nor do these distinctions very clearly appear to be justified, notwithstanding the anatomical arguments adduced in their behalf, the aboriginal American being clearly an inferior type of the Mongolian, and the Malay most probably being another type of the same, or possibly a degeneration from the Caucasian, shooting off from the Indo-Caucasian stock.†

* Entered according to an act of Congress, in the year 1859, by Geo. W. & Jno. A. Wood, in the Clerk's Office of the District Court of the United States, for the southern district of New York.

† The author is well aware that various writers of eminence have objected even to Blumenbach's classification of the varieties of the human family, as altogether too comprehensive. These writers have strenuously objected to the classification of the ancient Egyptians either with the Caucasian or Ethiopian race, and to the classification of the Hindoos with the latter of those races. Mr. James R. McCulloch, the eminent statistician, is among the number; also Messrs. Nott and Gliddon, American writers, who have lately put forth a work of considerable merit entitled, "The Types of Mankind." These questions, rather curious than useful, the author of this review does not deem it important to enter into. When he shall come to consider the great practical and momentous question—how far influences of race, or *ethnological causes*, may operate to determine the social condition—it will be found, perhaps, that he takes as many and nice distinctions as Messrs. Nott and Gliddon could reasonably desire.

Of these three divisions or races of the human family, the Ethiopian or black race has never made, so far as is known to Europeans, any contribution to the stock of human ideas in any department of science. Nor does their social condition appear to have anywhere exhibited any social phenomenon different from those which are common to the rudest state of monarchical society.*

Of the Mongolian or yellow race, there have been but four nations that are known by us to have made any notable attainments in civilization—the Chinese, Japanese, Aztecs, and Incas. To all these nations may be applied the common remark, which may, perhaps, be adopted as a *portraiture* of the whole Mongolian family, that, while decidedly inferior to Europeans intellectually, and in those moral traits which give men a strong proclivity to freedom of thought and independence of action, they are much better adapted, and to some extent on account of these very deficiencies, to the social state, and better qualified for combating, in the right way, the real difficulties that are naturally incident to that state. With some important qualifications, indeed, the remark of Count Carli concerning the Peruvians, quoted by Mr. Prescott in his history of that people, may be applied to the whole Mongolian or yellow-skinned race—"The moral man of Peru is decidedly superior to the moral man of Europe."† It would be well for the European nations if they would study more attentively the Sociology of these Mongolians, more especially of the Chinese, and adopt some of their leading ideas, as, for example, their strict subordination of youth to age, their rigid adherence to national customs, and their profound reverence for superiority in learning. How contemptible, in contrast with these characteristics, appear the opposite traits, so characteristic of Europeans—their slight deference to age, their puerile fickleness in fashions, as well of manners as of dress, and their ignoble worship of the adventitious circumstances of birth, and, what is far more ignoble, of mere wealth!

Of these four Mongolian nations, the Chinese and Japanese only appear to have possessed a very extensive literature; and it is only with the riches of these two that Europeans can claim to be particularly acquainted.

Although among the Chinese, as among Europeans, the multitude of books is very great, and their multiplication continues without end, the range of their literature is very limited, all their books being, for the most part, the mere reproduction of the same ideas which have prevailed in China since the time of their great teacher, Koong-foo-tse, or Confucius, (as the name has been *latinized* by the Jesuits,) who flourished nearly twenty-four centuries ago.

Nearly all the ideas embodied in Chinese literature are fundamentally contained in the nine books of Chinese classics, which have for many ages formed the text-books of all their schools—the *four sacred books* and the *five canonical books*—nearly all of which are commonly regarded as the work of Confucius.

* If the Egyptians are to be considered as Ethiopians, of course they constitute an exception to this remark. Herodotus, in one place, speaks of the Egyptians as being black, and having short, curly hair. See Herodotus, book ii., chapter 104. From this passage it has been stoutly contended that they were negroes. But Cuvier, who examined the skulls of upwards of fifty mummies, pronounced them Caucasian, and decidedly not Ethiopian; and his authority on this point has been generally acquiesced in.

† See Count Carli's *Letters, Americans*, tom i., p. 215, and Prescott's *Conquest of Peru*, book i., chapter 5, p. 171.

The fourth of the "four books," which is nearly as voluminous as all the other three, and which Mr. Davis (one of the European historians of China) considers decidedly the best of them all, was the work of Meng-tse, (or Mencius, as the Jesuits have rendered it,) who flourished a century after Confucius. But the design of this work is chiefly to amplify the ideas of Confucius, respecting the principles of government, as expressed in the first of the four books.

The doctrines of the fifth of the five canonical books, moreover, (the Ye-king, or mystical book, which relates to the origin and nature of things,) have been subsequently much enlarged upon by the celebrated commentator Choo-foo-tse, who flourished during the eleventh century of our era, under the learned Soong dynasty, which may be regarded as the Augustan age of Chinese literature.

A large part of these fundamental books of Chinese literature is devoted to sociological ideas; for Confucius was engaged in Politics nearly all his life, and Dr. Morrisson says "even his Ethics dwell chiefly on those social duties which have a political bearing."

The speculative or theoretical Sociology of China, which is so exactly reflected in its practical, is expressed in the first of the four books. "It is the business of the first of the four books," says Mr. Davis, "to inculcate, that from the knowledge and government of one's self must proceed the proper economy and government of a family, and from the government of a family that of a province and of a kingdom."*

This idea expresses summarily the whole theory of Chinese Sociology, which, in its practical embodiment, exhibits a grand patriarchal monarchy, animated throughout, in its political as well as its domestic relations, by the reciprocal sentiments of parental regard and filial obedience. There is, indeed, a vast mine of wisdom in this predominant idea of the first and fourth books of Chinese Scripture. It is worthy of the fame of Confucius, and of that remarkable nation, who have preserved unimpaired the same political institutions, though shaken by repeated convulsions and changes of dynasty, for nearly 3,000 years, while every other nation under the sun has been dashed to pieces, and scattered to the four winds of heaven, leaving scarcely a discernible wreck behind.

The idea of Confucius, that the proper government of a nation can only proceed from the proper government of the individual, is eminently just and profound; and it goes far towards refuting the fanciful and commonly received dogma, so prominently set forth of late by Auguste Comte, as a *novel idea*, of the gradual development and steadily advancing progress of human ideas.† Here we find one of the sages of a race decidedly inferior to Europeans intellectually, of a remote period, a contemporary of Pythagoras, advancing an idea on the abstruse science of Politics, which will compare with the most profound idea that has been advanced, in these latter days, by Guizot in his great work on Civilization, or Dr. Maistre in his admirable "Essay on the Generative Principle

* See Davis's History of China, chapter 4; also Martin's China. Meedhurst, in his work on China, says the first two of the "four books" were written by the grandson of Confucius. Still, they may both be considered as the books of Confucius, as they claim to be expositions of his ideas. See Meedhurst's China, chapter 7. Mr. Davis says that the first of the *eleven* sections, into which the first of the "four books" is divided, only is ascribed to Confucius.

† Mr. Comte puts forth this notion as if it were something new, when in reality it is one of the baldest of all the trite ideas. It is absolutely bald from triteness. See Comte's Positive Philosophy, book vi., *passim*.

of Political Constitutions," or by Mr. Comte himself in his transcendently able work on the system of Positive Philosophy.

How insignificant, in comparison with this profound and valuable idea of the Chinese sage, appears the correlative but opposite idea advanced two centuries later by the great philosopher of the earlier Europeans, Aristotle! This illustrious writer, whose memorable work on Politics has been altogether too much and too indiscriminately praised, in the very commencement, or in the second chapter, of his work, asserts the preposterous proposition, which is in unison with the whole scope of his sociological ideas, that, "in the order of nature, the State is prior to the family or the individual."* And, as if anxious to make the grossness of his error still more palpable, and to show to still greater disadvantage a bad idea, by defending it with a worse illustration, he adds, "for the whole must necessarily be prior to the parts; for if you take away the whole body, you cannot say a foot or hand remains, except by equivocation;" which is about as wise as saying a bootmaker makes a pair of boots before he makes the vamps, for if you take away the boots you cannot say that any vamps are left. Anybody else except Aristotle would say, in direct opposition to what he has said, *that the parts must necessarily be prior to the whole*, and that therefore, if you would have a good State, you must, as the wise Confucius advises, look to the parts, the individuals of which it is to be composed.

The great superiority of Confucius to Aristotle as a sociologist and true political philosopher, is moreover conspicuous in this, that while they both, like truly wise men, treated of Ethics and Politics as intimately related and inseparably connected, Aristotle preposterously made Politics the foundation of morals, *as if men were to be legislated into virtue*, while Confucius, far more wisely, treated of morals as the foundation, and the only true and sure foundation, of Politics. Nor is the superiority of the Chinese to the Grecian sage any less conspicuous in the quality of the moral precepts which they respectively inculcated. For while Aristotle taught the abominable doctrine that it was lawful to wage war upon, and hunt down, a part of mankind for the purpose of making them slaves, † Confucius taught the sublime doctrine of Christ, "love your neighbor as yourself," five centuries before Christ was born.

Confucius makes a family the prototype of his nation or empire, and, as the learned Dr. Morrisson remarks, "he lays at the bottom of his system, not the visionary principles (which have no existence in nature) of independence and equality, but principles of dependence and subordination, as of children to parents, the younger to the elder, and the like." ‡

But the grand merit of Chinese Sociology, and that which distinguishes it above that of all other nations, is exhibited in the practical operations of their social system, and consists in this, *that cultivated intellect is the great controlling qualification for office, and the only passport to rank and*

* See Aristotle's Politics, book 1, chapter 2. It is proper to remark, in justice to Aristotle, that in other parts of his work he palpably contradicts what he says here, (no uncommon thing with Aristotle,) and distinctly enough recognizes the idea of Confucius. See Politics, book iii., chapter 9. But our author is fairly to be held responsible for what he says. Moreover, when he asserts two contradictory propositions, he is to be considered as adhering to that to which he gives the most prominence; and it is the proposition referred to in our text that Aristotle most prominently and emphatically lays down.

† If any one doubts that Aristotle taught this doctrine, let him consult Aristotle's Politics, book I., chapter 8.

‡ On this point Aristotle agrees with Confucius. See Aristotle's Politics, *passim*.

consideration in the State. Indeed, the whole government of China may be regarded as a grand College of Literati, into whose ranks no person can gain admission, not even the son of an emperor, without passing through the ordeal of a rigid examination on the learning and jurisprudence of his country. The Chinese have a proverb which is of real significance with them, that "by learning the sons of the common people become great; without learning the sons of the great become mingled with the mass of the common people."

In further illustration of the practical Sociology of the Chinese, the following observation of Mr. Davis, concerning one of their customs, is suggestive and valuable:—"To the system of clubbing together in families—we might almost say in clans—is to be attributed that sacred regard to kindred, which operates better than a public provision for the poor, and serves as one of the best means for the *distribution of wealth*; a valuable science, in which they perhaps beat our economists, though they do not equal them in the rules for its creation."* This remark is not less creditable to the discernment of Mr. Davis as a speculative sociologist, than it is to the Chinese as practical sociologists.

The Sociology of Confucius, however, though admirably well adapted to the Mongolian family, and to all that part of mankind who are unfitted for rising to the higher grades of social existence, and eminently suggestive and instructive to all, is not, however, so well adapted to the higher grades of humanity, such as we find among the Caucasian family, or the European branch of it. It is not adequate to the requirements of a Sociology which aims at the freedom and higher interests of all mankind.

No very complex problems are to be solved by the social philosopher who does not propose to elevate more than one-half the human family to the dignity of spiritual or intellectual life. It is easy enough, or certainly not very difficult, to devise a social system in which nearly one-half of the society may enjoy, in large measure, the comforts of rational existence, while all the suffering, privation, and degradation incident to the workings of the machinery of society, or rather of the machinery of the universe, are thrown upon the other portion, who are doomed to the condition of a merely animal existence, toiling like dumb cattle, to be lodged on straw and fed on husks, or at best to be lodged on husks and fed on meal. All that is necessary to the perfecting of such a state of society, is a well-regulated political system, adequate to insure stability and order in the State, and to keep down the lower orders, should they, *like the eels in the play*, writhe too convulsively at being skinned.

For the perfecting of such a state of society the Sociology of Confucius is admirably well adapted; but it contemplates, from too low a standpoint, the social destiny of mankind, and does not rise to an adequate consideration of the higher and more difficult questions, which have been so much discussed by European philosophers, between prince and people, capitalist and laborer, master and slave.

If, indeed, we may believe what the Abbe Le Huc, the French Jesuit, in his late work on China, tells us, we must accord to the Chinese a capacity for somewhat deeper, if not more just, speculations, and even experiments, in Sociology. He informs us that in the eleventh century of the Christian era, the reigning emperor of China was induced, at the ur

* See Davis's History of China, chapter 7, page 248, of vol. i.

gent instance of one Wan-gan-che, a speculator in Sociology, to attempt a grand scheme of *communism*, the government undertaking, for the common good of all, the direct control and direction of the whole property and business of the empire, which it is superfluous to remark proved a grand failure, after entailing incalculable disorder and suffering.* But this statement of Huc is to be received with considerable distrust, from its great improbability, as well as for other reasons.

With the literature of Japan, notwithstanding the learned researches of Kaempfer, Thunberg, Klaproth, Meylan, Fischer, and Siebold, and the accidental discoveries of Golownin and others, Europeans are still very slightly and imperfectly acquainted. If we may rely upon the statements of Fischer and Siebold, however, their moral philosophy (and we may conclude also their social) consists in little more than commentaries on the doctrines of Confucius, whose mighty influence is not confined to China. Our historic glance at Japan is not, however, barren of sociological interest and suggestion. Its political system is one of the most remarkable that ever existed. It exhibits most strikingly the potent efficacy of custom, the supremacy of law, and the excess to which political regulations may be carried. If there ever was a country completely under the dominion of law, and happily exempt from the arbitrary authority alike of king and populace, it is Japan. If there ever was a nation that might be said to be governed to death, it is the Japanese. Every man in Japan is a slave to the unbending despotism of law. From the wretched outcast *pariah*, who deals in hides and leather, to the superior *mikado* upon the throne, whose person is so sacred that he dare not be seen outside the precincts of his prison palace, every one in Japan is subject to the most minute and exact regulations, and is beset and tormented with spies to watch and report upon his conduct.

So stern, moreover, is the rigor of the political system of this remarkable people, that if at any time a difference of opinion should happen to arise between their grand council of State, or executive board of thirteen, and the *Ziagoon*, or visible and *de facto* emperor,† and the point in dispute be referred (as imperious custom requires) to the arbitration of the three first princes of the realm, the most serious consequences, it is said, must inevitable follow; for if the council be sustained by the arbitration, the *Ziagoon* must abdicate forever; if he be sustained, the councilman who proposed the rejected measure, and often the whole council, must commit suicide. Thus would seem to be practically carried out in Japan the organic law proposed by Charondas of Greece, that whoever proposed a new law should do it with a halter around his neck, so that, if his proposition was rejected, he might be hung on the spot. Whosoever believes that mankind can be legislated into either wisdom or virtue, and that there is any great efficacy in the multiplication of political regulations, let him study the Sociology of Japan.

* See Huc's work on China; also, Chambers's Journal, No. 84, for August 11th, 1855.

† Some European writers on this country have spoken of two emperors as being recognized by the political system of Japan—the *Ziagoon*, or visible and temporal emperor, and the *Mikado*, or invisible and spiritual. The better opinion, however, appears to be that there is but one emperor *de jure*, the supreme invisible *Mikado*, while the emperor *de facto*, the *Ziagoon*, is, in contemplation of law, merely his vicerent.

This, in fact, is not materially different from what exists in Britain, where the king is nominally, or *de jure*, the chief executive magistrate, while the prime minister is *de facto*, and in reality, so. Indeed, in all political systems there is a constant tendency to this *dual* manifestation of authority—the *de jure* and *de facto*—the apparent and real.

The Aztec writings, executed in rude hieroglyphics, and relating only to the history of their nation, can scarcely deserve the name of literature; and we should doubtless search among them in vain (were they all preserved to us, and could we decipher them all) for any important speculative ideas on Sociology. Nor does their practical Sociology, as exhibited in their political institutions, exhibit any very prominent features that possess more than a historic interest. Their elective monarchy, their independent judiciary, their judicious gradation of courts of justice, and their faithful record of judicial proceedings, evince no inconsiderable share of political sagacity—the more remarkable in a people, in many respects, so rude and barbarous.*

There were, however, two features in Aztec Sociology, intrinsically deserving of special notice, both of unusual historic interest, and one particularly suggestive to the social philosopher. These were public hospitals for the sick, and important limitations on the institution of slavery.† It is remarkable that the Aztecs were the only people not blessed by the light of Christianity, so far as we know, who ever established public hospitals for the needy and afflicted. Their limitations on slavery were also highly important. The rights of the slave were defined with precision, and guaranteed by law; so that he was not left to the arbitrary control of a master, responsible only for his life. His children, moreover, were born free. *No one could be born to slavery in Mexico.*‡ The slave class could only be replenished from the original sources of slavery, captivity in war, crime against the State, voluntary surrender of liberty, or sale of child by parent.§ These Aztecs had no great State document declaring that “all men are created free and equal.” But they distinctly recognized, to a certain extent, the sublime doctrine, and consistently adhered to it in their practices.

The Inca race, of Peru, can, with less propriety than the Aztecs, of Mexico, be said to have had any literature or speculative philosophy embodied in writing; though like most nations, however rude, they had their *haverees* or poets; and besides these, their *amautas*, or annalists, charged with the duty of transmitting orally, or by tradition, the deeds of the reigning Inca and his ancestors, and also their *quipus*, or State archives, consisting of skeins of various colored thread, attached to cords of convenient length, the rude symbols which comprised their only substitute for written language.|| Very imperfect, we may reasonably conclude, must be that literature which is expressed merely in skeins of thread, though these rude symbols were adequate, it appears, to express much accurate historical, as well as statistical, information.¶

But if we derive quite as little suggestion in Sociology, speculatively, from the Inca as from the Aztec race, we derive far more, practically. The sociological system of the Peruvians, under the rule of the Inca race, as described by Prescott, was the most remarkable, so far as we know, that ever existed. It afforded the nearest approximation, on a large scale, to the realization of the visionary idea of the commonest school of socio-

* See Prescott's History of Conquest of Mexico, ch. ii., pp. 23-28-29-31-33 of vol. I.

† See Prescott's Mexico, ch. ii., pp. 37-48, of vol. I.

‡ See Prescott's Mexico, ch. ii., p. 37, vol. I.

§ *Idem.*, p. 36, vol. I.

|| See Prescott's His. of Conquest of Peru, book i., ch. 4, pp. 118-19-20-21-22-23, of vol. I.

¶ *Idem.*, *Id.*

logists to be found in human history, and on the only condition on which such an approximation is possible, on any large scale—the absolute subjection of one portion of society to another.

The whole national domain of Peru, it appears, was divided into three equal parts—one of which was assigned to the Inca or ruling order of the State, another to the Sun or priestly order, and the third to the people or working order. The people's part was again divided equally, every year, among the great body of the people or slaves of the Inca family, as they virtually were; each head of a family (which every man was required to become at the age of twenty-four) receiving an equal part, and the whole body of the people being required to cultivate the lands of the Inca and priestly order, as well as their own.* Thus did the government of the State undertake to assure to every one engaged in agriculture (their chief industrial pursuit) an adequate share of landed property for his maintenance.

The government undertook a similar office as to those engaged in manufacturing pursuits—taking that branch of industry, as well as the agricultural, under its own supervision.† Nor did the paternal care of the government cease here. The very lamas, or Peruvian sheep, were all owned by the Inca and priesthood; and the wool annually clipped from their flocks was stored in public magazines, and dealt out to each family according to its wants,‡ almost precisely after the manner which prevails on a Virginia or Georgia estate of supplying the slaves with clothing.

In truth, the whole sociological scheme of Peruvian society, under the Inca rule, as portrayed by Prescott, was but an expanded application of the scheme of domestic slavery, as exhibited in the slave States of America; and a Virginia or Georgia plantation may be regarded as an almost perfect *miniature* of the Peruvian State—the master representing the Inca, the overseer the priesthood, and the negroes the great body of the people. To those who would accept communism on such terms, it may be said, try the experiment; for on such terms only is it practicable, for reasons that will hereafter be fully explained and demonstrated.§

One other feature of Inca Sociology, intimately related to those already noticed, and forming a part of the whole system, is deserving of special notice. This was the storage of large quantities of agricultural produce in public magazines by the Inca, to be kept as a *reserved fund*, to be distributed to the people in seasons of scarcity. This is an indispensable provision, in one form or another, for a perfect social system. It would be better by far that every individual member of society should be provident enough to lay up this *reserved fund* for himself and his natural dependents. In default of this, however, in order to prevent occasional famine, it must be furnished in the mode adopted by the Incas, or, as is much more common in highly civilized and wealthy communities, by those *wasteful habits* of the affluent, so much clamored against by superficialists, which being discontinued in seasons of scarcity, yield a sufficiency for the needy and suffering.

We may conclude this review of Mongolian or yellow-skinned Sociology by observing, that though instructive and suggestive, and peculiarly

* See Conquest of Peru, book I, ch. 2, pp. 47-8, of vol I. † *Idem.*, p. 51. ‡ *Idem.*, p. 52.

§ Mr. George Fitzhugh, in his "Sociology for the South," already alluded to, has justly said that what the *communists* seek to accomplish is practically realized under the institution of slavery.

well fitted for the Mongolian family, it is not adequate to the requirements of many branches of the Caucasian family; that it is predicated upon too low an estimate of the inherent dignity and natural rights of man; that it does not rise to the contemplation of many of the important questions as to the relative rights of prince and people, capitalist and laborer, master and slave, so important in many conditions of human society; and that Mongolian intellect does not appear to have anywhere shown itself competent to grapple with those high and momentous questions.*

Of the great Caucasian division of the human family, with its various branches and manifold ramifications, more widely distributed than any other, penetrating Africa, Asia, and Europe, and latterly extending into America, the only *type*† of the human genus that has shown any decided indications of a progressive development, and from whose stock have issued all the nations that have contributed very largely to the stores of human knowledge, or yielded any of the choicer fruits of genius, many nations have disappeared from the world, leaving scarcely any relics of their learning, and but few vestiges of their existence.

The learning of ancient Egypt, Chaldea, Phœnicia, and Persia, are almost as little known to the present age as if they had never existed, while that of India continues, for the most part, locked up in a language but little known to Europeans, from a doubtless well-grounded conviction that it is scarcely worthy of translation into European languages.

The *hieroglyphics* of Egypt, the only remaining records of its ancient inhabitants, and which have been found so profusely inscribed upon their monuments, as well as upon the numerous scrolls of *papyrus* that have been discovered in their tombs, remain, to a great extent, undeciphered, notwithstanding the aid which has been afforded to the learned, by the trilingual inscription on the Rosetta stone. And such of them as have been deciphered have been found to relate, almost exclusively, to the mythology of their priests, and the chronological order and military achievements of their kings. The few fragments of Egypt's renowned historian, Manethe, preserved to us in Josephus, Eusebius, and Clemens, of Alexandria, are barren of nearly all information not essentially chronological. We strive in vain to restore the contents of the forty-two sacred books of Egypt, which existed in the time of Clemens in the third century of the Christian era, from the brief references made to them by that eminent writer. Nor does the recent elaborate effort of the learned German scholar, the Chevalier Bunsen, to restore "Egypt's place in History," aspire to much more than a philosophical dissection of its language, and the rectification of the chronology of the human race.

While all insight into the speculative Sociology of Egypt (if, indeed, it ever possessed any) is thus denied to us, we find in its practical Sociology, as developed in what we know concerning its political system, a remarkable and suggestive illustration of the infusion of *theocratical* principles into the social system—an extraordinary blending of religious with politi-

* To this remark an exception may be found, perhaps, in the Aztec race, in their important and humane limitations on the institution of slavery already referred to; also in the Chinese race, in their grand experiment in communistic philosophy, also before referred to.

† Perhaps it would be more proper and less liable to criticism to say, the only *division* of the human family, any of whose *types* has shown, &c. This mode of expression should at least be less objectionable to Messrs. Nott & Gliddon who, in their late work on the "Types of Mankind" stoutly insist that there are many more distinct *types* than even Blumenbach recognizes.

cal power, or what, in later times, has been termed "the union of church and State." In this respect the Sociology of Egypt was most probably the model on which that of the Hebrews was framed, though the latter was doubtless aided and improved greatly by the more immediate inspirations of Israel's great law-giver. In this respect, it is also worthy to be noted that the Sociology of Egypt bears testimony to the idea of Comte, before referred to, that the human mind, in its first stage of development, is theological or fictitious. Other nations besides Egypt, indeed, bear testimony to the same point, if not all; a fact, however, from which somewhat different conclusions might be drawn from those deduced by that eminent, though rather too dogmatical, philosopher.

The highly theocratical character of Egyptian Sociology is attested by a fact which is not only worthy of note to the sociologist, but eminently suggestive to the mere political philosopher. This was their remarkable *scaling of votes*, by virtue of which the priestly order vastly preponderated in the State. In the earlier times of Egypt, when their kings or political chieftains were elective, it seems that in the election of their kings the vote of the highest order of priests, or the *prophet* order, counted one hundred, that of the next order twenty, and that of the next ten, while the vote of a soldier counted only one.*

This idea of scaling or weighing votes was also acted on by the Romans, as will be subsequently noticed more particularly, though they scaled votes according to the wealth of the voters, and not, like the Egyptians, according to occupation.

In modern times this idea has been almost totally neglected, instead of being maintained and improved upon, in political systems, although it may be detected in the American system of government, when it is recognized in the organization of the Federal Senate; for every State in the American Union is entitled to just *two senators*, in the senatorial branch of the Federal Congress, so that the little State of Delaware, (which has been facetiously termed, from its diminutive size, the county of Delaware,) with a population of less than 100,000, has an equal voice and influence in this great deliberative body with the Empire State of New York, having a population of more than 3,000,000. In the American government, however, this idea is recognized purely on federal grounds, in deference to State sovereignty under the federal compact, and not upon any general and fundamental grounds of political propriety.

It may be very gravely questioned whether modern Sociology has not suffered in having lost or abandoned this political idea, so prominently recognized among the Egyptians and Romans, and whether experience does not fail, on this point at least, to sustain Mr. Comte (and others) in his favorite idea of a constantly progressive development of the human race. In this respect, as in some others, it might appear to many that mankind have rather retrograded than advanced in modern times. Of how many errors might some modern States be relieved if there were only some tolerably just and reliable mode of *weighing* votes instead of merely *counting* them!

All that is left to the world of the learning of the three great kingdoms which successively flourished on the plains of Mesopotamia, (Chaldea, Assyria, and Babylonia,) with the exception of the few fragments of Bero-sees preserved in Josephus, are embodied in the *cuneiform* characters,

* See Bunsen's Egypt, book I., sec. 1, art. iii., p. 5, and note thereto.

inscribed on the Babylonish, Assyrian, and Chaldean bricks, the inscriptions on the clay tablets lately discovered in such large quantities at Nineveh, by Mr. Leyard, and which have been fancifully denominated "the royal library of Nineveh," the inscriptions on the clay cylinders still more recently discovered at Babylon, by Mr. Rawlinson, which he has supposed to contain the records of the Babylonish empire, and on the clay cone and block marble tablet, discovered by the same explorer among the ruins of cities supposed to have been more ancient than either Babylon or Nineveh, and believed by him to contain records relating to the more ancient empire of Chaldea. Should the learned linguists succeed in deciphering all these inscriptions, it is probable that some curious and interesting information, not now known concerning those primeval empires, will be disclosed to the modern world. But it is doubtful whether they will shed any light on the science of Sociology, or indicate that the philosophy of that age has concerned itself, to any important extent, with questions of that nature.

The Phœnicians, with all their advancement in navigation and the industrial arts, have disappeared from the world, leaving no relic of their literature except their *letters*, which, as Grecian story informs us, were brought into Greece by one of their colonists under the leadership of Cadmus, some 1,500 years before the Christian era—an event to which Europeans are immediately indebted for the advantages which they have long possessed of the *phonetic*, or alphabetical, mode of writing, instead of the *symbolic*, or hieroglyphical, which prevailed in Egypt, and prevails to this day in China.

The learning of the Carthagenians, an offshoot of the Phœnician stock, is equally lost to the world, having been all destroyed, together with their historical records, by the ruthless spirit of their Roman conquerors. Nor are any traces of their language preserved to the present age, except in a few passages of a comedy, by Plautus, a Roman writer of the second century before Christ. Some knowledge of their Sociology, so far as relates to their political organization, we are enabled to deduce from various Grecian and Roman writers, and more particularly, Aristotle, Polybius, and Livy. From these we learn that their government was framed upon the best model known to antiquity, being a highly aristocratical republic, and bearing a strong resemblance to those of Sparta and Rome, having two chief executive magistrates, or *suffetis*, corresponding to the two kings at Sparta, and the two consuls at Rome, a Senate, and also popular assemblies exercising an important influence in State affairs.

In connection with the Sociology of Carthage, it may be important to remark, that Polybius, (who flourished some two centuries later than Aristotle, and when Carthage had lost much of that excellence in its political character, which had elicited the admiration of that philosopher,) attributed the disadvantage of that State, and its inferiority to its great Italian rival, in their ever memorable struggle for supremacy, to the fact, that Carthage was, at the time, to a great extent, under the dominion of the populace, while Rome was still chiefly under senatorial rule and influence—Carthage being then in its age of decay, and Rome in its age or period of perfection, which period, in the opinion of this great political philosopher, was indicated by the ascendancy of the aristocracy, a senatorial body of a State.*

* See Polybius's General History, book vi., chap. 2.

Of the four different languages which have been successively spoken on the plains of Persia, the Zend, Pehlevi, Parsee, and Persian, scarcely any traces now remain of the first three. But if the learning which they embodied, during their respective periods of existence, may be judged by that which is embodied in the living Persian, the cause of science has little reason to regret its extinction. The learning of Persia, as embodied in its extant writings, (which are nearly all in the modern Persian,) does not rise above the dignity of mediocrity in any of the sciences. Its only merit is to be found in its historical and poetical compositions, and principally in the latter. The *Zendavista*, the most notable, as well as most ancient, book of the Persians, written originally in the ancient Zend, and translated successively into the three succeeding languages of that country, as well as into some of the European languages, is nothing more than the Koran or Bible of the ancient Persians, embodying the ideas of the Magians or fire-worshippers, of whom the persecuted and insignificant sect of the Ghubres, as the Mahommedans style them, in Persia, and the Parsees, as they are still called in Hindostan, are the only surviving remnants at this day.

If we were warranted to suppose that what Xenophon has said, in his *Cyropaedia*, concerning the Persian mode of training youth, was historical truth, that their children were rigidly drilled at their public schools, in the principles of justice, as among other nations they were drilled in the principles of the alphabet, and that instead of aiming at the multiplication of laws to punish offences, the grand aim of the Persians was so to train up their youth that there should be no offences demanding punishment, we should be authorized to accord to the Persians some very just and highly important ideas in social philosophy. But there are abundant reasons which constrain us to the conclusion that the *Cyropaedia* was essentially a mere historical romance, and that the valuable ideas which it contains concerning State education, are to be referred rather to the speculative Sociology of Greece, than to the practical of Persia.

The vast collections of Hindoo literature, notwithstanding the labors of Sir William Jones, and other eminent Oriental scholars, are still almost entirely locked up, not only to Europeans, but also to the modern Hindoos themselves, in the long extinct Sanscrit, the most ancient human language (not strictly hieroglyphical) of which any remains are now extant. It would be unwarrantable in our very limited acquaintance with that literature, to pronounce any very positive judgment upon it, as to its merits or the nature of its contents. Sir William Jones, indeed, informs us, that among the Hindoo writings are to be found systems of philosophy very similar to those of the most eminent Grecian philosophers—a fact which may tend unduly to raise the character of Hindoo philosophy, in the estimation of those who do not consider, or are not aware, how near a resemblance (naturally if not necessarily) exists between the fundamental ideas of the wise men of all ages and countries, upon those theological, metaphysical, and ethical questions, which chiefly engaged the attention of Grecian philosophers; and that it is by the application which is made of fundamental principles, and the mere particular deductions which are drawn from them, rather than by the mere recognition of those principles, that the sagacity of a philosopher is to be estimated.

Notwithstanding, moreover, the remark of Sir William Jones, that “wherever we turn our attention to Hindoo literature the idea of infinity

presents itself," the character of that literature cannot be very highly estimated by us, when we consider that nearly the whole of it is embodied in verse, even down to their histories and philosophical treatises, and when we furthermore consider the extravagant, unnatural, and monstrous character of their two most celebrated works, "The Mahabarat" and "Kamayana," the one a sort of historical, and the other a sort of theological or mythological, romance, some of the best specimens of which have been translated into English. Philosophy is eminently *prosaic*; and we may feel tolerably well assured that a nation which has never risen above that poetical, or rather rhythmical, style of writing, which characterizes the earliest and rudest period of a nation's literature, has not made any very important contributions to science, either in the realm of Physiology or Sociology.

It might be supposed that the marked distinctions of class, (or of *caste*, as it is commonly styled, in reference to those of Hindostan,) which are so minutely dwelt upon in the ancient Hindoo writings, and which still exist, in a remarkable degree, in that country, (though founded on somewhat different grounds at present, from those of former times,) are entitled to prominent notice in a *review, historical and critical, of the different systems of social philosophy*. But on a close and critical examination, it will be found that these distinctions do not differ essentially from those which exist to a greater or less extent in every community, although they may be somewhat more numerous in Hindostan, more rigidly adhered to, and founded upon more frivolous grounds.

The distinctions of *caste* in Hindoo society are, for the most part, such as relate to social intercourse in the private relations of life, and are of too frivolous a nature to merit the attention of the social philosopher, whose office it is to concern himself only with the material comfort and substantial well-being of mankind. Now it is evident that such social distinctions have little to do with these, however much they may affect the spiritual sensibilities, or the *sense of the frivolous*. The flavors of one's coffee is not at all impaired by the fact that his neighbor refuses to partake of it with him; and if the plainer member of society has his larder well stored with coffee and other substantial provisions, it is a matter of small consequence to him (if he be a man of good sense) that the wealthier citizen declines exchanging visits with him.

In point of fact, moreover, it is doubtful whether the distinctions of Hindoo society are more numerous than exist in other populous communities. If there are 168 different *castes* of Brahmins in Bengal, as we are informed, there is probably a not less number of different *cliques* or *coteries* in the city of New York, who in point of fact have as little intercourse with each other, in private relations, as the different castes of Brahmins, though they may not be kept apart, and certainly are not, as to many of these *coteries*, by any such absurd notions of self-arrogated superiority.

In so far as the distinctions of *caste* in Hindostan are the foundations of peculiar privileges to those of particular *castes*, they are not essentially different from those which exist, and have existed, in other forms of human society. What are the sociological tendencies of such distinctions, or what is the real influence on the social welfare of "privileged classes" in societies in which they are recognized, would be an inquiry too elaborate to be consistent with the purposes of this review, and rather

appertains to the work to which this is intended merely as a general introduction.* It should, of course, be quite superfluous to remark, that in so far as social distinctions in Hindostan are founded upon differences of wealth, or actual superiority of comfort, they are, to all intents and purposes, the same as exist in every state of society, at all advanced in civilization and wealth; since in every such society there exist at least these three grand divisions of human society—the high, low, and middle, or rich, poor, and moderately circumstanced—and if it were possible to efface these, there would still exist the three grand distinctions founded in nature, and underlying all social distinctions, of *good, bad, and indifferent*, according to which men will affiliate, and according to which they will, in the main, and to a greater or less extent, prosper.

All things in the universe go by *trinities*, in many of their most important relations. This great fundamental organic law of creation, we shall find, crops out in Sociology, as well as in every other department of universal science. What nature and nature's God have ordained, and laid fast in the external constitution of things, let not man vainly and presumptuously hope that he can ever reverse.

The Hebrews do not appear to have been ever a scientific people, nor to have cultivated any species of literature, except the poetical, historical, and theological. They do not appear to have ever had any literature except those writings which are held sacred by them in common with Christians, the historical writings of Josephus, and the Talmud, which is little else than a collection of Jewish laws and traditions, with the comments of learned Rabbins. The three famous sects of ancient Hebrew philosophy, the Pharisees, Sadduces, and Essenes, appear, from Josephus, to have been altogether concerned about theological and ethical questions. And although the Essenes may be termed practical Malthusians, inasmuch as they refused to marry, and thus to increase population, yet this does not appear from Josephus's account of them, to have been on account of any social or political reasons, but purely from spiritual or psychological ones, thinking doubtless, like St. Paul, that it was better not to marry.

From this cursory and unsatisfactory commentary on the learning of ancient Egypt, and those Asiatic nations which are commonly regarded as belonging to the Caucasian branch of mankind, showing rather what we do not know, than what we know, concerning their attainments in science and general literature, it may be concluded, that, if they ever contributed any important ideas in social philosophy, it would be difficult now to discover what they were, or to distinguish them in the general mass of ideas which now prevail. It is, however, more than probable, that if they ever made any such contributions, they are not entirely lost to the world, for if contributed by the ancient Hindoos, they are probably still preserved in the Sanscrit libraries of India, if indeed they have not already been thrown into the general current of human ideas, which has been almost constantly flowing from the east towards the west; if contributed by the Egyptians, Chaldeans, Phœnicians, or Persians, it is altogether probable that they have been incorporated and preserved in the writings of Grecian philosophers. For most, if not all, the eminent wise men of Greece

* For a consideration of this question reference may be made to part iii. of the work to which this is introductory, where the "influence of government on the social condition, or man in relation to his political organizations," will be considered.

visited Egypt, Phœnicia, Mesopotamia, and Persia, and doubtless became acquainted with the philosophy of those countries, before publishing their own writings.

It is, however, most probable that none of those nations ever directed their philosophical speculations to questions in Sociology. The genius of their political institutions, as well as their inherent national characteristics, was eminently unfavorable to such speculations. The absolute despotism which have generally prevailed among Asiatic nations, of the Caucasian, as well as the Mongolian race, whensoever they have become advanced in civilization beyond the nomadic state, are incompatible with any speculations in social or political science, except such as aim at, or are in perfect harmony with, the adulation and exaltation of the monarch. And it is not a little remarkable, therefore, that we should find such valuable ideas in Sociology among the Chinese, as those which have been already remarked upon.

Thus we find that even in this enlightened age, and among the highly enlightened and philosophical French people, under the somewhat absolute rule of Louis Napoleon, while the spirit of philosophical inquiry is entirely free upon all other topics, it is not permitted to speculate freely on political questions; and the same observation may be made in relation to despotic Russia.

But independently of the influence of their political institutions, the inherent characteristics of those nations, as ascertained from what we know of their learning, and from the remains of their works of art, forbid us to suppose that they were concerned themselves much about schemes for the improvement of society, or the enlargement of the comforts of the suffering masses of mankind, or about the principles of Sociology best calculated to promote those ends.

When we contemplate the wonderful remains of the ancient greatness of Egypt, Assyria, and Persia, when we behold their stupendous pyramids, their grand palaces now in ruins, the gigantic proportions of their ruined temples, and their costly and exquisitely adorned tombs, we are at first overwhelmed with admiration, and are prompted to imagine that we behold the ruins of a civilization which the present inhabitants of the globe have not the power to emulate. But when we look through the imposing exterior of these wonderful remains, we find reason to doubt the justness of our admiration. Upon a more profound contemplation, we are apt to conclude, that those magnificent productions of the earlier nations were but the exterior fabric of a civilization of which the *interior* was to be modeled by a subsequent age—as the mere material framework of a civilization, the *moral* principle of which was yet to be supplied—as little else than the mere *body* of civilization without its animating, vital *soul*.

What idea, indeed, do these remains convey, except that of a merely material grandeur—a grandeur, moreover, designed only to gratify the vanity of a few pampered mortals, rather than to satisfy the wants of the general mass of mankind? The very magnitude of those works of the earlier nations attest the lowness of their ideas respecting the true aim of human improvement—the elevation of the condition of the great body of mankind. Those costly tombs for the dead bear testimony to the insufficiency of the habitations of the living. Those magnificent palaces of the princes, argue the abject meanness of the dwellings of their subjects. Those grand temples and stupendous pyramids speak to us of the

wretchedness of the slaves by whose hands they were reared. The vast amount of labor and capital expended in those comparatively useless works, would have been differently applied among a people even moderately advanced in Sociology. In a tolerably healthy state of society there would have been such a distribution of the aggregate wealth of the community, as well as of its political power, as could have been incompatible with such an enormous outlay of unproductive consumption.

In view of the foregoing observations and reflections, it may be safely concluded that that portion of the great Caucasian family, or division of mankind, which has existed in Asia and Africa, and whose greatest and only notable attainments in civilization, with the single exception of the Arabians, (who are to be subsequently noticed,) were made in ancient times, has neither made any high attainments in Sociology, in point of fact, nor turned its attention, speculatively, to questions of that nature, at least to any extent deserving of special notice. It is only among the strictly European divisions of the great Caucasian, or (as it is sometimes termed) European, branch of mankind, that questions in Sociology have been considered to any important extent. The consideration which such questions have received among them, will be noticed next in order.

Art. II.—PRINCIPLES OF THE BRITISH BANK ACTS OF 1844-45.

THE precious metals, gold and silver, from their nature and general estimation in which they are held by mankind, have become almost universally the material for money. They possess high value in their natural state. When they are coined, or are brought into the form of *money*, as we are accustomed to see them, their real value is but slightly changed, though their usefulness as articles of exchange is immensely increased. It is evident that gold or silver might be taken indifferently as the standard of value. Gold is the standard in Great Britain, while silver is that of France and America, though in both these countries there is the alternative of gold. The inconveniences of a *double* standard are very evident. Uncertainty would be introduced into the operations of commerce, for as gold and silver could not retain their identical proportionate value for any long period, debts would be paid in the metal which had become overvalued, while the one which had become undervalued would offer a profit on its exportation to foreign countries. Gold, then, being the standard of value in the United Kingdom, and the standing measure of all other commodities, it is plain that it can never rise or fall in value with reference to this measure—that is, with reference to itself.

The sovereign, or pound sterling, contains 480-1,869 parts of an oz. of gold, or little more than a fourth of an ounce; in other words, 5 dwts. 3 grns., or 123 grns. of standard fineness. The quantity of *pure* gold contained in a sovereign is 113.001 grns. The ounce of gold is thus worth £3 17s. 10½d., and that is what is usually called the "fixed price" of gold. This is sometimes spoken of as if there were some *arbitrary* price fixed on gold, and the demand is sometimes made by those who have not accurate notions on the subject for "a free trade in gold." The truth is, there is no trade more free. It may be exported and imported without

duty, and, in fact, it is the most free of all commodities. All that is fixed is the quantity of gold of a certain fineness that the pound shall contain, and all contracts are made to be discharged by the payment of so many pounds—that is, of such a weight of gold of standard purity.

The mode in which the metallic currency of the United Kingdom is regulated is as follows:—At the mint, gold is coined into sovereigns and half-sovereigns, at the rate of £3 17s. 10½d. per ounce, and any one who possesses a quantity of gold may take it there, and after waiting a certain time—usually about a fortnight—will receive it back without any deduction for the expense of coinage, divided into a certain number of coins, stamped, so as to certify the quantity of gold which each contains. The Bank of England, however, is obliged, by law, to purchase bullion, on demand, at the rate of £3 17s. 9d. per ounce, and this, practically, is the mode in which people obtain money for their bullion. The bullion is taken to the Bank, and after examination the value is paid to the owner in bank notes at the above rate. The small difference of 1½d. per ounce is more than compensated by the saving of the delay and inconvenience unavoidable at the mint; and the Bank of England, in fact, alone sends money there to be coined. The value of the gold coin is, therefore, no greater than that of the bullion composing it, but this is not the case with the silver coinage. A duty of rather more than six per cent is charged on the coinage of silver—that is to say, the gold contained in five sovereigns, instead of being worth only 100 shillings, is worth a little more than 106 shillings. The object of this regulation is, to prevent the exportation of silver coin, and this object has, up to the present time, been perfectly secured. Such must remain the case till gold shall have suffered a depreciation of upwards of six per cent. Should this, however, take place while the gold standard is maintained, the inconvenience may be obviated by the expedient of diminishing the amount of silver in the silver coins. Of course, had the enhancement of the value of silver coin been much more than it is, an inducement would be held out for illegal coining. Since 1816, silver is legal tender to the amount of 40 shillings, but not above that sum; it, therefore, has ceased to be a standard of value, and forms merely a subordinate species of currency, occupying the same relation to gold that copper occupies in relation to silver. Copper is legal tender for 1 shilling in pence, and half that sum in half-pence; and similar regulations are made in reference to it as are made in regard to silver, to prevent its being profitable for exportation in the form of coin. The amount of gold coin in circulation is variously estimated at from £45,000,000 to £60,000,000. In the United States a similar law in 1853 reduced the value of silver coins under \$1, and limited the legal tender of them to sums of \$5; the object being to retain small change in the country, and it has been realized.

Now, with regard to the effects of the increased supply of gold from California and Australia, though the nominal price, per ounce, at the mint can never fall below the amount already stated, yet it will be obvious that the *purchasing power* of an ounce of gold may vary; and, when the large additions to the stock of gold annually made from these sources are considered, it may safely be predicted that it will actually decrease, or, in other words, the value of gold will be depreciated.

