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Art. I.—THE PACIFIC RAILWAY.*

A FEW years since, when Whitney started the scheme of a railway to the Pacific, he proposed to commence at Chicago, but the stream of emigration, bearing with it the arts of life, has moved so rapidly that twelve lines now radiate from Chicago.

The iron way has crossed the prairies of Illinois, has spanned the Mississippi, intersecting that river at no less than six points—six lines are now advancing from the banks of the Mississippi, westward, and in two years more will strike the Upper Missouri, and give easy access to the prairies and hill-sides of Kansas and Nebraska, the future garden of the Union.

One-fifth of the distance from Lake Michigan to the Pacific is now achieved, and the future starting-points for the Pacific Railway will be St. Paul, Fort Kearney, or Fulton, on the borders of Texas.

Twenty-six thousand miles of railway have already been built in the Eastern section of the Union, and in some sterile States, like Massachusetts, the average distance between lines of railway is less than six miles. We have not yet reached with the rail the territorial center of the Union, which lies on the frontier of Kansas, and there is more to be done. The annual income of our nation from agriculture, manufactures, commerce, and fixed investments, exceeds four thousand millions. Our population has risen to thirty millions, and is three millions greater than that of England, Ireland, and Scotland; the annual growth of that population

* Report of the Committee of Congress. Minority Reports of Hon. Messrs. Wood and Kidwell. Reports of the Secretary of War, of Governor Stevens, and the corps of officers detailed to survey the Northern Routes.

exceeds a million. We have colonized the shores of the Pacific with young and vigorous men, full of ambition and enterprise. Our growing population is yearly pressing westward towards the natural pastures of the West; and the question now arises whether we may not construct one, two, or even three lines of 2,000, or 4,000, or even 6,000 miles across the remaining two-thirds of our territory at distances 500 miles apart, and whether such lines do not demand the countenance of the government.

When California was opened, the first settlers from Massachusetts took passage in whale-ships and merchantmen, whose average passage was six months. Clipper-ships soon reduced the journey to four months; steamers to the Isthmus brought it to one month. The Panama Railway has since made it three weeks; and now railways across the continent will diminish it to three or four days; and when, half a century hence, the population of these States shall have risen to an hundred millions, and the seat of government has been transferred to the territorial center, the citizens from the outposts and extreme frontiers may then meet at the capital in forty-eight hours, from their respective homes.

The Western lines now in progress, and those lately built, have demonstrated the efficacy of grants of land through a sparsely settled region to carry forward a great enterprise, for they allow its projectors to participate in the enhanced values they create. The grant to the Illinois Central line has enabled the government to double its price for lands almost worthless, and to cover them with an active and prospering population, while the railway has increased tenfold the value of the grants made to the company. Similar grants have been made with similar effects to the lines of Iowa and Missouri, for lands rise and population presses in, even in advance of the railways in progress.

The great importance of a line to the Pacific is generally conceded; but as there are some even in the great council of the nation who do not appreciate its advantages—who are disposed to overrate the physical difficulties in the way, let us present a brief summary of the arguments.

It will bind together this vast republic, making the distances to a common center therein virtually less than when it was confined to thirteen States. It will insure the defense of the country. Armies, seamen, military, and naval stores, may be transferred from ocean to ocean in less time and with less expense, than were required between the ocean and the lakes in the last war with England.

The passengers moving annually between the Atlantic States and California and Oregon last year, 52,000 in number, will, by the stimulus of railways, be at least doubled, and avoiding the tedious detour by the feverish shores of the Gulf, will pass to their respective destinations under a temperate climate, by the most expeditious route, and without sacrificing their constitutions or their lives.

The Pacific Railway will give a direct and quick transit to mails, which now require an annual expenditure not far from a million.

It will open between the two oceans a quick and sure conveyance for gold, dry goods, boots, shoes, and leather, hats, jewelry, stationery, cutlery, liquors, and other articles of merchandise, whose value exceeds three-eighths of a dollar per pound, and for all light and perishable commodities.

These articles are now carried in merchant-ships or steamers as meas-

urement goods, at certain rates per ton of 40 cubic feet. Such goods rarely weigh more than 30 lbs. per foot, and the charges to which they are subjected for freight, wharfage, insurance, interest, and deterioration, will necessarily give the traffic to the railway.

In addition to such merchandise, most articles of provisions which suffer from confinement in the hold, or exposure to a tropical climate, will take the route of the railway; and whenever sugar, rice, coffee, flour, or other staple articles rise two cents per pound, they will leave the ocean for the railway.

The railway will thus engross more than two-thirds of the values which pass between the old States and the Pacific, leaving the coarser articles of wood, coal, iron, and agricultural products to pursue the ocean route.

But there are other and important duties for such lines of railway—they must constitute the great routes between Europe and Asia, saving at least one-half the time now required for the transit of passengers. Specie, silks, muslin, and other costly articles, will pursue this route; and if Asia continues to draw, as she does, forty millions of silver from Europe annually, the freight on this alone must be an important item to the railways.

But there are two other ways in which the importance of such lines of railway presents itself most prominently. If even two or three of them should be made, each must become a highway for the vast emigration which annually crosses the Mississippi.

Before these lines can be opened, the land of Wisconsin, Iowa, and Missouri will be absorbed, and at least half a million of people will annually press westward, and follow the lines towards the Pacific. It is safe to assume that at least 100,000 will annually ascend each railway as it advances, even if three should be constructed, and plant themselves on its borders, settling the land on each side and supplying produce and passengers for the railway. Assuming each passenger to pay but $2\frac{1}{2}$ cents per mile, and to furnish an equivalent in freight and return passengers, the local emigration must contribute at least \$5,000 yearly to each mile of railway.

But there is another branch of commerce to be opened by such lines of railway which deserves our attention. It is the local commerce of California and Oregon with the interior in mails, passengers, and freight, and the vast commerce which must spring up between the States of Iowa, Wisconsin, Missouri, Nebraska, and the other prairie regions, with the seashores and fisheries of the Pacific, and with the pineries and cedar groves of Oregon and California. The prairies require materials for fences and building. Oregon and California can supply them with pines, whose height of 100 to 300 feet is scarcely credited by Eastern men. California requires cattle, beef, mutton, butter, cheese, and other products of the prairies, in exchange, and those vast pastures which for centuries have sustained, summer and winter, hosts of buffalo ranging northerly beyond the 49th degree of latitude, and finding a winter home even on the most northern route, can supply the wants of California, while the smoked salmon of the coast will furnish an agreeable exchange for the hams and sausages of the prairies. The Western States, instead of looking to the East for sperm-oil, tea, coffee, rice, and sugar, will draw them via the Pacific coast.

The aggregate of this commerce, swelled by the accessions which must

come to it during eight years of construction by the growth of population, will give an adequate support not merely to one but to at least three railways, by the time they are completed. The South line most remote from the current of trade and from the direct route between Europe and Asia, and penetrating an inferior region, will doubtless earn the least; but what it loses, will flow on to the more northern routes and swell their revenues.

During 1855, no less than 52,000 passengers, by actual returns, including a small estimate for the overland route, passed between California and the Eastern States. Nearly all these would more readily have taken the railway at St. Paul or Council Bluffs. These paid an average of \$135 each, or \$7,000,000. The uniform effect of a railway is to at least double the traffic, and we have thus a single item of \$14,000,000 to sustain our Pacific railways.

Assuming three lines of railway of 6,000 miles between St. Paul and Puget's Sound, Council Bluffs, or Fort Kearney and Benicia, Fulton and San Diego, the government could well afford to guaranty to each \$600 per mile for the conveyance of mails, troops, and munitions of war; for the expense they already incur in communicating with California, Oregon, Santa Fe, and other Western posts, for mails and transportation, is already approximating to the amount.

The aggregate of these sums to be drawn from the treasury is three-and-a-half millions of dollars.

The gold from California at 2 per cent only (less than the present freight and insurance) will pay over one million; and the silver from Europe to Asia, with occasional remittances from Australia, may be expected to supply another million of dollars.

The express freight will yield at least two millions more. The commerce between Europe, the old States, and California has, during some years, employed 400,000 tons of shipping, transporting at least half a million of tons. If we assume, for the dry goods, boots, shoes, and clothing, stationery, cutlery, silks, teas, spices, liquors, jewelry, and perishable articles, but 50,000 tons, at \$50 per ton, for the Pacific railways, we have two-and-a-half millions more. If to this we add but \$4,000 per mile for the local way traffic attendant upon the railways as they progress, we add \$24,000,000 to the amount; and allowing but \$1,000 per mile for the commerce between the inland States of the West and the Pacific, and we add \$6,000,000 more, and find an aggregate for the Pacific railways of \$9,000 per mile, or \$54,000,000.

Although this aggregate may appear large, the estimated receipts per mile for these great national thoroughfares, nearly 500 miles apart, are actually less than those of many of the rival lines of Massachusetts, less than those of many of the new lines terminating at Chicago, and of the lines across the Alleghanies, viz., the Baltimore and Ohio, the Pennsylvania Central, and the Erie railways.

The net result from this traffic would be at least 50 per cent, or nine millions for each line of railway, for the business could be done on each by less than six trains daily; and if we estimate the average hauls for the wood at 100 miles, and allow \$1 25 per mile for the average cost of running trains, and this is from 25 to 50 per cent in excess of the cost in the Atlantic States, the cost of running will come within 50 per cent of the estimated income. Nine millions will pay six per cent on a possible cost

of \$150,000,000 for each line of railway, and 9 per cent on the more probable cost of \$100,000,000.

How small do even such sums appear, contrasted with the resources of a country whose annual revenue amounts to \$75,000,000, whose railways annually earn \$100,000,000, whose shipping annually earns \$150,000,000, whose foreign imports and exports annually exceed \$600,000,000—doubling within ten years—and whose domestic commerce is at least double of its foreign!

We have considered some of the advantages which would result to the country from the construction of the lines proposed; but we have not pictured the growth, expansion, or development of the vast interior, which must attend such a movement; the increase of value that will be given to a thousand millions of acres, to the mines that will be opened, the forests cleared, or the trees converted into houses, tools, and carriages. An accession of three-eighths of a dollar to the value of each acre in the public domain would more than pay the assumed cost of three lines of railway.

But in addition to these general results, each line of railway has its separate advantages. The north route will connect the head of Lake Superior with Puget's Sound, and thus reduce the cost of transit of heavy articles for one-third of the distance to \$10 per ton. It will also on its way strike the Mouse River and Red River of the West, and open a steamboat navigation of at least 400 miles into the British dominions, through the pineries and fertile land—at least 50,000 square miles—of the Mouse, Assiniboine, and Red rivers, which may eventually be carried to Hudson's Bay.

Again, it may intersect the Upper Missouri River, near Fort Union, and deliver to it for the treeless prairies of that river the pines of Lake Superior, Minnesota, and the rivers enumerated—to say nothing of Oregon—which may float down the Missouri in rafts or flat-boats to their destination.

It touches, too, long lines of steamboat navigation on the Columbia River. Again, it opens to the settler vast pastoral regions, the Crow and Black Feet valleys and hills, which the chief so happily described to Capt. Bonneville as the true country, the paradise of Indians. It crosses the divide between the Missouri and the Columbia at spots so level that Lieut. Mullan, one of the corps under Stevens, was able to trot his horses in a wagon across the summit on a natural road, and between December, 1853, and March, 1854, crossed the summit, by different routes, no less than six times, without any inconvenience from snow, and repeatedly found less than two inches at the summit.

And here let us remark, the country is under obligations to this officer, who has distinguished himself in the survey by his intrepidity, sagacity, and zeal, and by the ability he has shown in his dispatches. Such men are the parties to locate and construct the Pacific railways.

Let me extract from his Report, (folio 1, part 2, page 342,) a brief description of the Deer Lodge Park, near the summit, between the waters of the Missouri and the Columbia, and a sketch of one of his passages across the summit:—

December 31, 1853. Commences clear and mild. Every one turned out at an early hour this morning, and, having breakfasted before sunrise, we were enabled to make an early start.

At this point we left the river entirely, and followed up the valley of a small willow run, which was from a mile to a mile-and-a-half wide, affording an excellent road. We found the valley had been burnt over recently, showing that Indians had preceded us, probably the Nez Percés. The mountains on each side were high, and covered with the pine to about midway of their slopes. Arriving at the head of this willow river, we crossed low, clay ridges, the latter of which formed the dividing ridge of the waters of the Wisdom River and those of the Hell Gate fork of the Bitter Root River. This ridge forms no obstacle whatever to the passage of wagon trains, as the ascent and descent are both easy and gradual. Arriving on the summit of this divide, we could see to the north a high range of mountains, which the guide pointed out as being the ridge along the right bank of the Hell Gate fork. To our right lay a second, but low ridge, which separated a small tributary of the Hell Gate from the main stream, and ended abruptly in a beautiful prairie valley. This ridge, as also the one in the distance, was clad with the pine. On the dividing ridge we found snow two inches deep, though no snow was to be seen in the valley below; the only snow besides this being on the higher peaks on the ridges around us. Leaving this divide, we fell upon a small creek, whose waters flow into the Hell Gate River. Having traveled fifteen miles, we encamped on a small stream running from the mountains to our left, where we found good grass, wood, and water. We entered to-day the granitic region, as shown by the large detached masses and boulders; from the mountains passed along the trail, after crossing the dividing ridge. The weather to-day has been exceedingly warm and summer-like; we found the weather much warmer on the waters of the Hell Gate than on those of the Missouri.

Thus did the close of the year 1853 find us once more on the waters of the Columbia, which we all greeted with feelings of joy, as we now had no apprehension of danger, either from cold or the snow. We had all supposed that our labors on the expedition would have been closed before the end of 1853, but we still found ourselves traveling through the mountains in midwinter, apparently with as little concern as if it had been midsummer.