To estimate accurately the effect of the depreciation of the value of gold arising from this increase of the supply is one of the most difficult

of problems, and probably we have not at present the means of attempting its solution. But some of the causes may be indicated which have retarded the depreciation, and, perhaps, up to the present time, have actually neutralized the effect on prices of the increased supply. Gold being used extensively in the arts, it is possible the consumption of it for articles of ornament and use may have somewhat increased; but there is no doubt that a large portion of the increased supply has been absorbed in the currencies of the different countries of the world, and the tendency to depreciation has thus been checked. Take, for example, France and the United States of America. In both countries the standard of value is silver, and the prices of the various commodities are reckoned in the one country in francs, in the other in dollars. But in both there is the alternative of gold, and the effects previously mentioned are likely to result from a *double standard* have actually come into play. In France, since 1802, the 20 franc gold piece is legal tender for 20 francs of silver, and, till a few years ago, it was at a premium; consequently silver was almost the sole coin in use. Since 1850, however, the supply of gold being increased, its value, in relation to silver, has fallen, and it has become profitable to replace silver coin with gold coin. We are told, on good authority, that, in France, all silver money is rapidly melted; 5 franc pieces are becoming rare in Paris; the bank pays its notes in 20 franc pieces. A remarkable increase of the gold coinage of France has consequently taken place. The quantity of coin in use in France, as estimated by the best authorities, was, early in 1849, 100,000,000 sterling in silver, and 3,000,000 in gold. In Holland gold coins ceased to be legal tender after the 23d June, 1850, the effect of which was to produce an efflux of gold into France, so as to reduce the premium of gold at Paris from 9 per mille in July, 1850, to *par* in December, 1850, while, during the greater part of 1851, it fell to 4 or 5 per mille discount. The French mint has been employed principally in coining gold of late years, so that the relative proportion of gold and silver coins in circulation has been completely changed. This is exemplified by the component parts of the reserve of the Bank of France, which on the 31st December, 1849, consisted of £160,000 of gold to £17,170,000 of silver; while at the same period of 1854, the proportion was £7,730,000 gold to £7,940,000 silver, and the silver has now nearly disappeared. In the United States, under the law of 1792, the proportion of the value of silver to gold was fixed at 15 to 1. This proportion was lower than the *market* proportion, and in consequence of this undervaluation of gold, but little gold was sent to the States mint, or employed in circulation. The act of 1834 raised the proportion at the mint of the United States to 16 to 1, at which period Mr. Sennington, one of the highest authorities on the subject, computed that, in England, the mint proportion of silver to gold is 15.71 to 1, and in France 15.69 to 1.

The act of 1834 undervalued silver, and led to the exportation of the smaller silver coins; in 1853 a change took place as follows, (silver coin being 9 parts fine and 1 alloy:)—

	1837.	1853.
Silver dollar.....grains	412½	412½
Half dollar.....	206½	192
Quarter dollar.....	103¼	96
Dime.....	41½	38.40
Half dime.....	20¾	19.20

The gold eagle, 10 dollar piece, by the act of 1834, contains 232 grains of pure gold, and as the sovereign contains 113 grains pure gold, the sterling value of the gold dollar is 49.08s, or 4.89 dollars per £1.

When people are suffering, as during the late commercial crisis, from the scarceness and dearth of money, we sometimes hear the question asked, "where is the gold all gone?" or, putting it into the form of a paradox, "since gold is so much more plentiful than it used to be, why is money so scarce?" Now, it will be seen from the foregoing observations, that, in so far as the effect of the increased supply of gold is *felt* in the markets of the world, a depreciation of its value has taken place; in other words, there has been an advance in the prices of other commodities. Consequently, it will require a larger amount of money to represent these commodities in their transference from hand to hand. Thus, if, at one time, the price of silk be 20s. per pound, it will require a sovereign to purchase the 1 pound; but, if there is an increased supply of sovereigns, and only the same supply of silk, the price may rise to 30s. per pound; and, in that case, it will require a sovereign and a half to make the purchase.

It is sometimes assumed that, as money becomes more plentiful, and consequently less valuable, the rate of interest, or the price paid for its use, should fall. The fallacy, however, that lurks under this statement will be detected by the consideration, that the amount paid, in the form of interest, for the use of the money, will be diminished in its purchasing power in exactly the same proportion as that of the money lent, and the rate of interest, therefore, other things being equal, should remain the same. Thus, suppose 5 per cent per annum is given as interest for the use of £100, and gold becomes so abundant that its purchasing power diminishes by one-half, it is evident that the purchasing power of the £5 will be affected exactly in the same proportion as that of the £100, and, consequently, though gold has become more abundant, the interest paid for its use will not, necessarily, vary.

People sometimes speak of the supplies of gold from Australia as if they caused an actual increase of our wealth to the extent of the value of the gold we receive. They forget that, for every ounce of gold transmitted to us, we had previously sent out a corresponding value of woolen, or cotton, or silk goods, or of other commodities. The value of these goods we had expended in the purchase of the raw materials, and in wages; the only advantages we have derived from the transaction being the profits that may have resulted to the merchant and manufacturer, and the increased wages which our operatives have been enabled to earn. A real increase of profits and wages, however, can only arise from the increase of money, so long as the latter is partially distributed. When the process of distribution has gone so far as to bring gold to its proper value in comparison with all commodities and services, neither merchants, nor manufacturers, nor operatives gain by the increase of price of what they have to sell. But a general rise of prices can only be brought about by successive partial rises, and the capitalists and laborers, who are the first to receive the higher prices, are gainers in their purchases. But by means of their purchases they raise prices against themselves, and help to bring about a general rise, and a true equilibrium in the value of gold, as compared with all other things in the market.

The basis of our commercial transactions is specie payments. "Who-

ever," says Mr. Huskisson, "buys, gives—whoever sells, receives such a *quantity* of pure gold or silver as is equivalent to the article bought or sold—or, if he gives or receives *paper* instead of *money*, he gives or receives that which is valuable only as it stipulates the payment of a given quantity of gold or silver." The currency of the country, in so far as it consists of the precious metals, is so much of the capital of the country applied to that purpose. Even, however, supposing the currency of the country to consist entirely of specie, it does not follow that the amount of that currency would bear anything but a small portion to the actual amount of the exchanges of commodities. The same coin passes frequently from hand to hand, and becomes the representative of value in many different sales.

Bank notes are a very important mode of saving the amount of unproductive capital employed as circulation. They form the substitute for gold, and even were a sovereign deposited in the bank for every pound-note issued, the use of notes would be a saving in the actual wear of the coin, and the avoiding of accidental loss in the transference from place to place. Practically, however, it is found unnecessary for the purposes of securing the convertibility of notes to have their full amount deposited in the form of bullion. A certain amount can be calculated upon with absolute certainty, as likely to be kept in circulation, by notes being more generally available for many purposes than the actual coin; but it has been deemed advisable by the Legislature to secure that, beyond this amount, a deposit of coin shall be retained for every note issued. It is upon the effect of this limitation that a great deal of controversy has taken place—based, too often, upon much misconception and ignorance of the functions of a currency. Few, indeed, if any, would desire a return to the system which prevailed from the beginning of the present century till the resumption of cash payments by the Bank of England in 1821. During this period, a difference in value existed between bank notes and gold, varying from 2 to 25 per cent. A pound-note, which ought to have been exchangeable for 5 dwts. 3 grns. of gold, was really only exchangeable for 4 dwts. 8 grns. Gold, instead of being worth merely the mint price of £3 17s. 10½d. per ounce, was worth at the market price £4 12s. 0d. per ounce. But assuming that every precaution has been taken to secure the perfect convertibility of bank-notes—and one of the most important of those precautions is the preserving of a proper amount of reserve of bullion—it seems perfectly clear that, for carrying on the internal trade of the country, there might be a complete substitution of bank-notes for specie with absolute safety to the convertibility of the notes. In England, a hinderance is placed to this substitution of bank-notes for gold, by the prohibition of the issue of notes for less than £5; but there seems to be no good reason why notes of a lower denomination should not be allowed. During the period when no limit was fixed to the issue of bank-notes, and when the usury laws, by limiting the raising the rate of interest beyond a certain point, trammelled the action of the bank, and prevented its exercising proper control over the currency, thus endangering the convertibility of notes, the objections to a circulation of one pound-notes might have been valid. At present, however, these objections, founded principally on the danger of alarm arising among small note holders, are shown to be futile by the experience of Ireland and Scotland, where the law, however, is defective, from laxity, in permitting issues of notes up to

a certain amount without security of any kind whatever, except the assumed prudence and solvency of the issuers. The issue of one-pound notes was suppressed in England in 1825, principally on two grounds—the danger of the issuers being unable to pay them on demand, and the risk of forgery. The first objection is removed by the provisions of the act of 1844, and by the application of the principles of that act in case of the permission of the issue of such notes; and the other could be easily remedied by having elaborately engraved notes similar to those issued by the Scotch and Irish banks. The one-pound notes formerly issued by the Bank of England were so clumsily executed that their imitation was comparatively easy. A considerable advantage would also accrue to the State by such an issue. In Ireland and Scotland the aggregate sum of the one-pound note circulation exceeds that of the larger notes, and such would probably be the case in England were the issue of one-pound notes permitted. Under the present law £22,000,000 of notes, unrepresented by bullion, are allowed to be issued in England, and a similar amount might, therefore, be presumed as a reasonable sum of one-pound notes, which might be left also to be issued without bullion, thus adding so much to the capital of the country, and the profits of this amount of note circulation might be added to the income of the State. It would, also, be a convenience were Bank of England notes made legal tender throughout the United Kingdom. They are, in fact, never refused when tendered in payment; but their legalization as tender would enable the banks to employ them instead of gold coin, on emergencies.

Every bank-note bears on its face the following words:—“*I promise to pay the bearer on demand.*” It may be assumed, therefore, that in regard to the sum specified in the document, this promise ought to be rigidly performed, and that it is the duty of the Legislature to secure the strict fulfillment of this obligation. In other words, it is assumed that every holder of a bank-note should be able to obtain, on demand from the issuer, the number of gold coins which the note promises. It is true that there have been, and that there are, some who have maintained that it is not the duty of the Legislature to interfere in the matter at all, while others have puzzled themselves with finding out some other meaning for a pound than that which the generality of mankind attribute to it—namely, a certain definite weight of gold of standard fineness. The vast majority, however, of those who think on the subject have arrived at the opinion, that the convertibility of bank-notes ought to be maintained by law. Parliament, in its efforts to secure their convertibility, has thought it necessary to make such regulations in regard to the issues of bank-notes, as shall make them, in all respects, conform to the variations which would occur in a purely metallic circulation.

Among those who assert the expediency of securing the convertibility of notes, there are some who maintain that the mere fact of their being payable in coin will necessarily prevent the possibility of the over-issue of notes. It is maintained by them that the circulation of notes is entirely beyond the control of the issuer; that, if too many notes are issued for the convenience of trade, they will be immediately returned to the bank for gold, and that thus the supposed evil would correct itself. It is of the utmost consequence, in dealing with such questions as the currency, to guard against the use of vague and indefinite expressions—the dark cover under which may lurk a fallacy sufficient to vitiate the whole

argument. Such an expression is that of the "convenience of trade," which implies that this assumed convenience is always of a definite and legitimate character. This, as we are too well aware, is far from being the case. The expression may mean the "convenience" of reckless speculators, desiring to make use of bank-notes for the purchase of large quantities of commodities, and for holding them in possession, in anticipation of an extravagant profit consequent on an advance in prices.

It is argued by others, with great force of reasoning, that the real convertibility of the notes can only be maintained by such regulations as shall make their circulation fluctuate as a purely metallic currency would do. They assert that, unless certain restrictions are made on the issue of notes, the mere fact of their being payable on demand would not necessarily prevent an over-issue, the temptation of increased profits being likely to induce bankers to issue a larger amount of paper, and to maintain a larger quantity in circulation, than would exist of coin, provided there was no paper. The effect of this, they say, would be to raise prices and maintain prices at somewhat greater height, and for a longer period, than would occur with a currency purely metallic. Of course these issues would necessarily at some period be brought to a metallic test by the action of the foreign exchanges; but during the over-issue, the whole currency of this country—gold as well as paper—would be depreciated, as compared with that of other countries—that is to say, during the over-issue, a bank-note, or a sovereign, would purchase a smaller quantity of any commodity, than either would purchase under a purely metallic currency.

Such is the view which the late Sir Robert Peel induced Parliament to take when the bank acts of 1844 and 1845 were passed—the former regulating the issues of the Bank of England and the country banks of England—the latter the issues of the Irish and Scotch banks. Though parts of the same system, the laws which affect the issues of the Bank of England are very different from those which apply to the other banks. It is evident that the principles above referred to have been rigidly applied in regard to the Bank of England; whereas, in regard to the other banks, there has been a very partial application of them. It may hence be inferred, that the author of the measure ultimately contemplated the extinction of all issues, except those of some great central establishment under the control of the State.

With regard to the country banks of the United Kingdom, there is simply a restriction of the issue of notes unsupported by a bullion reserve to a certain amount, in the case of each bank, determined by the average circulation of the bank during a certain specified period. The English country banks are prevented from issuing any notes whatever beyond their fixed issues; while the Irish and Scotch banks are allowed to issue notes beyond their fixed amount, provided they have gold in their possession equal in value to the amount of such issue. No security is, in fact, taken for the convertibility of the notes allowed to be issued without the deposit of bullion, except the assumed solvency of the issuers. There is, however, a very important and salutary provision for the periodical publication of properly-certified statements of the amount of issues of all banks, and the quantity of bullion held.

A positive limit having thus been fixed on the English country issues, and those of the Irish and Scotch banks being thus regulated, the fluctua-

tions in the amount of paper money are thrown on the Bank of England, and the amount of the issues of the Bank of England is made to vary with the bullion held in that establishment. The primary object and purpose of the act of 1844, (as stated by Lord Overstone, its ablest expounder,) is the effectual protection of the bullion reserve "from the possibility, under any circumstances whatever, of falling below a safe amount." It does not trust the regulation of its issues to the discretionary action of the bank. In case of a drain of bullion, or, in other words, the diminution of the specie reserve, the operation of the act is intended to compel the bank to contract the currency in proportion to that drain, and, by advancing the rate of discount, so to enhance the value of money in England as to attract back the bullion into the coffers of the bank. The mode of effecting this object is twofold:—First, the separation of the issue of notes from the banking business; and secondly, the placing a limit on the amount of bank-notes allowed to be issued without the actual deposit of specie.

There is an entire legal and virtual separation between the issue and the banking departments of the Bank of England, except in regard to one point, to which reference will afterwards be made. The office of the issue department is very simple, and one purely mechanical. Notes to the amount of £14,000,000 are issued against "government debt" and "other securities;" and for any further issue actual specie must be deposited, of which one-fourth, and no more, may be in silver, and the rest must be in gold. In case of any of the country banks of England ceasing to issue their own notes after 1844, two-thirds of their issues may be taken up by the Bank of England, and the actual amount, therefore, (including the notes to replace these lapsed issues,) now issued against securities, and without the deposit of coin, is £14,475,000. The banking department has, in fact, no control whatever over the issue department, either in regard to the amount of bullion deposited, or the notes issued; and the whole profits of the issue of bank-notes by the Bank of England, accrue to the public and not to the bank. The net profits of the issue department, in round numbers, are £350,000 a year, of which the State receives £250,000, and the bank £100,000 for its agency in the matter and the risk it incurs. The profit on the issue is reckoned at 3 per cent per annum. It may be asked, on what principle was the limit fixed of £14,000,000 as the amount of notes to be issued against securities? To this question the answer seems to be, that this amount was the very lowest to which the active circulation of the Bank of England had gone down of late years. The lowest amount of note circulation was, in 1839, £15,800,000. Deducting £1,000,000 for bank post bills, and £600,000 estimated as lost notes, the active circulation was then £14,200,000; casting aside the odd sum, £14,000,000 was fixed as an amount below which it is in the highest degree improbable that the note circulation will fall. This is a simple explanation of this supposed mysterious amount, as given by Mr. Weguelin, the late Governor of the Bank of England, in his evidence before the Committee on the Bank Acts in the year 1857; and this account of the matter is confirmed by the other witnesses. The lowest amount of active circulation since the act of 1844 was £16,736,000 on the 30th December, 1848; the average in 1856 was £19,648,000.

The Bank of England, like the other banks, is also obliged to publish accounts of its circulation; but the accounts of the Bank of England are

much more full and complete, in regard to the whole working of the establishment. The accounts of the issue and banking departments are kept distinct, and are so published. In the former, the whole issue of notes is shown to be exactly the aggregate amount of the £14,750,000 of notes issued against securities, and the amount of notes representing and issued against the bullion deposited; while in the latter are exhibited on the one side the "proprietors' capital," the actual available capital of the bank called "*rest*," the "deposits," and "seven days bills;" while on the other side are exhibited the "securities," or loans made by the bank, and the notes and coin held in reserve. It should be distinctly understood, that the notes held in the banking department really represent available coin held in the issue department, so that the two sums, notes and coin added together, form, in fact, the bullion reserve of the bank. The importance of this weekly publication of accounts can scarcely be exaggerated. It is one of the most effectual checks that can be conceived on the conduct of the bank, and forms one of the best criterions by which the public may estimate the general state of trade, and our commercial relations with foreign countries. It forms the basis for prognosticating the future; and the fluctuations in the various items in these accounts deserve the most careful study of every one who wishes to understand the course of monetary affairs. Had the acts of 1844 and 1845 contained no other clauses than those enforcing the publication of the accounts, and that of the circulation of the other banks of the United Kingdom, it would have conferred on the public an invaluable safeguard.

Having thus considered the principles of the Bank Charter Act, let us examine its operation, as exhibited by the light of recent events. It cannot be denied that, under its provisions, the bullion reserve of the issue department has been protected, and that the note circulation has, in fact, varied with the amount of the bullion, exactly to the same extent as if the circulation had been entirely metallic. The employment of the notes has been simply to economize the use of coin, and to economize, to the extent of the issues against securities, the capital of the country. The convertibility of the notes of the Bank of England has thus been completely maintained, and that, also, of the country banks throughout the kingdom.

Since the passing of the act of 1844, two periods of great commercial pressure have occurred; one in 1847, the other in 1857. Into the causes of the derangement of the business of the country in these years it is not necessary at present to enter. It is sufficient to state that at the former period there was an enormous importation of food to supply the deficiency of the harvest, and that this occurred immediately subsequent to a large expenditure of capital in railways and extensive speculations in railway stocks; while in 1857, the beginning of the derangement occurred in the United States of America, and was aggravated by the unsoundness of trade in the north of Europe, and in some branches of business in England and Scotland. Combined with these causes was the drain of silver to the East, consequent on the commotions in India. The effect in both cases was a drain of bullion from the bank, proceeding to such an extent as to call forth the interference of the government to suspend the operation of the Bank Charter Act. Had it not been, in fact, for the occurrence of these commercial crises, few would have been found to doubt the wisdom both of the principles on which the act of 1844 was

founded, and the means provided for the carrying these principles into effect. There are some, indeed, who contend that the suspension of the act in 1847 was unnecessary, and they base their argument on the fact that the provision of the law was not actually violated by the bank; but this argument is certainly weakened by the experience we had in 1857, when the act was not only suspended, but an actual issue of notes beyond the legal limit took place. It is not too much to state that, at these periods, the Bank of England itself was endangered, and that it was, in fact, saved from suspension of payment by the interference of the government permitting the further issue of notes.

Let us examine a few of the circumstances which occurred in 1847, as we have them detailed in undisputed evidence before Parliament. In the month of October, in that year, a bill, bearing the best English names, and indorsed by the Bank of France, having only three days to run, was refused discount at the Branch Bank of England, in Liverpool. On another occasion, in that year, the possessors of £60,000 in silver were unable to obtain any advance upon it from the bank. In fact, there was such a feeling of universal distrust, that one of the witnesses before the Bank Committee of the House of Commons calculates that, of the £21,000,000 of Bank of England notes in the hands of the public, between £4,000,000 and £5,000,000 were lying inactive in the hands of private bankers, and, for the purposes of currency, inoperative. This amount was retained because they foresaw the period rapidly approaching when the Bank of England would be unable to give any banking accommodation whatever. This feeling will not appear altogether unreasonable when it is considered that, on the 23d October, 1847, the following was the state of the banking department of the Bank of England:—

LIABILITIES.		
Public deposits		£4,766,394
Other deposits.....		8,580,509
Seven-day and other bills.....		947,013
		£14,293,946
AVAILABLE MEANS.		
Reserve, {	Notes.....	£1,547,270
	{ Gold and silver	447,246
		1,994,516
		£12,299,400

Now, it is stated in evidence, by Mr. Weguelin, the late Governor of the Bank of England, that the *minimum* reserve which should be held by the bank is one-fourth of the whole deposits; consequently, instead of £2,000,000 of reserve, the smallest amount ought to have been upwards of £3,000,000. A still more alarming state of matters, however, occurred on the 11th November, 1857, when the following was the position of the bank:—

LIABILITIES.		
Public deposits.....		£5,314,659
Other deposits		12,935,344
Seven-day and other bills.....		853,075
		£19,103,078

AVAILABLE MEANS.

Reserve, {	Notes	£957,710	1,462,158
	Gold and silver.....	504,443	
			<hr/>
			£17,640,925

The actual amount of reserve, according to Mr. Weguelin, ought to have been between £4,000,000 and £5,000,000, instead of £1,500,000. But this was not the worst aspect of affairs, for we have it under the hand of the governor of the bank that, on the day following (the 12th of November) the whole reserve had been reduced to £581,000; so that the withdrawal of any of the deposits to a greater extent than this sum must have been followed by the immediate stoppage of the bank. From this crisis, the government letter of that day saved the bank, and saved the country from a convulsion which it is fearful to contemplate.

Let us see what the effect of the stoppage would have been, simply on the *convertibility* of the notes, which it was the great object of the Bank Charter Act to maintain. Bank-notes, in case of the stoppage of the bank, would immediately cease to be legal tender, and, consequently, would be at once returned on the issue department for gold. In October, 1847, there was £8,000,000 of bullion in the issue department; on the 11th November, 1857, there was £6,666,000. But this amount of bullion, though ostensibly lying against the issue of notes, is, in reality, equally reliable for the claims of depositors, who would, of course, immediately take the proper steps to secure that this treasure should not be appropriated by the noteholders; and the consequence would, most certainly be the suspension of specie payments.

It seems perfectly evident that the bank must have relied on the interference of the government in its favor, otherwise it would not have allowed its reserve to fall to such an unsafe amount; and, certainly after the suspension of the act in 1847, it had almost a right to expect that a similar measure would be resorted to whenever a like emergency should arrive. It was, indeed, imagined by some that the experience acquired in 1847 would have been sufficient to guard against the recurrence of such a necessity. Lord Overstone attributes the exhaustion of the bullion reserve in that year to the bank not having sooner raised its rate of discount; but, in his evidence on the 10th July, 1857, he states that, "during the last two years, the bank has been managed, as nearly as human affairs can be, *perfectly*." The events which occurred three or four months after probably somewhat modified his opinion, the "perfect" management of the bank having resulted in a greater exhaustion of the reserve than took place in 1847, and in a much more critical position of that establishment. Is this state of things, then, to continue without a remedy? Are we to have a banking *law*, of which public opinion shall demand the suspension at the time when alone its provisions come into real operation?

Some whose opinions are entitled to considerable weight have proposed, as a substitute for the interference of the government, that a discretionary power should be given to the bank itself to relax the law. Such is the proposal of Mr. Horsely Palmer; while Mr. Glyn would leave the power in the hands of the bank, but would associate in the bank court certain persons not elected by the proprietors, but appointed under an act of Parliament, and not removable by government. It seems unlikely, however, that Parliament will ever pass a law controlling the discretion

of any body of men, and then leave it to their discretion to suspend the law whenever they may consider it desirable.

It has been suggested, as a remedy for the supposed evils arising from the limit of a fixed amount of notes issued against securities, to establish a government bank, having the power to issue notes, the convertibility of which shall be secured by the deposit of two-thirds of the amount in government securities, and one-third in bullion. This, no doubt, would be a safe proportion of bullion, as a general rule; but a little consideration will show that it would be totally impracticable in its working in times of pressure. Suppose, for example, that £30,000,000 of notes are issued against £20,000,000 of securities and £10,000,000 of bullion—let a drain of bullion set in and £5,000,000 of notes be returned to the bank for gold, it is clear that the proportion between gold and securities is completely changed; £25,000,000 of notes would then be in circulation, but against that issue only £5,000,000, or *one-fifth*, would be in bullion. Let £5,000,000 more of gold be demanded for notes, and the whole bullion reserve is gone. The only way for the bank to restore the proper amount of gold would be by the sale of securities; but such a forced sale would, of course, derange the money market, besides entailing an enormous loss on the bank by the consequent depreciation of the value of the stock. These observations, however, are not directed against the establishment of a State bank, whose business should be simply the issue of notes. The establishment of such a bank would certainly have the advantage of separating, in the mind of the public, the function of issuing notes and that of the ordinary business of a bank, the want of which clear distinction appears to be at the root of the evils of the present system, which are so apparent.

Let us fairly meet the question and inquire—In what department of the Bank of England (the issue or the banking department) did the difficulty arise, requiring the interference of the government? Plainly not in the issue, but in the banking department; though, as has been shown, the consequence of a stoppage in the one department would have necessitated a similar catastrophe in the other. The remedy, then, and apparently the only remedy, is the carrying out the principle of the separation of the departments of issue and of banking to its full extent. In other words, the *complete and total separation of the issue of notes from the banking business of the Bank of England*. A slight change in the law would effect this object. All that is required is simply to declare that the bullion held in the issue department shall not be liable for the payment of the deposits in the banking department. The proposal is a most equitable one—namely, that the fund which, on the face of the accounts, appears opposite the issue of notes—namely, the “government debt,” “other securities,” and “bullion,” should be, what it professes to be, the security for the convertibility of the notes, and for that alone. The bank, then, in the conduct of its banking business, would be obliged, in prudence, to keep an adequate reserve to meet the calls to which it has made itself liable by receiving the deposits of the public; and the directors would be aware that, in case of their neglecting to do so, they would have no more claim for assistance than any other banking establishment. Any bank which takes deposits payable on demand must, for its own safety, and for the purpose of keeping faith with the depositors, retain a reasonable amount as a reserve; and this amount is perfectly well under-

stood to be, in general, one-third, or, at the very least, one-fourth of the amount of the deposits. The Bank of England, if obliged to depend on its own resources, and its own management, and deprived of the power of appealing to the government in case of difficulty, would, doubtless, be found conducting its affairs on the strictest and soundest banking principles. In the time of abundance of money, the directors would see the danger of encouraging the spirit of reckless speculation by lending their money, as they have sometimes done, at $1\frac{1}{2}$ or $1\frac{3}{4}$ per cent per annum; and the London discount houses would cease to depend, as has been too much their custom, almost wholly on the reserves of the Bank of England. It would be for the manifest advantage of all classes in the mercantile community to be convinced that the law shall, under no circumstances, be violated, either with or without the sanction of the Government of the day; or if violated, that the penalty shall fall impartially on those, whoever they may be, who break the law.

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

NUMBER LXX.

PEORIA, ILLINOIS.

FIRST VISIT TO PEORIA—CHEVALIER LA SALLE—CREVE CŒUR—DANIEL COXE—FRENCH SETTLEMENT—INDIAN EXPEDITION—FORT CLARK—PRESENT SETTLEMENT—FIRST COMERS—INDIAN AGENT—PEORIA COUNTY—ORIGINAL EXTENT—AMERICAN FUR COMPANY—FIRST ELECTION—TOWN OF PEORIA—BLACK HAWK—SIZE OF PEORIA IN 1833—VALUE OF LOTS—FIRST CENSUS—PRESENT COUNTY LIMITS—FIRST NEWSPAPER—FIRST STEAMBOAT—WATER WORKS—CITY OF PEORIA—CITY DIRECTORY—FIRST CANAL—BOAT—MICHIGAN AND ILLINOIS CANAL—PROGRESS OF MANUFACTURES—FLOUR MILLS—PRESENT NUMBER OF MILLS—CROPS—AGRICULTURAL IMPLEMENTS—PLOW—WHEAT DRILLS—CORN SHELLERS—PLANING MILLS—FOUNDRIES—CARRIAGE MAKING—BOAT BUILDING—DISTILLERIES—BRICK YARDS—OTHER FACTORIES—FAIR GROUNDS—CHURCHES—LIBRARIES—POLICE—TRADE—WHEAT—CORN—PORK—LUMBER—POPULATION AND ASSESSED VALUATION—NUMBER OF BUILDINGS—RIVER TRADE—RAILROADS—COAL MINES—BRIDGE—GAS—INSURANCE.

AMONG the "magic cities" of the West, which spring up upon the prairies with such wonderful vigor of growth as to excite the surprise of the observant world, Peoria, Illinois, is a favorable example. Although the city took root fairly about fifteen years since, its site was one of the earliest trodden by the whites west of the mountains. The pioneer in that region, as almost everywhere else in that age, was a French Jesuit, Father Marquette, who visited it in 1673. Six years later, the Chevalier La Salle, from Rouen, in Normandy, seeking fame and fortune in those wilds, erected near the site of the present city his fort of *Crève Cœur*, expressive of his chagrin at the loss of the richly laden vessel in which he had crossed the lakes on his return homeward. This fort continued for some time the halting place for French expeditions between Canada and the Mexican Gulf. Twenty-six years later, Dr. Daniel Coxe, physician to Charles II., visited the country, and published his account of it, under the title of "A description of the English Province of Carolina." More than one hundred years after the visit of La Salle, another Frenchman, M. Hypolite Maillet moved, in 1779, with a small colony to the

vicinity, and commenced the settlement of La Ville de Maillet. This was the foundation of the famous "French claims" controversy. The original French settlement was about a mile north of the town, but owing to the unhealthfulness of that locality it was gradually deserted for a settlement below what is now Liberty-street. In 1781, or about that time, the inhabitants of the settlement became alarmed and abandoned it. At the end of some two years, however, they returned, and resided peacefully until the commencement of the war between this country and Great Britain in 1812. Ninion Edwards was then governor of the Territory of Illinois.

In the fall of 1813, an expedition was planned against the Indians of the territory, who were giving unmistakable signs of hostilities. The result of the expedition was the expulsion of the French from the Peoria country, and the erection of Fort Clark at the spot which is now the junction of Liberty and Water streets.

The present settlement of Peoria was commenced by seven settlers from Shoal Creek, about forty miles east of St. Louis. The names of the party were Abner Eads, Seth and Josiah Fulton, Virginians; S. Dougherty, J. Davis, and T. Russell, Kentuckians; and J. Hersey, a New Yorker. They arrived in Peoria on the 19th of April, 1819, and pitched their tent by the pickets of Fort Clark till they could cover and fit up two old log huts that were still remaining. One of these huts stood on the present site of the Illinois Brewery on Bridge-street. In June, this company was reinforced by a small party from St. Louis, who came to the lake for the purpose of fishing. The following winter two additional families came in—one from Ohio and another from New York. In 1822, John Hamlin, Esq., was appointed Indian Agent, and became the first exporter of pork and provisions in boats to Chicago.

Peoria County was organized in 1825. The territory embraced in its limits comprises between 30 and 40 of the present counties of the State. It extended to the Mississippi on the west, Indiana on the east, and Wisconsin on the north, taking in Galena, Chicago, and other places then unborn. Chicago then contained only a fort and agency house of the American Fur Company.

The first county election was held on March 25th, 1825; the whole number of votes cast being 66. Nathan Dillon, Joseph Smith, and Wm. Holland were chosen County Commissioners; Norman Hyde, Clerk; Samuel Fulton, Sheriff; and Aaron Hawley, Treasurer. At this meeting it was ordered that a court-house and clerk's office be built. The court-house was built of hewn logs, 14 by 16 feet, with a cellar beneath, which was used sometimes as a jail and sometimes as a stable. The court-room was occupied as a place of worship on Sundays, and during the sessions of court at night as a lodging room for those attending, there not being accommodation at the solitary hotel of the town. This court-house stood till 1843, when it was pulled down to give place to Orin Hamlin's steam flouring mill, now better known as the "Old Red Mill."

Peoria was laid off as a town and named in 1826, but owing to a difficulty about the title, its incorporation was retarded for some eight or nine years. In 1835, the qualified voters accepted the corporation. In 1832, a great panic was created among the surrounding settlers by the ravages of Black Hawk in Northern Illinois. The settlers between the Rock and Illinois rivers fled in dismay. Peoria then contained some fif-

teen or twenty hamlets, with only two frame houses. The inhabitants, however, to the number of some twenty-five, formed themselves into a company, which they called the Peoria Guards, and resolved to defend the place. The old fort was rebuilt, the ferry seized, and none of the fugitive whites, save the women and children, were allowed to pass. Quite a formidable force was thus collected, which Black Hawk did not molest. Many of the fugitives remained and became citizens of Peoria. The Black Hawk troubles were closed in September of 1832 by treaty.

In 1833, the entire town consisted of seven frame houses; the remainder were log tenements, and few at that. There was but one building (a barn) west of Washington-street. Lots on Washington-street sold for forty dollars. The court was held in the old log-house before mentioned; the grand jury deliberated in the pleasant shade of a locust tree now standing on Liberty-street; and the petit jury retired to partially-filled cellar of the old French settlers, or a potato hole, to make up their verdicts. Such was Peoria only twenty-six years ago.

The first census of Peoria county was taken in 1825. The population amounted in all to 1,236, of which 611 were males and 625 females. In 1826, we find John Hamlin, Esq., as one of the County Commissioners. In 1830, the county was reduced to its present limits, and showed a population of 1,792.

In 1834, the first newspaper enterprise was started, a weekly paper called *The Illinois Champion*, published by Abraham L. Buxton and Henry Wolford. The first number was issued March 19th.

The first steamboat that arrived at Peoria was the *Liberty*, in December, 1820. The second boat was the *Triton*, in the spring of 1830, which was chartered by John Hamlin to take a stock of goods up from St. Louis. In 1833, there were four steamboats plying the river, and in 1834, there were seven. The first boat built in Peoria was completed by Capt. Wm. S. Moss, in 1848.

In 1833, a contract was entered into between the County Commissioners and Stephen Stillman, who by himself, his heirs, executors, assigns, or associates, was to have the exclusive privilege to bring water to the public square. It was to be brought in lead, wood, or other pipes by the 1st of June, 1834, which was done by the use of bored logs. The water was taken from "Stillman's Spring," on Rose Hill.

Peoria was incorporated as a city in 1844. In then contained, according to a census taken by the late S. W. Drown, a population of 1,619, divided according to ages as follows:—Under 10, 486; between ten and twenty, 319; between twenty and fifty, 718; over fifty, 86. During that year the increase of population was 315. The first election under the city charter was held on the 28th of April, 1845. In 1844, S. W. Drown published the first volume of his *Peoria Directory*. The first canal-boat that visited Peoria was the *Gen. Shields*, which arrived the 24th of May, 1848. She was built in Rochester, New York, and came by the way of Buffalo, Ohio and Erie Canal, and thence by the Ohio, Mississippi, and Illinois rivers. The owner of the boat had his family with him to locate on the western prairies. The Michigan and Illinois Canal was opened two days afterward, and was the cause of great rejoicing in Peoria. The price of lumber fell one-half.

Among the most interesting features of a growing town is the progress of its manufactures, which always spring up and follow the local wants,

developing the best local resources for supplying those wants. In 1830, John Hamlin and Jehn Sharp erected the first flouring mill in that section of the State. It was located on the Kickapoo, about three miles west of the city. The mill contained two run of stones, and manufactured about fifty barrels of flour per day, or twenty-four hours. Considerable of this flour was transported by flat-boats, in 1832-3, to New Orleans, where it brought from \$1 37½ to \$1 50 per barrel. In 1850, there were four mills within the city limits, and the amount of flour exported (saying nothing of the home consumption) was put down at 33,753 barrels, which, at \$4 50 per barrel, was valued at \$151,877 50. In 1855, the census value of the flour manufactured was \$650,000.

There are now six flouring mills in operation. One of them, the Peoria City Flouring Mills, owned by a stock company, was put in operation in November, 1858. It has a capacity for making 2,500 barrels of flour per week, and has been so erected that with a very small outlay its capacity can be doubled. It is equipped with two run of Rand's patent stones, which will grind from fifty to sixty bushels of wheat each per hour. Owing to a failure of crops last season this mill has not yet been put in full operation. The Fayette Mills, on North Fayette-street, are owned by W. Moore, contain three run of stones, and are capable of manufacturing one hundred and fifty barrels of flour per day. The Farmers' Mill is situated on Adams-street, and has about the same capacity. Then there is the "Old Red Mill," operated by McClanahan & Co., and the mills of Moss, Bradley & Co. and Richard Gregg, running in connection with their distillery business, at the south part of the city.

The wheat crop being cut off last year, the operation of these mills has been greatly curtailed. The amount of wheat ground last year (independent of the Peoria City Mills, which has been in operation less than six months,) we find, by the statement of the proprietors, to have been in round numbers 490,000 bushels, which, at five bushels to the barrel, produced 98,000 barrels of flour. With a good crop the present autumn, these figures, swelled by the manufacture of the Peoria City Mills, will be nearly doubled for 1859.

The importance of Peoria as a place for the manufacture of agricultural implements, cannot be over-estimated. She has an easy water communication with St. Louis and Chicago, and the numerous railroads centering there tap the surrounding country in all directions. Then, she furnishes all the requisite fuel for manufactures (a most important item elsewhere) in inexhaustible quantities, and at prices almost insignificant. These advantages have been appreciated and availed of in the establishment of many manufactories.

Prominent among these manufactories is that of the plow. This was commenced in the spring of 1843. At that time but one forge was operated, and less than two hundred plows were turned out during the year. The excellence of these plows soon gave them a reputation, and the proprietors went on annually increasing the capacity of their establishment, until they are able to turn out ten thousand plows per year. The establishment furnishes employment to fifty men.

Two years ago was commenced the manufacture of wheat drills in Peoria. The establishment employs in good times fifty to sixty men, and annually manufactures one thousand drills, valued at \$80,000.

Corn-shellers, horse-powers, &c., were manufactured last year to the

value of \$9,000. The sales last year of threshing machines, reapers and mowers, corn mills, and other implements, amounted to the value of \$69,000.

There are two steam planing mills in the city, both of them doing a fair business, and are capable of planing five million feet of lumber each yearly. In addition to the planers, there is a siding saw, capable of turning out twenty thousand feet of siding per day, and ripping and scroll saw for various work, earning, with two men to tend them, from \$20 to \$25 per day.

There are four establishments for the manufacture of sash, doors, and blinds; the value of the sash, doors, and blinds manufactured last year amounted to \$29,871.

There are four foundries, machine, and boiler shops at present in Peoria, one with a capacity to employ from thirty-five to forty men, and turn out work to the value of \$75,000 to \$80,000 annually. Every variety of castings is made, and of sizes varying from one pound to one-and-one-half tons. The machine-shop department is driven by an engine of 20 horse power. The City Foundry machinery is driven by a 16 horse power, and the establishment is capable of furnishing employment to fifty men, and turning out from \$60,000 to \$75,000 worth of work annually. Fort Clark Foundry and Machine Shop is driven by an engine of 20 horse power. It was built five years ago last spring, and can give employment to some fifty men, and turn out work to the value of from \$50,000 to \$75,000. All of these establishments furnish anything in the way of iron castings or machinery, from the smallest article to a complete steam-engine of the largest size. The Peoria Boiler and Sheet Iron Works is capable of turning out a boiler a day. A machine shop, containing two lathes and a turning machine, is connected with the works, the whole being driven by steam.

The carriage-making establishments of Peoria are as fine and complete as can be found in the West. The value of the manufactures turned out last year, which were small on account of the exceedingly small demand for wagons from the surrounding country, amounted to \$53,775. The attention of the people of Illinois is attracted to the carriage establishments of Peoria, which are very creditable to the State. Any style of carriage can be duplicated, and at a price full as low as it will cost to bring it from the East, and the work will be warranted.

There are four establishments in the city engaged, in connection with other business, in the manufacture of fanning mills. The number manufactured last year was 1,050, valued at \$31,500.

The furniture manufactured in Peoria will rank with any in the country. It is well made, of excellent finish, solid, and durable. The sales are about \$60,000 per annum for three firms.

There are two brass foundries in the city. One is an establishment capable of turning out \$10,000 worth of work per year; the second establishment has been just erected, and gives employment to two men.

An establishment for the manufacture of iron safes, bank vaults, door locks, iron railing, balconies, &c., gives employment to half a dozen men.

A lightning-rod manufactory used last year 100 tons of iron and two tons of copper, making 5,000 lightning-rods, valued at \$34,000, and gives employment to about twenty men. It is driven by horse power.

The Peoria Starch Manufacturing Company carry on their operations

to the following extent:—Corn used, 40,000 bushels; starch manufactured, 20,000 boxes; value, \$80,000.

There are three establishments in Peoria for marble work, such as gravestones, monuments, mantels and counter tops, &c. The marble is obtained from Vermont, and rivals in quality and beauty the best of imported marble. The value of last year's manufactures, as taken from the books of the manufacturers, amounts to \$36,400.

There are two stone-cutting establishments, giving employment to 17 men, and turned out work last year to the value of \$16,000. They are doing a very much larger business so far this year than they did the last. The stone worked up in these yards is brought from Joliet.

There are seven saddle and harness shops in the city, the aggregate of whose manufactures last year exceeded \$30,000.

In giving a statement of the distilleries, we included the operations of the cooper shops connected with them. There are eight cooper shops in addition to these. The number of pieces manufactured in the city last year, as returned to us, was 104,340. This is exclusive of small articles, such as kegs, tubs, firkins, &c., valued at some \$5,000. Value of manufactures not less than \$40,000.

Boat-building is, in good times, an important branch of manufacture. There have been years during which over \$50,000 worth of work has been turned out. The commercial revulsion and short crops for two years past, however, have cut off the manufacture of new boats for the present. The value of the work done last year was in the neighborhood of \$14,000. There are at present three yards. One is engaged in building the new steam ferry-boat that is to ply across the lake. The boat is to be one hundred feet in length and forty-two in width over deck, and double hull with eight feet opening in the middle. It will have ample cabin accommodations for passengers and deck arrangements for the accommodation of fifteen or twenty teams at a crossing. The cost of the boat when finished, exclusive of engine, will be between \$6,000 and \$7,000. The boat will be driven by two engines of about 75 horse power, which will cost, when set up, about \$3,000. In addition to this, there are building four ice-boats, to be used to convey ice to St. Louis.

The distilleries of Peoria form its heaviest manufacturing interest, about two-thirds of a million of dollars in stock and buildings being invested in it. There are six in operation at present, exclusive of the alcohol works, all located on the river bank in the south part of the city. From a detailed statement of the business of Messrs. Moss, Bradley & Co., who have \$144,000 invested in the manufacture, the following facts relative to a single establishment are derived. The statement is made up for the year ending April 30, 1859:—

	Bushels.	Cost.		Barrels.
Corn purchased ..	243,266	\$117,057 60	Highwines manufactured	17,561
Wheat.....	30,724	25,987 90	Flour.....	2,000
Rye.....	11,574	8,217 79	Hogs purchased and fed ...No.	3,636
Barley.....	3,882	2,473 16	Cattle.....	43
Oats.....	1,437	622 97	Men employed in distillery.....	38
Barley malt.....	3,740	4,321 98		
Middlings....lbs.	815,984	9,787 32		
Coal & charcoal..	102,220	7,322 94		

A cooper shop connected with the distillery employs 33 men, using up

last year stock (staves, heading, and hoop-poles) to the amount of \$13,353 39, and manufacturing the following number of barrels:—

Whisky barrels.....	15,898	Flour barrels.....	235
Pork barrels.....	2,641	Lard tierces.....	224
Alcohol barrels.....	2,461	Kegs.....	31
Pieces in all			21,490

The statements of the other distilleries are not so full and minute, but from the facts we have gathered, taken personally at each establishment, we are enabled to give the following figures as the distilling business (with the exception mentioned below) of Peoria the past year:—

Corn used.....	bushels	1,304,482
Wheat, (mostly made into flour).....		181,724
Other grains.....		126,433
Coal used		754,620
Whisky and highwines made.....	barrels	103,368
Hogs fattened.....	No.	33,456

Richard Gregg has a cooper shop connected with his establishment, in which was manufactured last year 30,000 whisky, 6,000 flour, and 4,000 pork barrels.

Another distillery for the manufacture of first qualities of rye, Bourbon, and malt whisky, rum, gin, &c., has been in operation only five months. The following is a statement of its operations for the five months it has been in operation:—

Chinese sugar-cane molasses (soured) consumed.....	bbls.	118
Rye highwines.....		200
Corn highwines.....		265
Malt highwines		25
Alcohol.....		20
Coal and charcoal.....	bush.	5,645
Copper distilled rye whisky, at proof, manufactured	bbls.	250
Copper distilled Bourbon whisky, at proof		330
Copper distilled malt whisky, at proof.....		30
Copper distilled rum, at proof.....		30
Copper distilled gin, at proof.....	pipes	5

There are two alcohol distilleries in the city. In addition to the alcohol, both establishments manufacture pure spirits, camphene, and burning fluid. The last year's operations of one amounted to 7,500 barrels of alcohol. The other has a building 100 by 35 feet, containing a steam-engine of ten horse-power, and capable of using 80 barrels of whisky per day, which will produce 48 barrels of alcohol; at present manufacturing and shipping about 150 barrels per week.