January 1, 1854. Commences clear and pleasant. We resumed our march at 8 A. M., which continued over a series of low rolling ridges, through whose valley flow small mountain streams, all of which, when open, empty their waters into a creek called the Spear Fish Creek, which, eight miles from our camp of last night, we crossed and found frozen to the bottom. This creek is so called by the Indians, who, some years ago, caught fish from its waters by spearing them. Journeying a short distance from this creek, and crossing a series of low sand ridges, we reached a long, level, and beautiful prairie called the Deer Lodge—a name given it from the great number of deer found in and near its vicinity. This place is a great resort for the Indians west of the mountains at all seasons, and especially when returning from the buffalo hunt, where they remain several weeks recruiting their animals, finding the greatest abundance of rich and luxuriant grass. Through it flow two large streams, one of which is the main stream of the Hell Gate fork of the Bitter Root River, and a great number of prairie streamlets—thus rendering it an excellent recruiting rendezvous for the Indians, with their large band of horses. It is about fifty miles long, north and south, and from twelve to fifteen wide—bounded on all sides, save on the east, by high, pine-clad mountains, the summits of which alone are found covered with snow. A very slight fall of snow covered the valley. It is noted for the very small quantity of snow found on it during the severest winters known in the mountains, which gives it the principal advantage for wintering over the many prairie valleys of the mountains. Its many streams are all lined with timber, consisting of the cotton-wood, birch, willow, and the black-haw. Finding our animals very much jaded by their long march, we concluded to remain here a day to rest and recruit them, where they found an abundance of excellent grass. We saw, when entering this valley, large bands of antelope feeding. These, with a few mountain sheep and goats seen on the highest peaks of the mountains, constituted the game of the day. We did not exert ourselves to secure any, since we had a great

quantity of elk meat with us. The weather to-day has been exceedingly mild and summer-like, at noon being very warm. Traveling a distance of eighteen-and-a-half miles by a very excellent road, we encamped on Deer Lodge Creek, where we found good grass, wood, and water.

In other passages he eloquently describes a series of rich valleys on the way to the mouth of the Columbia, in several of which oats, wheat, and potatoes grow luxuriantly, and which, he predicts, will soon become populous.

There is, too, strong reason to presume, from the information which reached Lieut. Mullan, that the northern line may be materially improved and carried further from our northern boundary, by a line crossing the Missouri below the great bend, and traversing the country of the Crows and Black Feet Indians across the prairies.

THE CENTRAL ROUTE.

A central route for a Pacific railway commences at Fort Kearney or Council Bluffs, on the Missouri, crosses the prairies, ascends the South Pass, approaches the Salt Lake, enters the valley of the Sacramento, and descends to the Bay of San Francisco. The country is already familiar with most of this route, from the successful explorations and vivid descriptions of Col. Fremont.

This route has, too, the advantages of being the most direct line from Philadelphia, Baltimore, Cincinnati, and St. Louis, and may easily connect with six lines, which are progressing across Iowa and Missouri toward the territorial center of the Union; it passes near that center also, and opens to commerce the heart of the great prairie. Its route is easy, and few physical obstacles more serious than those encountered by a railway along the Hudson, are found to exist. Its only drawback is a high summit, approached, however, by easy grades.

A third route, but partially explored, commences at Fulton, crosses the desert and Llano Estocado to New Mexico, then crosses the Rio Bravo, and winds through several passes, by the Gila and Colorado, to San Pedro and San Francisco. This route, although out of the direct course of trade, makes a more direct connection with the Southern cities, and opens to commerce the western borders of Texas, and the mines, vineyards, and pastures of New Mexico. While its revenue and the facilities it affords must fall below those of the other lines, and its grades and summits are unfavorable, the South may reasonably ask a charter and grant of lands for its construction, if they are accorded to the Northern lines, and efforts will doubtless be made, by more minute survey, to reduce its unfavorable summits and gradients before active capital is embarked in its construction.

REPORT OF THE SELECT COMMITTEE OF THE UNITED STATES HOUSE OF REPRESENTATIVES.

At the last session of Congress, the committee of the House upon the Pacific railways, made a report, accompanied by a bill establishing three lines to the Pacific upon the routes we have indicated—subject, however, to the provision that the Central line shall commence at some point near Fort Kearney, where the lines crossing Iowa and Missouri may unite.

The bill reported grants for the Northern railway 20 alternate sections

per mile, from St. Paul and Lake Superior to the 100th degree of longitude; thence to Puget's Sound 40 alternate sections per mile, with 20 sections more per mile for a branch to Willamette valley.

For the Central line, it grants 30 alternate sections per mile from Fort Kearney to a point 200 miles west; thence 80 alternate sections per mile to the frontier of California; and thence to the coast, 6 such sections for each mile of railway.

For the Southern line, it grants 40 alternate sections per mile from the frontier of Texas to the 118th degree of longitude; and thence 10 alternate sections to the Western terminus.

The act also requires each company to erect a telegraph and to convey the mails; to give precedence to the United States in the use of the telegraph and transportation of troops, indicates an annual payment of \$500 per mile as a proper compensation for the mails and a limited amount of transportation. It grants also ample land for tracks and stations, and requires the construction of the lines within ten years, from the 1st of January, 1857.

This bill conforms closely to the views taken in this article, and meets our cordial approbation.

It favors neither South or North, East or West. It provides not merely for a Pacific railway, but for the development of our vast interior; and, taking by the hand enterprising companies which have crossed, or are crossing, the Father of Waters, it beckons them onward over the prairies to the golden gates of the Pacific, and allows them to participate in the wealth they are to create. The act is bold in its conception, comprehensive in its grasp, and reflects credit upon the committee.

We would, however, suggest two additions. The grant of corporate power to the several lines, and the further grant of 4 per cent stock, at the rate of \$15,000 per mile for each mile of railway finished, in place of the annual payment for mails and transportation of \$500 per mile, indicated by the act. The interest upon the stock would amount to \$600 per mile, and a small increase in the military and transport service would give the United States a full equivalent; the principal can be well secured, and the performance of the duties imposed guaranteed by a reservation of a lien upon the road-bed and railway.

The companies might place such stock in Europe, either at par or at a trifling discount, and the funds thus realized would provide the salaries, iron, timber, and equipage, and vivify the whole undertaking.

While the companies could thus avail themselves of the superior credit of the Union, the energy, frugality, and sagacity of individuals would direct the outlay.

Under such provisions, the undertaking would move onward with celerity.

REPORT OF HON. J. M. WOOD.

It is proper, however, to notice here that the Hon. J. M. Wood, of the committee, submits a minority report, in which he proposes that the United States shall issue bonds to the extent of one hundred millions, and construct a railway, wagon-road, and line of telegraph upon the Central route; and submits a bill intrusting the work to a board of commissioners.

The report of Mr. Wood displays much ability, and as a railway man

he is entitled to the highest respect. He is conversant with railways, has displayed sagacity in their construction under the harsh climate and over the sterile soil of Maine, and has honorably acquired a fortune from railway contracts. It is true, also, that both France and Belgium have built railways with success, and have selected their routes with remarkable sagacity, and it is true that the latter country has administered her railway system with more liberality, care for the public safety, and benefit to the people, than any other nation whatever; but under our form of government, we may well fear political favors for political objects, great delays, and we should eventually have but one line dragging its slow length along, in place of three avenues to our Western territory.

If the question were simply this, "Shall we have one line or none?" the able argument of Mr. Wood for the Central line would be difficult to meet. The question would be between the Southern, the Central, and the Northern; and he well asks, "In what latitude is the great central mass of the population of this country situate? In which direction is the current of the moving population pressing? The replies to these queries should have more bearing in determining the route than, perhaps, any other considerations, after the practicability of the three great routes is admitted."

The answer is obvious. The slave States are but thinly peopled; the density of population there is, by last census, but 11 to the square mile, against 22 in the free States; and the great current of emigrants is not following the Red River of Louisiana or the frontier of Mexico, but moving Northwest through the great basin of the Missouri.

Upon another point, the subject of snow, which seems to alarm or dazzle the fancies of Southern gentlemen, upon which Mr. Wood is competent to speak, for he has built a railway into Canada, back of the White Mountains, through a region where snow lies at least eight months of the year, and accumulates in the winter to the depth, sometimes, of 10 to 15 feet, he says:—

Objection has been made in some quarters to Northern or Central lines on account of the deep snows common to high northern latitudes. This objection has some plausibility, when we take into consideration the manner in which roads were located and constructed in the old States, some years ago; but the observation and experience of later years have taught engineers and those having charge of locations, the necessity of elevating their road-beds much higher than was formerly the practice, thus avoiding the evil consequences attendant upon hugging the plain too closely. This improved elevation has resulted in entire relief from the effects of snow, as experience has shown, beside providing a better drainage, and not adding materially to the cost of construction.

Were there any doubt upon this point, the remedy might be further assured by snow fences or "snow traps," which have been successfully adopted at the North—or, in extreme cases, the lines could be carried through the mountain passes with side-walls and a roof, like the covering of a lattice bridge, adding but one or two millions to the cost of the Northern lines. But the reports contain no evidence that such precautions will be requisite.

MINORITY REPORT OF HON. Z. KIDWELL.

Mr. Kidwell differs both from the majority and minority of the committee. While he concedes in his report "that good railways from New

Orleans, St. Louis, Chicago, and the head of Lake Superior, across the continent within our country to San Diego, San Francisco, the mouth of the Columbia, and Puget's Sound, in peace and war, would be productive of consequences most beneficent both to commerce, to manufactures, and the mechanic arts," he questions the possibility of any such railways—is disturbed by the aspect of arid deserts and treeless plains—of rugged, snow-clad, and solitary mountains, towering a mile or two above the ocean—by the possible cost of construction, and the want of patronage. He questions, too, the policy of government action, and falls back upon the Southern construction of the Constitution. It is obvious Mr. Kidwell has tried to inform himself, but there is reason to fear he has pursued a line of inquiry tending to confirm his doubts rather than to demonstrate the possibility of the measure, and one might almost infer from his report that he came from one of those Rip Van Winkle districts of the South not yet illuminated by the rays of science, or that his native courage had been quelled by some unfortunate railway investment. His doubts and his dangers, however, need not disturb any candid inquirer. For instance, he suggests that it is "doubtful whether a road located on the best known route could be maintained from its earnings during the first ten or fifteen years, even should its builders be willing to sink all their capital and abandon the road to whosoever would give security to maintain and run it, and at the end of that time money would have to be obtained to re-build the whole railroad."

Were this to be so, "it would, indeed, be paying dear for our *steam-whistle!*"

But Mr. Kidwell breaks down upon the facts which he cites to sustain his fancies.

We have pictured sources of business competent to maintain *three* distinct railways, but Mr. Kidwell has overlooked the principal part of them—he has not watched the tide of emigration preceding and following, like a triumphal train, the Michigan railways, the railways of Illinois, and the railways of Iowa, raising land 1,000 per cent, and studding their sides with farms, granaries, and villages—until we now see 4,000,000 bushels of grain delivered by rail in a single month at Chicago. He forgets that California yields annually more than 50,000,000 of gold; that the prairies require the pines of Oregon and Superior; that countless herds of buffalo, elk, and antelope, revel through summer and winter on the rich pastures of the plains crossed by the Central and Northern routes. He rates the whole amount paid in 1855, for freight and passage between the old States and California, at \$5,000,000 to \$6,000,000, when the passengers and gold alone last year, as we have shown, paid \$8,000,000—and there have been years when the *freight bills alone* between those States and California, have exceeded \$8,000,000.

He tells us that but an insignificant part of the commerce of the United States is conveyed upon railways, but is not aware that the Erie and Central railways are fast diverting the traffic from the Erie Canal, and that there are three American railways—the Reading, Erie, and Baltimore and Ohio—whose aggregate tonnage exceeds the tonnage of all the imports drawn from all foreign ports into the United States. And when he tells us, on page 42, "that \$100,000,000 is a sum of money greater, probably, than is yearly earned by all the shipping of all the oceans in the world,"—let us remind him that the shipping of the United States and

Great Britain alone (over 10,000,000 tons) annually earn more than twice that amount.

He tells us that railways are too costly to be introduced into Iceland, Africa, or Patagonia. But the rich pastures of the prairies, the noble forests of Oregon, and golden quartz of California, are not to be found in Iceland, Patagonia, or Africa; and when he objects to plains elevated a mile above the sea, and rising a mile into the air, does he forget that the verdant and fertile plains avoid the City of Mexico, under an Italian sky, which extend northward to New Mexico, are more than a mile-and-a-half in perpendicular height above the sea, and that the trains which leave Baltimore and Wheeling, Boston and Albany, daily ascend, in the aggregate, two miles into the air, as they pass summits of 1,000, 1,440, and 2,700 feet above the level of the sea?

If Mr. Kidwell imagines that railways require rebuilding once in eight or ten years, because the Boston and Worcester Railway in the interval from 1838 to 1848 trebled its cost, let him learn that the Boston and Worcester Railway was designed as a local road—that it opened long before it had found the necessary land, stations, or freight-cars—that, after finding these, it became a section of the Great Western line, and was obliged to expend a million in city lands, bought at prices somewhat above land on the prairies, viz., \$50,000 to \$135,000 per acre, or in erecting stations and providing side-tracks, and one or two millions more in providing second tracks and equipments, and substituting a rail of 60 lbs. for one of 35 lbs. to the yard.

The experience of twenty years under the snowy sky of Massachusetts has shown that railroads with an annual expenditure of \$1,000 per mile upon the track and road-bed, instead of perishing once in five, ten, or fifteen years, may be made progressive, and that an annual outlay of 20 per cent on cars and engines will cover all repairs and deterioration, although heavy engines and increased speed have accelerated decay. That water may be conveyed long distances, at small expense, in pipes of lead or iron to supply engines, and that in no division of the Central or Northern routes will the average haul of wood exceed 160 miles, or the cost of fuel on either of those lines average so much as the present cost of wood per cord on the Boston and Worcester Railway.

If thousands of miles of railways in Michigan, Indiana, and Illinois have cost but \$30,000 to \$35,000 per mile, why should lines across an easier country beyond them, extending to the head waters of the Missouri, cost more, as Mr. Kidwell supposes, than double that amount? And if the defiles of the Rocky Mountains are so easy that the officers of the United States could, in midwinter and on natural roads, trot their horses through them without meeting snow, and find in their valleys rich meadows, pastured in midwinter by countless herds of horses and cattle, with grass six inches high, why is the expense of spanning them with railways to exceed the cost of crossing the Green Mountains of Massachusetts and Vermont, and the Alleghanies of the Middle States—mountains which in their awful solitude, and with their rugged and almost inaccessible sides, frowned down such liberties and discoveries?

No man who has been, like us, for twenty years familiar with the railway routes, plans, and profiles on the rocky, and often snow-clad surface of New England, can glance without admiration at the long levels and gentle ascents of the prairie lines, and at the easy passage of the mount-

ains, where, for one-eighth of the distance, only a few cuts half a mile or a mile in length, a possible tunnel of one mile to two-and-a-quarter miles long, a few banks of streams as rugged as those of the Hudson, are the principal physical obstacles to lines 2,000 miles in length. The world may be traversed in vain to find lines so long, so important, so direct, encountering so small an amount of physical impediments; and the cosmographer would smile at the sensitive delicacy and the maiden scruples which deter our Southern member from a plunge into the crystal waters before him.

But let us pass from the fears, the scruples, and refinement of Mr. Kidwell to actual surveys and explorations of our distinguished engineers in the field, and to the somewhat singular commentary of an ardent son of the South, the Secretary of War.

REPORT OF HON. JEFFERSON DAVIS.