The ale and beer manufacture is a very important one in Peoria, and is rapidly increasing. In 1855, according to the census returns, the value of the ale and beer manufactured was \$24,900; it is now upwards of \$81,000. One brewery presents us with the following statement of its operations for the last year:—

Malt consumed.....	bush.	4,923	Coal consumed	bush.	4,320
Hops	lbs.	7,032	Ale manufactured.....	bbls.	1,371

Total ale and lager beer manufactured last year, 11,671 barrels; value, at \$7 per barrel, \$81,697.

There are at the present time ten individuals and firms residing in the city who are engaged in the manufacture of bricks, but, with one excep-

tion, we believe all the brick-yards are outside of the city limits. The following is a statement of the brick manufacture of Peoria at the present time, as we have obtained it from those engaged :—

Number of bricks manufactured.....	11,400,000
Number of hands employed	123
Value of manufactures.....	\$57,000
Value of those manufactured in 1855, as given in the census.....	20,750

There are a great number of other smaller manufactures in Peoria, which are too numerous to give the details, but which are not the less important to the social welfare of that thriving place.

The Peoria County fair grounds comprise 22½ acres of land, tastefully laid out and conveniently arranged for the accommodation of exhibitors and spectators. The avenues and pathways which intersect the grounds are numerous, and are disposed in the best approved style. The buildings are spacious and appropriate, and adequate to any demand. Contiguous to the twenty-two-and-a-half acres enclosed within the fair grounds proper are forty acres of land which can be used for the purposes of a fair, on extraordinary occasions.

The state of the schools at the present time may be briefly summed up as follows :—Five school houses owned by the city, capable of seating, with the room leased for the sixth school in the basement of the United Presbyterian Church, 1,272 pupils. The houses are all fine structures, well arranged and commodious, well lighted and ventilated, and furnished with all the modern improvements in seats and desks.

Peoria has twenty-three churches, representing twelve different denominations. These churches, with perhaps one or two exceptions, possess commodious and comfortable houses of worship, many of them fine and costly structures. There are twenty Sunday-schools connected with them, with libraries containing a total of 9,800 volumes.

There are two library associations in the city. The Peoria City Library was organized in January, 1857, and was the consolidation of two former library associations. It numbers 350 members, and contains some 3,500 carefully selected volumes, to which additions are made yearly. The German Library Association was organized in August, 1857, numbers 100 members, and contains 500 volumes.

Peoria is possessed, for a city of her size, of a very efficient fire department, numbering three engines, a hook and ladder apparatus, and 141 firemen.

The city is possessed of an effective police force, both day and night, and crimes are of rare occurrence.

There are five military companies in the city, two American, two German, and one Irish, and all in a good state of discipline and a prosperous condition.

Independent of her manufactures, Peoria has a very large trade in grain, pork, lumber, coal, West India and other goods. We have no means of getting at the annual grain business of past years, but the imports and exports for the years 1850-2-5-6, will give the reader some idea of its magnitude and growth :—

	1850.	1853.	1855.	1856.
Corn.....	628,729	1,080,064	1,356,563	2,569,780
Wheat.....	151,465	430,460	594,533	320,199
Oats.....	265,367	251,524	318,151	385,595
Barley.....	6,331	18,790	20,587	50,662

It must be recollected that those were years of abundant crops, while the past two have been years of scarcity. Little or no grain came into market last year, save of last year's growth; and our returns give the amount of corn exported at 710,890 bushels; used in the distilleries, 1,304,482 bushels; starch factory, 40,000. This does not include the amount ground into meal and feed at our several feed mills, or otherwise consumed in the city, which will swell the amount to a million and a quarter of bushels, or very nearly the figures of 1856. The amount of wheat exported last year was 127,623 bushels; manufactured into flour, &c., 554,724 bushels; total, 682,347 bushels. The oat crop last year was almost entirely cut off. The amount exported, saying nothing of the home consumption, was 16,244 bushels. There was no barley or rye exported of any consequence, it being used in our various distilleries and breweries.

The pork packing business is very important, and has been pretty steadily on the increase. We give the number of hogs packed for the following years:—

1850	26,796	1856	44,789
1853	23,725	1857	35,322

The number of hogs packed last year was 53,550, or 18,245 more than the previous year. The following is a statement of the different houses engaged in packing, and the number packed by each:—

Tyng & Brotherson.....	21,000	G. Trant.....	2,200
Reynolds & Co.....	17,150	Kellogg & Nowland, for Adams	
Grier & McClure.....	8,200	& Co., St. Louis.....	5,000

Total

53,550

Most of the slaughtering was done by Reynolds & Co., who killed 28,512 hogs, and Kellogg & Nowland, who killed some over 10,000. Their slaughter-houses are located on the river bank, in the neighborhood of the distilleries. The above statement does not include the retail butchering business of the city.

There are at present sixteen individuals and firms in the lumber trade. Several new ones have entered the business the past year. Although the trade was greatly curtailed by the absence of any country demand, we find the sales to have been larger than any previously reported year. The following is a statement of the sales in 1853-5-6-8:—

	Lumber, feet.	Shingles, pieces.	Lath, pieces.
1853.....	6,256,683	3,602,000	1,107,600
1855.....	9,715,284	6,815,500	3,102,800
1856.....	13,960,140	.....	.....
1858.....	14,768,000	9,284,339	3,411,200

The books of the census taker and the assessor are the best criterions by which to judge of the progress of a city. The assessor, however, seldom comes up to the real valuation. Below we give a table of the population and valuation of Peoria for each year since 1844:—

	Population.	Valuation.		Population.	Valuation.
1844.....	1,610	\$319,952	1852.....	7,316	1,797,980
1845.....	1,934	323,922	1853.....	8,285	2,315,660
1846.....	2,392	655,711	1854.....	10,155	2,212,252
1847.....	3,014	719,837	1855.....	11,923	2,857,980
1848.....	4,079	854,536	1856.....	14,500	4,458,530
1849.....	4,601	1,154,029	1857.....	17,482	4,718,965
1850.....	5,890	1,540,281	1858.....	21,103	4,739,910
1851.....	6,202	1,751,662			

It cannot be denied that the late financial revulsion of our country, and the short crops of this section for two years past, have had their effect on the business interests of Peoria; but, we can say with truth, that she has suffered as little as any place of her size in the Union, if not less. There is no place where less property is owned by foreign capitalists; and no place where the local property holders are so free from embarrassment from foreign creditors. During the whole of the hard times, not a half dozen failures occurred, small and great. The operations of trade and manufactures suffered curtailment, but it was only a temporary infliction. Already, with true elastic force, both trade and manufactures are springing back to their former prosperous condition, while all the signs of the times indicate that a greater impetus will be given to the progress of the city than ever before.

There are now in process of erection 120 substantial buildings, of which the aggregate cost will reach over \$270,000. This is a greater number than was ever before erected at one time, and affords great evidence of the progressive nature of the business of the place.

The Illinois River was formerly the great channel of communication between Peoria and other places. All imports and exports found by it their inlet and outlet. Everything, even to lumber, was shipped to Peoria from St. Louis, Pittsburg, and other points on the great rivers. The first exports from Peoria, we have already stated, were by John Hamlin, Esq., in 1826. The first steamboat arrived at Peoria in December, 1829. Ten years afterwards forty-four different boats arrived. In 1848, the Illinois and Michigan Canal, connecting the Illinois River with Lake Michigan, was opened, and had the effect to reduce the price of lumber in Peoria one-half. The price of other commodities were affected, but not to such a degree. In 1850, fifty-nine different boats visited Peoria, making 1,286 arrivals. Six of these were regular packet boats, plying between St. Louis and La Salle; twenty-seven were tow-boats.

Since the opening of the various railroads leading out of the city, the importance of the Illinois River as a channel of communication has somewhat diminished. Still the river business is very heavy. A daily line of steam packets ply between Peoria, St. Louis, and La Salle; and the trim steamer Delta makes two trips a day between that city and Pekin, ten miles below. There are, besides these, several boats running between there and Pittsburg and other cities, and scarcely a day goes by without the arrival and departure of some laboring steamer, with a fleet of canal-boats in tow. The amount of Peoria freight received and forwarded by the river last year by steamers was 60,000 tons. This was exclusive of the merchandise shipped by canal-boats, of which there are no reliable statistics, although it was heavy. The distance by river between Peoria and St. Louis is two hundred and forty miles.

There are at present three railroads leading from the city, with two additional roads in process of construction.

The Peoria and Bureau Valley Railroad runs from Peoria to Bureau Junction, where it connects with the Chicago and Rock Island Road. It is forty-seven miles in length. The company was organized in June, 1853, and the road was completed in November, 1854. It is operated by the Chicago and Rock Island Company, who pay an annual rent of \$125,000. The distance between Peoria and Chicago by this and the Rock Island Road is 160 miles; between Peoria and Davenport, Iowa, 115 miles.

The Peoria, Oquawka, and Burlington Railroad extends from Peoria to Burlington, Iowa, a distance of 95 miles. The company was organized in June, 1851, and the road completed in January, 1857. The road is operated by Moss, Harding & Co., lessees. The amount of freight received and shipped at the Peoria station of this road last year was 28,000 tons.

The Peoria and Oquawka (Eastern Extension) Railroad is now completed to Gilman, on the Chicago Branch of the Illinois Central Railroad, 86 miles, and is in process of construction to Logansport, Indiana, 87 miles further, where it will connect with the Toledo, Wabash, and Western Railroad direct to Toledo, and thence east by the Lake Shore and other routes; also at Logansport with the Cincinnati and Chicago Road to Cincinnati, and Central Ohio, &c.; and at Fort Wayne with the Pittsburg and Fort Wayne Road to Pittsburg, Philadelphia, Baltimore, Washington, and New York. A connection will also be made at Middleport, Iroquois County, Illinois, with the Lafayette and Indianapolis Road, (to be extended from Lafayette to Middleport,) whereby the distance to Indianapolis, Louisville, and Cincinnati will be still further shortened.

The Illinois River Railroad, which is in process of construction, is to extend from Peoria to Jacksonville, 86 miles, where it will connect with the Jacksonville, Alton, and St. Louis Railroad, thus forming, with the Bureau Valley and the Chicago and Rock Island roads, another continuous line from Chicago to St. Louis.

Peoria is immediately surrounded by immense and inexhaustible mines of bituminous coal. It crops out of the bluffs on nearly every hand, and is mined and brought to the city and exposed for sale in wagons, the same as wood and hay. An idea of its extreme cheapness may be gained when we say that the average price of this coal, delivered at people's doors, is about eight cents per bushel, or \$2 per ton. Let one consider the cost of mining, the expense of a team of two horses and wagon, with man, to bring it into the city, taking a half-day and sometimes more, before a sale is effected, and we think that he will agree with us that there is not a very large margin for profits, and that it cannot well be afforded cheaper. Large consumers, however, such as distillers and manufacturers, pay $7\frac{1}{2}$ cents per bushel, delivered. A heavy business has sprung up within a couple of years, or since the opening of railroads east and west, in the way of exportation of coal. It is shipped to all points of Central Illinois, and westward toward Galesburg and Burlington. The coal so exported last year, as we learn from those engaged in it, amounted to 570,000 bushels. The following is the nearest approximation to the actual amount of the coal business of Peoria that we can arrive at:—

Consumed in manufactures, not weighed by city.....	bush.	1,040,358
Weighed by city		380,695
Exported.....		570,000
Total		1,991,053
Value, at eight cents per bushel		\$159,284 24

An association was organized for the purpose of throwing a toll bridge across the Illinois River at Peoria in 1847. The bridge was commenced the year following, and completed in November, 1849, at a cost of about \$33,000. In 1856, the bridge was repaired at a cost of \$10,000. It is one of Howe's patent truss bridges, with five stone piers and one abut-

ment, and a swing 292 feet in length for the passage of steamboats. Including the trestle-work over the flat on the Tazewell County side, the bridge is 2,600 feet in length.

There is also a railroad bridge over the Illinois, built by the Eastern Extension. The length, including trestle-work, is nearly 4,000 feet, as follows:—truss bridge, 300 feet; swing, 292 feet; trestle-work, 3,300 feet. The cost of the bridge proper and swing was some \$60,000.

The Peoria Gas and Coke Company was chartered in January, 1853, and went into operation in November, 1855. The capital is \$85,000. The following are the statistics in regard to the operations of the works:

Coal used in 1858.....bush.	25,773	Added the past year....miles	1½
Lime used in 1858.....	2,538	No. of street lamps.....	140
Gas manufactured.....feet	5,780,372	Added the present year ...	33
Tar manufactured.....bbls.	200	No. of private consumers....	325
Price of gas per 1,000 feet..	\$3 50	Value of gas and tar manu-	
Length of street mains.miles	3½	factured.....	\$20,681

The Peoria Marine and Fire Insurance Company was chartered in 1841; capital stock, \$500,000. The following is a statement of the operations of this company for the year past:—

	Amount insured.	Premiums.	Losses paid.
Marine.....	\$1,572,387 59	\$17,843 00	\$4,370 08
Fire	6,806,077 00	89,375 19	46,897 60
Total.....	\$8,378,464 59	\$107,218 19	\$51,267 68

Art. IV.—STRICTURES ON AN ADDITIONAL REVIEW OF MR. CAREY'S
LETTERS TO THE PRESIDENT.*

YOUR contributor, Mr. Sulley, very unfairly charges me with being "astonished and somewhat indignant that any one should call in question" the doctrines of Mr. Carey. If he will again read my "Strictures," he will find that I have merely expressed surprise at his rashness in attempting, without proper preparation for the task, to overthrow this new social philosophy, which is now making such rapid progress towards universal acceptance, as well on the continent of Europe as in the United States.

It is not my intention to retrace in this article the ground of my former contribution to the *Merchants' Magazine*, being entirely content that the positions of Mr. Sulley and myself on those points shall be judged by what has already been presented.

There are, however, one or two questions, which have been introduced by Mr. Sulley in his recent paper, which I feel need some attention, and that attention I will now proceed to give them.

Mr. Sulley says:—"Mr. Baird appears not to be satisfied with principles laid down in our argument. He says he is no blind follower of the professors of the *dismal science*. Now, if this phrase is intended to refer

* "Free Trade and Protection: or, a Partial Review of Mr. Carey's Letters to the President." By RICHARD SULLY, Esq., of Fort Wayne, Indiana; *Mer. Mag.*, vol. xli, p. 288.

to Adam Smith and his followers of the English school, I have no objection to be ranked among its humble professors; but I cannot help thinking it would have been better to have proved it fallacious or dismal before descending to vituperative language."

The systems of philosophy taught respectively by Plato and Aristotle are not more unlike each other than the political economy of the "Wealth of Nations" and that of those who worship the name, yet utterly disregard the most important teachings, of Adam Smith. In the "Wealth of Nations," its author keeps in view, and makes reference, from first to last, to the teachings of actual experience. Hence, his system is inductive. His "followers of the English school," as Mr. Sulley terms them, treat the subject in a manner directly the opposite. "The social science," says Mr. John Stuart Mill, the acknowledged head of this school, "is a deductive science." In regard to statistics, Mr. Sulley has himself informed us that "very little reliance can be placed upon them as a proof of the operation of general principles;" thus clearly indicating *his* preference for the treatment of social problems by the deductive system—that system, in which, according to Mr. Mill, "all the general propositions are, in the strictest sense of the word, hypothetical."

The labors of Adam Smith have never been over-estimated; and, indeed, it is almost impossible that they ever can be. In reading his book, one is amazed that, at so early an era in the science of which he treated, he should have brought to light so many and such important truths. But mingled with these truths there is much error, and throughout his entire book there is a want of that method which is indispensable in the treatment of every branch of science. There are central principles in the "Wealth of Nations," which, if fully developed and elaborated, are comprehensive enough for the foundation of an enduring system of political economy. Adam Smith, however, merely enunciated them, and "his followers of the English school" failing to recognize their vital importance, have allowed them to pass by entirely unnoticed. Many of the errors of his system, however, they have "accepted as fundamental truths." Is it, then, any wonder, in view of all these facts, that one of the teachers of this school—Mr. De Quincey—should, in 1844, be forced to make the acknowledgement, that "political economy does not advance?" Permit me to ask the attention of your contributor to the important principles enunciated by Adam Smith* in the following passage:—

"An inland country, naturally fertile and easily cultivated, produces a great surplus of provisions beyond what is necessary for maintaining the cultivators, and on account of the expense of land carriage and inconvenience of river navigation, it may frequently be difficult to send this surplus abroad. Abundance, therefore, renders provisions cheap, and encourages a great number of workmen to settle in the neighborhood, who find that their industry can there procure them more of the necessaries and conveniences of life than in other places. They work up the materials of manufacture which the land produces, and exchange their finished work, or what is the same thing the price of it, for more materials and provisions. They give a new value to the surplus part of the rude produce, by saving the expense of carrying it to the water side, or to some distant market; and they furnish the cultivators with something in exchange for it, that is

* Wealth of Nations, book iii., chapter 3, fourth edition.

either useful or agreeable to them, upon easier terms than they could have obtained it before. The cultivators get a better price for their surplus produce, and can purchase cheaper other conveniences which they have occasion for. They are thus both encouraged and enabled to increase their surplus produce by a further improvement and better cultivation of the land; and as the fertility of the land had given birth to the manufacture, so the progress of the manufacture reacts upon the land, and increases still further its fertility. The manufacturers first supply the neighborhood, and afterwards, as their work improves and refines, more distant markets. For, though neither the rude produce, nor even the coarse manufacture, could, without the greatest difficulty, support the expense of a considerable land carriage, the refined and improved manufacture easily may. In a small bulk it frequently contains the price of a great quantity of rude produce. A piece of fine cloth, for example, which weighs only eighty pounds, contains in it, the price, not only of eighty pounds weight of wool, but sometimes of several thousand weight of corn, the maintenance of the different working people, and of their immediate employers. The corn, which could with difficulty be carried abroad in its own shape, is in this manner virtually exported in that of the complete manufacture, and may easily be sent to the remotest corners of the world."

Will your contributor inform me where, among the teachings of Adam Smith's "followers of the English school," he will find any attempt to develop and push to their utmost limit these great principles?

Does he believe in these doctrines himself? Will he, as a disciple of Adam Smith, inform me how he can reconcile with them that "free trade" which compels the people of Fort Wayne, Indiana, and the country to the west of it, to send "several thousand weight of corn," and "eighty pounds of wool," to a distance, instead of converting them into a "piece of fine cloth," so that it may be used on the spot, or cheaply and "easily sent to the remotest corners of the world?"

Will he inform me, further, how he can reconcile with these principles that "free trade" policy which compels these people to purchase their "eighty pounds of fine cloth," which has been made at a distance, and is loaded with freights, commissions, and other charges innumerable?

Will your correspondent inform me whether he is so far a disciple of Adam Smith as to believe in the advantages to the farmer, as well as to the manufacturer, thus demonstrated?

If he does believe in those advantages, will he inform me how he reconciles with them the following passage from his "Review," in the May number of the *Merchants' Magazine*:—"He," [Mr. Carey,] says Mr. Sulley, "holds out that by this means the anvil, the loom, and farm will be located together, and that the labor of *all* would become *more profitable*, merely by saving the present cost of carriage of material to and fro. But it really seems superfluous to go into the subject, as the daily experience of the world proves it to be a mere trifle compared to the importance of the facilities of skill and the cheapness of labor, and other advantages, peculiar to certain localities?"

Will he inform me whether, in the passage above quoted, Adam Smith does or does not recognize the important fact that "the manufacture reacts upon the land, and increases still further its fertility?" And if he does, how he reconciles his belief in these teachings of the author of the

"Wealth of Nations" with his vain attempt to prove a greater decline in the fertility of those States which have some manufactures, than in those which have none?

Finally, will he inform me who more nearly approaches to the position of the teacher of these doctrines of Adam Smith, Mr. Carey or himself?

It will be useless for him to evade making answers to these questions, on the ground that, since the days of Adam Smith, the facilities of transportation have been increased beyond any conception he could have had, for the means of converting raw materials into finished fabrics have increased in an incomparably greater ratio. The principles above enunciated are eternal—equally true to-day as on the day they were first given to the world by their illustrious author. It is as great a disadvantage at this hour for a nation to expend its substance, its energy, its power, and its time in merely carrying things about from place to place, and trading in them, as it was in 1775-6, when the "Wealth of Nations" was first written and published. How much of the means of this nation are annually squandered in this way I have already demonstrated to Mr. Sulley, who, with a *profound philosophy*, informs us that "it is now bootless to lament over the loss!" I cannot avoid the conviction, however, that it would be more manly, as also really more independent and sensible, for him, regardless of former prejudices, to search for the cause, and when found to acknowledge the fact, and see that he did not lend his aid to the perpetuity of the policy which has resulted so disastrously.

Having, at some length, presented certain of the doctrines of the truly great author of the "Wealth of Nations," and having placed in comparison with them those of his American "follower," Mr. Sulley, I will, as briefly as possible, indicate some of the reasons which, in my view, constitute English political economy the "dismal science"—indeed, *the only one* which is dismal or discordant. To every one at all conversant with the teachings of this school, it is well known that its fundamental principles are contained in Ricardo's Theory of Rent and Malthus's Law of Population.

Ricardo's Theory of Rent has never been more briefly, clearly, and fairly stated than in the following words:—

"*First.* That in the commencement of cultivation, when population is small, and land consequently abundant, the best soils—those capable of yielding the largest return, say one hundred quarters, to a given quantity of labor—alone are cultivated.

"*Second.* That with the progress of population land becomes less abundant, and there arises a necessity for cultivating that yielding a smaller return; and that resort is then had to a second, and afterwards to a third and a fourth class of soils, yielding respectively ninety, eighty, and seventy quarters to the same quantity of labor.

"*Third.* That with the necessity for applying labor less productively, which thus accompanies the growth of population, rent arises; the owner of land No. 1 being enabled to demand and to obtain, in return for its use, ten quarters when resort is had to that of second quality, twenty when No. 3 is brought into use, and thirty when it becomes necessary to cultivate No. 4.

"*Fourth.* That the *proportion* of the landlord tends thus steadily to increase as the productiveness of labor decreases, and that there is thus a tendency to the ultimate absorption of the whole produce by the owner

of the land, and to a steadily increasing inequality of condition; the power of the laborer to consume the commodities which he produces steadily diminishing, while that of the land-owner to claim them, as rent, is steadily increasing.

"*Fifth.* That this tendency towards a diminution in the return to labor, and towards an increase of the landlord's proportion, always exists where population increases, and most exists where population increases most rapidly; but is in a certain degree counteracted by increase of wealth, producing improvement of cultivation."*

Although not announced for nineteen years after Malthus's "Law of Population," Mr. Ricardo's theory at once took its place logically anterior to it, and became the foundation of the English school.

Mr. Malthus's Law of Population may be briefly stated as follows:—

"That population has a constant tendency to increase beyond the means of subsistence, and that it is kept to its necessary level" by the absence of the means of subsistence. "The difficulty" arising from the want of the "food must be constantly in operation," and "must fall somewhere, and must necessarily be severely felt in some one or other of the various forms of misery by a large portion of mankind."†

Now, to me it seems that the mere statement of these propositions is enough. They at once prove the science, of which they are the corner-stones, to be "dismal," and productive of "discord" between the different classes of men—indeed, the sole discord in nature, although concerned directly with man, the greatest of all the works of the Creator. That these are logical necessities of the propositions, is as clear as that two and two make four.

Even the statement of Mr. Sulley that Malthusianism, with its attendant horrors, constitutes "a device of Providence to *people and replenish* the earth," will not save his cause, as we have the acknowledgement of Mr. Malthus himself, that emigration can only prove a temporary mitigation to the evils of over-population, and is not to be relied on as a sufficient "check."

Having seen what must be the result of Ricardo-Malthusianism, it will be well to turn to the system which will ever be associated with the name of Henry C. Carey.

By careful reference to the history of the world from the earliest ages, of which sufficient records exist, to the present hour, Mr. Carey has shown that in new settlements "man commences the work of cultivation on the higher grounds," and in process of time he is able to bring into activity richer soils. That with increased numbers there is an increased power of association, an increase of wealth, and a constantly augmenting ability to obtain control over the rich heavy soils of the valleys and river bottoms.‡ That, of the yield of land, capital receives an increasing *quan-*

* Carey's "Past, Present, and Future," p. 21; Philadelphia, 1848.

† Malthus's "Essay on Population," book i., chapter 1, third edition.

‡ If any evidence whatever were wanting for a complete and triumphant vindication of the doctrines of Mr. Carey, respecting the occupation of the earth, and for the entire demolition of those of Mr. Ricardo, it has recently been furnished by a record of the experience of Mr. John Johnston, of Geneva, New York, well known as "the father of tile drainage in America." A most important paper on the history and practice of this gentleman, and the remarkable results which have crowned his efforts in tile drainage, will be found in the *New York Daily Tribune*, of October 29, 1859.

Mr. Johnston has opened the way to a revolution in American agriculture, and unconsciously given powerful aid to a revolution in political economy throughout the world. He has furnished

tity, arising out of an increasing yield, but a *decreasing* proportion—thus a constantly increasing proportion going to those who work the land.

Further than this, he has demonstrated, by the aid of physiology, that matter takes upon itself more rapidly the form of vegetables than it does that of animals; and that every known description of animal—the elephant alone excepted—possesses greater procreative power than man.

While he has demonstrated all of these important truths, he has further shown that, with an increasing population, and a diversity of employments, the farmer and gardener can raise those vegetables of which an acre yields by tons, while he who raises produce for a distant market is confined almost exclusively to the cultivation of grains, of which an acre yields only by bushels; and that over-population really has never existed.

Thus has he established the fact that, so far from the future being dark and dreary for the mass of mankind, it is full of brightness and hope, and that we may look for the time when pauperism will cease to be an accompaniment of what we now call civilization.

In the above very imperfect outline of the basis of that harmonious and beautiful system, I have shown, that, by an appeal to facts, the picture drawn by Ricardo and Malthus is entirely reversed. This is the system, however, which Mr. Sulley—a believer in the horrors and monstrosities of Ricardo-Malthusianism—characterizes as “the pestilential quagmire of the Carey doctrines.” But, as Mr. Sulley, in his arguments, has so utterly disregarded the rules of logic that he has been forced to acknowledge that his “premises are not necessary to his conclusions,” there is but little need of regarding the opinions of this American “follower” of Adam Smith.

Passing over the minor points of your contributor’s paper, I will here leave him for the present.

H. C. B.

Art. V.—CAPE OF GOOD HOPE, AND ITS COMMERCE WITH UNITED STATES.

THE British colonies in South Africa have, until recently, received but an indifferent share of attention from our mercantile community. Their endeavors to establish commercial relations of some import with this extreme southern point of Africa, have resulted, however, satisfactorily, and a regular traffic now exists between the eastern ports of the United States, Cape Town, and Algoa Bay. In 1850, an occasional ship would visit these ports to recruit on a long passage to India or the east coast of Africa, (along this latter coast American ships have monopolized the trade for many years,) on which occasions they would bring tobacco, flour, &c., in small quantities, for trading and as payment for their disbursements. Now several fine American ships from 500 to 800 tons, built expressly for the trade, are constantly employed in direct communication between these ports. They are owned jointly between houses at Cape

to all those who can trace effects back to their causes, an explanation of those causes which have produced periodical destruction to so large a portion of the crops of the West. Mr. Carey’s philosophy furnished long before, to every one “within the circuit of its influence,” a clear solution of those difficulties which have crushed so many hopes, and broken so many hearts, among those who follow the plow and the harrow in the United States.

Town and Boston, at which latter port they are loaded principally with flour, lumber, staves, &c., and receive in return the produce of South Africa.

Cape Town is thirty-two miles to the westward of the Cape of Good Hope, and comparing it with any other colony of similar age and nation, has, at all times, a dronish appearance, although somewhat picturesque, and has been much retarded from the customary enterprise visible in most English colonies at the present day by the aversion its inhabitants, who are mostly of Dutch descent, have of encouraging the introduction of modern facilities of almost any description. The patronage of the East India Company having been withdrawn, the prosperity of the neighboring settlement of Algoa Bay and its increasing importance to English merchants has, apparently, awakened the cape inhabitants to a sense of their comparative want of self-reliance and energy in extending their commerce. Published statistics of the latter port show an excess of exports over Cape Town annually, and also an increase in emigration.

Within the past twelve months some unusual excitement has beneficially resulted in Cape Town by the carrying out of two railroad projections—the importance of which hitherto has not apparently occurred to them. A few months since the Governor turned the first sod for a railroad of some extent between Cape Town and Stellenbosch; and another shorter road is now being surveyed, both of which will be a valuable step, if sufficiently extended, in diverting produce from Algoa Bay to this port for shipment. Already this era in cape enterprise has commercially benefited the United States, as ten cargoes of lumber for railroad purposes have been shipped from eastern ports, and more will yet be required on the coast, as a road is in projection at Algoa Bay, and one already commenced at Port Natal. Measures have been taken to erect a breakwater in Table Bay at the expense of the colony—the home government having been solicited to contribute, but refused, owing to the colony rejecting convict labor. This movement is of great importance, as harbor facilities are much required. A marine railway has also been contemplated; nothing, however, as yet, has been done towards it. The locomotive whistle, hitherto unknown to the Dutch farmers and Kaffirs, will be instrumental in lessening the present crowd of formidable ox teams always visible in Cape Town, which are seldom drawn by less than eighteen oxen of large proportions, and driven by Kaffirs, who make, invariably, excellent teamsters. The produce brought from the interior by these teams consist of wool, sheepskins, hides, wine, raisins, &c., from distances varying to 500 miles. A large proportion of these commodities are submitted at public auction twice each week on the parade. Ostrich feathers, ivory, rhinoceros horns, aloes, and many such valuable commodities are brought round the coast to the cape by small craft and two small screw steamers, regularly employed on the coast, making weekly trips to Port Natal and intermediate ports; most of these shipments are for transfer to the mail steamers for European account.

Cape Town presents somewhat of a dull appearance from the bay, owing to its situation at the foot of Table Mountain, which is nearly perpendicular, and 3,000 feet high. The streets are laid out at right angles from the peculiar build of the houses, which are of Dutch architecture; and to avoid injury from the strong southeast winds, which blow furiously down the mountain, they are built low and with flat roofs. Many of the streets are destitute of sidewalks. Stoops surrounded by iron railings

force the pedestrian into the frequently muddy roads. The trees around the city show the influence of the strong winds, as they all bend several degrees to the northwest. The town was settled in 1650, and now contains 22,000 inhabitants, consisting of Europeans, Dutch, and Malays—the two latter in about equal proportions. But few Hottentots or Kaffirs are visible in the town. The Malays form the laboring population, and were originally introduced from Java, by the Dutch, as slaves. The present race, however, having been raised among the cape colonists, are much improved from the Malays of Java, although they still retain many of the habits of their race—Mahommedan religion and the Malay language intermixed with Dutch. Their dress is somewhat Oriental and very conspicuous. In 1858, the small pox broke out and depopulated them to some extent; also extending to the Dutch lower orders called "Africaners." Leprosy is yet a common disease among them, but does not extend to the other population. A number of cases always exists at the Leprosy Hospital, on Robbin Island, at the entrance of Table Bay. Since the emancipation of slaves in 1834, emigration to these colonies from England has been steadily increasing, and is much encouraged by the British government in granting free passages to artisans and laborers.

The good offices of the cape merchants are not unfrequently occupied in the very profitable business of marine surveying, consequent on the numerous homeward-bound Indiamen putting into one of their bays in distress, after endeavoring for weeks to weather the cape. On these occasions, which, during the winter months are very frequent, quite a competition exists among the various agents in their zealous endeavors to protect the interest of American and European underwriters. In many of these general average casualties a reshipment of the whole or a portion of the cargo is consequent; and frequently, when funds are not properly secured for the ship's disbursements, a portion of the cargo is reserved for public auction, and proceeds used to cover incidental expenses thus accruing, including satisfactory commissions which are generally of a remunerating character. During the months of June, July, and August, the Dutch and most continental ships are prohibited from anchoring in Table Bay, and many English ships would also vitiate their policies by entering this roadstead, the exposure of the bay to the violent northwest gales rendering it, during these months, dangerous. During the winter of 1857, a number of ships parted from their anchors, and five stranded, during the continuance of one gale.

Vessels at this season seeking a refuge on the coast, bear up for Simon's Bay, situated twenty-four miles from Cape Town, and entirely protected from the severe weather of this season. Simon's Bay is a naval station for the British cruisers stationed in this part of the world; for other purposes it is of no importance. The quick sands in approaching this latter place from Cape Town, are of a very dangerous nature, and at seasons only passable by those well acquainted with the track. In the products of the Cape of Good Hope, wool is the principal and most valuable export, and should the present tranquility exist, it will, there is but little doubt, be a formidable rival of Australia in quantity produced, but in quality, on an average, inferior. The sheep indigenous to this country are not sustained for producing wool; their skins are only collected, of which a fair average find their way to the United States. Since Americans have become competitors in the market, the cost is now much above what it formerly was. The tails of these native sheep will average ten

pounds in weight, and very often exceeding it, even to twenty pounds—the fat of which is somewhat prized, and sells at a higher price than the carcass, being used by the Dutch and Malays in lieu of butter. The wool-producing sheep are of imported breeds, principally Merino, and which have thriven admirably. The value of this staple imported into the United States in 1857, was \$183,426.

In agriculture, wheat-growing is the principal occupation of the farmers; attention to this branch of industry is not followed, to any great extent, being limited somewhat, owing to the continuance of the old Dutch law of succession, dividing the estates equally among children; and deficiency in the crop of wheat, which is frequent, is amply supplied by the large stock of American flour always on hand; complaints are often made, also, of the inferior quality of the latter shipments. Stock-raising receives more of their attention, and for which a good market in the island of the Mauritius is readily found. Great encouragement of late has been offered them by the East India government to breed horses, and a Remount agent established here for the purpose of purchasing all good stock available, and of which an immense number have, and are, continually being shipped to Calcutta. Among the list of ships taken up for their conveyance, several American clippers are included.

Wine, of various qualities, denominated Constantia, Fontignac, and Pontac, is a valuable and greatly increasing production. In the vicinity of Cape Town great attention is paid to the grape cultivation, and several vineyards are to be seen upwards of a century old. The proprietors of many of the manufactories have, of late years, been very successful in the excellent quality of their productions; among the most prominent are the Messrs. Cloete, proprietors of the well-known Constantia plantation, about fourteen miles from Cape Town, and which is invariably a place of resort for visitors. The demand for the annual production of Constantia is usually to the full extent of its capacity—a great portion of it being shipped to India, and the usual price in Cape Town is £1 sterling per gallon. The next in quality is the Fontignac, and which is also of excellent quality, is expensive, and is principally shipped to Europe; it is grown all over the colony. Pontac is made in large quantities, and is the ordinary wine shipped to the United States—it resembles Teneriffe and Sicilian light wines. The red Pontac, with a little adulteration is, without doubt, consumed to a great extent in Europe and the United States as Portugal red wine. Brandy of tolerable quality is manufactured to some extent. The wines of the cape if not injured by adulteration are healthy and very palatable; and since the total failure of the grape vine in Madeira, are much used throughout Europe as a substitute. Wines shipped from the cape are admitted into England at a more favorable duty than from any other country. Guano, from Ichaboe and Saldanha Bay, of which there is always a large accumulation at the cape, is an article in which an extensive business is done.

Whale oil, in former years, was an article of considerable importance here, but of late the southern American whaleships have forsaken this port for the Island of Mauritius. A number of ships from New London the past four years, each having one or two schooners attached to them as tenders, have been employed at that island, and have made a rendezvous at the "cape" for disposing of and reshipping their oil home. The sea-elephant whalers have a station at Heard's Island in 63° south, where they

have the past four years been very successful. One of these vessels is nearly always at the cape. An occasional whaleship from the Indian Ocean will recruit at this port, and which has many advantages for the purpose. The Mauritius supplies the cape with all its tropical necessities, and a considerable inter-colonial trade exists between the two ports sufficient to encourage resident American merchants to employ two fine vessels on the line, one of which is now building at an eastern port. "Copper ore" is a new article of export, and the average of 100 tons per month has been shipped from Cape Town with the prospect of a large increase; several mines having of late been opened.

Algoa Bay, in latitude 33° south, on the east coast, and 425 miles from Cape Town, having been originally colonized by the English, has, within a few years, outstripped its more ancient cotemporary in many branches of commerce. The surrounding country is well adapted for sheep; and in agricultural pursuits the colonists are very successful. The Dutch are not numerous here. Several tanneries and beef-packing establishments are doing a thriving business. Within the past year the clearances from the United States to this port direct have been numerous, and American manufactures are much favored. During the winter months the anchorage in Algoa Bay, which is on the west and northeast parts of the bay, is perfectly secure; during the summer season, however, heavy rollers set in.

Port Natal is in latitude $27^{\circ} 40'$ south, longitude 29° east, and its productions tropical. Cotton and indigo grow wild. A railroad has been commenced to Pietermaritzburg, the capital. The exports are not on an extensive scale, and at present limited to wool, arrow-root, butter, hides, and sugar; in the latter article great difficulty is found in competing at Cape Town with supplies from the Mauritius, owing to scarcity of labor. Arrivals of American shipping at this port are not frequent. Material for the railroad now progressing would meet with ready sale. Vessels drawing over fourteen feet of water find difficulty in getting up to D'Urban, which is the port of entry. Regularity in a limited trade between the cape colonies and Rio Janeiro exists. Outward, the cargoes consist of wine, live stock, &c., calling at St. Helena, which port is supplied altogether with sheep and cattle from the cape, returning with coffee and Brazilian produce. Dried raisins "from the cape" are met with in many parts of the world—"the packages having the Malaga brand," of which, however, Australia receives the greater portion.

The circulating medium of South Africa is British specie and notes issued at various denominations by three private banks;* but the majority of the inhabitants, especially in country districts, and at auction sales, use the rix dollar, which is valued at 1s. 6d., or $13\frac{1}{2}$ to a pound sterling. The schelling, eight of which go to a rix dollar, is of the value of $2\frac{1}{4}$ d., and a stiver $\frac{2}{3}$ of a penny sterling, six of which make a schelling. Commissariat bills on the English treasury, £20 and above, can always be purchased at $\frac{1}{4}$ per cent premium; and banks sell at 1 per cent premium, exchange on Europe.

Weights are Amsterdam standard, and were introduced by the Dutch, consisting of pounds subdivided into 16 ounces, or 32 loods each. The usual proportionate comparison of Dutch and English weights is 92 lbs. Dutch to 100 English. Wine is sold in pipes of 100 gallons; aum, 38 gallons; anker, $9\frac{1}{2}$ gallons.

T. D.

* Bank of Cape of Good Hope, Bank of South Africa, Bank of Eastern Province.

JOURNAL OF MERCANTILE LAW.

DECISION IN ADMIRALTY—COLLISION—VIS MAJOR—FERRY-BOAT—BAD WEATHER.

Before Judge NELSON. Samuel Beatty, *et al.*, vs. the ferry-boat Brooklyn.

This is a libel filed by the libelants and owners of the schooner Sarah E. Porter, against the Brooklyn, to recover damages for a collision occurring between the two vessels on the evening of the 10th of January, 1856, in the East River. The schooner was lying in a slip at the dock, south side of it, just above the Fulton-ferry slip, on the Brooklyn side of the river. The ferry-boat left her berth at Whitehall, between five and six o'clock in the evening, for a trip on the South-ferry for Atlantic-street, Brooklyn. The usual trip occupied some seven or eight minutes. The East River, at this time, was full of broken running ice. It was flood-tide, which sent the ice over against the Brooklyn shore. After the ferry boat had passed across about two-thirds of the way, she found the ice so compact and solid, that she was obliged to desist her efforts to enter the Atlantic dock. She then drifted on the tide up the river, and attempted to enter the Montague dock, but failed. She then passed further on with the view of entering the Fulton dock, but on reaching it, preparing and being about to enter, she encountered a large block of ice, which checked her progress, and while thus obstructed, the tide and ice outside swaying the stern of the boat by the river, brought it against the bow of the schooner, which lay next, breaking her jib-boom and bowsprit, beside creating some other damages by forcing her against a brig that was stationed in the slip between her and the dock.

The ferry-boat had on board from 500 to 600 passengers, beside as many teams as could be taken that trip. The night was excessively cold, and some two hours were consumed in the effort to cross the river and land the passengers and teams. The court below dismissed the libel. We have looked attentively into the proofs in the case, and all the facts and circumstances attending this trip of the ferry-boat, and after the fullest consideration cannot see that any fault was committed in her navigation. Every effort seems to have been made by the hands on board which skill and attention to duty could suggest; first, to gain the dock at Atlantic-street, after failing in this to enter the nearest dock practicable on the Brooklyn side. The Fulton dock, in the attempt to enter which the accident occurred, belonged to the proprietors of the boat. Besides the force of the tide carried her to a place where she had a right to enter and land her passengers. It seems to me that, having reached this point the accident was the result of circumstances entirely beyond the control of the hands of the boat. It has been argued that the boat should not have left her berth at Whitehall, taking into consideration the night and the condition of the river; but she had been running her trips regularly through the day, and the last trip was made just before 5 o'clock. The ice had been running in the river some weeks, and great difficulties were encountered in crossing, yet no one thought of closing the ferries between the two great cities on account of the obstructions. It has also been argued that the ferry-boat, after having failed to enter her dock at Atlantic-street, should have returned to her berth at Whitehall. But the master and hands owed a duty to the passengers, which they would have failed to fulfill if further efforts had not been made to enable them to reach their homes. These efforts, in my judgment, are entitled to commendation, and manifest an energy corresponding to the dangers and difficulties of the occasion, and to the responsibilities resting upon them, arising out of it. The locality of the schooner as unskillful and improper has been relied on, on the part of the respondents, and the circumstance that it was the purpose of the pilot of the ferry-boat to enter the slip ahead of the schooner. But these points are in controversy upon the evidence. We have preferred to place the opinion upon the undisputed facts of the case. The decree of the court below affirmed.

DECISION IN ADMIRALTY.

In the United States Circuit Court—September 21. Before Hon. Judge NELSON. *Butterfield vs. Boyd and others.*

The libel was filed in this case by BUTTERFIELD, one of the owners of the Mexican steamer *Iturbide*, against the respondents, owners of the ship *Mercury*, to recover damages occasioned by a collision between the two vessels on the 6th of November, 1854, after both vessels had passed outside of Sandy Hook. The ship had been towed to sea, and the hands were engaged in taking in the hawser which had been cast off by the tug a short time before the accident occurred. The steamer had passed the ship as she was going through the Gedney Channel, and soon after hove to for the purpose of sending the pilot and some passengers on board the tug, which was about to return to the city. At the time the hawser was cast off, the steamer was standing some quarter or half a mile to windward, and in advance of the ship. The wind was from the west-northwest, a pretty fresh breeze, the tide about half-flood, setting in in a direction nearly opposite to the wind. The steamer was heading northeast, and the ship about east or east by south. The steamer had come down the bay with steam and canvass, topsails and topgallant sails, jib and flying jib; when she hove-to, her jib and flying jib were lowered, her fore and main topgallant sails were set, the head sails were laid aback. The ship had only her top main staysail set, and was under no other sail. The vessels came together nearly broadside, the starboard side of the steamer against the larboard side of the ship. Within some ten or fifteen minutes after the one hove-to, and the other commenced taking in the hawser, they drifted together, and the serious dispute in the case is, which party was in fault in permitting his vessel to drift against the other. Four witnesses, including the master, mate, the pilot, and a passenger on board the steamer, have been examined for the libellant, and all concur that the ship drifted against the steamer. Five witnesses, on board the ship, including the master, first and third mates, the pilot, and a hand on board, were examined, and all concur that the steamer drifted against the ship. The court below dismissed the libel, and it is difficult to see upon this conflict of testimony how the judge could have arrived at any other conclusion, unless there is something else in the case charging fault upon the defendant's vessel. The court, after going over the evidence adduced and the arguments of counsel, concludes:—"We feel bound to say that the management of the steamer in the position in which she lay, was not such as to recommend her to any very favorable consideration. She had her steam up, and sails set, and yet it does not appear that she used any effort by her officers or crew to avoid the collision." It is agreed that the vessels were apart from each other from a quarter to half a mile before they began to drift, and it is difficult to resist the conclusion that if there had been a proper attention to duty under the circumstances, on the part of those on board the steamer, that she might have avoided the collision or accident; but at least she should have made the effort. We are satisfied the decree of the court below is right, and should be affirmed.

DECISION IN ADMIRALTY ON APPEAL—SLAVE TRADE.

In the United States Circuit Court. Before Judge NELSON. *The United States vs. the brig Henry.*

The libel was filed in this case by the Government against the brig *Henry*, upon a charge of having been fitted out in this port for the purpose of engaging in the slave trade, praying forfeiture and condemnation of the vessel. The court below dismissed the libel, but granted a certificate of reasonable cause to the collector or person making the seizure.

The claimants appealed from the order granting the certificate. The principal objection raised was that no seizure took place by the collector or any other officer of the customs, and hence the case was one in which the court below had no jurisdiction or authority to grant the order under the act of Congress, (1 U. S. Statutes at Large, 696.) It appeared from the record that an actual seizure was omitted, at the request of the counsel for the claimant, and that the Acting

District Attorney agreed to take a stipulation of the counsel that a seizure had been made, and waived the formality of one to save expense and delay.

It was insisted that the stipulation was designed to furnish evidence of the seizure, so far as the fact was essential to maintain the suit for condemnation, but not to be used as a ground for the granting of an order for reasonable cause of seizure.

Judge NELSON, on the appeal, held that the act of Congress referred to, makes the seizure a material fact to the maintenance of the suit, and provides for a certificate of reasonable cause, in case of judgment for the claimant, in which event the claimant is denied costs, and the person making the seizure exempt from suit for the same. The judge was of the opinion that the mode adopted in proceeding in this case is not such as should be entitled to any very favorable consideration.

Public officers had better follow out the requirements of the law, and assume all the responsibilities belonging to their acts. Very great abuses might arise from the institution of these penal suits on behalf of the Government by stipulation or compromise. He, however, held, from the facts of the case, that the decree of the court below should be affirmed.

BOTTOMRY BOND—COMMISSIONS—STEVEDORE'S BILL.

In the United States Circuit Court—September 17. Before Judge NELSON. *Cæsar A. Robert vs. the bark Yuba.*

This was an action to enforce a bottomry bond upon the bark *Yuba* for the sum of \$9,240. The vessel was in New Orleans in distress, and was repaired under the directions of her master, and the money advanced by the firm of AD. ODIER, STOUSE & LEISY, who took this bond for the amount, with maritime interest of 20 per cent, and afterwards transferred it to the libellant. The money advanced was used for paying various bills for discharging the vessel previous to the repairs, for the bills of repairs, and commissions for procuring the advance, &c., and after the bills were paid there remained a balance of \$192 44, which was handed to the master of the vessel.

Judge BETTS, in the District Court, decided that the circumstances of the case were calculated to throw suspicion upon the good faith of the loan, and gave a decree for the libellant for only \$4,000, with leave to make a reference and show whether claims which were liens on the vessel were paid by this loan to a greater amount. The libellant, however, did not take a reference, but appealed to this court.

NELSON, C. J.—I am satisfied that the repairs of the vessel at New Orleans, which port she entered in distress, were necessary, and that the money was lent on the bottomry bond by ODIER & Co. in good faith, for the purpose of their payment, and that the money was applied to the payment of the same.

The objection that the repairs were made before the loan was effected, and hence that it was not necessary, in order to procure them, and enable the vessel to proceed on her voyage, we think not tenable. They were made upon the credit of the vessel, and the loan was indispensable to relieve her from the charges.

The discharge of the cargo became necessary to enable the surveyors to ascertain the extent of the damage, and to enable the shipmaster to make the repairs. The service was incidental to the repairs, and one without which they could not be made; and thence the stevedore's bill was a proper charge. So in respect to the commissions on the procurement of the loan. They were incidental to the loan itself, as it could be raised, in the given case, only through an agency. This principle is applicable also to several other items objected to.

The charges for the repairs and other expenses connected therewith, are high, and may be unreasonable; but the weight of the proof shows that they are customary charges and expenses in the port of New Orleans. The premium of 20 per cent on the bottomry bond is objected to as exorbitant and out of all proportion to the risk, but we cannot so hold upon the proofs in the case.

If the question was between the claimants and the persons rendering the ser-

vice to the vessel, we might be disposed to cut down some of the charges, notwithstanding the evidence in support of them. But we think the lender upon bottomry in good faith, and under circumstances which justified the loan, cannot be justly held responsible for the reasonableness of the charges in the repairs of the vessel. This would require him, if we should hold him to this responsibility, to take upon himself the burden of contracting for, or superintending all repairs.

Reasonable exertions were made by the consignee of the vessel to procure the funds from the owners and agents of her in New York, but they declined making the advances, or rather admitted their inability to make them, and the parties at the port of distress were left to raise the money as they best could.

Upon our view of the case we must reverse the decree below, and decree in favor of the libelant the amount of the bottomry bond, except the \$192 44 paid to the captain.

SHIPMENT OF LARD IN HOT WEATHER—RESPONSIBILITY OF THE CARRIER.

In the United States Circuit Court. Before Justice NELSON. William Nelson, *et al.*, vs. John O. Woodruff; John O. Woodruff vs. William Nelson, *et al.*

The libel was filed in the first case by the libelant to recover freight upon a shipment of 1,099 bbls. and 61 tcs. of lard, in the ship *Maid of Orleans*, from New Orleans to this port, in July and August, 1854. It was filed in the second case by the consignee against the respondent, to recover damages for a loss of part of the lard in the course of the shipment. Both cases depend upon the same evidence, and were heard together in the court below, and in this court. It is not denied but that a very heavy loss of the lard occurred on board of the vessel during the voyage, which was discovered upon discharging the cargo at this port—a loss of about 60,000 pounds, worth some \$6,000. The bills of lading are in the usual form—shipped in good order, &c., damages of sea, &c., except to each is added at the foot, "contents unknown." The weather was excessively hot in New Orleans in the month of July, 1854, when the lard was put on board and delivered by the shipper on the levee, which was done morning and evening to avoid the heat of the day. The delivery, however, was continued in the morning until 10 o'clock, and renewed between 3 and 4 P. M. And according to the weight of the testimony the lard was taken on board the vessel with all reasonable dispatch. When taken on board it was in a liquid state, and a few barrels leaked so badly at the levee that the hoops had to be tightened, and some of the barrels were found to be partially empty.

The great deficiency that occurred in the course of the shipment, is attributable to the leakage of the casks which the libelant insists is chargeable alone to the condition and character of the article and to the excessive heat, whether at the time of the shipment or during the voyage. The proofs in the case taken at New Orleans, and at this port, are very full and satisfactory that the lard was properly and skillfully stowed, both in respect to the place in the hold of the vessel, and the manner of the stowage. And it is further shown that all due and proper care was taken in the course of the shipment, and I perceive nothing in the evidence, when critically examined and weighed, in the appearance or condition of the packages when discharged at this port, going to impair the proof of the libelant on this head. The barrels and tierces appear to have been well made and with proper material, and to have withstood any substantial injury, with the exception that the seams were opened, and hence the leakage. But this is accounted for by nearly all the witnesses experienced in the shipment of the article, as resulting from the effect of the hot weather in connection with the tendency of the melted lard to shrink the staves and loosen the hoops. The proof is that the months of July and August were hot beyond those of preceding years; and that on opening the hatches of the vessel at this port the heat in the hold was so excessive that no person could remain in it. It is well settled that the shipper takes a risk attendant upon a shipment of cargo of this character from the heat of the weather, unless one neglect or fault can be charged upon the vessel contributing to the loss, (12 How., 272.) and I must say, after a very careful examination of the evidence, that in my judgment, no such negligence or fault has been established. The decree of the court below must be affirmed.

APPEAL IN ADMIRALTY.

In the United States Circuit Court. Before Justice NELSON. Elisha Baker vs. the ship Potomac.

The only question in this case arose on the report of the commissioner in the court below, in respect to the amount of repairs made, and materials furnished to the ship Potomac. The court below based its decision upon a defect in the exceptions taken to the report as relating either to matters settled in the decree and not before the commissioner, or not sufficiently specific and pointed to raise the exception.

I am inclined to think the court right on both grounds stated. But, independently of this answer, have looked into the evidence before the commissioner, without regard to the formal objections, and am satisfied that the weight of it sustains the report; at least the evidence furnished on the part of the respondent, tending to reduce the amount and value of the repairs, and to change the terms upon which they were made, is so questionable that we are not disposed to interfere with the report, as the witnesses were personally before the officer making it, and who had a better opportunity to determine the degree of credibility to be given to them than he can have. The extent and cost of the repairs seem to have been established in the usual way, and with reasonable satisfaction, and the rebutting proof is very general and indefinite. Decree below affirmed.

COMMERCIAL CHRONICLE AND REVIEW.

GROWING ABUNDANCE OF MONEY—DIMINISHED VALUE—STOCK BUSINESS—EXCESS OF CAPITAL—SUPPLY OF THE METALS—IMPORTS AND EXPORTS IN GREAT BRITAIN AND FRANCE—INCREASE OF SPECIE IN EUROPE—DECREASE IN UNITED STATES—FLOW OF SPECIE TO RICH COUNTRIES—GOLD THE CHIEF PRODUCT OF CALIFORNIA—OTHER CAPITAL SCARCE—GRADUAL INCREASE OF INDUSTRY—PROGRESS REQUIRES MORE CAPITAL—SUFFICIENCY OF GOLD FOR CURRENCY—ALL CAPITAL ABUNDANT IN GREAT BRITAIN—RENT OF CAPITAL—RECALL OF CAPITAL—EXPORT FROM UNITED STATES—MINT—ASSAY—OFFICE—SPECIE IN BANKS—AGGREGATE OF FOUR CITIES—EFFECT OF PANIC ON SPECIE—EXCHANGE WITH EUROPE—INTERNAL EXCHANGE—RATES OF MONEY ABROAD—DISCREDIT—APPARENT INCREASE OF METALLIC CURRENCY—RATES OF EXCHANGE—IMPORTATIONS—RISE OF MONEY ABROAD—RATE OF INTEREST IN NEW YORK—SUPPLY OF PAPER—CASH BUSINESS—CROP MOVEMENT—PROCEEDS OF CROPS—NO LOCAL MARKET—CROPS AND RAILROAD TRAFFIC—DECLINE OF PASSENGER TRAFFIC.

THERE has been a growing abundance of money towards the close of the autumn trade, and its price has declined in face of the continued large export of the precious metals. The absence of all business enterprise, and the low prices for food and goods, are calculated to throw out in relief the apparent supply of capital, in proportion to demand, which manifests its excess in the low prices of money, as well as in other shapes of capital. It is somewhat remarkable, however, that while the supply of the precious metals in the United States is rapidly decreasing, France and Great Britain are absorbing larger quantities. The official returns of the imports and exports of gold and silver, into and from France, in the first eight months of 1859, have been as follows, reducing the amounts to dollars:—

	Great Britain.			France.		
	Gold.	Silver.	Total.	Gold.	Silver.	Total.
Import...	\$76,133,575	53,241,021	129,374,596	113,074,455	28,849,060	141,923,515
Export...	65,441,640	62,920,101	128,361,741	29,343,262	55,831,983	85,175,245
Excess im.	\$10,691,935	.....	1,012,855	83,731,195	.....	56,748,270
Excess ex.	.....	9,679,080	.....	.....	26,982,923	.....

England and France together absorbed, it appears, \$94,423,130 worth of gold in the first eight months of the present year—that is, both countries imported that amount more than they exported. In the same period of time, the Atlantic United States exported \$54,276,292 against \$25,030,245 received from California, showing a depletion of \$29,246,047 in the United States in the same time that the two great nations of Europe accumulated to such an extent. This depletion in the United States still continues, and has, up to 15th November, been as follows, including Boston :—

	Received from California.	Export from Boston & N. York.	Excess of export.
January 1 to September 1	\$25,030,245	\$54,276,292	\$29,246,047
September 1 to November 15.....	11,224,420	17,076,870	5,852,450
Total	\$36,254,665	\$71,353,162	\$35,098,497

These figures indicate that the loss of nearly \$30,000,000 in specie in the first eight months of the year had no effect upon the drain, which has continued, in the last two months and a half, at a rate of 50 per cent greater than the supply from California, leaving a net loss of \$35,098,000 in the first ten months of the current year.

The current of specie sets always from those countries where capital in other shapes is scarce towards those where it is abundant. Thus gold is the chief product of Californian industry, and much capital is consumed in its production. When the country was first occupied by the miners who sought gold, there was probably less capital per head among the population than in almost any other civilized country. The whole energies of the people were confined to gold production. As that article has, of itself, but little value, it was rapidly exported in search of those commodities that were more desirable. Gradually other industries sprung up; those which required the least capital, like agriculture, were the first. But in proportion as the country prospered there was more demand for capital, which is drawn, through the medium of gold, from those countries where it is most abundant, as England and Europe. This export of gold is not a matter of regret. It indicates only that there is a sufficiency of gold in that country to answer all the purposes of exchange, and the balance is exchanged for more necessary articles, which constitute, in another shape, the capital needed. In a country like England, capital of all descriptions is superabundant, and the greater the supply of general capital, the greater proportion of the precious metals is required for the exchange; hence it is to the rich countries that the metals gravitate. In California, whence it proceeds, "money" is quoted 24 per cent per annum; and in England, to which the gold goes, "money" is quoted 2 per cent per annum, or about one-twelfth of the rate. It is, however, not "money," gold pieces, that command those rates, it is capital, which, in all shapes but gold, is scarce in California, and very abundant in London. The depression of general business which has prevailed since the panic of 1857, has been accompanied by a stoppage of the disposition of the cheap capital of England and Western Europe to seek employment at a distance, and also by a disposition, to some extent, to recall capital to the great central reservoirs. The decrease of specie in the United States is an indication of this operation.

The comparative receipts and exports have been 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.

	1858.		1859.		Specie in sub-treasury.	Total in the city.
	Received.	Exported.	Received.	Exported.		
Jan. 8.....		\$2,398,684		\$1,052,558	\$4,202,151	\$82,601,969
15.....	\$1,607,440	1,045,490	\$1,376,300	218,049	4,312,987	33,693,699
23.....		1,244,368		567,398	4,851,666	34,323,766
30.....	1,567,779	57,075	1,210,713	467,694	7,230,004	34,985,294
Feb. 5.....		2,928,271		606,969	8,103,546	34,095,987
13.....	1,348,507	48,850	1,319,923	361,550	8,040,900	33,460,000
20.....		641,688		1,013,780	6,770,555	33,115,510
27.....	1,640,430	128,114	1,287,967	358,354	7,193,829	33,664,000
Mar. 5.....		297,898		1,427,556	7,215,928	33,915,839
12.....	1,279,134	225,274	933,130	307,106	8,677,357	34,207,411
19.....	11,000	116,114		870,578	9,046,759	34,089,942
26.....	1,403,949	88,120		208,955	8,041,268	34,227,800
Apr. 2.....		115,790	1,032,314	1,343,059	7,686,700	32,918,800
9.....		250,246		576,107	7,232,451	32,981,118
16.....	1,325,198	203,163	1,404,210	1,637,104	7,079,111	32,557,778
23.....	41,208	15,850		1,496,889	6,894,810	32,972,965
30.....	1,550,000	136,873	1,723,352	1,680,743	6,568,681	32,897,686
May 7.....		106,110		2,169,197	6,481,913	32,568,545
14.....	1,626,171	720,710	1,480,115	1,926,491	6,020,400	31,191,731
21.....		532,862		2,223,578	5,488,205	31,578,209
28.....	1,575,995	400,300	1,938,669	5,126,643	4,752,084	29,171,906
June 5.....		51,425		2,325,972	4,327,155	28,055,464
12.....	1,446,175	16,616	1,513,975	1,877,294	3,684,754	25,816,954
19.....		68,318		1,669,263	3,604,800	26,790,017
25.....	1,799,502	276,487		1,620,731	4,493,200	26,253,081
July 2.....		317,110	2,041,237	1,861,163	4,086,751	27,028,416
9.....	1,500,000	564,030		1,398,885	4,278,400	26,773,049
16.....		637,240	1,736,361	2,495,127	4,282,600	27,506,279
23.....		1,028,270		2,030,220	5,114,600	26,361,512
30.....	1,163,818	303,318	2,145,000	2,344,040	5,116,800	25,881,300
Aug. 6.....		786,841		1,284,855	5,341,000	25,424,877
13.....	1,531,514	440,729	1,860,274	1,605,389	5,347,389	26,085,269
20.....		844,781		1,594,933	4,960,400	26,363,848
27.....	1,434,674	187,941	2,126,332	1,584,879	4,869,800	25,597,866
Sept. 3.....		562,087	*962,030	509,649	4,877,200	26,355,494
10.....	1,796,139	227,980	2,046,006	2,363,385	4,919,788	26,687,036
17.....		1,361,110		1,760,331	5,067,200	21,579,880
24.....	1,570,924	474,945	2,042,363	2,727,194	5,190,600	25,851,036
Oct. 1.....		1,126,404		1,414,590	5,230,400	24,489,500
8.....	1,322,005	675,817	†2,350,670	727,981	4,719,100	24,214,200
15.....		886,234	1,883,670	1,430,833	4,648,500	24,299,793
22.....	1,352,101	401,866		1,109,603	4,703,300	25,610,397
29.....		593,310	1,871,554	2,059,492	4,850,700	26,099,675
Nov. 5.....	1,672,656	184,452		1,519,673	4,608,687	24,836,930
12.....		142,130	1,568,107	1,068,407	5,094,642	25,281,598
Total.....	30,400,126	23,957,835	37,754,665	65,858,694		

The fine bars that arrive from California have generally been exported in the same shape, and neither the Mint nor the Assay-office have had much increase of business by reason of the larger receipts this year.

The transactions of the United States Mint at Philadelphia have been as follows :—

* From New Orleans.

† \$500,000 silver from Mexico.

UNITED STATES MINT, PHILADELPHIA.

	Deposits.		Coinage.		Cents.
	Gold.	Silver.	Gold.	Silver.	
January	\$148,040	\$51,635	\$59,825	\$56,000	\$35,000
February	80,155	77,650	147,983	127,000	27,000
March.....	67,000	107,640	119,519	108,000	27,000
April.....	74,200	100,015	42,520	128,500	29,000
May.....	215,760	86,710	76,640	104,000	25,000
June	104,710	64,230	180,060	90,000	36,000
July.....	158,720	57,770	117,788	48,000	30,000
August	111,650	64,900	92,151	54,487	25,000
September	138,500	118,610	122,804	54,909	36,000
October	151,784	43,336	194,661	122,000	30,000
Total.....	\$1,232,514	772,496	1,153,941	887,996	290,000

The operations of the New York Assay-office have been as follows :--

NEW YORK ASSAY-OFFICE.

DEPOSITS.

	Foreign.				United States.			
	Gold.		Silver.		Gold.		Silver.	
	Coin.	Bullion.	Coin.	Bullion.	Coin.	Bullion.	Coin.	Bullion.
January..	\$4,000	\$13,000	\$23,380	....	....	\$365,000	\$2,500	\$4,120
February.	6,000	10,000	57,700	\$9,000	....	689,000	2,300	6,000
March ...	8,000	3,000	82,000	3,000	....	351,000	3,500	4,500
April ...	8,000	10,000	31,000	28,000	....	328,000	1,000	4,000
May	5,000	10,000	29,000	2,000	....	162,000	600	7,000
June.....	20,000	20,000	25,500	3,500	....	185,000	2,000	4,000
July.....	12,000	8,000	33,400	6,400	....	137,600	1,000	3,100
August... 16,000	8,000	30,800	10,000	....	201,000	....	3,200	
Septemb'r	20,000	22,000	18,000	3,000	....	160,000	....	48,000
October..	6,000	6,000	61,200	3,000	....	193,000	....	8,200
Total..	105,000	\$110,000	\$393,980	\$67,900	....	\$2,558,600	\$12,900	\$31,920

PAYMENTS BY ASSAY OFFICE.

	Bars.	Coin.
January	\$387,000	\$252,000
February	750,000	10,000
March.....	255,000	290,000
April.....	336,000	74,000
May.....	156,000	59,600
June.....	140,000	120,000
July.....	155,000	46,500
August.....	165,000	104,000
September.....	175,000	75,000
October.....	180,000	98,000
Total.....	\$2,699,000	\$1,128,100

If we turn to the tables of weekly bank returns, annexed as usual to this article, we shall observe that the aggregate specie in the banks of the four leading cities which stood at \$58,710,102 January, 1859, had fallen to \$43,404,396 November 5th, showing a loss of \$16,306,000, leaving a sum equal to \$18,792,000, which was drawn from the internal resources of the country; and by so much diminishing the specie basis of the circulation. The flow of specie towards England in the past year has not, apparently, benefited the Bank of England; but the aggregate amount held by the banks of six cities is as follows for October, reduced to dollars :—

	1857.	1858.	1859.
London.....	\$35,850,110	\$94,365,436	\$81,469,810
Paris.....	35,585,613	103,007,890	120,251,883
New York.....	7,843,230	88,705,300	19,651,293
New Orleans.....	3,230,370	11,473,272	12,601,590
Boston.....	2,563,112	8,692,225	5,195,497
Philadelphia.....	2,071,434	7,361,906	5,323,153
Total.....	\$86,743,890	\$263,606,549	\$244,493,226

The figures for 1857 are those for the panic, which drew specie into the pockets of individuals to an enormous extent. That panic also caused gold to set from distant points of employment homeward towards the great central reservoirs, which collected, up to October, 1858, \$172,862,659—a sum equal to three years' production of California. In the past year the current has continued in the same direction, but notwithstanding the large receipts, as shown above, in England and France, the Bank of England now holds less than at the same date last year, and the Bank of France has increased its coin but 17½ millions, although the net import into France, as above, has been 56½ millions since January 1st. On the other hand, while the excess of export has been so great from the United States, the specie in the banks has been well maintained. This fact indicates that the drain from the interior has sufficed, with the aid of the California supplies, to meet the export demand for the metals. Large as has been the movement, however, it has not sufficed to correct the internal exchanges on New York, or to depress the rates of foreign bills in New York, which are still firm at the specie point. The rate of interest has fallen as the season has advanced. In Europe, also, the rates have been very low. In Germany there have been loans even at 1 per cent, and in England 1½ per cent, although recently there was an advance to 2½ per cent. The continued current of gold to France and England indicates that capital is, for want of employment, returning to the reservoirs; and, perhaps, that disposition may, to some extent, be aided by the discredit which has attached to some descriptions of credit. The exports of silver from England and Europe are large for Asiatic account, and the process of substituting gold for silver continues. Nevertheless, the aggregate metallic currency increases. This increase in France was in the first part of the year probably due to political fears that led to hoarding; but it has continued both in England and France since the peace, and that without showing any material increase in the amounts held by the banks. The rates of exchange in New York are as follows:—

RATES OF BILLS IN NEW YORK.

	September 1.	October 1.	November 1.	November 15.
London.....	9½ a 10½	10 a 10¾	9¾ a 10½	9¾ a 10½
Paris.....	5.15 a 5.11½	5.15 a 5.12½	5.13¾ a 5.12½	5.12½ a 5.13½
Antwerp.....	5.13 a 5.10	5.15 a 5.11½	5.13¾ a 5.12½	5.12½ a 5.13½
Amsterdam.....	42½ a 42½	41¾ a 42	41¾ a 42	41¾ a 42½
Frankfort.....	42 a 42½	42½ a 42½	42 a 42½	42 a 42½
Bremen.....	79 a 79½	79¾ a 80	79¾ a 79¾	79¾ a 79¾
Berlin, &c.....	73¾ a 74	73¾ a 74	73¾ a 73¾	73¾ a 74
Hamburg.....	36¾ a 37	36¾ a 37½	36¾ a 37	36¾ a 37½

The importations at the port continue to exceed those of last year, and aided by the abundance of money, the remittances are promptly made. The latest dates also brought some improvement in the value of money in Europe. Under

these circumstances, the crops have not yet been able to arrest the outflow of specie; nor has the latter affected the rates of money, which tend downward as follows:—

RATES OF MONEY AT NEW YORK.

	Aug. 1st.	Sept. 1st.	Oct. 1st.	Nov. 1st.	Nov. 15.
Loans on call, stock securities....	6 a 7	5½ a 6	5½ a 7	5 a 5½	5 a 5½
Loans on call, other securities....	7 a 8	7 a 8	6 a 7	6 a 7	5½ a 6
Prime indorsed bills, 60 days....	6½ a 7½	6 a 7	6½ a 7	6 a 7½	6 a 6½
Prime indorsed bills, 4 a 6 mos...	7 a 8	7 a 7½	7 a 8	7½ a 8	6½ a 7
First-class single signatures.....	8 a 9	8 a 8½	10 a 12	10 a 12	7 a 8
Other good commercial paper....	11 a 13	11 a 14	10 a 12	12 a 15	10 a 12

The supply of money at banks and from private lenders is quite large; but there is much discrimination as to names, and six months paper is not taken readily at bank under the legal rate. The quantity of short business paper on the market is not large. The course of trade during the autumn months has not been such as to create the usual quantity; and on the other hand many firms have been enabled to retain their paper on favorable terms. It is probably due to the more general adherence to the cash plan, or the approximate cash plan, than formerly, which has prevented the usual pressure for money to bridge over the fall payments, and prevented the rise in the rate of interest that generally marks the autumn months.

The deliveries of the annual crops have been very satisfactory, as far as quantities go, but the money results have not been so large, as was anticipated, since prices are lower than two years since. The grain ports of the lakes show larger receipts, but these do not indicate larger sales by the farmers, for the reason that in the years of railroad activity which preceded the panic of 1857, the employees of the railroads and the rush of emigrants caused a large local consumption of grain, at high prices, and those sales did not appear in the traffic reports of trade centers. This year there is little or no market for any produce except at the ports. Hence the whole surplus produce finds sale. The month of October is the most active month of the year for grain deliveries, and its effect on the western railroads for October this year, as compared with the last, has been as follows:—

	1858.			1859.		
	Passengers.	Freight.	Total.	Passengers.	Freight.	Total.
Galena	\$49,332	\$92,320	\$141,652	\$39,063	\$157,825	\$198,885
Chicago and Burlington ..	59,584	157,112	216,696	49,833	187,785	187,643
Milwaukee & Mississippi .	34,635	57,841	92,476	20,060	102,862	122,922
Illinois Central	112,377	131,746	244,123	77,877	164,461	242,348
Michigan Southern	96,578	101,638	198,216	74,312	140,155	214,468
Michigan Central.....	103,603	106,265	209,868	89,798	136,879	226,677
Total.....	454,109	647,922	1,103,031	350,354	889,964	1,240,318

If the aggregate of these six roads for October are compared with the figures for the same month of previous years, the results are as follows:—

	Passengers.	Freight.	Total.
1856	\$774,708	\$944,213	\$1,718,921
1857	596,650	748,065	1,344,715
1858	454,109	647,922	1,103,031
1859	350,354	889,964	1,240,318

The active year, 1856, gave a passenger revenue double that of the present year, and the freights were swollen by the large quantities going West. This year the down freight has been the most prominent; and the harvest of 1858

being almost a failure, they contrast strongly with those of last year. The passenger traffic shows the continued decline that has marked the general business of the western country. The deliveries of the cotton crop have, on the other hand, been very large. The receipts at the port already exceed by 100,000 bales the receipts of last year, and the prices are well maintained. The general elements of great prosperity exist in the whole country in a most abundant manner, but there is yet wanted that confidence in the future which stimulates enterprise and induces the employment of capital.

The imports into the port of New York for the month of October show little variation from the three preceding years, and are \$2,000,000 less than for the same month in 1855. The decline in imports has been in general merchandise, however, since the imports of dry goods are \$900,000 for the month more than last year. The warehousing operations have not varied much from the last year's, the entries and withdrawals nearly balancing. In 1857, the panic was in full operation in October, and the warehouses received large quantities. The stock in warehouses is somewhat less. We annex a comparison, which includes four years:—

FOREIGN IMPORTS AT NEW YORK IN OCTOBER.

	1856.	1857.	1858.	1859.
Entered for consumption.....	\$9,982,001	\$2,791,905	\$9,234,470	\$9,345,609
Entered for warehousing.....	2,836,781	7,356,424	2,157,678	2,194,258
Free goods.....	961,781	1,782,345	2,061,468	1,447,433
Specie and bullion.....	95,029	2,509,194	89,368	630,646
Total entered at the port.....	\$13,825,592	\$14,439,867	\$13,542,984	\$13,617,946
Withdrawn from warehouse.....	3,273,982	1,750,392	2,462,425	2,740,892

The imports since January have been larger than for the same period of any previous year, and are \$82,431,280 more than last year:—

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

	1856.	1857.	1858.	1859.
Entered for consumption.....	138,832,192	117,314,904	\$85,816,904	153,743,279
Entered for warehousing.....	31,331,443	64,212,297	22,389,828	30,546,026
Free goods.....	15,663,426	17,287,050	18,613,563	24,608,111
Specie and bullion.....	1,245,799	9,189,107	2,110,541	2,464,700
Total entered at the port.....	187,072,860	208,003,358	128,930,836	211,362,116
Withdrawn from warehouse.....	22,371,624	33,872,666	33,560,002	23,046,201

The imports of dry goods fell off in October, as compared with the previous months. The quantity in bond increased, and there were other indications that the markets were fully supplied. The arrivals for the month were \$1,100,000 less than in 1855—the decline being in woollens and silks:—

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

ENTERED FOR CONSUMPTION.

	1856.	1857.	1858.	1859.
Manufactures of wool.....	\$910,699	\$200,452	\$1,008,686	\$1,421,850
Manufactures of cotton.....	594,649	95,994	529,125	774,620
Manufactures of silk.....	1,005,771	145,702	1,364,921	1,155,513
Manufactures of flax.....	408,354	70,197	415,830	625,838
Miscellaneous dry goods.....	386,998	110,490	226,523	241,175
Total.....	\$3,306,471	\$622,835	\$3,545,090	\$4,218,996

WITHDRAWN FROM WAREHOUSE.

	1856.	1857.	1858.	1859.
Manufactures of wool.....	\$169,765	\$61,255	\$300,980	\$147,508
Manufactures of cotton.....	69,032	20,408	64,094	57,924
Manufactures of silk.....	59,091	49,929	54,498	28,843
Manufactures of flax.....	62,416	4,902	72,534	38,240
Miscellaneous dry goods.....	31,133	25,258	75,730	29,516
Total.....	\$391,437	\$161,752	\$567,836	\$302,031
Add entered for consumption....	3,306,471	622,835	3,545,090	4,218,996
Total thrown on market....	\$3,697,908	\$784,587	\$4,112,926	\$4,521,027

ENTERED FOR WAREHOUSING.

	1856.	1857.	1858.	1859.
Manufactures of wool.....	\$155,399	\$779,708	\$94,022	\$154,732
Manufactures of cotton.....	301,681	479,056	78,761	119,899
Manufactures of silk.....	67,424	877,371	44,216	53,051
Manufactures of flax.....	159,846	312,629	80,506	110,966
Miscellaneous dry goods.....	83,851	256,540	51,266	55,749
Total.....	\$768,201	\$2,705,304	\$348,771	\$493,797
Add entered for consumption....	3,306,471	622,835	3,545,090	4,218,996
Total entered at the port....	\$4,074,672	\$3,328,139	\$3,893,861	\$4,712,793

This leaves the total receipts of dry goods at New York from foreign ports, since January 1st, \$12,000,000 more than even in 1857 :—

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

ENTERED FOR CONSUMPTION.

	1856.	1857.	1858.	1859.
Manufactures of wool.....	\$22,225,997	\$19,211,416	\$14,899,522	\$29,797,207
Manufactures of cotton.....	13,357,725	13,844,025	8,087,121	19,640,906
Manufactures of silk.....	26,260,353	22,057,413	15,824,483	28,631,919
Manufactures of flax.....	7,057,713	5,114,515	3,775,793	8,715,678
Miscellaneous dry goods.....	6,260,955	5,490,856	2,924,698	4,936,479
Total.....	\$75,162,743	\$65,718,225	\$45,511,617	\$91,722,189

WITHDRAWN FROM WAREHOUSE.

	1856.	1857.	1858.	1859.
Manufactures of wool.....	\$2,487,694	\$4,876,938	\$4,304,226	\$2,578,390
Manufactures of cotton.....	1,888,943	2,738,823	3,344,757	1,404,902
Manufactures of silk.....	1,823,401	3,912,795	3,119,963	796,003
Manufactures of flax.....	927,274	1,394,028	1,940,560	880,313
Miscellaneous dry goods.....	367,108	733,135	1,212,109	354,466
Total withdrawn.....	\$7,494,420	\$13,655,719	\$13,921,615	\$6,014,074
Add entered for consumption....	75,162,743	65,718,225	45,511,617	91,722,189
Total thrown on market....	\$82,657,163	\$79,373,944	\$59,433,232	\$97,736,263

ENTERED FOR WAREHOUSING.

	1856.	1857.	1858.	1859.
Manufactures of wool.....	\$2,926,688	\$7,429,904	\$2,003,864	\$3,040,185
Manufactures of cotton.....	1,889,732	3,557,696	1,726,791	1,383,908
Manufactures of silk.....	1,937,818	5,515,267	1,076,773	787,544
Manufactures of flax.....	940,312	2,270,263	808,779	800,296
Miscellaneous dry goods.....	576,898	1,674,084	535,150	436,628
Total.....	\$8,270,948	\$20,457,214	\$6,151,157	\$6,448,561
Add entered for consumption ...	75,162,743	65,718,225	45,511,617	91,722,189

Total entered at the port... \$83,433,691 \$86,175,439 \$51,662,774 \$98,170,750

The exports of domestic produce from the port of New York are smaller than for either of the four previous years. This decline is due to the absence of any export demand for breadstuffs. The specie export has been larger than ever, however, for the month of October :—

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

	1856.	1857.	1858.	1859.
Domestic produce.....	\$6,129,837	\$6,491,529	\$5,233,363	\$4,752,779
Foreign merchandise (free).....	71,931	212,443	161,063	252,878
Foreign merchandise (dutiable)...	130,577	806,049	359,185	432,440
Specie and bullion.....	4,996,650	297,259	3,028,405	5,344,159
Total exports.....	\$11,329,005	\$7,807,280	\$8,782,016	\$10,832,256
Total, exclusive of specie ..	6,332,345	7,510,021	5,753,611	5,488,097

The total exports from the port since January 1st have been more than last year, and more than in 1855, but less than in the intermediate years. Specie has reached the large figure of \$63,270,614, or nearly \$30,000,000 more than in 1857 :—

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

	1856.	1857.	1858.	1859.
Domestic produce.....	\$63,466,032	\$53,725,298	\$46,767,981	\$48,223,748
Foreign merchandise (free).....	820,006	3,339,769	1,286,624	2,580,757
Foreign merchandise (dutiable)...	2,684,930	4,910,199	3,345,857	3,930,108
Specie and bullion.....	32,483,746	33,585,891	23,631,253	63,270,614
Total exports.....	\$99,454,714	\$95,561,157	\$75,031,715	118,005,227
Total, exclusive of specie... ..	66,970,968	61,975,266	51,400,462	54,734,613

The duties received at the custom-house, 50 per cent in advance of those of last year since January 1st, and are larger than for October, 1858, although the imports were nearly the same, showing a higher average rate of duty.

Of the duties received during the last month, only \$59,648 04 were in treasury notes, being the smallest total of notes returned during any month of the current year. The aggregate receipts of treasury notes for duties at this port since January 1st are \$2,328,626 16 :—

CASH DUTIES RECEIVED AT NEW YORK.

	1857.	1858.	1859.
First six months.....	\$19,293,521 31	\$11,089,112 57	\$19,912,181 99
In July.....	6,987,019 61	3,387,305 33	4,851,246 89
In August.....	3,946,830 40	3,545,119 01	4,243,010 43
In September.....	2,249,982 89	2,672,935 63	2,908,509 95
In October.....	867,534 99	2,054,834 43	2,318,750 82
Total since Jan. 1st....	\$33,334,890 00	\$22,749,305 97	\$33,833,700 08

JOURNAL OF BANKING, CURRENCY, AND FINANCE.

PROGRESS OF A STATE.

The State census of Iowa for the year 1859 has been officially completed, and we have compared the leading heads with the United States national censuses for 1850 and 1840, as follows:—

	1840.	1850.	1859.
Taxable.....	....	\$22,607,330	\$210,044,533
Population	43,112	192,204	633,549
Acres improved .....	....	824,682	3,109,436
Acres unimproved .....	....	1,911,382	7,335,567
Wheat.....bush.	154,693	1,530,581	3,293,253
Corn	1,406,241	8,656,799	23,366,684
Oats	216,385	1,524,345	1,703,760
Potatoes	234,063	276,120	1,497,204
Hay	17,953	89,053	547,639
Wool.....lbs.	23,039	373,898	627,860
Lead.....	500,000	.....	5,000,113
Butter .....	....	2,171,148	9,432,219
Cheese.....	....	209,840	778,788
Farm tools.....	....	\$1,172,379	\$2,467,532
Domestic manufactures.....	....	\$221,292	\$679,238
General manufactures .....	....	.....	\$3,764,962
Railroads, miles .....	....	.....	391
Railroads, cost.....	....	.....	\$12,000,000
Railroads in progress .....	....	480	310

The nine years that have elapsed since the United States census of 1850 was taken, have been marked by extraordinary excitement in all that region, following the railroad expenditures, the land speculation, the governmental grants of land in aid of railroads, the large migration of persons into that State, and the high prices that agricultural productions have enjoyed. All these circumstances have raised the taxable valuation ten-fold, and the population three-fold, while the taxable property has increased \$187,000,000. There have been built \$12,000,000 of railroads, and the federal government has granted 2,476,321 acres of land in aid of those roads. In the fiscal year 1858 the government sold 60,651 acres of land for \$83,000. If we admit the usual estimate of natural increase of population in ten years at 30 per cent, the numbers in Iowa in 1859 would have been 250,000 from natural increase alone, consequently the migration into the State must have been very nearly 400,000 souls in the last nine years. If those persons carried in \$100 each, the capital so added to the State would have been \$40,000,000. The improved value given to lands has added largely to the taxable value. This has been as follows:—

	1850.	1859.
Improved lands.....acres	824,682	3,109,436
Unimproved lands.....	1,911,382	7,335,567
Total.....	2,736,064	10,445,003
Value.....	\$16,657,101	\$104,450,030

The agricultural productions have not increased in the proportion of this large addition to the value of farming lands. The great numbers of emigrants settled in the State, the speculators who visited it, and the laborers on railroads employed in it, no doubt caused an active local demand for products at high

prices, which prevented much surplus coming forward. This year there is no home market for the product, and it finds sale only by exportation. A demand now from abroad that would make the Western surplus available, would give a new impulse in the right direction to the industry of that State, as well as to the others. All the elements now exist there of a season of great prosperity, and regular development, a large population, a fertile soil intersected by railroads, which give the products marketable value, and a prolific yield of the soil, are waiting only for an active demand for that produce to realize a season of still greater prosperity.

DEBT OF GEORGIA.

The annual revenue of the State of Georgia is less than \$1,200,000. The funded debt of the State is \$3,354,750; the market value of the six per cent bonds is at present 101 a 103. The public debt in bonds of the State of Georgia is as follows:—

Due in 1860, 7 per cent	\$7,000	Due in 1872, 7 per cent.....	100,000
“ 1861, 7 “	12,000	“ 1873, 6 “	173,000
“ 1862, 7 “	52,000	“ 1874, 6 “	80,000
“ 1862, 7 “	100,000	“ 1874, 7 “	181,500
“ 1862, 6 “	20,000	“ 1878, 7 “	100,000
“ 1863, 6 “	55,000	“ 1879, 7 “	150,000
“ 1868, 6 “	62,500		
“ 1865, 6 “	25,000		\$2,604,750
“ 1868, 6 “	205,000	Amount subscribed but not	
“ 1869, 6 “	272,000	issued.....	250,000
“ 1869, 5 “	72,000	Amount pledged conditionally	500,000
“ 1870, 6 “	150,000		
“ 1871, 6 “	161,000	Total.....	\$3,354,750
“ 1872, 6 “	625,500		

FINANCES OF VIRGINIA.

Mr. J. S. CALVERT, Treasurer of the Commonwealth, has transmitted to Governor WISE the following synopsis of the financial operations of the Treasury Department, for the fiscal year ending 30th September, 1859:—

Aggregate balance in the treasury on the morning of the 1st day of October, 1858, as per last annual synopsis

\$154,007 97

OCTOBER 1, 1858, TO SEPTEMBER 30, 1859.

On account of,	Received.	Paid.	Balance.
Commonwealth.....	\$4,306,671 68	\$4,222,536 31	\$104,013 36
Literary Fund.....	362,982 46	365,192 61	42,519 69
Board of Public Works....	2,108,665 75	2,120,287 05	9,217 23
Sinking Fund	2,451,842 58	2,453,266 27	67,137 72
Total	\$9,280,162 87	\$9,162,282 84	\$222,888 00

The above sum total of \$9,384,170 34, it will be observed, is the amount received and on hand in the treasury, but it embraces portions of the items received for the Literary Fund, Board of Public Works, and Sinking Fund, which are necessarily credited twice, thus:—\$255,010 08 of the Literary Fund was received from the Commonwealth's and Board of Public Works' Fund, \$8,899 50 of the Board of Public Works' Fund was received from the Commonwealth's Fund, and \$2,394,540 83 of the Sinking Fund was received from the Commonwealth's Fund; so that the actual receipts for the fiscal year were \$6,571,711 96, and the actual disbursements for same were \$6,502,831 93.

CITY WEEKLY BANK RETURNS.

NEW YORK WEEKLY BANK RETURNS.—(CAPITAL, \$68,645,014.)

	Loans.	Specie.	Circulation.	Deposits.	Average clearings.	Actual deposits.
Jan. 8	128,538,642	28,399,818	7,930,292	113,800,885	20,974,263	92,826,622
15	129,349,245	29,380,712	7,586,163	116,054,328	20,598,005	95,456,323
22	129,540,050	29,472,056	7,457,245	116,016,828	20,950,428	95,066,400
29	129,663,249	27,725,290	7,483,642	113,012,564	19,174,629	93,837,935
Feb. 5	130,442,176	25,991,441	7,950,855	114,678,173	22,712,917	91,965,256
12	129,106,318	25,419,088	7,872,441	109,907,424	20,560,606	89,346,818
19	127,476,495	26,344,955	7,766,858	108,937,564	19,911,207	89,026,357
26	125,866,083	26,470,171	7,736,982	109,000,892	19,785,055	88,215,837
Mar. 5	125,221,627	26,769,965	8,071,693	108,646,823	22,626,795	86,800,028
12	126,205,261	25,530,054	8,100,021	107,458,392	21,270,283	86,188,109
19	127,587,943	25,443,183	7,996,713	108,353,336	21,911,543	86,441,793
26	127,751,225	25,182,627	7,998,098	106,581,128	20,237,879	86,343,249
Apr. 2	128,702,192	25,732,161	8,221,753	110,176,088	22,438,950	87,737,138
9	129,865,752	25,748,667	8,449,401	111,692,509	23,549,945	88,142,544
16	129,968,924	25,478,108	8,293,459	111,695,711	23,607,914	88,087,797
23	129,192,807	26,068,155	8,289,112	112,627,270	23,671,453	88,955,814
30	128,706,705	26,329,805	8,300,672	113,217,504	23,655,166	89,562,338
May 7	129,519,905	26,086,632	8,804,032	115,586,810	26,714,767	88,872,043
14	129,680,408	25,171,335	8,490,933	113,141,178	24,445,039	88,696,639
21	128,701,553	26,090,008	8,352,723	112,731,646	24,171,516	86,441,793
28	127,137,660	24,319,822	8,232,653	107,064,005	21,501,650	85,562,355
June 4	125,006,766	23,728,311	8,427,642	103,207,002	20,628,166	82,578,836
11	122,958,928	22,132,275	8,391,116	99,042,966	20,159,422	78,833,536
18	121,800,195	23,192,217	8,281,111	99,170,335	20,042,356	79,127,979
25	121,744,449	21,759,881	8,216,043	97,353,393	19,160,278	77,193,115
July 2	122,401,773	22,491,665	8,365,790	98,920,313	20,787,701	78,132,612
9	121,614,633	22,494,649	8,553,061	98,090,655	21,077,643	77,013,012
16	120,405,658	23,323,679	8,201,675	97,257,070	19,121,159	78,136,911
23	119,934,160	21,196,912	8,170,626	94,416,054	19,114,111	75,301,943
30	119,347,412	20,764,564	8,214,959	91,707,877	17,232,932	74,474,895
Aug. 6	118,938,059	20,083,877	8,623,050	91,891,234	19,366,379	72,524,855
13	117,757,141	20,744,532	8,419,606	88,975,864	17,443,211	71,332,353
20	117,990,199	21,403,448	8,317,669	91,248,799	18,038,889	73,209,910
27	117,541,070	20,728,066	8,234,279	89,471,646	17,679,829	71,791,817
Sept. 3	118,184,258	21,478,299	8,373,318	93,250,438	20,094,729	73,155,709
10	118,421,430	21,767,248	8,513,062	92,732,324	20,095,939	72,636,895
17	119,366,352	21,512,680	8,444,766	94,002,721	20,855,322	73,147,399
24	119,387,320	20,660,436	8,357,296	93,460,300	20,729,701	72,730,599
Oct. 1	118,208,752	19,259,126	8,337,702	91,823,441	21,011,336	70,812,105
8	117,211,627	19,493,144	8,585,739	92,550,175	23,048,968	69,501,307
15	117,289,067	19,651,293	8,463,816	91,921,699	21,830,679	70,091,020
22	117,317,499	20,907,097	8,411,218	93,544,951	21,977,883	71,567,068
29	118,414,428	21,248,975	8,276,404	95,245,331	22,162,150	73,083,181
Nov. 5	120,118,037	20,228,342	8,627,421	96,900,567	23,226,669	73,673,898
12	121,206,352	20,186,956	8,443,555	97,657,512	22,977,321	76,680,191

BOSTON BANKS.—(CAPITAL, \$35,125,433.)