Any cursory reader who takes up the large and elegant folio volume which contains the Reports upon the Pacific Railway, and confines himself to the summary of the Hon. Secretary of War, must rise with the impression that for the last two or three years a large body of officers had carefully examined and surveyed each of the three great routes with equal care; that a mass of evidence as to all of them had been collected; that the irresistible deduction from the proof was that the southern route from Fulton, on the Red River, was the cheapest, easiest, and best, and would best subserve the commerce of the country. But should he recollect the counsel of the bard—

“Drink deep, or taste not the Pierian spring;
Here shallow drafts intoxicate the brain,
But drinking largely sobers us again;”

Should he go a step further, and dip into the documents from which this summary is drawn, the Reports of the Explorers, and they will richly reward him for his toil, it seems to us he will inevitably find that the facts do not warrant the deductions of the Secretary, and will discover a little Southern proclivity in his report.

Perhaps he might infer that a true son of the South, anxious for her supremacy, who has taken the extreme Southern view on the Kansas question, who has opposed that great link in Northern improvements, the Rock Island Bridge, might feel solicitous to secure to the South the great and perhaps sole route to the Pacific.

But before the nation confides to her this great highway, while she closes the Missouri to the North, it owes at least one duty to itself, viz.: to compare closely the deductions of our Secretary with his premises.

Without stopping to determine how far his feelings as a man may have influenced his action as an officer, let us consider the proofs on which his report is founded, and we are struck with the fact that the folio, while it overflows with reports on the Northern routes, does not contain a single original report upon the Southern route.

We have, indeed, an elaborate summary from Captain A. A. Humphrey, of the War Department, of certain reports which find no place in the folio, although we are told they have been circulated among members of Congress. These reports are from Messrs. Pope, Parke, Emory, and Williamson, one of whom seems to have made some observations while en-

gaged on the boundary survey, but as they are not published in the folio, and cannot be obtained from the Department, they must be treated in this discussion as of doubtful value, and entitled to little weight in the decision of the question. As respects the summary, we would accord to it that respect which is due to an argument or critique emanating from an able officer of the army, but it lacks evidence to sustain it, and there are certain peculiarities in this summary which deserve attention. For instance, the War Department has, in this summary, estimated the Southern line, from the difficult valley of the Rio Pecos across the desert and mountainous region of New Mexico, by the mountain gorges of San Gorgonio, Chiricahui, Valle de Sauz, Hueco, and Guadalupe, across the Gila and Colorado to New Mexico, will cost from \$45,000 to \$50,000 per mile, and for 780 miles actually reduces the estimate of the engineer some ten thousand dollars per mile, or more than seven millions of dollars; but when it comes to deal with the liberal estimates of Governor Stevens, who has added from 25 to 50 per cent to Eastern prices, and allowed eleven millions for steamboats, planting trees, and other extras not presented in Southern estimates, the Department, before comparing cost of the three great lines, adds some thirty or forty millions of dollars to the cost of the Northern line, and raises the estimate on the North line, from Milk River, across prairies, through the easy passes between the Missouri and Columbia, where the United States officers trotted the horses attached to their wagons in mid winter, and found grass six inches high, and down the Valley of the Columbia, until that estimate is carried 100 per cent above the cost of Eastern lines, and the cost of a railway via the valleys of the Missouri and Columbia is made over \$100,000 per mile against an average of \$48,000 across New Mexico.

And why should lines nearly parallel, the one resting on careful exploration, the other on reports either not deemed worthy of publication, or at all events withheld from general circulation, be subjected to such singular changes in valuation?

The Northern line has the best profile, is the most accessible by navigation, passes through the lumber regions of Minnesota and Oregon, and has access to the vast pine forests of the Red River, can command labor at lower rates than the South line, and if the South line has any advantage, it can be but in one item, viz.: the amount of graduation and masonry, for in all other respects the Northern line is superior; but can the amount of graduation and masonry give an advantage of \$52,000 per mile for more than one thousand miles? The average cost of the seven great lines out of Boston, over the rough surface of Massachusetts, is but \$9,000 per mile for the graduation and masonry. The graduation and masonry of the Western, carried through a tunnel and through rock-cuts seventy feet deep, alternating with viaducts seventy feet high, averaged but \$22,000 per mile, and it seems to us to be an absolute impossibility that the Northern line, with the best profile, leading through easy valleys, with but one tunnel of two-and-a-quarter miles in length, which may be avoided, should cost for the single item of graduation and masonry (which is usually in Massachusetts but one-fifth the cost of a railway) the sum of \$52,000 a mile more than the other line, through a worse country and nearly parallel, incurs for the same item. Let us assume that the graduation and masonry on the Northern line should cost \$22,000 per mile, which is the cost of the Great Western, and more than twice the average

of the lines out of Boston, and then, upon the theory of the War Department, the graduation of the South line sinks to \$30,000 per mile less than nothing.

The significant fact, conceded by the War Department, that the Southern line passes a series of high summits, having an aggregate rise and fall of 43,000 feet, with natural slopes varying from 108 to 194 and 240 feet per mile, while the Northern route has but 18,000 feet rise and fall, and far easier gradients, the further fact shown by the evidence that the Northern line has better access to water, wood, lumber, and navigation, and these remarkable changes of the estimates are almost conclusive proof that the Southern line has no advantage on the score of cheapness.

Second, the line which the Secretary pronounces best, but which commences on the prairie with a gradient of ninety feet, must ever be the most costly to work and maintain, from its excessive rise and fall and excessive gradients. It is a little amusing to notice the apologies for these gradients in the suggestion by the Secretary, that thirty-ton engines have climbed them, and in the still more pregnant suggestion of Captain Humphrey, that in computing the cost of equipage he has computed for a light traffic. It is obvious that this line, far away from the direct current of trade, away from the channels of navigation, will have little more than a local business to conduct, and no capacity to do more could it be commanded.

Again; we find in the Secretary's report, page 32, a table by which he seeks to demonstrate that this remote route is most accessible to commerce. How is this accomplished? Not by drawing the lines from Boston, New York, Baltimore, and Philadelphia, the great entrepôts of the country, but by vouching in the Southern cities of Charleston and New Orleans.

Such an argument is more specious than convincing. In detailing the advantages of the Southern line, the Secretary omits to mention that San Pedro, one of its termini, is but an open roadstead, having no shelter from prevailing storms, and Captain Humphrey concedes that lumber and coal, under certain contingencies, may be taken from Puget's Sound to San Pedro, and transported east twelve hundred miles for the use of the Southern railway. How much will its cheapness of construction and cheapness of running be increased by the possible necessity of going to the terminus of the Northern line, a thousand miles distant, for ties and fuel?

Then, is there not, through the whole report of the Secretary, a tendency to disparage the resources of the Northern line, and to give a coloring to those of the Southern.

The atlas of the schools has marked the American desert on the Southern line. Captain Humphrey, too, concedes that long stretches of it are destitute of water, where the corps of engineers are now testing the possibility of sinking artesian wells,* and that for three hundred and fifty miles on the Pecos, Rio Grande, Gila, and Colorado, the country is not grassed—we may say, has no wood or herbage—but the Secretary, while he concedes there are but 2,300 square miles of arable land in New Mexico and on the Colorado, undertakes to say, page 7, that the arable soil in

* While writing this article, I take the following extract from the Boston *Traveller* of October 6th, 1853:—

ARTESIAN WELL ON THE PLAINS.—We learn from a Texan paper that a party under Captain Pope has sunk an artesian well six hundred feet deep on the Llano Estocado, or Stalked Plain, without finding any water. But the work was still continued. This looks bad for the Southern Pacific Railroad.

the valleys of the Rocky Mountains, does not exceed 1,000 square miles. How distinctly is this statement controverted by the able reports of Governor Stevens and Lieutenant Mullan, who wintered in Oregon, and made repeated journeys through the defiles of the mountains. To illustrate this point, we extract the following passage from the report:—

Extract from Governor Stevens' Report, Folio, Part 2d, page 103.