	Loans.	Specie.	Circulation.	Deposits.	Due to banks.	Due from banks.
Jan. 3 ..	60,069,424	8,548,934	6,543,134	22,357,838	10,789,135	7,083,737
10 ..	60,310,965	8,295,392	7,016,104	21,615,468	11,263,766	7,137,234
17 ..	60,106,798	7,931,712	6,793,723	21,127,712	11,139,700	7,111,264
24 ..	59,400,354	7,383,391	6,609,374	20,727,905	10,430,454	7,037,715
31 ..	58,992,556	7,088,736	6,224,137	20,598,451	9,657,823	6,547,510
Feb. 7 ..	59,120,142	6,814,589	6,514,576	20,845,520	9,506,146	7,057,113
14 ..	59,087,249	6,671,619	6,332,342	19,983,531	9,391,733	6,763,270
21 ..	59,099,993	6,679,740	6,275,458	20,082,960	9,318,961	6,699,735
28 ..	58,636,328	6,410,563	6,283,959	19,469,489	9,184,941	6,815,160
Mar. 7 ..	58,892,981	6,386,580	6,578,472	19,935,649	8,477,968	6,673,623

	Loans.	Specie.	Circulation.	Deposits.	Due to banks.	Due from banks.
14 ..	58,436,379	6,265,661	6,372,298	19,202,029	8,456,312	6,330,719
21 ..	58,152,742	6,238,518	6,227,150	19,809,807	7,945,389	6,817,368
28 ..	57,672,804	6,370,283	6,108,505	19,908,785	7,767,582	6,864,684
Apr. 4 ..	58,031,003	6,401,822	6,386,853	20,899,191	7,665,274	7,524,274
11 ..	58,320,346	6,488,147	7,358,859	21,422,531	8,410,087	8,509,638
18 ..	58,496,225	6,496,137	6,985,273	21,666,840	8,663,857	8,343,446
25 ..	58,160,215	6,726,647	6,812,855	21,663,615	8,237,561	7,834,888
May 2 ..	58,178,264	6,910,187	6,658,260	21,990,246	7,850,530	7,346,135
9 ..	58,211,765	6,907,557	7,241,597	21,852,358	7,998,226	8,077,777
16 ..	58,445,596	6,851,787	7,064,757	21,466,499	7,704,870	7,805,577
23 ..	57,996,456	6,700,975	7,013,197	20,845,917	7,542,472	7,565,826
30 ..	57,318,243	6,874,399	6,664,483	20,769,103	7,289,128	7,549,033
June 6 ..	57,430,695	6,738,384	7,009,878	20,718,977	7,090,735	7,852,924
13 ..	57,972,199	6,672,767	6,863,659	20,118,426	6,865,611	7,778,657
20 ..	58,203,731	6,453,596	7,082,731	20,229,249	7,134,285	7,460,245
27 ..	58,474,300	6,180,858	6,552,901	19,878,006	7,099,339	6,663,773
July 4 ..	59,037,935	5,493,396	6,935,303	20,017,147	7,076,162	7,283,020
11 ..	58,802,700	5,234,600	7,371,600	18,846,900	7,307,000	7,300,400
18 ..	58,773,537	4,645,866	6,890,858	18,422,769	6,854,245	6,731,181
25 ..	58,214,940	4,662,014	6,987,221	18,201,927	6,838,207	7,110,420
Aug. 1 ..	57,972,321	4,667,352	6,387,768	18,033,821	6,511,893	6,331,385
8 ..	58,122,483	4,926,056	6,678,754	17,957,506	6,580,316	6,359,393
15 ..	58,123,231	4,769,101	6,570,163	17,417,279	6,570,922	5,764,922
22 ..	58,016,685	4,922,414	6,444,603	17,602,981	6,857,698	6,090,950
29 ..	58,089,045	5,094,717	6,259,360	17,569,101	6,892,813	5,749,899
Sept. 5 ..	58,567,281	5,115,478	6,495,950	18,159,586	6,921,705	6,153,490
12 ..	58,765,279	5,129,751	6,612,539	18,190,067	7,009,345	6,237,555
19 ..	58,851,495	5,342,342	6,650,383	18,459,463	6,946,411	6,296,528
26 ..	58,580,748	5,164,191	6,548,230	18,527,936	6,979,094	6,724,476
Oct. 3 ..	58,735,636	5,195,497	6,694,038	19,165,983	7,000,547	7,237,090
10 ..	58,881,297	5,451,900	7,420,173	19,635,881	7,018,707	7,975,757
17 ..	58,752,928	5,542,585	7,133,034	19,653,268	7,202,078	7,828,215
24 ..	58,433,628	5,648,712	6,991,568	19,379,720	6,961,026	7,416,931
31 ..	58,321,757	5,762,822	6,632,123	19,652,388	6,964,995	7,157,049
Nov. 7 ..	59,036,007	5,447,489	6,983,075	20,344,878	6,575,609	7,650,086

PHILADELPHIA BANKS.—(CAPITAL, \$11,632,295.)

Date.	Loans.	Specie.	Circulation.	Deposits.	Due banks.
Jan. 3 ...	26,451,057	6,063,356	2,741,754	17,049,005	3,424,569
10 ...	26,395,860	6,067,222	2,854,398	17,138,607	3,297,816
17 ...	26,365,385	6,050,743	2,830,384	17,323,908	3,258,315
24 ...	26,283,118	6,099,317	2,769,145	17,498,219	3,093,921
31 ...	26,320,089	6,138,245	2,709,311	17,557,809	3,159,539
Feb. 7 ...	26,472,569	5,970,439	2,786,453	17,007,167	3,307,371
14 ...	26,527,304	5,991,541	2,804,052	16,384,087	3,695,963
21 ...	26,574,418	6,017,663	2,782,792	16,129,610	3,964,000
28 ...	26,509,977	5,982,260	2,778,252	16,012,765	4,086,651
Mar. 7 ...	26,719,333	5,926,714	2,901,337	16,372,368	3,854,900
14 ...	26,685,873	6,046,248	2,900,832	16,703,049	3,841,605
21 ...	26,856,891	6,136,539	2,923,551	16,899,846	3,929,010
28 ...	26,967,429	6,296,429	3,029,255	17,476,060	4,109,455
Apr. 4 ...	27,737,429	6,363,043	3,425,196	17,154,770	4,329,343
11 ...	27,884,568	6,144,905	3,580,447	17,002,878	4,668,135
18 ...	28,808,106	6,404,375	3,364,531	17,829,494	4,619,146
25 ...	27,817,918	6,689,591	3,179,236	17,804,212	4,439,457
May 2 ...	27,747,339	6,680,813	3,081,102	17,781,229	4,217,834
9 ...	27,693,408	6,349,390	3,152,725	17,441,125	4,160,780
16 ...	27,435,268	6,286,620	3,090,007	17,603,264	3,930,536
23 ...	26,837,976	5,922,147	3,014,659	17,182,349	3,462,753
30 ...	26,406,458	5,521,759	2,975,736	16,454,661	3,403,572
June 6 ...	26,177,875	5,415,587	2,992,198	16,386,995	3,367,146

	Loans.	Specie.	Circulation.	Deposits.	Due banks.
13....	25,920,993	5,521,188	2,918,426	16,207,149	3,177,859
20....	25,715,316	5,301,167	2,835,643	15,705,980	3,198,968
27....	25,406,842	5,066,847	2,729,953	16,114,269	.....
July 4....	25,416,440	4,897,863	2,808,208	15,533,496	2,855,312
11....	25,248,246	4,696,111	2,940,108	14,295,683	2,912,575
18....	25,200,073	4,824,864	2,873,947	15,011,670	2,803,179
25....	25,106,124	4,697,604	2,808,592	14,862,920	2,605,878
Aug. 1....	25,007,875	4,942,313	2,775,043	14,854,543	2,789,268
8....	24,746,238	4,880,630	2,809,456	14,623,439	2,621,820
15....	24,497,730	4,996,541	2,736,302	14,249,758	2,721,907
22....	24,325,308	5,079,162	2,724,061	14,096,270	2,802,876
29....	24,363,912	5,235,976	2,655,866	14,292,308	3,003,258
Sept. 5....	24,640,746	5,435,090	2,702,837	14,901,572	2,843,855
12....	24,686,821	5,431,509	2,785,146	14,909,709	2,861,091
19....	24,916,413	5,500,992	2,766,370	15,056,018	2,913,027
26....	25,125,114	5,437,722	2,730,835	15,243,099	2,780,398
Oct. 3....	25,479,419	5,323,153	2,742,444	15,550,755	2,732,862
10....	25,687,358	5,233,622	2,910,908	15,459,055	2,763,141
17....	25,816,137	5,217,766	2,873,402	15,332,414	3,023,755
24....	25,634,207	5,023,745	2,809,752	15,093,336	2,923,502
31....	25,566,036	5,030,242	2,788,375	15,284,824	2,800,883
Nov. 7....	25,658,286	5,017,936	2,737,150	15,480,452	2,742,790

NEW ORLEANS BANKS.—(CAPITAL, \$19,284,000.)

	Short loans.	Specie.	Circulation.	Deposits.	Exchange.	Distant balances.
Jan. 3..	20,537,567	16,013,189	9,551,324	22,643,428	9,882,602	2,331,233
10..	20,453,417	16,294,474	10,383,734	21,756,592	9,866,131	2,540,573
17..	20,904,840	16,343,810	10,819,419	22,194,957	9,666,070	2,380,707
24..	21,442,167	16,279,655	11,224,464	22,549,305	9,492,871	2,057,217
31..	21,837,791	16,101,158	11,616,119	22,554,889	9,508,703	1,861,866
Feb. 5..	21,809,628	16,365,053	11,913,009	22,743,175	9,747,755	2,000,056
12..	22,594,245	16,700,188	12,148,174	23,830,045	9,686,145	1,879,644
19..	22,677,390	16,949,263	12,241,954	23,620,711	9,474,473	2,174,619
27..	23,126,625	16,806,998	12,522,244	23,203,848	9,217,655	2,320,031
Mar. 12..	22,944,605	16,828,140	12,581,934	23,501,784	9,046,372	1,959,638
19..	22,633,181	17,013,593	12,777,999	22,364,430	8,563,771	2,432,776
26..	22,420,444	16,837,405	12,681,931	22,589,661	8,770,788	2,420,725
Apr. 2..	22,465,730	16,179,137	13,054,416	22,465,730	9,059,382	2,545,873
9..	21,655,921	16,250,790	12,985,616	22,066,164	9,493,761	2,582,084
16..	21,132,186	15,975,547	12,777,079	22,356,833	9,949,531	2,243,523
23..	20,287,903	15,705,599	12,666,116	21,792,705	10,055,454	2,449,421
30..	19,926,487	15,650,736	12,578,111	21,315,664	9,537,886	2,100,219
May 7..	19,443,947	15,539,235	12,711,640	21,396,145	9,271,213	2,029,992
14..	18,948,824	15,534,148	12,513,001	20,569,681	8,439,088	1,127,956
21..	18,925,857	15,203,875	12,326,726	19,890,960	7,428,213	2,062,447
28..	18,594,556	14,784,944	12,032,821	19,445,178	7,190,460	2,089,701
June 4..	18,350,758	14,587,357	11,994,591	18,683,911	6,614,289	2,040,656
11..	17,889,718	14,240,114	11,825,081	18,159,432	6,481,915	1,928,315
18..	17,525,037	14,151,040	11,708,131	17,804,674	6,076,239	1,770,409
25..	17,262,214	13,597,084	11,501,679	17,139,130	5,853,472	1,774,067
July 2..	17,198,658	13,524,959	11,284,564	16,891,446	5,550,384	1,705,349
9..	17,133,649	13,475,341	11,061,704	16,643,664	4,839,808	1,743,348
16..	16,763,853	13,666,522	10,743,414	16,330,871	4,043,947	1,642,797
23..	16,690,806	13,744,709	10,507,084	15,933,313	3,657,302	1,278,875
30..	17,020,100	13,763,222	10,338,819	15,940,824	3,197,339	1,694,469
Aug. 6..	17,596,593	13,504,546	10,091,039	16,377,209	2,787,395	1,976,150
13..	18,032,892	13,124,146	9,951,954	15,356,742	2,647,128	1,852,705
20..	18,850,144	13,214,396	9,823,059	15,483,806	2,581,960	1,803,945
27..	19,505,226	12,924,929	9,788,919	15,314,628	2,411,899	1,788,802
Sept. 3..	19,827,317	13,154,963	9,805,674	15,394,654	2,445,097	1,772,558
10..	20,629,817	12,749,427	9,567,333	15,260,331	2,003,175	1,619,886
17..	21,144,174	12,824,667	9,442,349	15,402,592	1,862,657	1,516,252
24..	22,228,245	12,601,590	9,306,194	15,596,759	2,001,524	1,525,035

	Short loans.	Specie.	Circulation.	Deposits.	Exchange.	Distaut balances.
Oct. 1..	22,797,076	12,767,785	9,293,719	16,224,953	2,175,945	1,562,634
8..	23,189,871	12,815,675	9,376,949	16,325,445	2,587,384	1,717,069
15..	23,553,087	12,715,371	9,401,424	16,627,959	2,840,507	1,678,519
22..	24,228,872	12,663,741	9,454,114	17,058,401	3,246,394	1,163,523
29..	24,495,312	12,710,629	9,442,739	17,821,585	3,960,983	1,787,709

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

	Loans.	Specie.	Circulation.	Deposits.	Due banks'
Jan. 3.....	6,837,261	1,292,047	2,038,113	1,811,780	162,902
10.....	6,929,874	1,287,552	2,042,348	1,767,594	216,097
17.....	6,743,540	1,294,567	2,023,948	1,804,149	179,451
24.....	6,970,837	1,308,325	1,961,493	1,781,474	241,121
31.....	6,964,674	1,307,145	1,965,723	1,739,046	215,608
Feb. 7.....	6,988,923	1,260,532	1,904,978	1,748,144	202,505
14.....	7,027,680	1,219,551	1,958,098	1,724,773	164,859
21.....	6,953,599	1,223,396	1,919,658	1,699,020	134,859
28.....	7,001,804	1,213,552	1,937,498	1,683,030	175,640
Mar. 7.....	6,945,722	1,133,754	1,867,848	1,637,796	160,996
14.....	6,982,847	1,100,171	2,029,468	1,638,243	220,822
21.....	7,069,162	1,156,682	1,961,843	1,625,949	215,029
28.....	6,991,949	1,112,770	1,954,903	1,602,283	180,567
Apr. 4.....	7,213,664	1,113,769	2,080,363	1,704,191	237,290
11.....	7,212,513	1,128,686	2,035,188	1,747,237	196,288
18.....	7,197,068	1,191,797	2,089,498	1,751,230	262,922
25.....	7,245,963	1,155,780	2,084,153	1,782,131	274,549
May 2.....	7,327,114	1,182,273	2,000,344	1,856,843	291,061
9.....	7,276,965	1,141,556	2,010,948	1,899,305	212,682
16.....	7,235,561	1,089,513	2,101,348	1,865,657	228,187
23.....	7,161,874	1,053,799	2,024,673	1,774,093	.....
30.....	7,082,987	1,036,945	1,952,238	1,699,393	.....
June 6.....	7,090,569	1,063,567	1,930,468	1,666,775	.....
13.....	7,006,137	990,307	1,878,298	1,577,358	266,305
18.....	6,890,266	997,486	1,888,478	1,578,395	220,362
25.....	6,918,435	1,014,657	1,863,653	1,636,933	.....
July 4.....	7,006,116	1,018,685	1,874,093	1,694,895	.....
11.....	6,944,782	1,025,986	1,824,928	1,718,566	225,404
18.....	6,955,020	1,052,191	1,868,923	1,734,554	266,888
25.....	6,961,268	1,119,255	1,868,243	1,750,313	232,171
31.....	6,929,136	1,091,462	1,835,833	1,741,588	257,160
Aug. 7.....	6,915,619	1,079,179	1,780,298	1,695,557	239,571
15.....	6,829,277	1,095,789	1,776,633	1,646,966	248,565
22.....	6,809,909	1,076,376	1,805,178	1,645,959	222,021
29.....	6,767,148	1,099,419	1,735,836	1,657,486	200,076
Sept. 5.....	6,745,807	1,055,124	1,752,748	1,580,176	205,270
12.....	6,696,995	1,073,545	1,753,783	1,570,561	190,068
19.....	6,705,683	1,055,006	1,816,468	1,570,561	181,605
26.....	6,689,029	1,042,775	1,781,793	1,596,295	182,642
Oct. 3.....	6,749,855	1,073,083	1,808,398	1,604,173	176,755
10.....	6,754,557	1,069,448	1,796,613	1,597,592	160,198
17.....	6,686,696	1,115,186	1,299,808	1,570,568	187,125
24.....	6,747,778	1,115,425	1,786,943	1,625,076	191,933
31.....	6,717,718	1,165,458	1,773,728	1,557,259	223,635
Nov. 7.....	6,795,301	1,115,226	1,731,738	1,704,208	184,249

ST. LOUIS BANKS.

	Exchange.	Circulation.	Specie.
Jan. 8.....	3,297,559	2,030,608	1,705,262
15.....	3,345,015	1,992,670	1,578,800
22.....	3,331,189	2,116,870	1,584,541
29.....	3,409,026	2,185,385	1,640,541
Feb. 5.....	2,480,693	2,032,235	1,599,203
12.....	3,557,028	1,865,125	1,682,084
19.....	3,540,103	1,932,210	1,678,054

		Exchange.	Circulation.	Specie.
Mar.	26	3,549,330	1,819,745	1,636,054
	5	3,545,202	1,808,100	1,575,362
	12	3,400,186	1,733,620	1,569,742
	19	3,296,937	1,673,475	1,605,802
	26	3,422,612	1,596,806	1,642,589
Apr.	2	3,337,296	1,566,380	1,542,211
	9	3,339,900	1,516,840	1,531,199
	16	3,464,386	1,492,055	1,525,315
	23	3,425,470	1,439,085	1,434,491
	30	3,410,135	1,332,355	1,435,568
May	7	3,435,940	1,360,835	1,549,133
	14	3,475,945	1,359,241	1,574,657
	21	3,691,958	1,333,815	1,542,616
	28	3,615,197	1,274,605	1,373,194
June	4	3,678,049	1,267,675	1,367,181
	11	3,685,371	1,218,755	1,358,047
	18	3,710,240	1,163,440	1,441,301
	25	3,465,823	1,134,650	1,419,965
July	2	3,331,027	1,028,760	1,353,069
	9	3,418,224	1,035,845	1,329,076
	16	3,419,031	1,042,310	1,325,552
	23	3,492,105	975,220	1,275,820
	30	3,358,648	942,460	1,229,777
Aug.	6	3,265,140	919,415	1,120,829
	13	3,353,338	816,895	1,002,615
	20	3,317,433	778,365	986,750
	27	3,190,259	714,060	1,013,160
Sept.	3	3,306,732	684,745	894,998
	10	3,320,181	682,065	865,943
	17	3,411,213	648,890	867,943
	24	3,343,603	595,805	780,425
Oct.	1	3,190,900	550,810	820,574
	8	3,013,908	553,390	847,601
	15	2,990,092	521,535	913,356
	22	3,039,601	551,850	777,023
	29	2,998,648	541,315	820,053
Nov.	5	2,960,496	537,720	856,334

PROVIDENCE BANKS.—(CAPITAL, \$5,636,269.)

	Loans.	Specie.	Circulation.	Deposits.	Due oth. b'ks.
Jan. 17	18,037,795	537,884	2,003,313	2,513,422	1,307,647
Feb. 7	18,298,481	451,771	1,789,673	2,446,451	1,135,309
	21	18,533,944	412,571	1,927,359	2,411,858
Mar. 6	18,327,546	375,757	1,967,389	2,324,691	978,410
	21	18,333,574	377,945	1,943,450	2,288,175
Apr. 4	18,483,550	387,317	1,938,448	2,374,941	972,491
May 2	18,260,520	399,294	1,920,391	2,394,688	803,729
June 6	18,597,814	378,196	1,009,163	2,421,901	946,691
July 4	19,124,155	336,398	1,407,141	2,399,843	1,076,323
Aug. 4	18,972,736	315,810	2,018,775	2,331,568	1,559,874
Sept. 5	18,900,466	321,487	1,901,198	2,394,917	965,545
Oct. 5	19,019,691	312,658	1,914,490	2,602,946	807,827
Nov. 7	19,322,775	334,249	2,098,610	2,732,380	1,043,439

NEW ORLEANS FINANCES.

The Mayor of New Orleans, in his message to the City Councils, says that the total receipts for the year were \$2,237,249; the disbursements \$2,013,615. The liabilities of the city are \$11,659,136; of which the sum of \$3,671,900 is for bonds issued for railroad stock. The consolidated debt is \$7,785,136. The amount of public property owned by the city, as assessed the present year, is \$2,601,000; the value of the wharves added will swell the sum to \$5,000,000. The cost of supporting the public schools for the year ending June 30, 1860, is \$259,906.

SEMI-ANNUAL DIVIDENDS.

We are indebted to Mr. JOSEPH G. MARTIN, Stock Broker, No. 6 State-street, Boston, for the following statement of dividends and interest money to be disbursed at the dates given in November, and all payable in that city, with one exception, named below. Other dividends will be paid later in the month, among which are the Mercantile Marine Insurance Company of this city, and the Bartlett, Globe, and James' Steam Mills, of Newburyport. The assignees of CHARLES H. MILLS & Co's estate (failed October, 1857,) will pay early in November their first dividend of 15 per cent. The Dedham Bank will pay 4 per cent November 7. These payments, added to the table, will swell the total to nearly half a million.

Names of companies.	Capital	Dividends,		Amount,
	Nov., 1859.	May.	Nov.	Nov., 1859.
Nov. 1, Concord Railroad	\$1,500,000	4	4	\$60,000
1, Columbian Manufacturing Company ..	280,000	.	4	11,200
1, Franklin Manufacturing Company ...	400,000	.	5	20,000
1, Maine, town and city bonds	Int. about	3	3	*15,000
1, Manchester and Lawrence Railroad ..	865,200	4	4	In stock
1, Minnesota Copper Company.....	20,000 sh.	\$5	\$4	†12,000
1, Nashua and Lowell Railroad.....	600,000	4	4	24,000
1, New York Central 6s., 1883	Int. about	3	3	†60,000
1, Otis Manufacturing Company	500,000	4	5	25,000
2, West Roxbury (Horse) Railroad.....	40,400	4	4	1,616
1, Winnisimmet Company	4,000 shs.	.	\$12½	50,000
1, York Manufacturing Company.....	1,200,000	4	6	72,000
Total				\$550,816

FINANCIAL CONDITION AND RESOURCES OF TENNESSEE.

The report of the Controller of the Treasury to the present General Assembly, presents a gratifying view of the financial condition and resources of the State.

RECEIPTS AND EXPENDITURES FOR THE YEAR ENDING OCTOBER 1ST, WERE AS FOLLOWS:—

RECEIPTS.		EXPENDITURES.	
Taxes on property & poll.	\$474,200 55	For common schools	\$191,730 25
Registration of deeds	157,320 96	Interest on bonds	373,800 72
Profits of the Bank of Tennessee	420,403 32	State prosecutions	67,170 91
All other sources.....	127,028 64	Judicial expenses.....	51,579 29
Total receipts.....	\$1,178,953 47	Academies.....	18,275 97
		All other purposes.....	197,333 96
		Total.....	\$953,523 96

The receipts for the next *two* years are estimated at \$1,580,187 49, or \$790,093 50 per annum; and the expenditures at \$1,560,488 99, or \$780,244 44 per annum.

The State tax is at present 13 1-16 cents upon the \$100 of taxable property.

* This includes coupons on the Augusta, Bath, Brunswick, Gardiner, Hallowell, and Topsham bonds, payable at the Washington Bank.

† The total dividend of the Minnesota Copper Company is \$50,000, of which about \$12,000 is disbursed to Boston stockholders—balance in New York.

‡ The interest on the New York Central bonds (of which there are about \$8,000,000) is disbursed in New York at the Bank of Commerce, but a large amount of the bonds, estimated at some \$2,000,000, is held in this city and vicinity, the interest on which is eventually circulated here. These bonds were originally issued for the payment of the *premium* allowed on the stock of the various roads between Albany and Buffalo which were, in 1853, consolidated into the New York Central Railroad, at prices ranging from 117 to 155. The total par value of these stocks, which were held largely in New England, was \$23,085,000 and premium allowed, in bonds, \$8,892,600—since reduced by purchases for the sinking fund of 1½ per cent annually.

The Controller recommends that it be reduced to five cents upon the \$100. A tax of five cents, he says, for the next two years, upon the taxable property of the State, together with the present poll tax, (50 cents.) would yield more than is estimated, and leave a surplus from that source sufficient to cover any unexpected deficiencies from other sources.

SOURCES OF PUBLIC REVENUE.

The revenue of the State is derived from taxes on white polls, on property, sales of land, slaves, and merchandise, the exercise of privileges, litigation from fines and forfeitures, and the Bank of Tennessee.

TAXABLE PROPERTY OF THE STATE.

The value of the property of the State, as valued for taxation the last year, was as follows:—

East Tennessee	\$64,186,514
Middle Tennessee	189,867,004
West Tennessee.....	121,151,640
Total.....	\$377,208,641

INCREASE OF VALUE.

The following table will show the increase in value of the taxable property of the State for the last eleven years:—

Years.	Value of property.	Years.	Value of property.
1848	\$129,510,010	1856	\$260,310,611
1850	159,558,183	1858	320,398,012
1852	186,621,119	1859	377,208,641
1854	219,011,047		

QUANTITY AND VALUE OF THE LAND.

	Value.
East Tennessee, 8,970,240 acres	\$46,126,012
Middle Tennessee, 10,474,163.....	114,053,549
West Tennessee, 6,522,289	52,640,432
Total.....	\$212,820,993

Town lots are not included in the above. Their aggregate value exceeds \$40,000,000.

NUMBER AND VALUE OF SLAVES.

	Number.	Value.
East Tennessee	13,085	\$10,470,926
Middle Tennessee.....	67,934	55,850,579
West Tennessee.....	48,872	44,638,752
Total.....	129,831	\$110,950,257

The above has reference to such slaves as are between the ages of 12 and 50 years.

INCREASE IN VALUE OF LAND AND SLAVES.

The following table shows the average value of land per acre, and the average value of slaves between the ages of 12 and 50 years, for the last 11 years:—

	Land per acre.	Slaves per head.		Land per acre.	Slaves per head.
1848.....	\$3 06	\$467 44	1856.....	\$5 49	\$689 00
1850.....	3 25	506 93	1858.....	7 04	792 23
1852.....	3 34	547 26	1859.....	8 19	854 65
1854.....	4 60	605 52			

STATE DEBT.

The entire indebtedness of the State of every description is \$16,643,666 66, made up as follows :—

State bonds loaned to railroad companies.....	\$10,348,000 00
Railroad companies bonds and city of Memphis bonds indorsed by the State, all for railroad purposes.....	2,364,000 00
State bonds loaned to turnpike and plank road companies.....	57,000 00
State bonds loaned to Agricultural Bureau.....	30,000 00
	<hr/>
	\$12,799,600 00
State debt proper.....	3,844,666 66
	<hr/>
Entire State liability, actual and contingent.....	\$16,643,666 66

STATE BONDS LOANED TO RAILROAD COMPANIES, ETC.

East Tennessee and Virginia	\$1,602,000	Edgefield and Kentucky....	582,000
East Tennessee and Georgia	1,162,000	Central Southern.....	325,000
Memphis and Charleston...	1,100,000	Rogersville and Jefferson...	124,000
Memphis and Ohio... ..	1,427,000	Mississippi and Tennessee..	98,000
McMinnville & Manchester..	372,000		<hr/>
Tennessee and Alabama....	816,000		\$10,348,000
Mississippi Central and Tennessee.....	574,000	Mississippi and Dyersburg	
Mobile and Ohio.....	774,000	Plank Road.....	\$25,000
Edgefield and Kentucky, and Louisville and Nashville..	180,000	Carthage and Hartsville Turnpike..	6,000
Memphis, Clarksville, & Louisville.....	370,000	Mansker's Creek and Springfield Turnpike.....	16,000
Winchester and Alabama...	418,000	Agricultural Bureau.....	30,000
Louisville and Nashville....	450,000		<hr/>
			\$10,435,000

RAILROAD BONDS INDORSED BY THE STATE.

Nashville and Chattanooga.....	\$1,650,000
East Tennessee and Virginia.....	200,000
East Tennessee and Georgia.....	150,000
Tennessee and Alabama.....	14,000
Memphis and Little Rock.....	350,000
	<hr/>
Total.....	\$2,364,000

The State debt proper of \$3,844,666 66 could be redeemed at any moment, if due, with the capital of the Bank of Tennessee, which is owned by the State. All the residue of the public debt (\$12,799,000,) with the exception of \$87,000, it will be seen, is constituted of State bonds, loaned to railroad companies, and of the bonds of the companies indorsed by the State. That these bonds ought to command as high a price as those of any State in the Union, the Controller very clearly establishes in the following remarks :—

The material prosperity of the State, her taxable property having increased more than \$150,000,000, from \$210,011,047 to \$377,208,644, since the completion of her first railroad in 1854—the statutory lien upon the roads and fixtures in favor of the State—the certainty of the payment of interest through the Bank of Tennessee, and its compulsory payment to the Bank by the roads, by removal of its officers and directors if not paid promptly—the wise provision of the Legislature, creating a sinking fund for the ultimate redemption of the bonds, requiring two per centum per annum upon the amount loaned, with prompt process to collect; a sum so small as not to embarrass the operations of the roads, but large enough to redeem every bond issued before its maturity—the prosperity of the finished roads, their actual profit and comparatively small bonded debt—are material and ostensible guaranties, without appealing to State pride, that these bonds will be paid. If the railroads were worthless the debt would still be paid. The annual interest upon this railroad debt is \$763,720—the two per

cent added for a sinking fund would make \$1,018,705. To pay this the present State tax would be about doubled—a tax much lighter than many of the States now pay. But the roads themselves have thus far shown an ability to pay the interest and the sinking fund, which secures the ultimate redemption of the bonds, by their profits, as well as dividends to the stockholders. It does not matter to the State or the bondholder, whether the roads make profits for the stockholders or not, so long as the interest and the sinking fund are certainly made. The stockholders might feel compensated for their entire loss of stock by the enhancement in the value of their lands through which the roads pass. The State lends to the companies \$10,000 of its bonds for each mile of railroad, and additional for bridge aid, making about \$11,000 for each mile. The cost of the finished roads, fixtures, and equipments, average about \$27,000 or \$28,000 per mile. The State and the bondholder, being interested in the profits only to the extent to cover the interest and sinking fund upon the \$11,000, would always be safe as long as the road made 8 per cent upon that amount, or about 3 per cent upon the whole cost of the road.

To illustrate the safety to the bondholder, as well as to the State, it is but necessary to glance at the present condition and operations of the finished roads in the State—those not noticed having been finished less than a year, or the facts concerning them not readily accessible. The Nashville and Chattanooga Road, fixtures and equipments, cost about \$28,000 per mile. The State indorsed her bonds for \$1,650,000, the interest and sinking fund upon which amount to \$132,000—the net profits of the road for 1859 are \$320,000, leaving \$188,000, after paying interest and sinking fund, to be distributed among the stockholders.

The Memphis and Charleston Railroad, fixtures and equipments, cost about \$28,000 per mile—the State loaned it \$1,100,000; the road issued \$2,000,000 of other bonds—interest upon the whole and sinking fund upon the part loaned by the State are \$208,000, the net profits of the road for 1859 \$600,000, leaving \$392,000 to be divided as profits among the stockholders.

The East Tennessee and Georgia Road, fixtures and equipments, cost about \$27,000 per mile—the State loaned and indorsed for it \$1,312,000 of bonds, the interest and sinking fund upon that amount are \$104,960—the net profits of the road for 1859 are \$162,000—leaving \$57,000 to be distributed among the stockholders.

BANK OF FRANCE.

The following is a corrected statement of the position of the Bank of France, made up to the 13th of October, compared with the corresponding period in 1858 :—

	DEBTOR.	
	October, 1859.	October, 1858.
Capital of the bank.....frances	91,250,000 0	91,250,000 0
“ new.....	91,250,000 0	91,250,000 0
Profits in addition to capital.....	1,510,527 65	1,513,467 77
Reserve of the bank.....	12,980,750 14	12,980,750 14
New reserve	9,125,000 0	9,125,000 0
“ in landed property.....	4,000,000 0	4,000,000 0
Notes in circulation.....	702,079,175 0	690,492,375 0
Bank notes to order.....	6,513,987 30	7,454,000 83
Receipts payable at sight.....	8,541,050 0	8,096,786 0
Treasury account current creditor.....	186,606,371 83	117,610,609 54
Sundry accounts current.....	182,801,473 11	140,199,963 75
“ with branch banks.....	30,122,149 0	28,320,980 0
Dividends payable	893,610 25	734,599 25
Discounts, sundry interests.....	2,821,135 44	2,269,248 77
Commission on deposits.....	7,127,429 42	5,658,245 81
Rediscounted the last six months.....	1,751,105 05	1,066,532 18
Surplus of paid-up bills.....		34,757 68
Sundries.....	3,707,583 22	3,410,192 60
Total.....	1,843,081,347 41	1,215,458,509 34

CREDITOR.				
Cash in hand	224,369,480	91	253,294,667	20
Cash in the branch banks	367,856,209	0	296,080,748	0
Commercial bills overdue	606,025	43	268,161	67
" discounted, not yet due	216,934,821	79	191,492,672	73
" " in branch banks	258,338,825	0	211,724,901	0
Advanced on deposit of bullion	293,200	0	1,006,300	0
By the branch banks	894,800	0	1,654,600	0
Advanced on French public securities	27,951,500	0	51,804,200	0
By the branch banks	13,960,900	0	10,823,510	0
Advanced on railway securities	49,975,500	0	45,770,200	0
By the branch banks	32,838,700	0	22,553,850	0
Advanced on Credit Foncier scrip	730,700	0	577,000	0
" branch banks scrip	415,700	0	219,200	0
" to the State, agreement of June 30, '48	65,000,000	0	45,000,000	0
Government stock reserved	12,980,750	14	12,980,750	14
" disposable	52,198,332	13	52,188,102	18
New shares, not settled			73,150	0
Hotel and furniture of bank	4,000,000	0	4,000,000	0
Landed property of branch banks	6,719,450	0	6,617,585	0
Expenses of management	1,274,850	81	1,269,894	38
Sundries	5,741,602	20	6,058,917	4
Total	1,343,081,347	41	1,215,458,509	34

AUSTRIAN FINANCES.

We take the following statement of the Austrian finances for the last eleven years from an official journal, the *Ost Deutsche Post*. The florin is about 48 cents:—

	Income.	Expenditures.	Deficit.
1848	122,127,354	167,238,000	45,110,646
1849	144,013,758	190,459,567	46,445,809
1850	194,296,457	230,266,986	33,970,529
1851	219,505,140	260,856,670	44,361,530
1852	226,365,108	274,387,121	48,222,013
1853	237,136,993	286,313,610	49,176,617
1854	245,333,724	294,529,681	49,195,957
1855	263,786,885	300,875,669	37,088,784
1856	273,162,276	321,377,664	48,215,388
1857	293,295,847	324,686,875	26,391,028
1858	282,540,723	315,037,101	32,496,378
Total	2,506,564,265	2,966,238,944	459,674,679

COINAGE OF GREAT BRITAIN.

AMOUNT OF GOLD, SILVER, AND COPPER MONEYS COINED AT THE ROYAL MINT.

Years.	Gold.	Silver.	Copper.	Total.
1844	£3,563,949	£626,670	£7,246	£4,097,865
1845	4,244,608	647,658	6,944	4,899,210
1846	4,334,911	559,548	6,496	4,900,955
1847	5,158,440	125,730	8,960	5,293,130
1848	2,451,999	35,442	2,688	2,490,129
1849	2,177,955	119,592	1,792	2,299,339
1850	1,491,336	199,095	448	1,624,330
1851	4,300,411	87,868	3,584	4,491,863
1852	8,742,270	189,596	4,312	8,936,178
1853	11,952,591	701,544	10,190	12,664,125
1854	4,152,133	140,480	61,533	4,354,201
1855	9,008,663	195,510	41,091	9,245,264
1856	6,002,114	462,528	11,418	6,476,060
1857	4,859,860	373,230	6,720	5,239,810
1858	1,231,028	445,896	13,440	1,690,359

STATISTICS OF TRADE AND COMMERCE.

OUR TRADE WITH BRAZIL.

We have, says the Nashville *Union*, on several occasions alluded to the liberal modifications which the Brazilian tariff has undergone during the past twelve months; and it was with no small degree of gratification that we invited some months since the attention of our merchants engaged in commerce with Brazil to the reduction, to an almost nominal duty, of the heavy impost to which American flour was subjected in the ports of that empire, because, although this onerous tax had been a subject of complaint on the part of our merchants, and of diplomatic remonstrance on the part of our government for upwards of a quarter of a century, it was reserved for the administration of President BUCHANAN to remove this great obstacle to a more equitable interchange of the respective products of the two countries. With a population of some six million souls, and a soil and climate alike unadapted to cereal agriculture, there is no reason why we should not supply at least half a barrel of flour, or its equivalent in other breadstuffs, to each one of its inhabitants, in exchange for the coffee, hides, &c., which we annually purchase in their markets. We say there is no reason—neither is there—but there has existed an illiberal and unjust obstacle which we could not remove so long as Brazil adhered to the restrictive policy of the mother country in virtually closing her ports to the products of foreign countries—even those of prime necessity among the working and industrious classes of her subjects. Perhaps there is no country in the world whose tariff duties, even at this day, are so restrictive and onerous as Portugal; and it has always been her policy, unless when appalled by the gaunt visage of famine and pestilence into a paroxysm of liberality, to impose on her colonial dependencies a system of duties amounting, as against foreign nations, to an absolute prohibition. Such was the spirit of the Brazilian tariff in 1822, when Don Pedro declared Brazil to be a free and independent State, and assumed the title of Emperor. The main cause of unsuccessful negotiations, with a view to a more liberal tariff, heretofore was, that we could not convince the Brazilian authorities that the reason of their commercial laws having ceased, the laws themselves should also cease. So tenaciously have they clung to antiquated ideas and obsolete systems of political economy, that the tariffs of the mother country might be said to have continued unchanged and unmodified down to September of last year, when the decree was announced reducing the duties on many leading articles of importation, among which were included some of the principal imports derived from the United States. This salutary reform must be followed by a sensible reduction of the cash balances which the annual accounts current of our trade with Brazil exhibit against the United States. But this reduction must be very gradual. The heavy coffee planters must first find out that it is cheaper, in the end, to feed their hands with American flour, brought to their doors, at some six or seven per cent over the market prices in the country of production, than to depend, as they have hitherto done, on Mandioca and other native products—the supply of which is as uncertain as their growth is precarious in a country so far behind other nations in the science of agricultural industry. Still, an impulse will be given—indeed, has already been given—to our export trade to Brazil which will be felt more

and more every year; and we must hope that the reductions already made are but the harbinger of still greater modifications.

We give below the aggregate values of our exports to and imports from Rio de Janeiro during the three quarters ending with June 30, 1859:—

	Exports to.	Imports from.
Quarter ending December 31, 1858	\$1,255,726	\$4,195,908
Quarter ending March 21, 1859	703,274	3,053,026
Quarter ending June 30, 1859.....	1,124,740	3,637,220
Total.....	\$3,083,740	\$10,886,154

LONDON SHIP-BROKERS' RATES OF FREIGHT.

LIST OF FREIGHTS CURRENT AT LONDON AND LIVERPOOL, TO AND FROM BRITISH COLONIES, UNITED STATES, AND OTHER DISTANT PORTS, AND RATES QUOTED NOVEMBER, 1859, AND AVAILABLE FOR FIRST CLASS AMERICAN SHIPPING.

The European freight market has, of late, received a little animation, owing to the repulse of the combined fleets at the Peiho. An immediate demand for coals in the China Sea has created a temporary firmness in outward freights; and as an accumulation of shipping in Indian and Chinese waters will result, homeward freights may decrease in the same ratio; also, trade with the cape colonies is increasing—an impetus being given to it by the necessity of shipping requirements for transportation of railroad materials. The annexed list of freights is quoted by the London ship-brokers; and since the suspension of the English navigation laws, American shipping being placed on the same footing as British, these charters may be available to our ships for profitable employment:—

Newcastle to Aden,	coals keel.....	£54
“ Suez,	“	74
“ Bombay,	“	45
Wales to Kurrachee,	per ton.....	50s.
Newcastle to Ceylon,	per keel.....	£44
“ Madras,	“	45
“ Calcutta,	“	45
“ Singapore,	“	46
“ Java,	“	45
“ Hong Kong,	“	60
“ Shanghai,	“	65
“ Manilla,	“	43
“ Melbourne,	“	50
“ San Francisco,	“	50
“ Valparaiso,	“	37s. 6d. per ton.
“ Mauritius,	“	£35
“ Cape,	“	42
“ Monte Video,	“	38
“ Rio Janeiro,	“	36
“ Boston, goods.....	21 a 20s. per ton.	
“ Havana, coals.....	“	£19
“ Mediterranean	“	18 to 25

FREIGHTS FROM FOREIGN PORTS TO ENGLAND, CHARTERS CONFIRMED IN LONDON.

Bombay to United Kingdom.....	40s. per ton.
Akyab “	50s. “
Kurrachee “	45s. “
Mauritius “	30s. “
Ceylon “	45s. “
Chinchas “	50s. “

PREMIUMS OF INSURANCE ON SHIPS AND CARGOES.

To Mediterranean, lower ports.....	15s., F. P. A., 7s. 6d. per ct.
To Mediterranean, higher ports.....	15s. to 21s., " 7s. 6d. to 10s.
To India, ".....	22s. 6d. to 31s., " 25s. per ct.
To Australia, ".....	40s. and 50s.
From United States, provisions, higher ports	25s. to 30s.
In packets, ".....	12s. 6d. to 15s.
From cotton ports to U. Kingdon, ".....	40s.
From cotton Atlantic ports ".....	20s.
Steamers, time policies.....	6 guineas.
Sailing vessels ".....	7 "
Ships to and from India.....	4 "
Ships to and from China.....	5 "
Africa, out and home.....	5 to 7 "

PLACED ON THE BERTH FOR LOADING.

	Per register ton.
At London, for Calcutta.....	60s. sterling.
" Madras.....	60s.
" Colombo.....	60s.
" Bombay.....	60s.
" Australia.....	75s.
" Rangoon.....	60s.
" New Zealand.....	75s.
" Shanghai.....	65s.
" Kurrachee.....	65s.
" California.....	} 90s.
" or British Columbia.....	
" Cape Colonies.....	65s.
" Hong Kong.....	} 75s.
" Canton.....	
" Mauritius.....	50s.
" River Platte.....	55s.
" Rio Janeiro.....	35s.
" Callao.....	80s.
" Pernambuco.....	30s.
At Liverpool, for Calcutta.....	32s. 6d., salt.
" New York, tons delivered.....	18s., iron.
" " ".....	16s., coal.
" Pensacola.....	18s., iron.
" Savannah.....	18s., "
" Aden, per tons delivered.....	47s. 6d., coal
" Bombay, ".....	38s., "
" Ceylon, ".....	37s. 6d., "
" Madras, ".....	39s., "
" Singapore, ".....	40s., "
" Boston, ".....	18s., "
Tyne to Valparaiso and back, ton round.....	95s.
Cadiz to Rio Grande, salt, 35s. out and hides back.....	40s. per ton.
Hartlepool, Madras, iron.....	45s. t'n deliv.
San Francisco, or Oregon, to Australia.....	\$15 M. ft lumb'r.
Dublin to Melbourne.....	85s., per ton.
Riga to Cape Town, railroad sleepers.....	45s., ton ded.
Wales to Newcastle, N. S. W., railroad iron.....	55s., "
St. Ubes to Rio Grande, salt.....	35s., "
Newport to Pernambuco, iron out and sugar home.....	60s., T. r'd.
Hull to Trieste, keel coals.....	£20, deliv'r'd.
Hull to Venice, ".....	19, "
Hull to Alexandria, ".....	16, "
Hull to Galatz, ".....	15, 10s., "
Hull to Varna, ".....	20, "
Hull to Trebizonde, ".....	22, "
Clyde to Genoa.....	25s. per ton.

TIMBER FREIGHTS.

St. John to London, load.....	75s.
Savannah to United Kingdom, load.....	35s.
Too } Gottenburg to United Kingdom, load.....	30s.
late } Gottenburg to Australia, load.....	£9
in } Gottenburg to Valparaiso, load.....	7
season. } Gefle to Table Bay, load.....	7

The above rates are applicable to hulls, freight, and cargo of first-class vessels.

BRITISH TRADE WITH CENTRAL AND SOUTH AMERICA.