A belt on the eastern slope of the Rocky Mountains, including the valleys of the streams, possesses much the same characteristics of soil as already noticed on the western slopes, but has less advantages for lumbering, and has a colder climate.

This fertile strip gradually passes into the Grand Prairie country, and on leaving the vicinity of the mountains, the soil gradually becomes more thin, except in the numerous broad river valleys, as those of the High Wood, the Judith, the Muscle Shell, &c., &c. The pines end with the mountains, and the only trees are found in the growth of the cotton-wood, lining the streams. Immediately under the mountains is a region capable of profitable tillage, and with unlimited pasturage, delightful in summer, and though colder than the western valleys, is still milder than the climate of the plains still farther to the east.

I estimate that in the valleys on the western slopes of the Rocky Mountains, and extending no farther west than the Bitter Root range of mountains, there may be some 6,000 square miles of arable land, open grassed lands with good soils, and already prepared for occupation and settlement; and that in addition to this amount, there are valleys having good soils and favorable for settlement, which will be cleared in the removal of lumber from them. The faint attempts made by the Indians at cultivating the soil have been attended with good success, and fair returns might be expected of all such crops as are adapted to the Northern States of our country. The pasturage grounds are unsurpassed. The extensive bands of horses owned by the Flathead Indians, occupying St. Mary's village, on Bitter Root River, thrive well winter and summer. One hundred horses belonging to the exploration, are wintered in this valley, and up to the 9th of March the grass was fine, but little snow had fallen, and the weather was mild. The oxen and cows owned here by the half-breeds and Indians obtain good feed and are in good condition.

Probably 4,000 square miles of tillable land is to be found immediately on the eastern slopes, and the bottoms of the different streams, retaining their fertility for some distance after leaving the mountains, will considerably increase this amount.

There is a marked difference of climate between the two sides, and the comparison of the meteorological results of the winter posts established—one at Fort Benton, on the Missouri, and the other near St. Mary's village, on opposite sides of the mountains—will be of great interest as determining with some definiteness the extent of this difference. The question of climate will be considered more fully hereafter.

To bring out more clearly the character of the mountain region, I will, at the risk of some repetition, quote from Lieutenant Mullan's report of his exploration to Fort Hall:—"Thus we found ourselves at the main camp after an absence of forty-five days, during which time we had crossed the mountains four times, completely turning the eastern portion of the Bitter Root range, by a line of seven hundred miles, experiencing a complete change of climate, and crossing two sections of country, different in soil, formation, natural features, capability, and general character; crossing, therefore, in all their ramifications, the head waters of the two great rivers, Missouri and Columbia.

"We had now a fine opportunity to compare the climate and character of the Bitter Root valley with that of the Hell Gate and others in its vicinity. In the latter, snow from four to six inches deep was to be found, while in the former the ground was perfectly free from snow. It seemed as if we had entered an entirely different region and different climate; the Bitter Root valley thus proving that it

well merits the name of the valley of perennial spring. The fact of the exceedingly mild winters in this valley has been noticed and remarked by every one who has ever been in it during the winter season; thus affording an excellent rendezvous and recruiting station for the Indians in its vicinity, and of those sojourning in it, as well as all others that might be overtaken by the cold or snow of the mountains. It is the home of the Flathead Indians, where, through the instrumentality and exertions of the Jesuit priests, they have built up a village—not of lodges, but of houses—where they repair every winter, and with this valley, covered with an abundance of rich and nutritious grass, affording to their large bands of horses grazing and to spare, they live as contentedly and as happily as probably any tribe of Indians either east or west of the Rocky Mountains. Its capabilities in other respects, aside from grazing, have already been referred to in the former part of this report, and are of sufficient interest and importance to attract the attention of, and hold out inducements to, settlers and others. All that it at present needs is to have some direct connection with the east or the west, and the advantages that it and the sections in its vicinity possess, will be of sufficient importance to necessarily command attention. The numerous mountain rivulets, tributaries to the Bitter Root River, that run through the valley, afford excellent and abundant mill-sites, and the land bordering these streams is fertile and productive, and has been proved, beyond a cavil or doubt, to be well suited to every branch of agriculture.

"I have seen oats, grown in this valley by Mr. John Owen, that are as heavy and as excellent as any that I have ever seen in the States; and the same gentleman has informed me that he has grown most excellent wheat, and that, from his experience while in the mountains, he hesitates not in saying that here might agriculture be carried on in its numerous branches, and to the exceeding great interest and gain of those engaged in it.

"The valley and mountain slopes are well timbered with an excellent growth of pine, which is equal in every respect to the well-known and noted pine of Oregon. The advantages, therefore, possessed by this section are of great importance, and offer peculiar inducements to the settler. Its valley is not only capable of grazing immense bands of stock of every kind, but is also capable of supporting a dense population. The mountain slopes on either side of the valley, and the land along the base of the mountains, afford at all seasons, even during the most severe winters, grazing ground in abundance, while the mountains are covered with a beautiful growth of pine.

"The provisions of nature here are, therefore, on no small scale, and of no small importance; and let those who have imagined—and some have been so bold as to say it—that there exists only one immense bed of mountains from the head waters of the Missouri to the Cascade range, turn their attention to this section, and let them contemplate its advantages and resources, and ask themselves, since these things exist, can it be long before public attention shall be attracted and fastened upon this hitherto unknown and neglected region?

"Can it be that we should have, so near our Pacific coast, a section of country of hundreds of thousands of acres that will remain forever untilled, uncultivated, totally neglected? It cannot be. But let a connection, and that the most direct, be made between the main chain of the Rocky Mountains and the Pacific—and it can be done—and soon will these advantages necessarily thrust themselves upon public attention and open to the industrious and persevering avenues to wealth and power. Again; this section connects with another of equal, if not superior, importance—that of the Cœur de Alene country, which again connects directly, by a beautiful section, with the country at and near Wallah-Wallah, thus showing that from the main chain of the Rocky Mountains to the mouth of the Columbia, we possess a rich, fertile, and productive area, that needs but the proper means and measures to be put forth, and manfully employed, to be turned to private and public benefit." * * * * *

"Looking back upon our route, we saw we had followed Bitter Root River to its head, which we found, from its mouth, to be ninety-five miles long, flowing through a wide and beautiful valley, whose soil is fertile and productive, well

timbered with the pine and cotton-wood, but whose chief characteristic and capability is that of grazing large herds of cattle, and affording excellent mill-sites along the numerous streams flowing from the mountains. The country thence is watered by tributaries to the Missouri and its forks, to the range of mountains separating these waters from those of the Snake River, or the south branch of Lewis' Fork of the Columbia, and is also fertile, but its characteristic feature is the great scarcity of timber for any purpose, the willow and wild sage being used for fuel along the whole route. The geological formation of this section belongs to the tertiary period. The capability of this broad area, however, for grazing is excellent. It is a great resort at present for all Indians in the mountains, the mountains and valleys affording a great abundance of game, consisting of elk, bear, deer, and antelope, while the numerous rivers and streams abound in fish and beaver.