The Blue-Book which has lately issued from the statistical department of the British Board of Trade, contains a great deal of information respecting the central and southern portions of the American Continent, compiled from the official returns of the respective countries. Commencing with Guatemala, we find that the trade of that country has considerably increased during the last eight years, both as regards imports and exports. Four-fifths of the trade of Isabel and Santo Tomas, and one-fifth of that of San Jose, is carried on in British vessels. More than half the imports consist of British manufactures, and considerably more than a third of the Guatemalan produce exported goes to England; whilst another third is exported to Belize, and the greater part of this, also, is reshipped to England. France is the most formidable competitor of England, the imports of her woolens and silks, and even hardwares, exceeding those of British manufactures; but then English cotton exceed all the other imports put together. Spain consumes the greater part of the indigo produced in Guatemala, but nearly all the cochineal, sarsaparilla, mahogany, and half the sugar and hides, find their way to Great Britain, either direct or *via* Belize. Of the trade of Honduras, the greater part of the foreign portion is in the hands of the Americans and Spaniards. The value of the imports into Honduras shows an increase in 1858, as compared with the preceding year, but there was a decline upon the average of the last five years. The exports are returned only down to 1855, when they had fallen off. Cotton manufactures constitute more than half in value of all the imports. The trade of San Salvador has increased very largely during the last five years, but whereas it was formerly carried on chiefly in British vessels, more than half the shipping which entered the ports of the republic, during the last two years, has been American. The increase has been chiefly in indigo, hides, sugar, and rice, whilst tobacco and balsam have fallen off. The Americans have also much the largest share of the Costa Rican trade, which has been very fluctuating of late years. France now consumes the largest portion of the Costa Rican produce which goes to Europe. Farther south we find the American flag still predominant, and the largest consumption of Venezuelan produce is in the United States, though British manufactures make one third of the total imports. The Hanseatic ports stand second, both as regards shipping and export trade. The latter appears to be increasing, especially as regards coffee and hides. Nearly all the trade of Panama is carried on in American vessels, but at San Martha and all other New Granadian ports the largest portion is in British hands. At Guayaquil, the one port of Ecuador, the carrying trade was, until within the last three years, under the Peruvian, Spanish, and British flags, but of late years the Peruvian share has fallen off, while the Spanish has remained stationary, and the British has gone ahead to such an extent as to con-

stitute one-half of the tonnage entered, instead of one-sixth, as was the case prior to 1856. Both imports and exports have very much increased at this port, nearly a third of the former in value consisting of cotton manufactures. At Callao and Islay the predominant flag is the British, but the American seems likely soon to equal it. The guano trade is pretty equally divided between them. At Valparaiso and other ports of Chili the entries of British shipping are equal to those under the national flag, each being about one-third of the whole, and the other third comprising the American and all other flags. The imports into Chili have nearly doubled during the last ten years, and the exports have considerably more than doubled. British manufactures constitute one-third of all the imports, and French and American goods another third. More than half the Chilian produce is exported to England. Coming round the Horn, the tables next bring us to Monte Video. Here nearly one-third of the shipping is British, and nearly another third is composed of vessels under the French and Spanish flags. The exports show a great increase, England taking about one-fifth of the whole, chiefly hides, hair, tallow, &c. The Brazilian trade has also increased very largely during the last seven years. At Rio Janeiro the French and American flags predominate, each making about a fourth of the total tonnage entered and cleared, and at Para the Portuguese and American, but at the other ports British shipping is in much the largest proportion. Both imports and exports have more than doubled in the last ten years. More than half the former consists of British manufactures, and nearly a third of the Brazilian produce is exported to Great Britain. Almost another third is consumed in the United States. Coffee, cocoa, cotton, hides, sugar, and tobacco, are the commodities which show the largest increase; rice, caoutchouc, and wood, have remained stationary, but with considerable fluctuations. The exports from Rio Janeiro have fallen off, and were limited in 1857 to coffee, sugar, and rosewood; nearly one-half of the coffee is consumed in the United States, and the greater part of the remainder in Germany. The exports from Bahia show an increase, though that of sugar has declined, and cotton has been stationary. The increase has been chiefly in coffee and cocoa. There is no return from Pernambuco, except of average prices, which have advanced considerably during the last five years.

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#### BRITISH SPECIE TRADE.

The following tables show the British receipts for six months of 1859, of gold and silver supplies which proceeded from their sources of production:—

| GOLD IMPORTS.                        |            |                                                      |             |
|--------------------------------------|------------|------------------------------------------------------|-------------|
| Russia.....                          | £1,033,789 | Mexico, South America, &c.                           | £1,146,624  |
| Russia via Hanse Towns...            | 334,041    | U. States, (California).....                         | 3,881,847   |
| West coast of Africa.....            | 43,839     |                                                      |             |
| Australia .....                      | 3,972,383  | Total.....                                           | £10,462,523 |
| SILVER IMPORTS.                      |            |                                                      |             |
| Mexico, S. America, West Indies..... | £1,395,376 | Mexico, via U. S., including their own produce ..... | £411,526    |
| Total.....                           |            |                                                      | £1,806,902  |

Of the £11,730,529 of gold imported into England during the first half of the current year, £10,462,523 were immediately derived from the original sources of

production, while only £1,268,000 belonged to that floating stock of gold due to temporarily favorable exchanges. On the other hand, of the total of £8,227,483 of silver imported during the same period, only £1,806,902 were received from the silver-producing countries, while £6,420,581 had been abstracted from the stock of silver previously existing in France, Belgium, Germany, and other countries. Now it will be found that of the £10,462,523 of gold imported into England from the gold-producing countries, £9,513,413 were exported to France, Belgium, and Germany, principally in exchange for silver; £9,859,206 of silver mainly abstracted from the silver stock previously existing in Europe being again exported by England. Of that aggregate sum of silver, England shipped £8,822,308 to the East; India alone absorbing silver to the value of nearly £7,000,000 sterling during the first half of the current year. It appears, therefore, that the new supplies of gold derived from California and Australia, are, in the first instance, collected in England, who exchanges them for the silver of France and other continental countries, and finally ships the silver thus set free to Asia, principally to India, where, to a great extent, it is absorbed into hoards. Thus, the existing stock of bullion in America and Europe, has, on the whole, not been sensibly augmented by the new gold discoveries, but in Europe silver is being replaced by Australian and Californian gold, while the silver of Europe, in its turn, is converted into Asiatic treasures. As long as this process is going on, it is perfectly idle to speculate on the influence of the new gold supplies on prices. To the mass of silver absorbed by Asia must be added the yearly increasing quantity of gold used as raw material by the various industries of luxury.

MAURITIUS SUGAR CROPS.

The total shipments of sugar from the Mauritius to the 1st of August were 237,897,899 pounds, leaving about 6,000 bags in stock :—

COMPARATIVE STATEMENT OF THE SHIPMENTS OF SUGAR FROM THE MAURITIUS, FROM THE BEGINNING TO THE END OF EACH CROP.

|                                           | 1857-58.    | 1858-59.    |
|-------------------------------------------|-------------|-------------|
| To United Kingdom . . . . . lbs.          | 115,941,744 | 133,213,960 |
| To France . . . . .                       | 35,256,153  | 41,944,694  |
| To Cape of Good Hope . . . . .            | 12,110,887  | 10,622,440  |
| To Australian colonies . . . . .          | 48,887,514  | 47,581,513  |
| Other places . . . . .                    | 5,893,932   | 4,536,312   |
| Total shipped to August 1, 1858 . . . . . | 228,040,230 | .....       |
| Total shipped to August 1, 1859 . . . . . | .....       | 237,897,899 |

CEYLON COFFEE CROPS.

The disposal of the present season's crops to date stands thus :—

|                                  | Plantation coffee.— |            | Native coffee.— |            |
|----------------------------------|---------------------|------------|-----------------|------------|
|                                  | Present year.       | Last year. | Present year.   | Last year. |
| To Great Britain . . . . . cwt.  | 320,168             | 296,437    | 66,120          | 87,721     |
| To foreign ports . . . . .       | 38,995              | 61,153     | 117,747         | 60,020     |
| To Australia and India . . . . . | 7,515               | 4,733      | 7,271           | 9,168      |
| Total . . . . .                  | 366,678             | 362,323    | 191,138         | 156,909    |

## COMMERCE WITH JAPAN.

The following, says the *London Times*, is the concluding portion of an able and interesting paper read by Mr. LAURENCE OLIPHANT, on Japan, in the Geographical Section of the British Association at Aberdeen :—

From the little we know of the internal resources of Japan, it is probable that we should find a more profitable source of trade in its mineral than its vegetable productions. Unless we have been totally misinformed, these former are of vast extent and great value. We know that the principal profits of the early Portuguese settlers were derived from the export of gold and silver. So lucrative was it that KINIFFER remarks, "It is believed that, had the Portuguese enjoyed the trade of Japan but twenty years longer, upon the same footing as they did for some time, such riches would have been transported out of this Ophir to Macao, and there would have been such a plenty and flow of gold and silver in that town, as Sacred Writ mentions there was at Jerusalem in the times of Solomon." At a later period the Dutch carried on this same traffic to so great an extent that a native political economist, writing in 1708 on the subject, computes the annual exportation of gold at about 150,000 cobaugs; so that in ten years the empire was drained of 1,500,000 cobaugs, or about two millions and a half sterling. The gold is found in various localities. That procured from Sado has the reputation of being the finest, and it is stated that the ore will yield from one to two ounces of fine metal per one-and-a-quarter pounds. The mines in Garouga are stated to be very rich, the copper ore raised also being impregnated with gold. The ore from Satsuma yields from four to six ounces per one-and-a-quarter pounds. These are the principal mines. Gold dust is found in some of the streams. Copper is superabundant, as is evident from the lavish use made of it for ornamental purposes. For a long period the Dutch received at Nagasaki, in exchange for their merchandise, Japan copper. This, however, as well as the sale of gold, has been stopped for many years. The government allows no more copper to be produced now than is absolutely necessary for home consumption, which is comparatively very small. It will be for us now to develop more fully one of the most important elements in the wealth of this vast empire. By the treaty recently concluded, gold and silver coins may be exported from Japan, but not as cargo. The exportation of copper coin, as well as copper in bars, is prohibited, but the government engages to sell from time to time, at public auction, any surplus quantity of copper that may be produced. Iron abounds in various parts of Japan, the mines of which are extensively worked—much more so at present than those of copper. Judging of articles of casting of their own construction, the ores must be of excellent quality. Specimens of wrought iron, cast and blister steel, have been examined with very satisfactory results. The wrought iron is usually hammered, and in small flat bars, varying from 12 to 20 lbs. each. This is probably to be attributed to a want of proper machinery for heavier bars, and its being better suited to their purposes. The steel, of which the swords were composed which are procured at Yeddo, was of admirable temper and quality. I have already alluded to the local mines which exist in the Island of Kinsui—one of them is distant only seven miles from Nagasaki. They are a government monopoly. Hitherto the coal brought for sale since the opening of trade at Nagasaki has been surface coal, and consequently inferior in quality; it is described as small. It burns slaty, leaving considerable ash, and is very light. There can be little doubt that good coal is to be found in the island when the mines begin to be properly worked. By the treaty of Yeddo, coal, zinc, lead, and tin are to be exported, at a duty of 5 per cent. The vegetable productions of Japan, which are most probably destined to become articles of commerce, are camphor, vegetable tallow, rice, wheat, drugs, isinglass, seaweed, &c. Among manufactured articles we may mention lacquer-ware and porcelain, but it is almost impossible, at this early stage of our commercial relations, to predict either their character or extent. It would be well to remember that, while we have achieved a great result in thus opening to the world this

prosperous and happy community, we have also incurred serious obligations towards them, and are bound not to take advantage of their ignorance and inexperience in their dealings with western nations. We can only hope to commend our civilization to them by maintaining a high moral standard, both in our commercial and political intercourse. They are sufficiently enlightened to appreciate a policy influenced by higher considerations than those involved in the accumulation of wealth. Unless we follow such a policy, it is not too much to predict that we shall lose alike their confidence and respect, and involve ourselves in complications, disastrous to our commerce and discreditable to our national character. Of all the nations of the East the Japanese are the most susceptible to civilizing influences, and I quote the words of an eminent Chinese and Japanese scholar in saying that, in one respect, they are far in advance of their ancient neighbors, the Chinese, in that their attention is directed to obtain a knowledge of other nations. Their own efforts in this way will form their greatest security. Their soldiers once formed the body-guard of the king of Siam; their consuls once examined Spanish ships in Acapulco; their sailors once took a Dutch governor out of his house in Formosa, and carried him prisoner to their rulers; their princes once sent an embassy to the Pope; their emperor once defied the vengeance of Portugal by executing her ambassadors. The knowledge of these historical events remains among them. We may reasonably hope for a great preponderance of good results from an extension of an intercourse which has recommenced so peacefully. Let us indulge the expectation that the land of the rising sun may not only soon be fitted for taking her place among nations, but also among Christian nations, and with all the institutions, and liberty, and purity of the best of those nations.

BRITISH GRAIN TRADE.

The following table of imports of wheat and flour—reducing the flour to its equivalent in wheat—from the United States and France, since 1846, including the first eight months of 1859, will show their comparative ability to supply the wants of Great Britain:—

| Years.          | United States,<br>qrs. | France,<br>qrs. | Other,<br>qrs. | Total,<br>qrs. | Av. price<br>of wheat,<br>54s. 8d. |
|-----------------|------------------------|-----------------|----------------|----------------|------------------------------------|
| 1846.....       | 801,178                | 73,774          | 1,469,290      | 2,344,142      | 49 9                               |
| 1847.....       | 1,834,142              | 179,259         | 2,451,356      | 4,464,757      | 50 6                               |
| 1848.....       | 296,102                | 320,010         | 2,466,118      | 3,082,230      | 44 3                               |
| 1849.....       | 613,601                | 738,833         | 3,450,041      | 4,802,475      | 40 3                               |
| 1850.....       | 537,030                | 1,145,146       | 3,148,087      | 4,830,263      | 38 6                               |
| 1851.....       | 911,855                | 1,193,433       | 3,225,124      | 5,330,412      | 40 9                               |
| 1852.....       | 1,231,893              | 459,418         | 2,473,292      | 4,164,603      | 53 3                               |
| 1853.....       | 1,582,641              | 341,444         | 4,311,775      | 6,235,860      | 72 5                               |
| 1854.....       | 1,152,170              | 205,874         | 3,115,041      | 4,473,085      | 74 8                               |
| 1855.....       | 444,371                | 51,358          | 2,716,037      | 3,211,766      | 69 2                               |
| 1856.....       | 2,105,584              | 29,962          | 3,071,601      | 5,207,147      | 56 4                               |
| 1857.....       | 1,069,288              | 130,639         | 2,860,358      | 4,060,285      | 44 2                               |
| 1858.....       | 1,098,871              | 1,283,465       | 3,016,220      | 5,398,556      | 47 1                               |
| 1859, 8 months. | 15,952                 | 1,791,770       | 1,631,587      | 3,439,309      |                                    |

The French imports into Great Britain for the first eight months of the present year were as follows:—

| Years.    | Wheat,<br>qrs. | Flour,<br>cwt. | Total,<br>qrs. |
|-----------|----------------|----------------|----------------|
| 1858..... | 542,390        | 1,196,905      | 901,461        |
| 1859..... | 1,081,548      | 2,490,777      | 1,828,847      |

This French importation into Great Britain seems to have killed the United States trade in grain, which has not in many years been so small. In the year 1852 the United States sold three times as much as France, although the average price was lower then than now, and freights higher.

## ZURICH SILK.

The Silk Industry Association of Zurich report the export of silks as follows, for the month of August, 1858 and 1859 :—

|                          | 1859.   | 1858.  |                            | 1859.   | 1858.   |
|--------------------------|---------|--------|----------------------------|---------|---------|
| French destination..lbs. | 82,970  | 70,056 | Italian destination...lbs. | 310     | 925     |
| German destination....   | 13,500  | 11,444 | Other .....                | 1,289   | 3,398   |
|                          | 1859.   | 1858.  |                            | 1859.   | 1858.   |
| August.....lbs.          | 98,069  | 85,823 | February.....lbs.          | 102,739 | 73,609  |
| July.....                | 110,040 | 94,805 | January.....               | 102,557 | 78,017  |
| June.....                | 105,871 | 71,233 |                            |         |         |
| May.....                 | 85,010  | 54,109 | Total in 8 months....      | 769,701 | 577,319 |
| April.....               | 72,955  | 60,996 | Excess in 1859.....        | 192,382 | .....   |
| March.....               | 92,460  | 58,727 |                            |         |         |

## JOURNAL OF INSURANCE.

## INSURANCE PREMIUMS.

We annex a statement of the amount of premiums earned, and losses, expenses, and return premiums paid each year by the Mutual Companies of this city since 1839, compiled from the published statements of the several companies :—

| Year.     | Premiums earned. | Losses, return premiums, & expenses. | Year.      | Premiums earned. | Losses, return premiums, & expenses. |
|-----------|------------------|--------------------------------------|------------|------------------|--------------------------------------|
| 1839..... | \$337,765        | \$290,478                            | 1850.....  | \$6,900,209      | \$5,181,607                          |
| 1840..... | 473,149          | 382,392                              | 1851.....  | 7,956,877        | 5,666,070                            |
| 1841..... | 694,004          | 559,090                              | 1852.....  | 8,043,951        | 5,528,986                            |
| 1842..... | 1,197,628        | 955,451                              | 1853.....  | 10,764,971       | 8,349,618                            |
| 1843..... | 2,290,589        | 1,546,240                            | 1854.....  | 9,972,775        | 9,902,166                            |
| 1844..... | 3,683,210        | 2,708,072                            | 1855.....  | 12,867,487       | 12,358,425                           |
| 1845..... | 3,301,852        | 4,184,609                            | 1856.....  | 13,121,369       | 11,450,601                           |
| 1846..... | 3,744,508        | 3,157,440                            | 1857.....  | 12,891,490       | 11,221,984                           |
| 1847..... | 4,378,969        | 3,513,484                            | 1858.....  | 11,448,538       | 7,629,502                            |
| 1848..... | 3,864,690        | 2,623,270                            |            |                  |                                      |
| 1849..... | 4,743,758        | 3,379,499                            | Total..... | 122,677,784      | 100,588,984                          |

These figures are correct as far as regards the earned premiums, but to the other column must be added the losses of several companies that have failed, owing losses which have never been paid, and which consequently do not appear in the published statements.

## CONNECTICUT INSURANCE LAW.

AN ACT TO PREVENT INCENDIARY FIRES, APPROVED JUNE 27, 1857.

*Be it enacted by the Senate and House of Representatives in General Assembly, convened :—* That the Mayor, Aldermen, and Common Council of each city, and the Wardens and Burgesses of each Borough, in this State, may appoint a Fire Marshal for each of their several incorporations, who shall hold his office for one year. That said Fire Marshal shall have power to inquire into the cause of any fire which may happen in the limits of the corporation for which he is appointed, on being requested so to do by a proper officer of said corporation, or by any one interested in the property burned, at the expense of the applicant. Said Marshal may summon witnesses to appear before him at such times and places as he may designate, and examine said witnesses on oath, touching said fires, and

shall make a report of his examination and the facts found by him, to the clerk of the city or borough for which he is appointed.

SEC. 2. In case any fire shall happen in this State out of the limits of an incorporation in which there may be a Fire Marshal, any person interested in the property burned, may apply to any justice of the peace in the town where said fire has taken place, and said justice, in like manner, as is provided in the first section of this act, and at the expense of the applicant, may summon witnesses before him, and examine them on oath in relation to said fire, and shall find the facts as they may be proved before him, which finding shall remain in the files of his office.

SEC. 3. The fees of such Fire Marshal, or justice of the peace, while engaged in investigating the cause of any fire as aforesaid, shall be two-and-one-half dollars per day; witness fees, subpoenas, and the service of subpoenas, shall be the same as are allowed in the Superior Court.

#### TAXES PAID BY INSURANCE COMPANIES OF CINCINNATI.

The Ohio State House of Representatives passed a resolution requesting the several County Auditors to report, as soon as practicable, "the amount of taxable property listed by the foreign and domestic fire and marine insurance companies doing business in the State, and the actual amount of taxes paid by each," for the years 1853 to 1858, inclusive. The resolution was complied with by the Auditor of Hamilton County.

#### TOTAL AMOUNT OF REAL AND PERSONAL PROPERTY RETURNED BY THE HOME COMPANIES, AND THE TAX.

|                                    | Value.      | Tax.        |
|------------------------------------|-------------|-------------|
| 1853—Personal property.....        | \$287,430   | \$5,317 45  |
| Real estate.....                   | 41,530      | 669 30      |
| 1854—Personal property.....        | 228,418     | 3,826 00    |
| Real estate.....                   | 87,240      | 1,291 30    |
| 1855—Personal property.....        | 331,546     | 4,906 88    |
| Real estate.....                   | 87,240      | 1,461 43    |
| 1856—Personal property.....        | 367,163     | 4,956 70    |
| Real estate.....                   | 109,760     | 1,481 89    |
| 1857—Personal property.....        | 479,883     | 7,193 24    |
| Real estate.....                   | 109,760     | 1,646 55    |
| 1858—Personal property.....        | 588,368     | 9,776 90    |
| Real estate, Cincinnati.....       | 109,840     | 1,823 34    |
| Real estate, Spencer Township..... | 1,200       | 10 80       |
|                                    | <hr/>       | <hr/>       |
|                                    | \$2,829,378 | \$44,366 98 |

The full amount of the tax assessed, as above, was paid each year by the home companies, with the exception of the levy for 1858, one-half of which only was paid, in compliance with the provisions of the semi-annual tax law.

#### TOTAL AMOUNT OF REAL AND PERSONAL PROPERTY RETURNED BY FOREIGN COMPANIES, AND THE TAX.

|                                 | Value.      | Tax.        |
|---------------------------------|-------------|-------------|
| 1853—Personal property.....     | \$244,380   | \$4,521 03  |
| 1854—Personal property.....     | 275,004     | 4,606 31    |
| 1855—Personal property.....     | 194,046     | 2,871 88    |
| 1856—Personal property.....     | 199,444     | 3,692 49    |
| Real estate, Aetna Company..... | 9,700       | 180 95      |
| 1857—Personal property.....     | 239,663     | 3,594 94    |
| Real estate, Aetna Company..... | 13,700      | 205 50      |
| 1858—Personal property.....     | 216,850     | 3,599 71    |
| Real estate, Aetna Company..... | 13,700      | 227 42      |
|                                 | <hr/>       | <hr/>       |
|                                 | \$14,064 87 | \$23,450 23 |

## POSTAL DEPARTMENT.

### BRITISH POST-OFFICE PACKET SERVICE, 1858-9.

The following is a classified abstract of the votes in 1858 and 1859:—

| Route.                                    | Company.                | 1859.   | 1858.   |
|-------------------------------------------|-------------------------|---------|---------|
| <b>I. BRITISH SEAS.</b>                   |                         |         |         |
| Liverpool and the Isle of Man.....        |                         | £850    | £850    |
| Holyhead and Kingstown.....               | City of Dublin.....     | 25,000  | 25,000  |
| Aberdeen and Lerwick.....                 |                         | 1,200   | 1,200   |
| Thurso and Stromness . . . . .            |                         | 1,300   | 1,300   |
| Southampton and Channel Islands.....      | Southwestern Railway.   | 4,000   | 4,000   |
| Dover and Calais, and Dover and Ostend.   | Dover Mail.....         | 15,500  | 15,500  |
| Total.....                                |                         | 47,850  | 47,850  |
| <b>II. PENINSULAR.</b>                    |                         |         |         |
| Southampton, Vigo, Oporto, Lisbon, Cadiz, |                         |         |         |
| Gibraltar.....                            | Peninsular & Oriental . | 20,500  | 20,500  |
| <b>III. AMERICA, NORTH AND SOUTH.</b>     |                         |         |         |
| Liverpool and Halifax, and Boston, Liver- |                         |         |         |
| pool and New York, and New York and       |                         |         |         |
| Nassau.....                               | Cunard.....             | 176,340 | 172,840 |
| Halifax, Bermuda, and St. Thomas, and     |                         |         |         |
| Halifax and St. John's, Newfoundland..    | Cunard.....             | 14,700  | 14,700  |
| Southampton and West Indies.....          | Royal Mail.....         | 238,500 | 244,000 |
| Southampton & Brazils & Buenos Ayres..    | Royal Mail.....         | 30,000  | 30,000  |
| Panama, Callao, and Valparaiso.....       | Pacific.....            | 25,000  | 25,000  |
| Total.....                                |                         | 484,540 | 486,540 |
| <b>IV. AFRICAN LINES.</b>                 |                         |         |         |
| England and West Coast of Africa.....     | African.....            | 30,000  | 20,500  |
| England and Cape of Good Hope.....        |                         | 32,400  | 33,000  |
| Total.....                                |                         | 62,400  | 53,500  |
| <b>V. AUSTRALIA.</b>                      |                         |         |         |
| Australia and New Zealand.....            |                         | 14,000  | .....   |
| Southampton and Sydney, and branch from   |                         |         |         |
| Marseilles to Alexandria.....             | Peninsular & Oriental . | 180,000 | 185,000 |
| Total.....                                |                         | 194,000 | 185,000 |
| <b>VI. INDIA.</b>                         |                         |         |         |
| England and Alexandria, Ceylon, and Cal-  |                         |         |         |
| cutta, with branch from Marseilles to     |                         |         |         |
| Malta.....                                | Peninsular & Oriental . | 124,414 | 139,414 |
| Aden and Bombay.....                      | Peninsular & Oriental . | 21,675  | 24,700  |
| Additional mails to India by alternate    |                         |         |         |
| weekly communication to Bombay and        |                         |         |         |
| Calcutta.....                             | Peninsular & Oriental . | 22,000  | 20,000  |
| Total.....                                |                         | 168,089 | 184,114 |
| <b>VII. EXPENSE OF STATIONS.</b>          |                         |         |         |
| Packet establishments, Dover, Holyhead,   |                         |         |         |
| Liverpool, and Southampton.....           |                         | 4,862   | 5,629   |
| Allowance, if government agents on board  |                         |         |         |
| the contract packets.....                 |                         | 9,355   | 9,355   |
| Total.....                                |                         | 14,217  | 14,984  |
| General total.....                        |                         | 991,596 | 992,488 |

POSTAGE STAMPS AND STAMPED ENVELOPS.

The whole number of orders received and attended to in the finance office of the Post-office Department during the fiscal year ending 30th June last was 75,437, divided as follows, viz. :—For postage stamps, 56,001 ; for stamped envelopes, 19,436. Assuming that the number of letters, embracing orders both for stamps and envelopes was 10,000, then the whole number of orders requiring separate action would be 65,437, or an average of 211 orders each day.

COMMERCIAL REGULATIONS.

TARIFF OF NEW ZEALAND.

The following circular from MESSRS. BAIN, GRAHAME & Co., of Auckland, (New Zealand,) dated the 28th July, describes the new tariff in that colony, which came into force on the 18th of July last :—On the 18th instant the new tariff was officially proclaimed. It has been drawn up with a view to assimilate with those of the various Australian colonies. In many respects, as approaching so desirable an end, its rates are acceptable ; many articles, however—some indeed of primary necessity—are still unnecessarily hampered. We annex a copy of the new tariff :—

IMPORT DUTIES.

|                                                                                                                                                                                                                                                                                                                                                                      | £ | s. | d. |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|----|----|
| 1. Ale, beer, cider, and perry, in wood . . . . .gallon                                                                                                                                                                                                                                                                                                              | 0 | 0  | 6  |
| Ale, beer, cider, and perry, in bottle . . . . .                                                                                                                                                                                                                                                                                                                     | 0 | 1  | 0  |
| 2. Cigars and snuff . . . . .lb.                                                                                                                                                                                                                                                                                                                                     | 0 | 3  | 0  |
| 3. Coffee, chicory, cocoa, and chocolate . . . . .                                                                                                                                                                                                                                                                                                                   | 0 | 0  | 3  |
| 4. Cutlery, hardware, plate and plated-ware, hollow-ware, ironmongery<br>of all sorts, candles and soap of all sorts . . . . .cwt.                                                                                                                                                                                                                                   | 0 | 3  | 0  |
| 5. Firearms of every description . . . . .each                                                                                                                                                                                                                                                                                                                       | 0 | 5  | 0  |
| 6. Gunpowder . . . . .lb.                                                                                                                                                                                                                                                                                                                                            | 0 | 0  | 3  |
| 7. Manufactures of silk, cotton, linen, and woolen, and all articles manu-<br>factured therefrom, drapery, haberdashery, hosiery, millinery,<br>furs, hats, boots, shoes, confectionery, bottled and dried fruits, oil-<br>men's stores of all kinds, mustard, olive oil, pickles, preserves,<br>sauces, spices (measuring outside the packages) . . . . .cubic foot | 0 | 4  | 0  |
| 8. Spirits and strong waters of every kind, sweetened or otherwise, of<br>any strength not exceeding the strength of proof by Sykes' hydro-<br>meter, and so on in proportion for any greater strength than the<br>strength of proof . . . . .gallon                                                                                                                 | 0 | 9  | 0  |
| 9. Sugar, raw and refined, of all kinds, and treacle and molasses . . .lb.                                                                                                                                                                                                                                                                                           | 0 | 0  | 1  |
| 10. Tea . . . . .                                                                                                                                                                                                                                                                                                                                                    | 0 | 0  | 4  |
| 11. Tobacco . . . . .                                                                                                                                                                                                                                                                                                                                                | 0 | 1  | 6  |
| 12. Wine, in wood and bottle, containing less than 25 per cent of alcohol,<br>of a specific gravity of .825, at the temperature of 60° Fahren-<br>heit's thermometer . . . . .gallon                                                                                                                                                                                 | 0 | 3  | 0  |

DUTY FREE.

anchors and chains, and rod, bolt, bar, sheet, hoop, and pig iron, and nails, sailcloth cordage, twine, cotton yarn, bags, and woolpacks, spirits of tar and turpentine tobacco for sheep wash, nuts of all kinds, powder fit only for blasting purposes, and all other goods, wares, and merchandise, excepting those above enumerated.

## COMPARATIVE STATEMENT OF OLD AND NEW DUTIES ON THE FOLLOWING IMPORTS.

|                                                        | Old. |    | New. |        |
|--------------------------------------------------------|------|----|------|--------|
|                                                        | s.   | d. | s.   | d.     |
| Spirits, proof.....gallon                              | 8    | 0  | 9    | 0      |
| Tobacco.....lb.                                        | 1    | 3  | 1    | 6      |
| Coffee, chicory, cocoa, and chocolate.....             | 0    | 2  | 0    | 3      |
| Sugar, raw and refined, molasses, treacle, &c.....cwt. | 4    | 8  | 9    | 4      |
| Tea.....lb.                                            | 0    | 3  | 0    | 4      |
| Cutlery, hardware, ironmongery, &c.....cubic foot      | 1    | 0  | 3    | 0 cwt. |
| Manufactures of silk, &c.....cubic foot                | 3    | 0  | 4    | 0      |

## NAVIGATION OF WATERS ON THE NORTHERN FRONTIERS.

To prevent misapprehension, in future, in regard to the marine papers under which voyages can be pursued in part by sea, from ports on the northern, north-eastern, and northwestern frontiers of the United States, it is deemed proper to state, for the information and government of collectors and other officers of the customs, that the enrolment and license issued under the act of 2d March, 1831, authorizes a vessel to engage both in the coasting and foreign trade only when navigating "otherwise than by sea." In several instances, of late, vessels have cleared from their home ports on the lakes for European destinations, or for ports in the United States on the seaboard. The papers under which they navigate the lakes, are not, it is obvious, the proper documents for vessels pursuing voyages of that description. Recourse must be had, in such cases, to the provisions of the acts of the 31st December, 1792, and 18th February, 1793, prescribing marine papers for vessels navigating the ocean and its tributaries in the foreign and coasting trade. If, then, a vessel is bound from a port on the northern lakes or tributaries, to a European or other foreign port, in part by sea, her enrolment and license should be surrendered, and she should be furnished with a register, under the provisions of the act of 31st December, 1792. If she is destined for a port in the United States, coastwise, in part by sea, she should surrender her enrolment and license, under the act of 2d March, 1831, and should be furnished with an enrolment and license, under the provisions of the act of the 18th February, 1793. If she sails for a provincial port, and it is intended to clear her thence for a port in the United States on the seaboard, or for a foreign port, in part by sea, she should be furnished with a register under the act of 31st December, 1792, before leaving her home or a lake port on such a voyage. It is important that the proper papers should be issued to vessels pursuing these several voyages, otherwise they may be exposed to the disabilities and penalties imposed on vessels found engaged in a trade without the appropriate documents prescribed by law.

## ENTRY OF VESSELS FROM FOREIGN PORTS.

It is represented to the Department that vessels owned in districts adjacent to the British North American Provinces, take cargoes on board in provincial ports, destined for ports of the United States on the seaboard, and, on entering the waters of the United States, proceed in the first instance, to their home ports and there exchange their registers for enrolments and licenses, under which they proceed to their ports of destination, and claim to enter coastwise. It is also represented that, in some instances, they make an entry as from a foreign port, when they exchange their papers, but the cargo is not unladen or inspected, but passes at once, under a coastwise manifest, to the original port of destination. This practice is clearly illegal, and must be discontinued. Vessels from foreign ports must deliver their cargoes under the inward manifests prescribed by law, which show that they were laden on board at foreign ports, and which specify their ports of destination in the United States. They must complete their voyages to the ports of destination exhibited on their manifests, under their registers, which cannot be exchanged for enrolments and licenses, until entries are duly made as from foreign ports, and the merchandise brought in them duly unladen by permit from the proper officers of the customs.

## MINK SKINS.

TREASURY DEPARTMENT, September 28, 1859.

SIR:—I acknowledge the receipt of your reports of the 6th and 12th instant, on the appeal of J. M. OPPENHEIM & Co. from your assessment of duty, at the rate of 8 per cent, on a case of "mink skins," imported from Hamburg in the steamer "Hammonia," the importers claiming to enter them free of duty, under the following provision, viz. :—"Goods, wares, and merchandise, the growth, produce, or manufacture of the United States, exported to a foreign country, and brought back to the United States in the same condition as when exported, upon which no drawback or bounty has been allowed, &c.," in schedule I of the tariff of 1857. The "mink" is a European as well as an American quadruped, and no proof is presented that the articles in question are the produce of the United States. At all events they are not identified in the mode prescribed by law, and the regulations of the Department made in pursuance thereof, as having been exported to a foreign country, and brought back in the same condition as when exported. They are not, therefore, entitled to entry free of duty, but are subject to a duty of 8 per cent, under the classification in schedule G of "furs, undressed, when on the skin." Your decision is affirmed. I am, very respectfully,

HOWELL COBB, Secretary of the Treasury.

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

## NAUTICAL INTELLIGENCE.

## ACTION OF SEA WATER ON IRON.

A communication made to the London Institution of Civil Engineers gives the result of the analysis of a piece of the iron heel post of a vessel which, by the effect of salt water, was converted into a substance resembling plumbago. This substance was of a dark brown color, and easily cut by a knife; on exposure to a red heat in a crucible, it lost about twenty per cent in weight, and on being exposed to a white heat for about four hours it lost sixty per cent, and came out a light mass of very brilliant corburet; the latter, on being used as a carbonaceous substance for the reduction of an oxide of iron, was found to be less efficacious than the same quantity from the charcoal of wood. From these and other experiments made, it is considered that one hundred parts are composed as follows:—Carbonic acid and moisture, 20; protoxyde of iron, 35.7; silt, or earthy matter, 7.2; carbon, 41.0.

## NEW LIGHT ON THE COAST OF CUBA.

Official information has been received at this office, from the Commandant-General of Marine at Havana, that on the first day of November next, a light will be exhibited from a new lighthouse recently constructed on Cayo Paredon Grande, on the northern coast of the island of Cuba. The tower is of iron resting on a base of hewn stone, which again rests on a foundation of rugged rock, some twenty-six feet above the sea level. The color of the tower is not given. The illuminating apparatus is of the first order of the system of Fresnel, and the light is fixed, varied by flashes every minute. The focal plane being elevated 159 feet above the level of the sea, this light should be seen from the deck of an ordinary sized vessel 20 nautical miles. The lighthouse stands in latitude 22° 29' 36" N.; longitude 78° 07' 20" west of Greenwich. By order,

R. SEMMES, Secretary.

WASHINGTON, October 20, 1859.

## LIGHTHOUSE ON CRANEY ISLAND SHOAL, COAST OF VIRGINIA.

Notice is hereby given that a lighthouse on a screw-pile foundation has been erected about one hundred feet from the Craney Island light-vessel. The foundation is octagonal in plan, and is composed of iron screw piles. Its top is  $21\frac{1}{2}$  feet above ordinary high water. It is painted red. The superstructure is a square wooden building with watch room and lantern above its center. The sides are painted white, and the roof slate color. The watch room, below the lantern, is white. The height of the focal plane above ordinary high water is 52 feet. The illuminating apparatus is a lens of the fifth order of the system of Fresnel, showing a fixed light of the natural color, which should be visible in ordinary states of the atmosphere 12 nautical miles. The light will be lighted for the first time at sundown on Tuesday, the 15th of November next, and will be kept burning during that and every night thereafter until further orders. The Craney Island light-vessel will be removed from her station on the same day, and will not be replaced. A fog bell and fog horn will be sounded alternately from the lighthouse in foggy weather. By order of the Lighthouse Board.

W. B. FRANKLIN, Secretary.

WASHINGTON, October 27, 1859.

## SHAMBLES LIGHT-VESSEL, NEAR THE BILL OF PORTLAND.

Official information has been received at this office, from the Corporation of the Trinity-house, London, that a light-vessel having the word "SHAMBLES" painted on her sides, has been moored at the east end of the Shambles Shoal, in 15 fathoms low water spring tides, with the following marks and compass bearings, viz. :—Bellefield-house (in the trees) to the westward of Weymouth, in line with the west pier head of the Breakwater, N. N. W. Wyke Regis Church Tower, one-third the distance from the low N. E. point of Portland to the W. pier head of the Breakwater, N. N. W. S. A small white house on the beach at Church Hope Cove, between the two mills at Portland, N. W. Portland Bill, W. N. W. St. Alban's Head, E.  $\frac{1}{4}$  S. A fixed white light is exhibited from this light-vessel between sunset and sunrise, and will be so continued until further notice. By order,

R. SEMMES, Secretary

WASHINGTON, October 29, 1859.

## LIGHT DISCONTINUED.

The 3d section of the act of Congress, approved March 3, 1859, making appropriations for "lighthouses, light-boats, buoys, &c.," authorized the Secretary of the Treasury, in his discretion, on the recommendation of the Lighthouse Board, to discontinue, from time to time, such lights as may become useless, by reason of mutations of commerce, and changes of channels, of harbors, and other causes. The Lighthouse Board, at its meeting held on the 3d instant, recommended that the following light be discontinued, viz. :—The light at New Haven long wharf, (Connecticut.) It is therefore ordered and directed that the aforesaid light be discontinued on and after the 1st day of November next. By order of the Secretary of the Treasury,

R. SEMMES, Secretary.

WASHINGTON, October 5, 1859.

## HOLMES'S HOLE BEACON DISCONTINUED.

The third section of the act of Congress, approved March 3, 1859, making appropriations for "lighthouses, light-boats, buoys, &c.," authorized the Secretary of the Treasury, in his discretion, on the recommendation of the Lighthouse Board, to discontinue, from time to time, such lights as may become useless, by reason of mutations of commerce, and changes of channels, of harbors, and other causes. The Lighthouse Board, at its meeting held on the 18th instant, recommended that the following named light be discontinued, viz. :—Holmes's Hole beacon, at the head of Holmes's Hole Harbor, Massachusetts. It is therefore ordered and directed, that the aforesaid light be discontinued on and after the 1st day of December next. By order of the Secretary of the Treasury,

R. SEMMES, Secretary.

WASHINGTON, October 22, 1859.

RAILROAD, CANAL, AND STEAMBOAT STATISTICS.

COMMERCE IN ANIMALS—INFLUENCE OF RAILWAYS.

Within a few years, says the *Railroad Record*, the transportation of animals to the markets of the Atlantic has been carried on, almost entirely, by railroads; and their influence, in this respect, has been most remarkable. Perhaps in no one thing have railroads been more successful. In the old way of transporting cattle and hogs, the time required was so great, that the cost was great, on one hand, and the market entirely uncertain on the other. The grazer might drive a herd of cattle, and be forty days on the road, thinking the price was what it was reported when he started, but find it very different, perhaps to his benefit, but as often against him. The cost of forty days' driving is also considerable. Now, cattle are taken in three or four days, and the drover knows just what to depend upon in the way of price. The effect of this change has been to increase largely the number of cattle transported on railroads, and the number also carried to the eastern markets. This whole class of business is taken from canals, steamboats, and common roads, and done by railroads. Another effect, and a very important one, is to give better prices to the western cattle raisers; for, the reduction of freights is *not* taken off from New York prices, but is *added to the first price of cattle*. This is a curious, but almost universal effect of improved transportation. In fact, the rapid increase of *town* population causes the *demand* to be steadily pressing against the supply. There is, therefore, no opportunity for a fall in price at the point of consumption. If the supply is gradually increased by the transportation, it is met by increased demand. The reduction on transportation, then, enures directly to the benefit of the producer, and the western farmer has received all the advantages accruing from the beneficial effects of railroads on the transportation of produce. In the reports of railroad companies for the State of Ohio, and returned to the Commissioner of Statistics, we have the number of animals carried over most of the roads.

The following is an exhibit of this traffic on the most important roads:—

|                                               | Horses. | Cattle.  | Hogs.     |
|-----------------------------------------------|---------|----------|-----------|
| Pittsburg, Fort Wayne, and Chicago.....       | 1,532   | 16,672   | 154,562   |
| Cleveland, Painesville, and Ashtabula.....    | ....    | *116,874 | *403,593  |
| Cleveland, Columbus, and Cincinnati.....      | ....    | 65,182   | 230,844   |
| Cincinnati, Wilmington, and Zanesville.....   | ....    | *20,500  | .....     |
| Springfield, Mount Vernon, and Pittsburg..... | 112     | 2,352    | 13,250    |
| Bellefontaine and Indianapolis.....           | ....    | 19,940   | 39,860    |
| Sandusky, Mansfield, and Newark.....          | ....    | 3,600    | 30,000    |
| Indianapolis and Cincinnati.....              | ....    | 5,753    | 61,912    |
| Ohio and Mississippi.....                     | ....    | 3,388    | 66,430    |
| Cincinnati, Hamilton, and Dayton.....         | ....    | 4,458    | 99,390    |
| Little Miami, Columbus, and Xenia.....        | 3,720   | 37,060   | 122,250   |
| Central Ohio.....                             | ....    | 3,325    | *115,263  |
| Aggregate.....                                | 5,364   | 299,054  | 1,286,844 |

In the figures marked with a \* the horses and cattle in the second column, and the hogs and sheep in the third, are mingled together. In the Wilmington road they are all mixed. Making allowances for this difference in two or three roads,

we shall have the following aggregate of each class of animals carried on the railroads of Ohio :—

|             |         |            |           |
|-------------|---------|------------|-----------|
| Horses..... | 8,000   | Hogs.....  | 1,000,000 |
| Cattle..... | 295,000 | Sheep..... | 300,000   |

On this result, two or three comments are necessary to a more perfect understanding.

1. The majority of horses are driven to Cincinnati market—which is probably the largest horse market in the United States. They are collected there from Ohio, Kentucky, and Indiana in great numbers. Most of them, probably four-fifths, are driven, as the distance to be carried is not more than one-fourth that of cattle to the eastern markets, and the horse is a fast traveler. The railroad transportation of cattle is, therefore, comparatively small.

2. The number above given does not, by any means, represent the *exports* of animals, for many of the roads lead into other States. The exports of cattle and hogs are almost entire represented in four roads, viz. :—

The Painesville and Ashtabula, which leads to New York.

The Pennsylvania Central, from Pittsburg to Philadelphia, which drains the Pittsburg and Cincinnati, the Pittsburg and Chicago, and partially the Indianapolis and Bellefontaine roads.

Next, the Central Ohio and Marietta, which send their freights to Baltimore.

There is, therefore, a disappearance in the exports of many of the numbers above given. They, nevertheless, represent a part of the freights carried on each of these roads.

The number of animals actually *exported* from Ohio are nearly as follows :—

|             |         |            |         |
|-------------|---------|------------|---------|
| Horses..... | 8,000   | Hogs.....  | 340,000 |
| Cattle..... | 120,000 | Sheep..... | 220,000 |

We are not now speaking of manufactured meats, but only of *live animals*.

Looking to the export of manufactured as well as live animals, we *exported* the following amounts :—

|             |         |           |           |
|-------------|---------|-----------|-----------|
| Cattle..... | 150,000 | Hogs..... | 1,000,000 |
|-------------|---------|-----------|-----------|

There were fully 700,000 hogs slaughtered in Ohio last year, and this, with the number of hogs carried over railroads to eastern markets, makes more than a million.

3. The *freights* furnished by the animals above enumerated were—

|             |      |         |            |      |         |
|-------------|------|---------|------------|------|---------|
| Cattle..... | tons | 150,000 | Sheep..... | tons | 15,000  |
| Hogs.....   |      | 100,000 |            |      |         |
| Total.....  |      |         |            |      | 265,000 |

This is a very large item in railroad traffic.

4. This is another operation connected with the export of animals which is very important and quite curious. It is the habit of nearly all the cattle merchants to draw bills on the East for the most of the purchase money. It will be safe to say that the commerce in animals is the basis of inland bills of exchange to the amount of two-thirds the value of cattle exported. If this be so, cattle bills on the East must amount to \$5,000,000 per annum. This is a very profitable and safe branch of bank business. It is nearly all done by the banks of Chillicothe, Columbus, Lancaster, Athens, Zanesville, and Marietta. These bills are generally discounted at four months, and frequently renewed when the sales of stock have been delayed or the payments on time; but they are almost inva-

riably paid, and by the addition of exchange make much more interest for the banks than ordinary discounts.

The business of exporting cattle and hogs and transporting them on railroads is likely to increase rather than diminish, and continue to be a lucrative business for all parties engaged in it.

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#### TUNNÉL UNDER THE ALPS.