"The latter are still caught in large numbers on the head waters and tributaries of the Missouri, but are not so anxiously sought after as years back, owing to the great depreciation of value in the market east. The whole country is formed of a series of beds of mountainous ranges or ridges with their intervening valleys, all of which are well defined and marked, the decomposition and washings of the rocks of the mountains giving character to the soil of the valleys, which may be termed, as a general thing, fertile."

As respects the soil on the Red River of the North and its main branch, the Assiniboine, and on the Saskatchewan, let us cite from the speech of Mr. Allan Macdonell, reported in the *Railway Times* of Oct. 3d, 1856:—

At a meeting of the Provisional Directors of the Toronto and Georgian Bay Canal Company, in the Board of Trade rooms, Exchange, on Friday night, Mr. Allan Macdonell said:—

"He wished only to indulge in but few remarks, and to call attention, not to the United States, but to our own country, which, ere long, would also be pouring its flood of trade and traffic through your proposed canal. Westward, we possess vast and fertile countries, adapted to all the pursuits of agricultural life—countries susceptible of the highest cultivation and improvement. Between Lake Superior and the Lake of the Woods, we possess a country of this description, in soil and character inferior to no part of Minnesota; and bordering upon this territory lies the valley of the Assiniboine, or the Red River country, as it is sometimes called. As a wheat-growing country, it will rival Canada. It does so now in soil and climate. Perhaps, to give you some idea of the extent of that country, or, perhaps I should say, portion of Western Canada, I will call your attention to this fact. All Canada, as now usually designated, not in connection with what is termed Hudson's Bay Territories, contains about 350,000 square miles, and this includes Lahear. The valley of the Assiniboine contains about 50,000 square miles, but containing, perhaps, a larger extent of arable and agricultural land, and intersected in every direction by navigable rivers. Beyond this, again, lies the magnificent valley of the Saskatchewan. It contains about 400,000 square miles, larger again than Canada, and it abounds in all the material of agriculture and mineral wealth. Immense coal-fields exist in the valley of 400 miles in width, and the river Saskatchewan is navigable for 1,400 miles; it empties into Lake Winnipeg, at Hudson's Bay. Over the richest prairie lands, loaded carts now pass in any direction for hundreds of miles, and to the foot of the Rocky Mountains. In its present wild and uncultivated state it affords sustenance to immense herds of wild cattle. What would it do if cultivated by the hand of man? The future products of these immense countries must seek the seaboard, and all the canals and railroads which can be constructed will scarce suffice to afford facilities for the products of the West. He wished to call attention also to another source whence a trade would arise, and contribute to swell the traffic along the canal. Hudson's Bay would give to Canada a sea-coast of 3,000 miles. No maritime power has ever possessed so great a nursery for a mercantile navy as this. It abounds with whales and every kind of fish, and

strange as it may appear, that great sea lies, as it were, in the center of Canada: From the proposed terminus of the canal, it is about 650 miles, 350 miles of which is a navigation capable of bearing ships of any burden; from Lake Superior to Hudson's Bay is about 300 miles. Merchandise is now transported in large boats of the same description as those formerly used along the St. Lawrence, and all the vast countries that I have alluded to, and particularly the Western States, would take advantage of it. If the route between Lake Superior and Hudson's Bay was opened, and improved, they would speedily establish fisheries along the coasts of that bay. The oil and the fish now consumed in these States is immense, and they will be furnished then from Hudson's Bay cheaper and more speedily than from the source they now receive them. A trade like this will sooner or later spring up, and create along Hudson's Bay an immense demand for all those manufactures and productions which the United States can supply, and these must find their way through their canal. A large trade at this moment is had along that bay. The Hudson's Bay Company, who have seven forts there and one above York Factory, receive annual supplies to the amount of from £70,000 to £90,000."

We subjoin a further striking illustration of the character of the country on the head waters of the Missouri, in an extract from the adventures of Captain Bonneville, U. S. A., (page 190.)

The Account of the Crow Country, by Arapooish.

About the forks of the Missouri is a fine country; good water; good grass; plenty of buffalo. In summer it is almost as good as the Crow country; but in winter it is cold; the grass is gone; and there is no salt weed for the horses.

The Crow country is exactly in the right place. It has snowy mountains and sunny plains; all kinds of climates and good things for every season. When the summer heats scorch the prairies, you can draw up under the mountains, where the air is sweet and cool, the grass fresh, and the bright streams come tumbling out of the snow banks.

There you can hunt the elk, the deer, and the antelope, when their skins are fit for dressing; there you will find plenty of white bears and mountain sheep.

In the autumn, when your horses are fat and strong from the mountain pastures, you can go down into the plains and hunt the buffalo, or trap beaver on the streams. And when winter comes on, you can take shelter in the woody bottoms along the rivers; there you will find buffalo meat for yourselves, and cotton-wood bark for your horses; or you may winter in the Wind River valley, where there is salt weed in abundance.

The Crow country is exactly in the right place. Everything good is to be found there. There is no country like the Crow country.

The testimony of Mr. Macdonell and of the venerable Crow chief strongly confirms the reports of Messrs. Stevens, Mullan, and their associates, while it refutes the statement of the Secretary of War.

At page 9th of the Secretary's report, we are further told that the country on the North line, for 740 miles, viz.: from the Jacques River to the Sun River, is not fit for cultivation; but Governor Stevens, who explored it, in his official report, folio, page 82, 2d part, says, of this same country, that up to the great bend of the Missouri, far above the Jacques River, the land is adapted to continuous settlement; thence to Fort Union, at least one-fourth of the land is susceptible of cultivation; and above it to the California frontier much arable land might be found, while the immense quantity of game down to the bend of the Missouri, attests its goodness as a grazing country. And again; at page 1, he assures us the grasses on the Black Feet country are exceedingly good, and the country well watered.

The Secretary of War then informs us that an objection exists to the Northern line in the fact that it passes within one or two degrees of British territory, but he can see no objection to the Southern line in the fact that it skirts the frontier of Mexico, even though it may require six millions for the purchase of the Mesilla Valley. Perhaps he may regard proximity to Mexico as decisive in its favor, for it may open the way to those adventurers from the South who would carve more slave States from Mexican territory.

Again; the Secretary expresses great solicitude as to the extra expense which may arise from making two tunnels on the Northern route, which require but two hundred men, with powder, drills, and provisions, for the construction of each, both of which may probably be avoided, and one of which is within a hundred miles of a seaport; but when he deals with similar tunnels, which may be required among arid mountains far from the coast, to reduce almost impassable grades of 108 to 240 feet per mile, on the South line, down to those which are barely practicable, he shows no such solicitude for the extra expenditure, but suggests the high grades may be substituted, if not permanently, at least for a temporary purpose.*

The officers of the army of the United States, and more particularly the corps of engineers educated at West Point, are entitled to the highest respect—they are most of them gentlemen of superior ability, highly accomplished, and distinguished, alike for their services both in the closet and the field; but while we concede them talents, and accomplishments, and familiarity with the higher walks of science, the duty of building railways for the United States has not as yet devolved upon them, nor have they had practice in making original estimates of the cost of railways, or in resolving them into their component or original elements, and we may be permitted to question some of their computations. Let us consider for a moment upon what grounds can they safely add one hundred, fifty, or even twenty-five per cent to the cost of a railway in the old States as the standard for its cost in the new. Thus far the cost of railways has been diminishing as they progress westward. While the railways of Massachusetts have cost fifty thousand dollars per mile, the railways of Ohio, Indiana, and Michigan averages about thirty-five thousand dollars per mile, and the great Illinois Central, just finished, and lying still further west, has cost less than thirty thousand dollars per mile. Although iron costs more as we leave the seaboard, the features of the country soften, and the cost of graduation diminishes. There is, too, one marked distinction between the railways of the old States and those of the new, for which sufficient allowance has not been made in the official estimates, for such an allowance would have reduced some of these estimates at least 18 per cent. The distinction to which we refer is the cost of land and land damages. In a State long settled, like Massachusetts, the cost of land becomes oppressive to railways, and on the seven lines leading out of Boston, whose aggregate length is 534 miles, the cost of land, land damages, and fencing averages nine thousand dollars per mile. It indeed equals, if not exceeds, the whole cost of *graduation and masonry*,

* The Secretary of War, in a report of November, A. D. 1855, suggests that further explorations have shown that some of these summits and gradients may be reduced. It is doubtless true that all the routes may be improved by further study and examination, for such is uniformly the case on other railroads.

and forms 18 per cent of the whole cost of constructing and equipping such railways.