It is generally known that the immense work of boring a tunnel under the Alps, between Modane and Bardoneche, was commenced some months since; but we have now to record some interesting facts which might, perhaps, never have been discovered, but for the peculiar methods employed in this colossal operation. Modane and Bardoneche are situated on opposite sides of the Alpine chain which divides Piedmont from France, and precisely at a point where the valleys of the Arc and the Dora, which lie nearly on the same level, run parallel to each other, and the mountain is narrowest. The thickness of the intervening mountain is 13 kilometres in a straight line; the actual tunnel will be  $22\frac{1}{2}$  kilometres. It is designed in the same vertical plane, but, to facilitate drainage, is somewhat higher in the middle than at the orifice, so as to form gentle slopes on both sides—one not exceeding an inclination of five per thousand, and the other being twenty-three per thousand, in consequence of a difference of level between the two extremities, the numbers being, Bardoneche (southern orifice,) 1,324 meters; culminating point, 1,335 meters; Modane, (northern orifice,) 1,190 meters above the level of the sea. The crest of the mountain being 1,600 metres above the culminating point, the sinking of shafts, which is the method generally employed in order to begin boring tunnels at several points at once, was out of the question; hence the tunnel could only be worked at its extremities, so that the labor by the ordinary processes, could not be accomplished in less than thirty-six years. Then, how was a depth of gallery of three or four kilometres, and having but one orifice, to be aired? These were all serious obstacles. MM. ELIE DE BEAUMONT and ANGELO SISMONDA having examined the mountain geologically, found it to contain micaceous sandstone, micaceous schists, quartzite, gypsum, and limestone—all easy to blast, the quartzite alone excepted; but the stratum of this is not likely to be very thick. The other difficulties alone, therefore, remained; and these were at length overcome by three Sardinian engineers—MM. SOMMELLIER, GRATONE, and GRANDIS—who proposed to turn the abundance of water for which the locality was remarkable to account, by applying it to a peculiar system of perforation and ventilation, which we will now endeavor to explain. The first apparatus imagined by these gentlemen consists in a hydraulic air-condenser, which is a syphon turned with its orifices upward, and communicating by one of them with a stream of water, by the other with a reservoir of air. The water, descending into the first branch, enters the second, and by the pressure it exercises, condenses the air, which is then forced into the reservoir. This done, a valve is opened, by which the water contained in the syphon is let out, and the operation recommences. The emission and introduction valves are regulated by a small machine operating by means of a volume of water; and the air in the reservoir is maintained at a constant degree of pressure by a column of water communicating with a reservoir above. Thus, with a waterfall twenty meters in height, the air is condensed to six atmospheres, equivalent

to the pressure of sixty-two meters of water. This condensed air is used for two purposes; first, as a motive power, then for ventilation. Two kinds of perforators, worked by condensed air instead of steam are employed—one invented by Mr. BARTLETT, the other by M. SOMMEILLER—and the manner in which these machines perform their duty affords the first practical demonstration of the possibility of employing compressed air as a motive power with advantage. By means of these perforators, holes for blasting may be bored through the hardest sienite in one-twelfth of the time which would be required if ordinary means were employed. In order to understand the importance of this result, it may be stated that, in tunneling, three-fourths of the time is employed in boring holes, and the remainder in charging and blasting; hence, accelerating the former operation is an immense advantage. The perforators have another advantage; in a place where three couples of miners could hardly find room, eighteen perforators may be easily set to work; so that, by these ingenious contrivances, as well as by others for clearing away the rubbish, the perforation of the tunnel may be effected in six years, instead of thirty-six. The air that has been employed as a motive power, is used to feed the gallery; but when the latter shall have reached a considerable depth, it will require 85,924 cubic meters of air per twenty-four hours to replace that which has been vitiated by respiration, torches, and gunpowder; and this quantity in the form of 14,320 cubic meters of air condensed to six atmospheres, the reservoir can furnish. A new and curious fact has been observed during these works, viz.:—That when the air, condensed to the degree above mentioned, is shot into the gallery from the machine, any water happening to be near the latter suddenly congeals, although the ambient temperature be about eighteen degrees centigrade (seventy-two degrees Fahrenheit.) Hence, when a large mass of compressed air is driven into a gallery situated at 1,600 meters below the outer surface of the earth, and where, consequently, the temperature must be about 100 degrees Fahrenheit, the dilation of the compressed air produces a diminution of temperature sufficient to counterbalance the excess alluded to. The progress now making per day in boring, is three meters on each side of the mountain, or six meters per day in all.

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#### INCREASING THE POWER OF LOCOMOTIVES.

The importance of increasing the power of locomotive engines without adding to their weight, which is so destructive to the superstructure of railways, has led to some interesting attempts by Mr. E. W. SERRELL—a name well known in scientific circles—to magnetize the driving wheels, to obtain additional adhesion. Before doing so extensive inquiry was made in this country and Europe, as to whether previously ascertained facts indicated the probability of success, the responses being in the negative. The result of these experiments by Mr. SERRELL is, therefore, much more than was anticipated—an additional adhesion of over seventy-five per cent having been obtained, and this by a very simple method. The lower segment of the wheel is surrounded by a helix of copper wire, through which the wheel revolves, and, contrary to the generally received opinions, it was found that upon curving the helix into a segment, the radius of which is equal to the diameter of the wheel, the point of greatest magnetic effect coincided with the contact of the wheel and rail. One wheel had south polarity, and its corresponding opposite wheel north polarity.

The wheels magnetized in the experimental trial were four-and-a-half feet in diameter, and weighed eleven hundred pounds each. On a very slippery rail, nineteen pounds of steam per inch slipped the wheels without magnetism; under the same conditions thirty-five pounds were required to slip them when magnetized. On a very clean rail, and everything being favorable, fifty pounds were required without any magnetic effect, and eighty-eight pounds when magnetized. The helix was made of number eight copper wire in one strand, two thousand seven hundred feet in length, and laid in two hundred and eighty-eight turns, insulated with cotton and marine glue, and covered with India rubber. He was unable to discover any increased or diminished effect by the wheels being in motion or at rest, and they were tested up to three hundred revolutions per minute. The battery used was a modification of GROVE'S, so contrived as not to stop, and consisted of sixteen cups, each having about three hundred inches of zinc surface, and they were connected for the quantity of eight cups. A modification of SMEE'S and CHESTER'S batteries was subsequently adopted, being more permanent. When the helices produced the greatest effect they were raised about two-and-one-half inches above the rail, measuring from their under sides.

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## JOURNAL OF MINING, MANUFACTURES, AND ART.

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### SUBSTITUTE FOR GOLD.

An English chemist announces an invention for the manufacture of alloys of aluminum and iron, aluminum and copper, etc., at a very inexpensive rate. The method consists in the decomposition of alumina, or the oxide of aluminum, by means of carbon, in the presence of, and in intimate contact with, metals electro-positive to aluminum—such, for instance, as copper or iron, or their oxides, so as to cause the aluminum to combine in any desired proportion with the electro-positive metal and form an alloy. The alloy is produced by the close and intimate contact of the carbon, alumina, and the electro-positive metal, or their oxides in each other's presence, and their simultaneous decomposition or reduction by the application of suitable heat in a proper manner.

Thus, to produce an alloy of aluminum and copper, the inventor takes protoxide of copper, or peroxide of copper, or metallic copper in a granulated or in as finely divided a state as it can be conveniently obtained, and mixes this electro-positive metal with alumina obtained from alum or other salts of alumina, or from some other convenient source. The alumina is also in a finely powdered state. To this is added carbon, finely pulverized animal charcoal being preferred. All these three ingredients are then as intimately mixed or blended together as can be done mechanically, and the ingredients combined according to chemical equivalents and atomic proportions.

The alloy of copper with aluminum, when perfectly melted, can be cast in a mold, and subsequently reduced to any desired shape by hammering, rolling, pressing, &c. This alloy is capable of receiving a very high polish, and in color closely resembles gold, and has the property of comporting itself on exposure to the atmosphere in about the same manner as gold. The alloys of aluminum with zinc and copper produce a bronze of beautiful color, and of greater hardness than

any of the bronzes made in the ordinary manner. The alloy of aluminum and iron is useful for many mechanical purposes, especially in the manufacture of cast steel, to which it imparts all the advantages resulting from increased soundness, hardness, and bright silvery variegated polish. If in practice this invention proves as perfect as it is anticipated it will, there may be expected a very great change in the material used in the manufacture of domestic articles—in fact, the substitution of gold-colored metal for white metal. The aluminide of copper will be the substitute for gold, and may be employed in tea and dinner services where white metal has usually been employed.

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#### MANUFACTURE OF IRON AND STEEL.

An improved method of treating fused cast-iron during the process to which it is subjected in manufacturing therefrom either wrought-iron or steel, has been brought forward in England. The invention consists in the use of hydrochloric or muriatic acid, or sulphuric or nitric acid, applied in admixture with common salt or other analogous compound, this mixture of acid and salt being mixed with the fused cast-iron.

In carrying this invention into effect, as much of the acid is mixed with the salt as may be necessary to make a pasty compound. When sulphuric acid is used, it is sometimes diluted with water to such a degree that no gas is evolved when the sulphuric acid is added to the common salt at ordinary temperatures. Portions of this mixture of acid and salt are projected into the puddling furnace during the time that the puddling is being effected—the preferable time for introducing it being just as that stage called boiling is coming on. The mixture of acid and salt is added to the fused iron in the proportion of two parts by weight of the mixture to one hundred parts by weight of the iron; and it may be applied not only to the iron in the puddling furnace, but when the iron is in the refinery, or in any other furnace used for converting, or partially converting, cast-iron into wrought-iron or steel. By treating fused cast-iron in this way, the quality of the wrought-iron or steel is said to be much improved, that is thus produced.

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#### THE OIL OF PEPPERMINT.

There are several plants which yield fragrant oils when distilled with steam. Among this class peppermint holds a high place on account of its exhilarating as well as its aromatic qualities. About three thousand acres of it are under cultivation in this country, viz., 1,000 in New York and Ohio, and 2,000 in St. Joseph's County, Michigan, which appears to be its head-quarters. It is raised exclusively for its oil, about seven pounds of which is the average yield for an acre of plant, the price being \$2 50 per pound. The roots of the peppermint are planted thickly in rows, between which spaces are left for the cultivator to pass. The plant is generally cut about the latter part of August, and placed in small cocks, like those of hay, which are allowed to stand in the fields some days before being taken in for distillation. Great care is exercised to prevent weeds growing among the plants so as to insure a pure article of oil. The fields are plowed up, and changed every five years; the first year's crop being generally the most abundant and the purest.

The apparatus for distilling peppermint oil consists of a boiler for raising

steam, a still made of wood for receiving the charge of peppermint, a cooler for condensing the oil, and a receiver into which it flows. The whole apparatus is exceedingly simple. The plants are packed into the wooden still and trampled down with the feet; when a full charge is thus ready, the lid of the still is put on and steam admitted at the bottom by a pipe from the boiler. When the peppermint is heated to about 212° Fah., its essential oil passes over with the steam into a worm which is placed in a cooler; and as it condenses into oil and water, it then passes out of the worm into a connected receiver, where the oil, as it floats on the surface, is lifted out with dippers, placed in tin cans, and is ready for sale.

The refuse mint taken from the still is placed in piles, dried, and then becomes tolerable fodder for sheep. About 12,000 pounds of peppermint oil are shipped to England per annum, and the profits are about 18 per cent upon the capital invested and the labor required to carry on the entire business.

At the great French Exhibition of Industry held in Paris in 1855, samples of the oil of peppermint made in this country were exhibited, and were considered the best on exhibition.

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#### ROPE MAKING.

The name "rope" is generally applied to the larger descriptions of cordage, such as exceed an inch in circumference, though the principles of formation are much the same for cordage of every size, and the smaller sizes are known by various names. Those large ropes which are said to be cable-laid are formed by the combination of smaller ropes twisted round their common axis, just as the shroud-laid ropes are composed of strands twisted round their common axis. As cable-laid ropes are harder and more compact than others, this mode of formation has been adopted for ropes to be exposed to the action of water, even though their thickness may not be very great. Ropes formed by plaiting instead of twisting are made use of for some purposes in which pliability is especially needed, they being more supple and less liable to entanglement than those of the ordinary make; such ropes are generally preferred where the rope has to pass over pulleys of small diameter. Flat ropes, which are valuable for special purposes, are either formed of two or more small ropes placed side by side, and united by sewing, lapping, or interlacing with thread or smaller ropes, or of a number of strands of shroud-laid rope similarly united. In either case it is necessary that the component ropes or strands be alternately of a right hand and left hand twist that the rope may remain in a quiescent state.

Many experiments have been made to test the loss of strength by the ordinary twist given to ropes. DUMAHEL prepared the following statement to show the comparative strength of ropes formed of the same hemp, and the same weight per fathom, but twisted respectively to two-thirds, three-fourths, and four-fifths of the length of their component yarns. In rope of two-thirds twist, the weight borne in two experiments was 4,098 and 4,250 pounds; three-fourths twist, 4,850 and 6,753 pounds; four-fifths twist, 6,205 and 7,397 pounds. The result of these experiments led DUMAHEL to try the practicability of making ropes without any twist, the yarns being wrapped round to keep them together; these had great strength, but very little durability. In shroud or hawser-laid ropes the usual reduction of length by twisting is one-third; but cable-laid ropes are further shortened, so that 200 fathoms of yarn are required to make 120 of cable.

A hawser laid rope 6 inches in circumference by 120 fathoms long, weighs about 10 cwts. ; a cable-laid rope 12 inches in circumference and 120 fathoms long, weighs 36 cwts. ; a hawser-laid rope 6 inches in circumference will bear a weight of 140 cwts. The tarring of ropes somewhat impairs their strength, but renders them more durable.

#### CHEMICAL PROPERTIES OF TOBACCO.

During the process of curing, tobacco undergoes important chemical changes. Its peculiar properties are owing to the presence of several remarkable compounds, of which one called "nicotine," and another called "nicotianine," are most important. *Nicotine* is an alkaline substance, and has the form of an oily liquid when separated from other compounds. In its concentrated form, it is a most deadly poison ; but when taken in the dilute condition in which it reaches the stomach in chewing, or the lungs in smoking "the weed," its effects are greatly modified. The quantity of nicotine varies in the different qualities of tobacco cultivated in the same region, and still more does it vary in that cultivated in different countries. The Havana has about 2 per cent of nicotine—hence its mildness. Virginia (best manufactured) tobacco has 5 or 6 per cent, while the stronger varieties have about 7 per cent. The French tobacco has from 3 to 8 per cent of nicotine, according to the region in which it grows. *Nicotianine* is a more volatile substance than nicotine, and is more odoriferous. The pleasant odor of good tobacco is due to this compound chiefly.

The nicotine and nicotianine do not exist in the green leaf, but are formed during the curing of the tobacco, from substances already in the [plant in variable quantities. If the leaves are dried very rapidly, these compounds are not fully formed ; and if the heat is raised too high in firing, they may both disappear to some extent, by being either volatilized or decomposed. They both contain nitrogen, and, like all other compounds containing that element, are readily decomposed. Hence the firing should be commenced at a low temperature, which should be gradually increased, and may be advantageously suspended at night. The temperature should never rise above 120°.

Tobacco-barns should be closely planked, or in some way made close, having windows for ventilation, which may be opened or closed at pleasure. Smaller, and hence safer fires, will be sufficient in such houses. Curing yellow tobacco with charcoal at a high temperature, kept up day and night, is recommended.

"It is best to fire all grades of *shipping* tobacco, and cure it a dark nutmeg color. \* \* \* From 24 to 36 hours after cutting, if the tobacco is ripe—if not, from 36 to 48 hours, according to the weather—seems to be about the right time to commence firing. Begin with small fires, and bring the tobacco to a proper state, and then increase the fires."

#### THE PRESS.

*La Patrie*, of Paris, in a notice of HOE'S American Press, makes the following calculation :—

"The Journal *La Patrie* contains about 4,320 lines ; 8,000 copies make 34,560,000 lines. A scribe could write about three lines in a minute ; therefore, it would require 11,520,000 minutes, or 192,000 hours, for a single scribe to supply 8,000 copies of *La Patrie* ; or, in other words, it would require 192,000 men to supply, by copying, the same amount which Mr. HOE'S press supplies in one hour. Thus his press accomplishes as much as it would take the half, at least, of the whole French army to supply."

## SEWING MACHINES.

The wonderful increase in the use of this invention is indicated in the following facts from the New York *Tribune*, showing the number sold:—

|                                          | Six months ending | No. sold. |
|------------------------------------------|-------------------|-----------|
| Wheeler & Wilson .....                   | October 31, 1858  | 4,933     |
| Wheeler & Wilson .....                   | April 30, 1859    | 10,341    |
| I. M. Singer & Co .....                  | December 31, 1858 | 3,272     |
| I. M. Singer & Co .....                  | June 30, 1859     | 6,456     |
| Grover & Baker .....                     | October 31, 1858  | 3,154     |
| Grover & Baker .....                     | April 30, 1859    | 5,669     |
| A. B. Howe .....                         | December 31, 1858 | 155       |
| A. B. Howe .....                         | June 30, 1859     | 381       |
| Ladd, Webster & Co .....                 | December 31, 1858 | 363       |
| Ladd, Webster & Co .....                 | June 30, 1859     | 1,017     |
| Bartholf Manufacturing Company .....     | December 31, 1858 | 273       |
| Bartholf Manufacturing Company .....     | June 30, 1859     | 439       |
| Leavitt & Co .....                       | December 31, 1858 | 36        |
| Leavitt & Co .....                       | June 30, 1859     | 142       |
| Whitney & Lyon, total for one year ..... |                   | 261       |
| Total manufactured for one year .....    |                   | 37,442    |

## USE OF GOLD.

## DIFFERENT QUALITIES, STYLES, AND PROCESSES IN GOLD MANUFACTURE.

Articles made of gold are ornamented in two ways—either by designs cut into the work and called engraving, or by making the ornaments rise above the surface in relief. Engraving on gold was practiced at a very early period, particularly in Italy, and it is a remarkable fact that it was this kind of engraving that gave rise to the art of producing prints by engraving on copper; but it was long before any one conceived the idea that by filling the lines so engraved with a thick ink, and pressing them on paper, an impression or print could be produced, and it was mere accident at last that gave rise to this valuable discovery. When ornaments were to be in relief they were at first cast in molds, and the processes of casting and hammering were skillfully employed in working this metal. Articles are very rarely, however, now cast in solid gold, owing to the great shrinking that takes place on the cooling of the metal in the mold, in consequence of which it is difficult to obtain that sharpness of impression which is desirable, to say nothing of the great expense of the metal. The most usual method is to roll out the gold into thin plates, and to strike up the figures in relief from behind. This process is termed chasing or embossing, and is a very ingenious branch of the art of working in gold. The vessels upon which this art was formerly employed were of extraordinary value and of great magnificence. To perform the embossing the body of the design is bulged out from the inside by the application of a hammer; the vessel is then filled up with a composition of pitch and ashes, and rested upon a sand bag. The parts to be sunk, in order to produce the detail of the design, are struck by a hammer and little steel punches; and if any parts are required to be raised, they are struck up from the inside. By this simple mechanism the various parts of figures, foliage, landscape, &c., are represented with the greatest exactness.

Gold is so soft a metal that it is scarcely ever used in its purest state, from its liability to wear; it is therefore hardened a little by an alloy with other metals, and the purity of gold is indicated by dealers and jewelers in the following man-

ner :—They suppose each article divided into twenty-four parts, which they call carats ; and if it is pure gold they say it is gold of twenty-four carats ; but if there is an alloy, then this is deducted from the whole. With respect to many ornamental articles sold under the name of gold, they in fact contain only a portion of that precious metal, having as much alloy as the jewelers can possibly add without losing the appearance of gold ; and jeweler's gold, as this is called, looks very well when new, but frequently soon tarnishes, which real gold never does. The color of pure gold is given to this alloy by a certain process called coloring, by which, after the articles are manufactured, the base metals are destroyed at the surface by an acid, and the gold alone is visible ; when this superficial gold wears off, as it will in a short time, the tarnished articles may undergo the process of coloring a second time, by which the gold color is restored, and even a third time if the thickness of the article permits the action of the acid by which the restoration is effected, which is not always the case with such ornaments as chains, ear-rings, &c.

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#### TRIANGULAR FILES.

Triangular rolled steel began to be used for large three-square files a considerable time ago, the immediate cause of the change being as follows :—About that time lace machines began to be extensively introduced, for which three-square files, from fourteen to sixteen inches, were required, similar to the thirteen inch files, which had long been used in making stocking frames. Making these large three-square files was unpopular with the men ; the labor was much greater, they were less productive to the workmen than common work, and the unusual demand coming at a time when other work was abundant, the demand could not be met. Rolls were, therefore, turned for this particular work for the first time. The lower roll has grooves turned in it, forming two sides of an equilateral triangle ; and the third side is made by the plain roll which works over it. This altogether altered file making. Steel prepared in this manner made the thickest part of the file, which had been the hardest work, into the easiest, and the employers could get nothing else worked but three-square steel. Smaller styles were then introduced, and are now used universally for all but small sizes of saw files.

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#### AUSTRALIA NUGGET.

The largest nugget in the world was found June 11, 1858, in the claim of the Red Hill Company, property that belongs to a Mr. EDWARD KHULL, formerly a printer in Glasgow, but now a bullion dealer in Melbourne. The precise weight, as shown at the Bank of Australia, is 2,217 oz., 16 dwts., or 184 lbs., 9oz., 16 dwts., troy. The "Welcome" is 500 oz. heavier than the "Blanche Barkly," which was previously the largest nugget in existence. The Welcome has been assayed by a gentleman in London, who says it contains 99.20 per cent of pure gold, which makes it the purest mass of native gold on record. It has been placed on exhibition in several places for the benefit of benevolent associations, and was found to be a very handsome attraction.

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#### SOFT HATS.

An extensive branch of industry in Methuen, Massachusetts, is the manufacture of wool or Kossuth hats, of which about 450 dozen a day are made by six manufacturers. They begin with the raw wool, which passes through some ten or twelve processes, such as carding, steaming, coloring, &c., before the hat is ready for market. The two largest manufacturers make about 350,000 of these hats a year. In 1855, the number of hats got out in the town was 321,400, and the amount of capital employed, \$105,000. In the manufacture of this article, Methuen leads every other town in the New England States.

STATISTICS OF AGRICULTURE, &c.

AGRICULTURE IN IOWA.

The census of the State of Iowa for 1858, gives the following figures for the productions of that State :—

|                         | Aeres.  | Gallons              | Products.   |
|-------------------------|---------|----------------------|-------------|
| Sorghum .....           | 5,606½  | .....                | 416,774     |
| Orchards.....           | 23,310  | Bushels .....        | 118,306     |
| Hungarian grass.....    | 80,205  | Tons hay.....        | 114,036     |
| Meadow.....             | 172,362 | Tons hay.....        | 433,603     |
| Wheat, spring.....      | 750,719 | Grass seed .....     | 48,363      |
| Wheat, winter.....      | 29,190  | Grain, bushels ..... | 3,090,049   |
| Oats.....               | 315,372 | Grain, “ .....       | 203,204     |
| Corn.....               | 986,096 | Grain, “ .....       | 1,703,760   |
| Potatoes .....          | 34,021  | Grain, “ .....       | 23,366,684  |
|                         |         | Grain, “ .....       | 1,497,204   |
| Number hogs sold.....   |         | Quantity.            | Value.      |
| Number cattle sold..... |         | 337,261              | \$2,111,425 |
| Butter, pounds.....     |         | 141,146              | 2,950,187   |
| Cheese, “ .....         |         | 9,432,219            | .....       |
| Wool, “ .....           |         | 778,788              | .....       |
| Lead, “ .....           |         | 627,860              | .....       |
|                         |         | 5,000,113            | 63,124      |

GROWTH OF OPIUM IN CHINA.

There seems to be no ground for doubting any longer that the cultivation of the poppy is rapidly extending in China. A correspondent of the *North China Herald* states that opium is becoming the winter crop of several provinces, especially of Yunan, Honan, and Che-Keang, and that the growers are yearly bringing it to greater perfection. This year it can be used without a mixture of Bengal or Malwa, and the native drug already, we are told, supersedes Turkey and the inferior classes of Malwa. It is grown in a fine light soil on a slope, where the moisture can easily drain off. In cultivating the Chinese look more to quantity than quality, and, therefore, force the poppy till the heads are truly enormous. In April the juice is ready for gathering. On the head four delicate cuts upwards are made, leaving the wound covered by the overhanging skin, as a protection against the dews and heat. Early in the morning each wound is scraped by a piece of blunt bamboo, the juice being deposited in a hollow bamboo at the gatherer's side ; a process repeated every morning till the flow ceases. The juice has a very acrid taste, and at present is chiefly used for mixing with the dearer Patna and Malwa. ' A field of poppies standing on the hillside, seven feet high, and flaunting its gaudy blossoms in contrast with the rich green of the leaves and stalks, is, we may well believe, a beautiful sight. Pity it is that death lurks in every flower, and that the misdirected art of man contrives to develop its presence. Whether the home growth of the poppy will exercise an appreciable influence upon the demand for the Indian drug will depend upon the quality of the Chinese product. The opium trade is of far more moment to India than most persons imagine, and it is with unfeigned satisfaction that we recognize in the rapid growth of our general export trade the promise of our future independence of the opium duty for meeting our expenditure.

|                                                       | Points. | Hogs killed. |           | Aggregate weight. |             | Average weight. |           |
|-------------------------------------------------------|---------|--------------|-----------|-------------------|-------------|-----------------|-----------|
|                                                       |         | 1857-58.     | 1858-59.  | 1857-58.          | 1858-59.    | 1857-58.        | 1858-59.  |
| Ohio.....                                             | 78      | 615,139      | 609,212   | 127,254,347       | 116,711,223 | 206 14-16       | 191 9-16  |
| Indiana ..                                            | 71      | 456,470      | 392,782   | 93,295,569        | 73,075,388  | 204 6-16        | 186       |
| Kansas...                                             | 2       | none.        | 5,700     | none.             | 1,078,200   | none.           | 189 3-16  |
| Missouri..                                            | 23      | 175,644      | 145,046   | 36,152,948        | 26,551,489  | 205 13-16       | 183 1-16  |
| Tennessee.                                            | 6       | 42,801       | 69,405    | 9,186,075         | 14,762,055  | 214 10-16       | 212 11-16 |
| Wisconsin.                                            | 1       | 16,000       | 30,000    | 3,760,000         | 6,150,000   | 235             | 205       |
| Pennsylva.                                            | 1       | 16,000       | 15,000    | 3,376,000         | 2,940,000   | 211             | 196       |
| Virginia..                                            | 2       | 3,100        | 6,525     | 606,500           | 1,247,250   | 195 10-16       | 191 2-16  |
| Kentucky..                                            | 16      | 374,755      | 389,482   | 76,808,723        | 81,818,107  | 204 15-16       | 210 1-16  |
| Illinois...                                           | 66      | 466,280      | 571,543   | 104,364,430       | 109,412,365 | 223 13-16       | 191 7-16  |
| Iowa.....                                             | 34      | 122,354      | 167,894   | 25,101,981        | 29,893,224  | 205 2-16        | 178 1-16  |
| Total...                                              | 300     | 2,288,543    | 2,402,589 | 479,906,573       | 463,639,301 | .....           | .....     |
| General average weight in 1857-58.....                |         |              |           |                   |             |                 | 209 11-16 |
| “ “ “ 1858-59.....                                    |         |              |           |                   |             |                 | 193       |
| Excess of hogs in number in 1858-59 over 1857-58..... |         |              |           |                   |             |                 | 114,046   |

Excess of pounds weight of pork in 1857-58 over 1858-59, 16,267,272 pounds, or equal to 81,337 hogs of 200 pounds each.

#### HOW CORN IS PRESERVED IN RUSSIA.

At a late meeting of the Academy of Sciences, held in Paris, a letter from M. de SEMCHOFF, a Russian land holder, was read, describing the manner in which corn pits are made in that country. The pits are dug in a dry soil, and instead of masonry, the sides are hardened by a long-continued exposure to a wood fire. Before the corn is introduced, the air in the pit is rarified by burning some straw in it, after which the grain is thrown in, packed close, and the pit tightly enclosed. Corn has been preserved in such pits for forty years. Some of our western farmers, who raise large crops of wheat and corn, should try this method of preserving grain during years when there is a great yield, in order to lay up a store for seasons of an inferior yield.

#### WAGES OF FARM LABOR.

Some weeks since, says the New York *Tribune*, we published an inquiry made by a correspondent, as to what were the current rates of wages for farm laborers in different parts of the United States. He propounded ten questions, to which we have received many answers, and now embody enough of them in tabular form to give the desired information, as to the rate of wages common in various parts of the country. We repeat the ten questions, and give the answers by the respective numbers:—

1. Wages of a farm laborer per year.
2. Wages per month for eight months of the year.
3. Wages in sowing and planting time, per month.
4. Wages in sowing and planting time, per day.
5. Wages in haying and harvest time, per month.
6. Wages in haying and harvest time, per day.
7. Wages in time of fall work, per month.
8. Wages in time of fall work, per day.
9. Wages of winter work, per month.
10. Wages of winter work, per day.

The accuracy of the following rates is vouched for by the persons whose names follow each place:—

| Place.               | County.      | State.    | Vouchers.        | Wages   | Wages per | Wages in sowing |                 | Wages in haying    |                 | Wages in  |         | Wages     |         |
|----------------------|--------------|-----------|------------------|---------|-----------|-----------------|-----------------|--------------------|-----------------|-----------|---------|-----------|---------|
|                      |              |           |                  | of farm | 8 months  | Wages in sowing | Wages in haying | time of fall work, | of winter work, |           |         |           |         |
|                      |              |           |                  | laborer | year.     | per month.      | p. day.         | p. month.          | p. day.         | p. month. | p. day. | p. month. | p. day. |
|                      |              |           |                  | No. 1.  | No. 2.    | No. 3.          | No. 4.          | No. 5.             | No. 6.          | No. 7.    | No. 8.  | No. 9.    | No. 10. |
| Saco                 | York         | Maine     | J. Lord          | \$130   | \$12 a    | .. a            | \$0 75          | \$20 a             | \$1 25          | \$11 a    | \$0 66  | \$10 a    | \$0 50  |
| Dixfield             | Oxford       | Maine     | Henry W. Park    | 133     | 13 a      | \$15 a          | 0 83            | 15 a 26            | 1 25            | 12 a 15   | 0 75    | 8 a       | 0 50    |
| Acton                | York         | Maine     | P. C. G.         | 144     | 14 a      | 15 a            | 0 65            | 25 a               | 1 25            | 13 a      | 0 50    | 11 a      | 0 50    |
| Plainfield           | Sullivan     | N. Hamp.  | A. Merrill       | 160     | 16 a 18   | 17 a            | 0 92            | 28 a               | 1 34            | 14 a      | 0 87    | 12 a      | 0 75    |
| Cambridge            |              | Vermont   | E. P. Mudgett    | 150     | 15 a      | 18 a            | 0 83            | 24 a               | 1 25            | 14 a      | 0 75    | 12 a      | 0 50    |
| Peacham              | Caledonia    | Vermont   | A. L. Patridge   | 160     | 16 a      | 16 a            | 0 75            | 30 a               | 1 50            | 14 a      | 0 75    | 12 a      | 0 60    |
| North Brookfield     |              | Mass.     | O. W. Whitaker   | 150     | 16 a      | 18 a            | 0 83            | 30 a               | 1 00            | 15 a      | 0 83    | 10 a      | 0 67    |
| Massachusetts, east. |              |           |                  | 200     | 18½ a     | 21 a            | 1 00            | 30 a 45            | 1 25            | 18 a      | 1 00    | 13 a      | 0 83    |
| Low Hampton          | Washington   | N. York   | Norman Peck      | 156     | 16 a      | 13 a            | 0 75            | 20 a               | 1 25            | 14 a      | 0 75    | 10 a      | 0 63    |
| Southville           | St. Lawrence | N. York   | L. H. Wies       | 144     | .. a      | .. a            | 0 75            | .. a               | 1 00            | .. a      | 0 75    | .. a      | 0 60    |
| Otsego               | Otsego       | N. York   | LeGrand Brown    | 130     | 14 a      | 12 a            | 0 75            | 20 a 25            | 1 25            | 12 a      | 0 75    | 10 a 12   | 0 50    |
| De Ruyter            | Madison      | N. York   | N. R.            | 144     | 18 a      | 14 a            | 0 75            | 26 a               | 1 25            | 12 a      | 0 75    | 10 a      | 0 50    |
| Russia               | Herkimer     | N. York   | Lester L. King   | 140     | 14 a 15   | .. a            | 0 62½           | 22 a 30            | 1 25            | 10 a 15   | 0 62½   | 10 a 12   | 0 62½   |
| Cazenovia            |              | N. York   | S. H. S.         | 150     | 12½ a 16  | 14 a 18         | 0 75            | 25 a               | 1 25            | 12 a 15   | 0 62½   | 11 a 14   | 0 62½   |
| Springville          | Erie         | N. York   | Orrin S. Baker   | 132     | 13 a      | 12 a            | 0 75            | 22 a               | 1 25            | 10 a      | 0 75    | 8 a       | 0 62½   |
| Hings Settlement     | Chenango     | N. York   | Sidney Bowery    | 150     | 15 a      | 15 a            | 0 75            | 26 a 28            | 1 25            | 12 a      | 0 62½   | 10 a      | 0 50    |
| Onaugana             | Broome       | N. York   | Wm. Doolittle    | 150     | 15 a      | 14 a            | 0 75            | 25 a               | 1 12½           | 14 a      | 0 75    | 12 a      | 0 68    |
| North Stephentown    | Rensselaer   | N. York   | Solon H. Daboll  | 150     | 14 a      | 15 a            | 0 75            | 26 a               | 1 25            | 13 a      | 0 62½   | 10 a      | 0 62½   |
| Knox                 |              | N. York   | M. H. Barkley    | 132     | 12 a 14   | 10 a 12         | 0 75            | 20 a               | 1 00            | 10 a 14   | 0 62½   | 6 a 8     | 0 50    |
| Salem                |              | N. Jersey | Thomas Shourds   | 130     | 12 a 14   | 12 a            | 0 75            | 16 a               | 1 00            | 11 a      | 0 75    | 9 a       | 0 50    |
| Branchville          |              | N. Jersey | J. H. Williamson | 125     | 10 a 15   | 12 a 18         | 0 75            | 18 a 25            | 0 75            | 12 a      | 0 62½   | 8 a 13    | 0 62½   |
| Rhoresburg           | Columbia     | Penn      | John Staley      | 120     | 10 a 15   | 12 a 14         | 0 50            | 20 a 25            | 0 75            | .. a      | .. a    | .. a      | .. a    |
| Boalsburg            | Centre       | Penn      | Adam Hess        | 108     | 10 a      | 10 a            | 0 50            | 16 a               | 0 75            | 8 a       | 0 50    | 6 a       | 0 50    |
| Fayette              | Alleghany    | Penn      | C. Y. M.         | 120     | 11 a      | 12 a            | 0 50            | 22 a 25            | 1 25            | 10 a      | 0 50    | 8 a       | 0 50    |
| Guilford             |              | Ohio      | J. A. Clark      | 118     | 12 a      | 13 a            | 0 56            | 20 a               | 1 00            | 11 a      | 0 50    | 10 a      | 0 50    |
| North Bloomfield     |              | Ohio      | "A young farmer" | 150     | 13 a      | 15 a            | 0 75            | 22 a               | 1 25            | 14 a      | 0 75    | 10 a      | 0 50    |
| Marseilles           | Wyandot      | Ohio      | S. H. White      | 150     | 14 a 15   | 14 a 15         | 0 75            | 18 a 22            | 1 00            | 13 a 14   | 0 75    | 11 a 12   | 0 50    |
| Cold Water           | Branch       | Michigan  | Cyrus G. Luce    | 144     | 13½ a     | 13 a            | 0 75            | 18 a               | 1 38            | 12 a      | 0 75    | 10 a      | 0 50    |
| Lincoln              | Logan        | Illinois  | Sam. P. Boardman | 175     | 13 a 18   | .. a            | 1 00            | 20 a 25            | 1 25            | 13 a 18   | 0 75    | 12 a 15   | ..      |
| Bowers Prairie       | Jones        | Iowa      | J. Z. S.         | ..      | .. a      | 15 a            | 0 50            | .. a               | 1 25            | .. a      | 0 50    | .. a      | 0 50    |
| Athens               |              | Tenn.     | slave labor      | 120     | .. a      | 10 a            | 0 40            | .. a               | 1 00            | .. a      | 0 40    | .. a      | 0 40    |

In addition to the foregoing, we have a variety of other information, given in connection with the rate of wages, by the writers of several of the letters. For instance, Mr. LORD, of Saco, Maine, says:—

The average size of farms here is about 75 acres, ranging from 30 to 200 acres. Few farmers hire in the winter season; indeed, most of them are willing to hire out themselves. Most mechanics, shoemakers, &c., own more or less land, and all are obliged to turn their hands to any and every thing. But few men live in this State by pursuing a single avocation. True, some few in the vicinity of the largest towns can live by farming alone; but through the country men pursue a sort of mixed husbandry, and in winter engage in logging, milling, teaming, &c.

Mr. PARK, of Dixfield, Maine, says:—

I can hire men to work for me by the day in the winter for 50 cents, to chop in the woods or at the door, that would ask and command for wages in haying, \$1 50.

Mr. MERRILL, of Plainfield, New Hampshire, near the Connecticut River, says:—

Wages are 67 per cent higher than in 1825. (nominally at least.) The best land in the Connecticut Valley has more than doubled in value in the last thirty years. Good land, well tilled, has risen 30 per cent, or 1 per cent per year. That of middling quality has kept stationary. The poorer lands have fallen in price.

Mr. BROWN, of Otsego, New York, says:—

The farmers in this section of the country are mostly dairymen, and the greater number who hire at all, do so only through the season of milking. The rate of wages in harvest depends upon which party takes the risk of weather.

Mr. SHOURDS, of Salem, New Jersey, says:—

If day-laborers board themselves, they get twenty-five cents a day added to wages.

We remark that in all cases the rate of wages given includes board in the farmer's family. Some of the writers mention that day-laborers generally take the risk of weather, and month and year laborers do not.

Mr. BOARDMAN, of Lincoln, Illinois, says:—

The general practice in Central Illinois is to hire about the 1st of April for the "crop (corn) season," or until after harvest, which includes wheat, oats, hay, &c. Corn-cutting is nearly all done by the shock. We pay from 7 to 10 cents a shock for putting up shocks from 44 to 46 hills square—shocks not tied—at which work hands make from \$1 25 to \$2 per day. A great share of the corn planting in this State is now done with two-horse planters, which plant two rows at once, and are managed by two hands, both riding on the machine, one driving, the other operating the dropping. The past season, hands were hired through the corn-crop for from \$13 to \$18 per month; and at from \$15 to \$18 through harvest. Until last season I have paid first-rate hands \$20 per month through the summer, and as high as \$25 and \$30 for feeding in the winter. Feeding includes Sundays, and all weather. By the team "feeding" is understood, in this State, hauling out shock-corn for 100 to 150 cattle, or 1,000 to 1,700 sheep. This is paid for at from \$25 to \$30 a month. Sheep-shearing also is done altogether by the head, which work pays the best wages of anything on a farm. We pay five cents per head, at which price I have paid men \$3 per day.

Our Athens, Tennessee, correspondent says:—

In this section of country, embracing Western North Carolina, Northern

Georgia, and East Tennessee, slaves only are hired by the year, and they are very seldom hired for any shorter period; good men for \$120 to \$130, women cooks from \$60 to \$90 cash; and this is the only labor that commands money. The above rates are paid over all charges for good clothes, taxes, physicians' charges, and loss of time during sickness. The usual season for letting such property is just after the Christmas holidays. White labor does not run so long as the year, but generally during the crop, embracing four or five months, from March or April. This sort of labor for a good hand is worth \$10 per month. The next demand for work is in harvest, when a good able man can get from \$1 to \$1 25 to cradle; binders get from 60 cents to 80 cents per day. Day labor at all other times, except in harvest, is worth from 40 cents to 50 cents per day, except for work done upon the roads, and that is worth 25 cents per day. We have very little work to do here in winter but making rails and working the roads. The former sort of work is usually done by contract, at the rate of 40 to 50 cents per 100. All our white labor is for the most part paid in corn at 50 cents per bushel, and bacon at 12½ cents, which are the ordinary prices. However, we have corn, as year before last, worth \$1 50, and bacon 25 to 30 cents per pound. We call such times hard years. A large portion of our population come under the description of "poor folks," and, as they are forced to labor for small wages, they work just as much as will provide a scanty "daily bread." White labor very seldom is paid in cash, but in the staples of corn and meat. We have no grass here. Our stock is fed on the blades of corn stripped off and cured. This is put up in small bundles and called fodder. We have no fall work. The corn crop is gathered as is convenient during the fall and winter.

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#### HARVEST IN FRANCE.

As was the case in England, the harvest in France occurred this year from a fortnight to three weeks earlier than usual, but the unprecedented scarcity of hands prevented the farmers from beginning as early as they could have wished. It has been a practice of the French Government, through the Minister of War, to authorize the generals commanding in the several departments to place a certain number of the troops at the disposal of the farmers who may require them. This year, owing to the war in Italy, and the threatening appearance of things in Germany, they were deprived of this resource until the harvest was nearly finished.

Another means, however, was afforded for relieving the labor market, to a certain extent, in the large number of Austrian prisoners, who, by an official decree of the date of the 6th of May, authorized the police to cause these men to be employed in agricultural and manufacturing employments, under certain regulations, obligatory both upon the farmers and the employed; securing to the latter a supply of the necessities of life, but also effectually preventing them from making their escape. It also fixes their pay, in addition to their board, at not less than 40 centimes (4d. English) per day.

Still, notwithstanding this new resource, the harvest dragged on heavily, and a great deal of the corn was shelled and lost for want of being cut in proper time. In addition to this, the storms had been heavy and general, and the corn was lodged in every direction, making the cutting still more difficult and tedious; whilst the excessive heat and the burning sun had prematurely ripened the grain, and thus deteriorated the quality, as well as lessened the yield. The bulk of the wheat, in the number of sheaves, was larger than usual; but they were found to be light in hand, and far from promising an average yield; and the apprehen-

sions entertained were confirmed by the test of the flail or threshing machine in several districts. In Saone-et-Loire, l'Aisne, and l'Oise, it was found, on threshing, that the deficiency amounted to one-third of the average, whilst the grain itself showed a marked inferiority in quality to that of the average of years, owing to the two causes we have mentioned above; and this applies as well to the north as to the south of France, the three departments we have named belonging to the north. The south, however, was, if anything, in a worse condition still, the drought and heat having been much more severe there. The lightness of the grain will reduce the quantity of flour produced from it at least by four pounds per bushel, which upon the average crop of France (25,000,000 quarters) amounts to nearly 1,700,000 sacks of flour. The deficiency in the crop of wheat, if it amounts to one-third, (8,333,333 quarters,) is a more serious affair.

In a letter addressed to the *Journal of Practical Agriculture*, (French,) by M. LEONCE DE LAVERGNE, on "Good and Bad Harvests," the writer gives the following statement of the wheat crops in France in twelve years:—

|           | Hectolitres. | Quarters.  |              | Hectolitres. | Quarters.  |
|-----------|--------------|------------|--------------|--------------|------------|
| 1846..... | 60,000,000   | 20,634,000 | 1853.....    | 63,000,000   | 21,665,700 |
| 1847..... | 97,000,000   | 33,358,300 | 1854.....    | 97,000,000   | 33,369,212 |
| 1848..... | 88,000,000   | 30,263,200 | 1855.....    | 78,000,000   | 25,104,700 |
| 1849..... | 90,000,000   | 30,951,000 | 1856.....    | 85,000,000   | 29,231,500 |
| 1850..... | 88,000,000   | 30,263,200 | 1857.....    | 110,000,000  | 37,829,000 |
| 1851..... | 86,000,000   | 29,575,400 |              |              |            |
| 1852..... | 86,000,000   | 29,575,400 | Average..... |              | 29,318,384 |

This gives an average of nearly thirty million quarters of wheat per annum; but it is probably exaggerated, as most of such estimates are. What the writer endeavors to impress on the public mind is the enormous difference between a good and a bad harvest—the latter still more aggravated by the necessity of abstracting from it the same quantity of seed wheat for the ensuing crop as from the former. This he estimates at thirteen million hectolitres, or 4,470,700 quarters. The deficient harvests of 1853 and 1855 produced a scarcity, amounting to a famine, in the south and center of France, and this was hardly made up by the superabundance of the crop of 1857, which, when the seed wheat was deducted from each crop, was nearly double that of 1853, as thus:—

|           |                   |           |                   |
|-----------|-------------------|-----------|-------------------|
| 1853..... | 63,000,000        | 1857..... | 110,000,000       |
| Seed..... | 13,000,000        | Seed..... | 13,000,000        |
|           | <u>50,000,000</u> |           | <u>97,000,000</u> |

It was chiefly owing, however, to a large increase of wheat culture that the crop of 1857 proved so much greater than the average. This was stimulated by the previous high price, and it was said to have amounted to 283,000 hectares, (936,000 acres.) Still the yield that year was unprecedentedly large, and followed as it was by a full average in 1858, has left a large surplus on hand, which will probably prevent prices from rising in that country to any considerable extent until the spring of next year, when the deficiency of the late crop will begin to be felt.

#### THE LARGEST CARGO OF SUGAR EVER SHIPPED.

The French ship *Grand Pacifique*, of Bordeaux, measuring 1,920 tons, belonging to the *Compagnie Generale Maritime*, cleared at Havana, 28th July, for Havre, with 12,763 boxes of sugar, equal to 2,550 tons, and 1,778,000 cigars.

STATISTICS OF POPULATION, &c.

CENSUS OF IOWA IN 1858.

Iowa has just completed a State census, showing a population of 633,549. This is a considerable increase on former enumerations, a comparison with which shows the following result :—

| Years.     | Whites. |          |         | Free colored. |          |        |
|------------|---------|----------|---------|---------------|----------|--------|
|            | Males.  | Females. | Total.  | Males.        | Females. | Total. |
| 1840 ..... | 24,256  | 18,668   | 42,924  | 93            | 79       | 172    |
| 1850 ..... | 100,887 | 90,994   | 191,881 | 165           | 168      | 333    |
| 1852 ..... | 118,769 | 109,004  | 227,773 | ...           | ...      | ...    |
| 1854 ..... | 170,302 | 154,900  | 325,202 | 258           | 222      | 480    |
| 1856 ..... | 274,012 | 235,402  | 509,413 | ...           | ...      | 274    |
| 1858 ..... | 332,806 | 300,743  | 633,549 | ...           | ...      | ...    |

She has thus more than doubled her population in the last nine years, and increased it about fifteen fold in nineteen years. She will probably have nearly or quite 700,000 in 1860. The following are the most important aggregates attained by the new State census :—

|                                  |           |                              |            |
|----------------------------------|-----------|------------------------------|------------|
| Total population.....            | 633,549   | Acres of improved land.....  | 3,109,436  |
| Males .....                      | 332,806   | Acres unimproved .....       | *7,335,657 |
| Females .....                    | 300,743   | Miles of railroad .....      | 390        |
| Legal voters .....               | 136,457   | Miles partly built.....      | 310        |
| Value of hogs sold in 1858... \$ | 2,111,425 | Bushels of wheat in 1858...  | 3,293,253  |
| Value of cattle.....             | 2,960,187 | Bushels of Indian corn ..... | 23,366,634 |
| Value of manufactures.....       | 4,444,200 | Bushels of oats.....         | 1,703,760  |

It is noticeable that the wheat crop of last year was hardly more than four bushels to the acre, and the oat crop less than six bushels; but that was a most disastrous season. The corn crop was about twenty-four bushels to the acre; the hay crop was over two tons per acre.

CAUSES OF ENGLISH MORTALITY.

The question of relative mortality and its causes is a matter of much importance commercially as well as medically; and we draw from Dr. FARR on diseases the following remarks :—

In 1857, 90,414 persons died of zymotic diseases, in the ratio of 22 in every 100. Nearly 4,000 patients succumbed to small-pox, being an increase of 1,659 upon those of the previous year. Whooping cough destroyed 10,138 children. Scarlet fever carried off 13,831. Of croup 53 males and 35 females died. Diarrhœa was fatal to 21,189, dysentery to 1,698, and cholera to 1,150. Of 1,576 deaths ranged under erysipelas, 69 died of phlebitis, 1 of "hospital" gangrene, 2 of necrosis, (dissection wound.) 3 of glanders, 13 of erythema, *one* (italicised by Dr. FARR) of irritation from a blister, and 9 from porrigo, leaving 1,478 fatal cases of erysipelas proper; 18,249 died of typhus fever only; 3 persons died of hydrophobia; in 1856 the deaths from this cause were 5; 1855, as many as 14; in previous years it had even reached 25; 84,458 deaths were caused by "constitutional" diseases—at the rate of 20 in 100, or 1 in 5; 65,762 of these deaths were from tubercular diseases, and 18,696 from diseases "of uncertain and variable seat;" 158,899 deaths were from "local" diseases; (52,103 from cerebral,

\* Probably confined to lands which have become private property, so as to be taxable.

14,784 from cardiac, &c.; 58,320 from pulmonary, 23,532 from alvine or gastric, and 3,072 from diseases of the generative organs.) Nephria (Bright's disease) is killing double the number of patients as compared with the rate of seven years ago; 1,035 persons, chiefly children, died from diseases of growth; 26,847 deaths, or 65 in every 1,000, were referred to the incurable disease—if disease it be—called "old age;" 15,027 were "violent" deaths; deaths by cold were only 45, against 195 in 1855; 428 deaths were referred to "poison," properly so called; 2,807 to drowning, (exclusive of cases at sea;) 1,402 to hanging or suffocation; 605 to wounds; and 5,338 to fractures and contusions from all sorts of mechanical hurts. On an average 57,582 persons died in London annually during the five years 1849–53, whereas the deaths should not, at rates of mortality then prevailing in certain districts of England, have exceeded 36,179; consequently, 21,403 unnatural deaths took place every year in London. It will be the office of the Boards of Works to reduce this dreadful sacrifice of life to the lowest point, and thus to deserve well of their country. In Liverpool, by the same method, it is found that 6,418 lives were lost in the year 1857, in excess of the deaths at the healthy rates. In Manchester the sickness and mortality are also excessive.

#### COOLY EMIGRANT TRADE.

An Havana correspondent forwards a list of the vessels which brought Asiatic colonists to the island of Cuba, from the first importation in 1847, to the 16th of September, 1859, showing the ports from whence they were taken, the length of each passage made, number shipped, and the mortality up to the moment of landing. The following is a summary:—

AVERAGE OF VESSELS AND EMIGRANTS.

| Years.     | No. of vessels. | Tonnage. | —Chinese.— |         | Died.     | Loss per 100. |
|------------|-----------------|----------|------------|---------|-----------|---------------|
|            |                 |          | Shipped.   | Landed. |           |               |
| 1847.....  | 2               | 979      | 612        | 571     | 41        | 6.70          |
| 1852.....  | 15              | 8,349    | 5,150      | 4,307   | 843       | 16.37         |
| 1854.....  | 4               | 2,375    | 1,750      | 1,711   | 39        | 2.23          |
| 1855.....  | 6               | 6,544    | 3,130      | 2,985   | 145       | 4.63½         |
| 1856.....  | 15              | 10,567   | 6,152      | 4,968   | 1,184     | 19.24½        |
| 1857.....  | 28              | 18,310   | 10,116     | 8,547   | 1,509     | 15.51         |
| 1858.....  | 33              | 32,800   | 16,413     | 13,385  | 3,029     | 18.45         |
| 1859.....  | 13              | 10,283   | 6,799      | 6,027   | 772       | 11.35½        |
| Total..... | 116             | 90,216   | 50,123     | 42,501  | 7,622 av. | 15.20         |

The above footing, representing the total number shipped, does not include a cargo of 757 landed in Cuba lately, so that the total should be increased to 50,880; and 220 more should be added to the mortality. The total number of deaths, therefore, during the period named, was 7,842. This is a fearful record, and affords sufficient evidence of the inhumanity of the traffic.

#### DURATION OF LIFE IN THE PURSUITS OF LITERATURE AND ART.

We find in the *Journal of the Statistical Society*, edited by WILLIAM NEWMARCH, Esq., so well known as the joint author with the late THOMAS TOOKE in his work upon prices, a valuable paper upon the effect of professions upon the duration of life. From this we extract the following results:—

It now only remains that I should compare the two classes of independent and professional persons with each other, so as, if possible, to arrive at some general principles of practical application to the business of life. For this purpose it will be convenient to consider the English gentry as an intermediate class between the aristocracy and the professions, leaving kings and members of royal houses out of the comparison. The following figures represent the average age

at death of all members of these classes who have passed their thirtieth year; all the figures being taken from the "Annual Register" for the same period of time:—

|                           |       |                                 |       |
|---------------------------|-------|---------------------------------|-------|
| English aristocracy.....  | 67.31 | Officers of the army and navy.  | 67.59 |
| English gentry .....      | 70.22 | English literature and science. | 67.55 |
| Learned professions ..... | 68.86 | The fine arts .....             | 65.96 |
| Trade and commerce .....  | 68.74 |                                 |       |

The mixed class of the English gentry, occupying, as they do, an intermediate position between the aristocracy and the professions, largely devoted to healthy rural pursuits and manly English sports, recruited from the most energetic and successful of the professional and industrial classes, more occupied than the aristocracy, less anxious than the professions, less ambitious than the votaries of literature, science, and art, is distinguished from the classes above and below it by a more favorable duration of life. The aristocracy, more luxurious and less generally occupied, pays for its perilous advantages of social position with some few years of life, occupying an intermediate place between the mixed cultivators of literature and science and the short-lived devotees of art. This unfavorable position of the aristocracy would seem to be dependent, not on any inherent weakness of constitution. (for statesmen, who are for the most part members of that class, attain to a very favorable duration of life,) but to that cause which CELSUS, nearly 2,000 years ago, pointed out as the parent of a large family of diseases unknown to less artificial modes of existence—luxury. This serious evil, which it is not less the interest of the aristocracy itself than of the nation at large to see abated, can only be counteracted by maintaining, and, if possible, increasing the avenues to suitable occupation which the political constitution and social habits of this country provide. The curtailment, in the case of so important and influential a class of existing opportunities of employment, and of existing stimulants to an honorable ambition, would be an evil for which the most promising theoretical improvements in the constitution of the country might prove but a sorry compensation.

CAUSES OF THE DECREASE OF POPULATION IN TURKEY.

We gather from Mr. SENIOR's *Travels in Turkey*, the following interesting facts:—

The decrease of the Turkish population is accounted for on several grounds—partly by the unhealthy lives and criminal practices of the Turkish women; partly by the early marriages, so common, and so productive of degeneration among all Orientals; partly by the notorious neglect of female children, and the excessive and ever-increasing severity with which the conscription falls upon the males. Economical causes have also an equally important, though a more indirect, effect. The Turks have an acquisitive organ, but they are not by nature producers. As Mr. SENIOR concisely puts it, they have now lived upon their capital for three hundred years, and it is all but exhausted. They have come once more to the point where the pair of spurs is the only remaining entertainment to be placed on the board; and the spur, as a token of national policy, grows daily more out of date. Unless they turn their Damascus blades into reaping-hooks and plow-shares, the decrease of their population will, in the language of economists, continue to follow by a fixed law the exhaustion of their capital.

CENSUS OF NEW ZEALAND.

The total population in 1858 was, males, 35,043; females, 26,156; total, 61,199. The total number of acres held by Europeans, fenced and cropped, was 235,541. The stock was as follows:—Horses, 14,112; cattle, 137,204; sheep, 1,523,324; goats, 11,797; pigs, 40,734. The population in 1851 was only 26,707. The centesimal increase is 121.36. The increase of stock and crops has been on a still larger scale.

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## MERCANTILE MISCELLANIES.

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### COFFEE AND ITS ADULTERATIONS.

The coffee plant is a small evergreen tree, with dark glossy foliage, and bearing as a fruit clusters of berries, whose seeds constitute the coffee of commerce. These seeds, commonly but incorrectly called berries, are the only part of the plant in use among ourselves, but in those parts of the East Indies where coffee is grown, viz., in Sumatra and other islands of the Eastern Archipelago, its leaf is roasted after the manner of the tea leaf, and an infusion made from it which is said to be better liked, or, at all events, to be more consumed by the natives than that made from the seeds.

Although we might expect that the imitation of the whole or unground coffee would be a matter of much difficulty, yet it has been practiced, and machines are said to have been devised and used for pressing fragments of chicory into the shape of coffee seeds; but it is the selling of coffee ready roasted and ground that has most widely opened the door to adulteration. Various substances, such as roasted wheat, rye, and barley, peas and beans, carrots and acorns, tan bark, and what may seem at first sight to be a singular sophistication, "baked horse livers," being reduced to coarse powder and mixed with the coffee in various proportions, or entirely substituted for it. Of all adulterations, however, that with chicory or the root of the wild endive, a plant allied to the dandelion, is the most extensively practiced, owing to the fact that chicory, after being roasted, gives, with water, a dark-colored, bitterish, not unpleasantly tasted infusion, which somewhat resembles coffee, and which in Germany and elsewhere is used as a cheap substitute for it.

Dr. HASSEL, of London, whose examinations of adulterations are the best and most extensive that have ever been made, found that of thirty-four samples of coffee sold in the shops of that city, under various high sounding names implying articles of superior quality, thirty-one were adulterated, sixteen of the cases of adulteration being with chicory alone, and fifteen with a mixture of chicory and roasted wheat, beans, potatoes, and similar farinaceous vegetables.

Genuine coffee, even when roasted and ground, can be distinguished in various ways. A simple examination, without the aid of scientific appliances, will do a good deal, for when coffee is thrown into cold water it does not imbibe the water readily, nor sink in it, but, floating for the most part on the surface, remains hard, and does not communicate its color to the water for some time, differing in these respects from all its usual adulterations.

Chemically speaking, coffee is distinguished by containing but little starch or sugar, two bodies whose aggregate amount may be determined without much difficulty; and the ashes of coffee are characterized by the almost complete absence of silica from them. But although these tests would detect with tolerable ease and certainty the presence of any large amount of the usual adulterations of coffee, yet they are still inferior in quickness and satisfactoriness to that of microscopical examination.

Under the microscope the appearances presented by coffee are quite simple. It is seen to consist mainly of small irregular-shaped cells, well separated from each other by the cell walls and inter-cellular substance, and having in and

around them globules of oil, which latter disappear, however, upon roasting, partly by volatilization, partly by a more intimate diffusion into the neighboring mass. Mixed with these are the fragments of the investing membrane of the seeds, and these present two kinds of structure, one of thin, fibrous-looking pieces, and the other of long, somewhat boat-shaped cells, with numerous obliquely arranged dottings or marks similar to those seen on the so called spiral or dotted vessels of plants, which vessels, however, are too unmistakably tubes or cylinders to be mistaken for the cells of the coffee membrane.

The microscopic objects chiefly to be looked for in adulterating coffee are the dotted vessels and the large nucleated cells of chicory, and starch granules from wheat, peas, acorns, or whatever other farinaceous substances may have been fraudulently added.

#### AN ENORMOUS HAUL OF MACKEREL.

In Mr. COZZENS' entertaining "Arcadia, or a Month with the Blue Noses," we find the following sketch of a mackerel haul:—

Breakfast being over, the fog lightened a little. Our tiny horizon widened its boundaries a few hundred feet, or so; we could see once more the topmast of the schooner. So we lazily swung along, with nothing to do again. Sometimes a distant fog-bell; sometimes a distant sound across the face of the deep, like the falling of cataract waters. "What is that sound, BRUCE?" "It's the surf breakin' on the rocks," responds BRUCE; "I hae been listenin to it for hours." "Are we, then, so near shore?" "About three miles aff," replies the mate. Presently we heard the sound of human voices; a laugh; the stroke of oars in the row-locks, plainly distinguishable in the mysterious vapor. The captain hailed:—"Hallo!" "Hallo!" echoes in answer. The strokes of the oars are louder and quicker; they are approaching us, but where? "Hallo!" comes again out of the mist. And again the captain shouts in reply. Then a white phantom boat, thin, vapory, unsubstantial, now seen, now lost again, appears on the skirts of our horizon. "Where are we?" asks the captain. "Off St. Esprit," answer the boatmen. "What are you after?" asks the captain. "Looking for our nets," is the reply; and once more boat and boatmen disappear in the luminous vapor. These are mackerel fishermen; their nets are adrift from their stone-anchors; the fish are used for bait in the cod-fisheries, as well as for salting down. If we could but come across the nets, what a rare treat we might have at dinner? Lazily on we glide—nothing to do. PICRON is reading a stunning book; the captain, his lady, the baby, and I making a small family-circle around the wheel; the mate is on the lookout over the bows; all at once he shouts out, "there they are! the nets!" Down goes PICRON's book on the deck; BRUCE catches up a rope and fastens it to a large iron hook; the sailors run to the side of the vessel; captain releases his forefinger from baby's hand, and catches the wheel; all is excitement in a moment. "Starboard!" shouts the mate, as the nets come sweeping on, directly in front of the cutwater. The schooner obeys the wheel, sheers off, and now, as the floats come along sidewise, BRUCE has dropped his hook in the mesh—it takes hold, and the heavy mass is partially raised up in the water. "Thousands of them," says PICRON; sure enough, the whole net is alive with mackerel, splashing, quivering, glistening. "Catch hold here, I canna hold them; O the beauties!" says the mate. Some grasp at the rope, others look around for another hook. "Hauld 'em! hauld 'em!" shouts BRUCE; but the weighty piscatorial mass is too much for us, it will drag us desperately along the deck to the stern of the vessel. The schooner is going slowly, but still she is going. Another hook is rigged and thrown at the struggling mesh; but it breaks loose, the mackerel are dragging behind the rudder; we are at our rope's end. At last, rope, hook, and nets, are abandoned, and again we have nothing to do.

## FEMALE LABOR.

Female labor, its sphere and inadequate reward, has of late years occupied largely the attention of the wise and the humane. At a recent opening of the St. Nicholas Schools, Nottingham, the Bishop of London made some practical remarks, the application of which will be felt on this side of the water with as much force as in England, and we extract :—

I was told by my late lamented and reverend friend, Bishop ARMSTRONG, of Graham's Town, and he had every right to speak on such a subject, from the time and labor he bestowed on the establishment of penitentiaries, that, so far as he could judge from his experience, more than one-half of the class for whose reformation he was concerned, had been brought to the state in which they were, not so much by vice and passion, as by destitution. I remember that, some time ago, a society was formed in London for the purpose of endeavoring to meet these evils by procuring higher wages for the women who were working there. It did not succeed, and, of course, it never could have succeeded; and it is well worth while to consider what are the reasons for this state of things, and where, as I believe, the remedy lies. Why are not women employed in haberdashers' and other shops more generally than they are? One reason given is that they are not strong enough to move the heavy goods: but, if that is all, the difficulty can be easily met by employing one or two men for that particular purpose. But the only real correct reason, in my opinion is, that very few of them can add correctly a bill of parcels, or can do the summing necessary without making constant mistakes, and, therefore, shopkeepers will not employ them. The remedy for this lies in their better education in our schools. I must say it is no natural defect. I know in mixed schools, where boys and girls are taught together, especially in the matter of mental arithmetic, the girls beat the boys out and out. (Laughter and cheers.) The only reason, as I can see, why women should not be more generally employed in these shops in the greater part of England is, either they do not stay long enough in the schools, or that the schools do not sufficiently fit them for the employment they get there. Well, then, take the case of the needlewomen—of the needlewomen, who, as I said before, are starving on 4d. a day. The real explanation of this sad fact is, to put it in technical language, that there is a glut of unskilled labor in that particular branch. London is full, as I dare say most large towns are, of women who want plain needlework. Now, plain needlework is very often another term for bad needlework. They want such needlework as no careful, thrifty members of a family would put out, because they can get it done by their own servants. No first-class shopkeepers require it. Such work, therefore, is limited to what are called in London slop-shops, which are kept by those who sell very cheap goods of very inferior workmanship. That there is no lack of employment for really good needlewomen I know. In my own parish there were many shops where they dealt in boys' clothing, shirts, and articles of that kind, belonging to men of capital and respectability, who took great care of the women that worked for them, provided rooms for them, and paid them good wages. I have been told by them that they would be very glad to give employment to as many needlewomen as I could send them, if they could do their work. There were hundreds of applicants; but they were unable to employ them, as they could not do their work properly. The fact is, there are a greater number who cannot do work of that sort than of good needlewomen, the consequence being there is a competition amongst the former for such work as they can do. This kind of work is given out by middle-men, who are very often poor, and they are naturally enough tempted to get as much work as they can for the money they have at their disposal, and so wages fall and fall, and you have a numerous class of starving women, because they are not able to use skilled labor. Well, then, a remedy for this great evil we must look for, not in societies—they can do very little—nor can you interfere with wages by legislation, but it must be in our schools—in teaching the scholars to do such needlework as will always command a good price.

## SELF-RELIANCE.

Our cotemporary of the Baltimore *Prices Current* remarks on this important virtue as follows :—

We have always liked that principle—it has the ring of the true metal about it! Many a man falls by the way side, in the struggle for place or wealth, because, unfortunately, he never learned to depend upon himself—his friends forsook him—his best laid plans went wrong—the rapid accumulations of a few successful years in the outset of his career, soon vanished and were no more—and, alas! he is at once undone. Look now at him, and you see no longer the smile of buoyant hope upon his brow—the elastic step of invincible fortune no more is his—his face is overcast by a settled despondency—his air reminds you of the suppliant, so different from the former man of power and influence—he halts in his speech—he seems in constant fear of being mistaken in the opinion he wishes to express—a mere child can often turn him aside from his purpose—ah, me! what a falling off is there!

But, young man, let not this be *your* fate. We would have you learn the proverb of the printer's boy, whose fame can never die—you have doubtless read it before, but now we wish you to ponder it and practice the truth it suggests :—

“God helps those who help themselves.”

Why, did you never reflect or observe how much a single individual could accomplish by self-reliance and a due share of concentrated effort? And you may do all that we predict you can, without your being a foolish fatalist either. We say this, because we wish here to refer you to a very notable case in point—we mean LOUIS NAPOLEON. See what that single man has done by self-reliance! How many of our most distinguished members of Congress, do you suppose, would have reached there had they never believed themselves possessed of sufficient ability to grace such a position? Look at the case of that most remarkable man, JOHN C. CALHOUN. If you have ever read his life, you will remember an anecdote something like this :—Whilst at college he was noted for severe application to study—his fellow students were disposed to make light of him on account of it. “Why, sir,” he would say, “I am forced to make the most of my time, in order to be able to acquit myself creditably when in Congress.” This created a laugh, that a mere college boy should talk so confidently of going to Congress. “Do you doubt it?” he at last exclaimed, “I assure you, if I were not convinced of my ability to reach the national capitol in that capacity within the next three years, I would leave college this very day!” There was self-reliance for you! The broad scope of his intellect,

—“The pleasing hope, the fond desire,  
The longing after immortality,”

the lofty aspirations of his great soul, all combined to urge him forward to the arena wherein he felt himself destined to become “proudly eminent.”

Let us be more explicit. Do you desire to undertake any important enterprise? Depend upon it, no friend is so likely to secure its proper management and ultimate success as yourself; and if you never have been obliged to rely upon yourself before, sink a shaft into your mine of reflection—think out the necessary ways and means—when one plan is likely to prove inadequate, try another—do not despair, for as the idea originated with yourself, therefore you are the very man, above all others, to carry it out. Should you fail in business—*honestly* fail—do not despond for a moment—no one was ever put forward a single hair's breadth by desponding—you are no less in intellect, but wiser from experience—your best friend is still yourself—and if you began the world with firm and steady self-reliance, now at least you know your strength—it will not fail you because you have been unfortunate.

It is impossible that all men should succeed—but no man is so likely to rise superior to circumstances as he who never loses confidence in his own unaided abilities—he is the hero of the most brilliant of victories—defeated sometimes, 'tis true, but in the main, and finally, triumphant—his defeats are but temporary repulses—his successes eclipse all his failures with the splendor of a Thermopylæ or a Waterloo.

## PARISIAN AUCTIONS—HOW THEY ARE CONDUCTED.

JAMES BROOKS, Esq., the senior editor of the New York *Express*, is now on the European continent, where he has been for several months past, and by every steamer sends a very interesting letter to his paper. The following, under date of Paris, March 17, will be found quite readable :—

The French mode of conducting sales by auction is curious. It is a complete system, differing essentially from any I have ever seen elsewhere. Despite their reputation for irregularity and frivolity, the French, in matters of business, are as methodical and careful as their neighbors on the other side of the channel, or the former allies on the other side of the Atlantic. Everything in which trade plays a part is done upon fixed and immutable principles, and of all their systems, that of auctions is one of the most remarkable, both for its extreme simplicity, as well as its perfection.

In sales of importance, such as of land, houses, or other transactions, involving large sums of money, the affair is placed in the hands of a notary, who, for the time being becomes an auctioneer. The property, whatever be its nature, is usually first examined by competent judges, who fix upon it a price, considerably less than its value, but always sufficient to prevent any ruinous loss by a concerted plan or combination of bidders. The property is then offered, conformably to previous notice, with this fixed valuation stated. The notary-auctioneer is provided with a number of small wax-tapers, each capable of burning three or five minutes. As soon as a bid is made, one of these tapers is placed in view of all the interested parties and lighted. If, before it expires, another bid is offered, it is immediately extinguished and a fresh taper placed in its stead, and so on, until one flickers and dies of itself, when the last bid becomes irrevocable. This simple plan prevents all contestation among rival bidders, and affords each a reasonable time for reflection before making a higher offer than that of his predecessor. By this means, too, the auctioneer is prevented from exercising undue influence upon the bidders, or hastily accepting the bid of a favorite. It also saves him from deciding between two parties each protesting himself to be first; as it must become evident before the taper expires, who the proposed purchaser really is.

This for the large and important sales. The smaller ones are scarcely less curious, and are certainly far more amusing. Here, too, all is reduced to a system, and an admirable system it is; one which American auctioneers would lose nothing by adopting.

In the Rue Drouot, a few steps from the Boulevard des Italiens, is a building called the "Hotel des Ventes"—literally "hotel of sales." This edifice is a handsome construction, nearly, if not quite, as large as the Merchants' Exchange in Wall street. It was built specially for the purpose to which it is devoted, and here take place the principal auctions of Paris. The building is two stories in height, and is divided into about 20 different "sallies," or halls, each bearing a distinctive number, and each devoted to sales of a particular nature. Thus, in one of these halls are only pictures and works of art; in another, only books; in another, furniture; and so on. Everything offered at these sales is at second hand, or comes from the shop of some bankrupt whose chattels have been condemned to be sold to the highest bidder.

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 THE ENGINEERING OF SPIDERS.

The *Scientific American* has the following communication upon the wonderful art of these little insects :—

Some few days since, while writing on the primitive machines, I had just finished treating of the cord as one of these, when my attention was directed to a small spider descending from the under-side of a table in the corner of the room, where it had stationed itself unmolested. A large horse-fly, many times too large for the spider (which was very small) to manage, had by some means, become

disabled, and lay on the floor. The spider descended to the fly, and, with some caution, began to entangle it in its web, and soon had it completely bound. The spider then ascended to the table, but soon descended again; and thus continued to ascend and descend for some time, fastening the fly more completely each time it returned. I was at a loss to know its object in binding the fly so safely on the floor. Soon, however, it ceased descending, and appeared to be busily employed at its station near the table. I could not conceive what its object was in passing about so very actively; but imagine my surprise when, in a short time, I saw the fly leave the floor, and begin to ascend towards the table. This was soon explained. The spider had attached a number of cords to the fly, extending from the table, and by stretching each to its greatest tension, and confining the upper end, the elasticity of all the cords (some 50 or more) was combined in raising the fly. By continuing the process of tightening one cord at a time, in some 15 or 20 minutes the fly was raised to the table, and there deposited for future use.

Here was a lesson in mechanics taught by a spider; and where is the difference, in principle, between this machine of the spider and the cord, as used with a number of pulleys, by man? The spider, as he had no pulleys to enable him to use one long cord, and tighten the whole by applying a force at one end, as man does, effected the same object by using a number of cords, and tightening one at a time, thus obtaining the force of them all. The sum of the tension of all the cords equal the intensity of the force in each case. The principle is the same.

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#### RARE COINS.

There has been prevalent in this country, for more than a year past, a disease, which may be better termed a mania, for collecting coins. It has seized on all classes of the community, on all ages, and on both sexes. For the past three months it has not been so severe, and there is a manifest falling off in the number of cases, but as the cool season approaches it again revives.

The attention of collectors has been generally devoted to American coins and coinage; but the coins of all nations have come in for their share of notice.

Perhaps there is no more pardonable mania. Autograph-hunting is a nuisance to the friends of the collector, and a very useless waste of time. But there can be little doubt that coins and medals are the most valuable historical monuments, and that a boy will fix more dates and facts in his mind if he be allowed to connect dates and facts with a cabinet of his own collection, than he will by years of mere study in books.

The American series of coins would seem to contain a very small number, and one would suppose that the entire list of varieties would be very easily filled up by any collector. But this is far from true. There are, in fact, many hundred varieties of coins belonging to the American series, commencing with the Sommers Islands piece, struck for the Bermudas in the seventeenth century, for which now a fabulous price would be readily paid, and ending with the nickel cent of 1859. The subject is one of no small interest. The colonial coins, as they are commonly called, are many, and some of them are of great rarity. All of them have more or less immediate connection with the early history of the country; and a glance over a cabinet which is well supplied with these coins will repay any one interested in American history.

There are coins struck by France for Louisiana; coins struck by England for the entire country, but which obtained circulation only in the Carolinas; coins struck by the several States before the Federal Mint was established, and pattern pieces and Washington coins, as they are called, in great variety.

For the benefit of the curious in this line, and for the information of those of our readers who have not known of the mania for collecting which has prevailed during the past year, we have been at the trouble of obtaining a list of the prices current of some of the rarer specimens. The value of these coins in trade appears to be well fixed. There were, during the past winter, a number of auction sales of coins, held by BANGS, MERWIN & Co., and the prices which they brought seem to have been uniform and unvarying, except according to the condition of

the coins. Good specimens, in fine preservation, always bring about the same price.

The Washington cents stand among the highest on the list. The Washington cent of 1792 brought, at the BOGERT sale, \$20. That of 1791 has been commonly catalogued at \$15; it brought last winter uniformly \$6, but very fine specimens, in proof or nearly proof condition, may bring from \$10 to \$15. It should be remarked that coins in very elegant condition always bring higher prices than the ordinary rates. A coin may be fine, almost proof, and bring \$5, when if it were actually proof it would bring \$10, \$15, or even more, if there happened to be a purchaser present who wished to improve the specimen in his collection.

The Washington cent of 1791, above mentioned, is that commonly called the large eagle. The small eagle cent of 1791 is very rare, and much more valuable. One was knocked down at \$17 last winter, but it was said not to be a sale. It has been sold as high as \$35.

The U. S. A. Bar cent brought uniformly \$5 25. This is probably a pattern piece from the early Mint, having on one side the letters U. S. A., and on the other thirteen bars.

The Kentucky cent, (so called,) which is in fact an English token, with thirteen stars on the reverse, and the initials of a State in each star, brought \$3 50.

The Granby copper, the first copper money coined in America, being the work of a Dr. HIGLEY, at Granby, Connecticut, brought \$13 50 in one instance, and \$14 50 in another. This copper is usually valued at a much higher rate; but this is probably as much as it will ever bring under the hammer.

The Washington half-dollar, being the same die with the Washington cent of 1792, was sold for \$57. This can hardly be called a market value, since the coin is not likely to be often in the market, and when offered for sale will bring prices wholly dependent on the character of the bidders who may be present.

The N. E. coins, (so called because bearing only these two letters,) which were the first American silver, were struck off at \$22 50 for the shilling, and \$11 for the sixpence; but probably in neither case a sale. They are worth much more.

The LORD BALTIMORE groat, struck by LORD BALTIMORE for Maryland, was sold at \$25; and the CHALMERS shilling, a private issue at Annapolis at about the close of the Revolutionary war, brought \$9.

The Franco-American colonial piece, struck in France for a colony proposing to settle in Northern New York, brought \$5 50.

The Immunis Columbia, a New York copper of 1783 or thereabouts, \$5 50.

The Rosa Americana pieces, which were struck by the celebrated Wood, under his contract to supply America with copper, 1722 and 1723, brought various prices, according to the variety and condition of the piece, from \$1 to \$5 25 per piece. The Louisiana coppers of 1721 and 1722, from \$2 75 to \$3 50. The Washington and Independence tokens of 1783, from \$1 to \$2; and the Washington (North Wales) token, \$3 75.

These are sufficient to give a general idea of the prices paid for single coins by collectors. Of the regular series of coins from the United States Mint many are exceedingly rare, as will appear by the following list of prices paid for single specimens:—

|                                                                                 |         |
|---------------------------------------------------------------------------------|---------|
| Dollar of 1794.....                                                             | \$7 25  |
| Half-dollar of 1796.....                                                        | 8 75    |
| Half-dollar of 1797.....                                                        | 5 25    |
| Flying eagle, half-dollar of 1838, (a pattern piece, never in circulation),.... | 14 50   |
| Cent of 1793, from.....                                                         | 2 to 9  |
| Cent of 1799, from.....                                                         | 2 to 10 |
| Cent of 1804, from.....                                                         | 1 to 6  |

These cents are the rare years, and there seems to be no limit to the prices which collectors are willing to pay for fine specimens.

For the benefit of purchasers of coins we may add, that at private sale they will hardly be able to procure coins even at the high auction prices above quoted. Many of these prices are paid by dealers, who sell again at a large profit, and

in cases of unique coins, or those which are very rare, the auction price may be quadrupled. And on the other hand, holders of single coins cannot expect to procure such prices for them, since purchasers are not often to be met with, and it is only in the auction-room, or in the shops of dealers, that large sums are apt to be paid.

#### HEROISM IN DEBTORS.

JAMES SWAN, an American merchant, was committed to the prison of St. Pelagie, (in Paris,) on the 28th of July, 1808, for a sum of 625,640 francs, (upwards of £25,000,) and repassed the gates, for the first time, on their opening to the Revolution, on the 29th of July, 1830, twenty-two years afterwards. The man, possessed of a fortune amounting to nearly four millions of francs, denied the justness of the claim beyond the sum of six or seven thousand francs, and determined to spend his life in prison rather than obey a judicial sentence which he considered unjust. Having first caused it to be intimated to his wife and children that he would disinherit them to the last farthing of his property if they paid the debt, he furnished his prison apartment in a style of princely magnificence, and hired, in the Rue de la Cele, opposite the gates of St. Pelagie, a spacious dwelling, with coach-house and stables, for his friends, cooks, etc. For the former class he kept two carriages, and they were commissioned to appear before him and spend his money in the Bois-de-Boulogne, public streets and promenades, balls and theaters. "A curious original was JAMES SWAN. He strutted and attitudinized in his prison like CHODRUC-DUCLOS in his rags; it was his method of flinging a defiance in the face of society. Consistent in his determination, he was preparing to return to his prison, after the events of the 'three days,' when, on the 31st of July, he was seized with apoplexy at his temporary lodging," and consigned to the closer and longer imprisonment of the grave.

The motives of the well-known OUVARD are less honorable, though the consequences to himself were less severe. Not disputing the debt for which he was detained, he yet refused to pay it, and determined, like Mr. SWAN, to undergo his imprisonment, which, as a Frenchman, could not in his case exceed five years. He, too, led a life of princely expenditure in his prison, and, among other instances of extravagance, it is told of him that, for the purpose of adding a neighboring room to his establishment, he paid the debt of the prisoner who occupied it. "One day, when M. DE VILLELE, the Finance Minister, was dining with him, the latter urged him to settle matters with SEGUIN, representing the scandal which his conduct reflected on the government, which had so long retained him as contractor-general. 'Parbleu, Monsieur,' replied OUVARD, 'you speak very much at your ease. I am here for five years, for five millions of money; I gain, therefore, by my imprisonment, one million a year; and if you know of any speculation at once more lucrative and sure, I am not obstinately wedded to this, observe. In that case, I will pay to-morrow.'"

For the sake of its honorable contrast, we may add to these the case of DANTE, the Conde de Foscolo, Patriarch of Jerusalem, who was incarcerated for 100,000 francs, at the suit of a cure of Paris, and liberated by an accidental omission in the deposit of the aliment money required by law on part of the detaining creditor, after imprisonment of upwards of six years. "But the Patriarch was an honest man. When he had recovered his liberty, and was under no further compulsion to do so, he paid every farthing of his original debt, and the cure eventually lost nothing but his cost."

## PRICE OF NEGROES.

The great prosperity of the South has had its influence in advancing the price of hands, and the rates at which some sales have been made were remarkable. At a chancery sale at Lebanon, Tennessee, the results were as follows:—

The negroes belonged to the heirs of INGRAM and DELOACH, and were recently recovered against HENRY SMITH and others of Wilson County, after eleven years' litigation.

The terms of the sale were one-third cash and the balance in twelve months. JERRY, 16 years old, one arm defective, \$1,125; HARRIET, 19 years old, and a little child, \$1,675; JUDY, 30 years old, \$905; LEWIS, 15 years old, \$1,406; JACOB, 34 years old, \$1,305; JANE, 26 years old, and two small children, \$2,050; SALLY, 8 years old, \$1,051; EMELINE, 7 years old, \$1,051; JOHN, 14 years old, \$1,575; PARALEE, 22 years old, and two small children, \$2,280; Tom, 21 years old, \$1,656; HANNAH, 19 years old, suckling child, \$1,687; TABBY, 15 years old, \$1,501; EMELINE, 25 years old, unsound, \$700; PRINCE, 10 years old, \$860; BOBB, 7 years old, \$800; HASTY, 60 years old, \$100.

At an executor's sale at Franklin, Kentucky, on the 12th August, of the property of THOMAS LAYNE deceased, the following prices for slaves were obtained on a credit of twelve months:—

A boy 21 years old, \$1,660; a boy 16 years old, \$1,730; a boy 11 years old, \$1,365; a boy 11 years old, \$1,305; a boy 9 years old, \$1,170; a boy 9 years old, \$1,000; woman 18, and child 3 months old, \$1,910; woman 27 years old, \$1,220; girl 7 years old, \$1,075; total \$12,435; being an average including the child of \$1,243 50.

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 PRICES IN FRANCE.

The government has just published in the *Moniteur* the report of the Commission charged to fix the *real value* of the articles imported into, and exported from, France in 1858 compared with 1857. It shows that in 1858, out of 1,739 different sorts of merchandise which figure in the customs tables, 609 present a decline, 347 an increase, and that the rest were stationary. The report ascribes this result mainly to the commercial crisis in America, which, though it broke out in the latter part of 1857, did not produce its full effect in France until 1858. Amongst the articles which declined in value were tallow from 1 f. 50 c. to 1 f. 35 c. the kilogramme, wheat from 24 f. to 17 f. the hectolitre, flour from 42 f. to 33 f. 20 c. the quintal, India rice from 38 f. to 27 f. do., ordinary wine from 70 f. to 50 f. the hectolitre, superior do. from 170 f. to 160 f., brandy (for exportation) from 2 f. 60 c. to 2 f. 10 c. the litre, do. (better sorts) from 4 f. to 3f. 75 c., pure alcohol from 1 f. 5 c. to 73 c., do. from 60 c. to 50 c., 1 f. to 70 c., colonial sugar 80 f. to 64 f. and 60 f. the quintal, foreign sugar 88 f. to 74 f., refined sugar 96 f. to 89 f., coffee 145 f. to 130 f., tea 7 f. 50 c. to 6 f. the kilogramme, tobacco (in leaf) 1 f. 40 c. to 1 f. 4 c., coal 1 f. 91 c. to 1 f. 80 c. the quintal, cast-iron 18 f. to 12 f., rails 22 f. 50 c. to 20 f., iron wire 75 f. to 70 f., wool (imported) 1 f. 23 c. to 1 f. 10 c. the kilog., do. (washed) 2 f. 28 c. to 2 f. 5 c., do. (exported) 3 f. 25 c. to 2 f. 90 c., cotton (United States) 2 f. 5 c. to 1 f. 85 c.; also oil, horses, oxen, copper, tin, zinc, silks, ribbons, cloth, skins, gloves. Amongst the articles of which the prices augmented were sheep, pigs, cows, butter, oysters, dyeing woods, cabinet-making wood, sulphur, iron tubes, flax, and flax fabrics.

## THE BOOK TRADE.

- 1.—*A History of the Four Georges, Kings of England*; containing Personal Incidents of their Lives, Public Events of their Reigns, and Biographical Notices of their chief Ministers, Courtiers, and Favorites. By SAMUEL M. SMUCKER, LL. D., author of "Court and Reign of Catharine II.," &c., &c. 12mo., pp. 450. New York: D. Appleton & Co.

That period of English history, dating back to the time when the House of Hanover first ascended the throne of England, possesses peculiar interest; not only from the fact, that at no time have public events of equal magnitude and interest occurred at any other epoch of the nation's progress, but at no period has there been found on the stage of action so many distinguished men, consisting of orators, statesmen, generals, philosophers, poets, as were at that time mixed up with the affairs of England, at a time, too, when the rights of public opinion first commenced making progress in the face of those dark shadows, so long encompassing authority in England—that government was expressly ordained of God, and that from him alone princes and sovereigns derived all their authority—consequently, to him alone were they responsible for the exercise of their prerogatives, condemning all resistance to the will of the sovereign, as being resistance to the will of God—that if a ruler seeking only to promote his own aggrandizement and security, trampled the most precious rights of his people in the dust, if he made the machinery of government an instrument only of outrage, injustice, and tyranny, there was, as then contended, no possible remedy for the evil, except passive obedience, humble remonstrance, and earnest supplication. It remained for such men as Walpole and Pitt, to overthrow the heresy of these positions, and to inaugurate a more liberal system of toleration, in place of absurdities and falsehoods, which has never yet ceased to gain ground with the English people, until church and State have changed from an aphorism to be at least apocryphal in meaning. Hitherto but an imperfect knowledge of this era and its events could be obtained by the general reader, except by the perusal of many ponderous volumes, hence the writer has conceived the idea of giving to the public the chief incidents of the public history and private lives of the Four Georges, in a compact and convenient compass, believing them to be useful in filling up an unoccupied niche in that department of literature, and though an English book reprinted here, we doubt not it will commend itself favorably to many American readers, so closely allied is the foundation of our own government and free institutions with the reign of the Georges.

- 2.—*The Boy's Own Toy Maker*. New York: D. Appleton & Co.

This is a boy's book, in which the author has tried with his pen and pencil, to teach some useful things for the pleasant time of play hours. It is a plain book, teaching many things of every-day life, which, should the youthful student be of an inventive turn of mind, will greatly assist him in acquiring the names and uses of forms and materials; and as an endeavor to unite instruction with amusement, is deserving of the highest praise.

- 3.—*The Money-King and Other Poems*. By JOHN G. SAXE. 12mo., pp. 180. Boston; Ticknor & Fields.

All who appreciate John G. Saxe's readiness in rhyme, and his peculiar talent for writing satirical and humorous verses, will have afforded them a treat in this little volume, which comprises the principal part of the many poems written by him since the publication of his former volume, some ten years ago. As a writer of gingling verse, possessing wit and truthful delineations of human nature, we have few, or none, who excel Mr. Saxe, as is proven by the general favor he has found with the public, his former volume of poems having reached its sixteenth edition. That the present one will meet with equal success, we are free to predict.

- 4.—*Twelve Years of a Soldier's Life in India*; being extracts from the letters of the late Major W. S. R. Hodson, B. A., including a personal narrative of the siege of Delhi, and capture of the King and Princes. Edited by his brother, Rev. GEO. H. HODSON, M. A. 12mo., pp. 444. Boston: Ticknor & Fields.

This will be found to comprise the personal narrative, in the form of numerous letters to friends, of the late Major W. S. R. Hodson, who fell at the storming of the Begums' Palace during the Indian rebellion of 1857. It must be confessed, that in no case have the stern resolve or noble soldierly qualities of the English stood out in bolder relief than in that great and terrible deluge of blood which swept over the Indian empire during the late rebellion; and yet we cannot but view this as a terribly egotistical detail, all to the especial glory of Major W. S. R. Hodson, B. A., who, as a hair-brained adventurer, delighting in peril, and thirsting for the excitement of the fight, reminds us forcibly of the chronicles of Fernando Perez, or some other Paladin of old, who was wont to turn the tide of battle by the mere charm of his eagle eye. He it was who captured the old king and led him a captive into his own palace at Delhi; and he it was, too, who deliberately shot the Shahzadahs, the king's sons, with his own hand, after they had surrendered—a deed, the humanity of which has been strongly caviled at in England as a serious deviation from military rules. As a narrative, comprising the military operations of the late rebellion, it is all very well; but that there were others than Major Hodson who as bravely combatted for the glory of old England and her continued sway over those Indian provinces she has plundered so long, we as firmly believe.

- 5.—*The Manufacture of Photogenic or Hydro-Carbon Oils*. By THOMAS ANTISELL, M. D., Professor of Chemistry in the Medical Department of Georgetown College, D. C., etc., etc. New York: D. Appleton & Co.

This well-got-up little octavo of 144 pages, materially differs from some books of the day. It is more than its title purports. To understand the manufacture of photogenic oils, implies the necessity of some knowledge of the source and essential constituents of coal and bitumen. The information is here given, and then follow the general principles involved in the destructive distillation of coal, schists, bitumen, and wood, together with the various modes of applying heat in the process of distilling photogenic oils. The utility of this book is apparent from the fact, that the demand for photogenic oils is so great that the oils are frequently sent into market so impure as to be exceedingly unpleasant from disagreeable odors, and tar, which causes them to give off smoke. These conditions are wholly due to too hasty, unscientific manipulation. And as this book gives the necessary knowledge to judge of the qualities of photogenic oils, as well as the means of producing them, it is of no less utility to the consumer than to the producer, and is alike commendable for both. Manufacturers and experimenters will also here find a concise resume of all the patents thus far issued in the United States for "paraffine," "coup oil," "kerosene," "pyrogenic oil," "paranaphthaline," &c., &c., all here brought together under an appropriate title.

- 6.—*Mary Staunton; or, the Pupils of Marvel Hall*. By the author of "Portraits of my Married Friend." 12mo., pp. 398. New York: D. Appleton & Co.

Is another one of those novelettes which elicits, not so much wonder at its revelations, as how all these numerous hot-house effusions of fashion and frivolity are supported by even our own generous public; not so strange either when we consider—

—“of what delusive worth  
The bubbles we pursue on earth;  
The shape we trace  
Amid the world of treachery;  
They vanish ere death shuts the eye,  
And leave no trace.”