In a correct estimate of cost for a Pacific Railway this item, included in the cost of Eastern lines, should disappear, for the right of way and land for stations are granted from the public domain. Why, then, should the Department, not content with adding this item, double it also, and thus swell the cost of one or more of the Pacific Railways some thirty millions of dollars?

Let us resolve an Eastern railway into its elements, and consider how far the cost of each element will be enhanced when it is applied to the Pacific route. If we take the seven great lines out of Boston, the Boston and Lowell, the Boston and Maine, the Boston and Providence, the Boston and Worcester, the Fitchburg, the Eastern, the Old Colony and Fall River, we resolve the aggregate into the following elements, as approximately stated:—

Iron	20	per cent.
Land, land damages, &c.....	18	"
Graduation and masonry.....	18	"
Miscellaneous labor, about....	15	"
Materials for track, stations, &c., principally of wood..	14	"
Equipage	10	"
Engineering and agencies.....	5	"
	100	"

While the whole cost of the Boston lines averages \$50,000 per mile, as nearly two-fifths of their length has been furnished with a second track, the cost of iron amounts to \$10,000 per mile, or one-fifth of the aggregate.

Upon the Pacific Railway this proportion of iron will doubtless suffice. If at intervals of 75 miles 50 miles of second track be inserted, the line, aided by the telegraph, may be safely conducted, but in estimating iron we must make allowance for the additional cost of its transportation.

Now iron can be delivered by contract on Puget's Sound, or the head of Lake Superior, for less than 20 per cent advance on Boston prices, and as the average haul from each end of the line will not exceed 500 miles, aided by navigation on the Columbia and Missouri rivers, a further addition of 20 per cent, or 40 per cent in the whole, will cover cost of transit. Forty per cent on one-fifth the entire cost will add but eight per cent to the estimate for the Pacific Railway.

But the next item of 18 per cent for land and land damages must be stricken from the account, and thus we place in the opposite scale a reduction of 18 per cent upon the aggregate cost deduced from Eastern standard.

Then comes the graduation and masonry, which must be at least a third less on the Pacific route than on the rugged surface of Massachusetts, if we may judge from the profiles of the Northern lines, on which seven-eighths of the route appears to be nearly level or slightly undulating. Let us concede that the labor will cost 25 per cent more east of the Sierra Nevada, and 100 per cent more west of that range, than in the Eastern States; still the estimated reduction of amount of earth-work and rock-work will counterbalance the excess of wages, and leave graduation and masonry at the Eastern standard of 18 per cent.

The cars and engines may be built in Iowa and Minnesota at prices not materially varying from the Eastern. The timber on the Northern lines will cost nothing except the expense of cutting and moving from the public lands of Minnesota, Kansas, California, and Oregon. The cost of engineering and agencies need not be exceeded, on long and easy lines, and if we add 25 per cent east and 100 per cent west of the Sierra Nevada, or an average of 50 per cent to the cost of miscellaneous labor, we shall find the saving in land and land damages more than compensates for the excess on iron and miscellaneous labor, and leaves the estimates of \$50,000 per mile a safe standard for either of the Northern routes to California.

If we compare the cost of the elementary parts of a railway upon the Northern with those which would enter in the composition of a railway on the Southern route, we find the advantages decidedly with the former.

1st. The iron would cost less on the former, in consequence of the facilities of navigation on Lake Superior, the Missouri and Columbia, the exposed condition of the port of San Pedro, and the difficulties in the way of access to the town of Fulton.

2d. Labor is more costly in the Southern than in the Northern States, as illustrated in the cost of ship-building in our navy-yards, to say nothing of the superior profile of the Northern routes, and the greater fertility of the soil and resources of the country, from which the laborers would draw their supplies. This would reduce the cost of graduation, masonry, and miscellaneous labor.

3d. Timber is cheaper on the Northern route, inasmuch as the Southern relies upon it more or less for supplies.

4th. The equipage, agencies, and engineering would be as cheap or cheaper upon the Northern routes. In what element, then, has the Southern route the advantage, and which of them will sustain the labored theory of the Secretary of War?

But we pass from the inconsistencies which characterize the report of the Secretary of War on a national question, addressed to the whole nation, for they have ceased to be important. The South can no longer expect the sole avenue to the Pacific shall be carried, at the national expense, through Southern territory, inferior in soil, resources, and commerce to those which attract the great current of emigration in more northern latitudes.

If a national line is to be made, it must be either upon the great central route towards which so many lines are tending, like strands of rope combining into one strong cable, or upon that more northern route, which finds in lower levels a milder climate, which connects with the great chain of lakes at the head of Lake Superior, avails itself of the great canal at the Saut St. Mary, and by branch lines to Chicago strikes the great thoroughfares of Northern and foreign emigration, which opens to commerce the navigable streams of the Upper Missouri, the Columbia, the Mouse River, and the Red River, even to the shores of Hudson's Bay, which crosses fertile prairies in a temperate climate, boundless and almost perennial pastures, and rich bottom meadows and hunting grounds, which opens vast supplies of coal, wood, and timber, which gives the best profile, and as we may well presume from the surveys, one of the cheapest routes to the Pacific.

The committee, like statesmen, have presented a comprehensive plan, which does justice to the entire country, which places each line before the

nation, with judicious grants of land, upon the merits of its own route, upon its individual resources in the fertility of its soil, the exuberance of its pasturage, its adaptation to the current of trade and emigration, and its river connections. These are sufficient to insure the construction and maintenance of the Central and Northern lines.

And if the South can find in the arid plains and rugged hills of their line, and in the mines or pastures of New Mexico, or in the Western commerce or emigration of New Orleans and Charleston, sufficient inducements to build the Southern line, let it be built, for we war with no railway, but let it not divert the public treasure from its legitimate channels.

Let Congress, at its present session, consummate the great work it has undertaken; let it mature the charters and grants which have been reported; capitalize the mail-money; and the great work of the present century, which is to bind together this vast empire in bands of iron, and to bear the light of the Gospel, of science and civilization, across the continent, and make it the great highway between Europe and Asia, will be accomplished.

ART. II.—THE POST-OFFICE AS IT HAS BEEN, IS, AND SHOULD BE :

AS A MEANS OF MODERN CIVILIZATION.*

As Congress is about to be asked to reform our postal system, with a view of incorporating into it some improvements which the experience of other countries have successfully tested, it has been thought advisable to set forth some of the considerations which have operated to call public attention to the subject, as well as to state some reasons why all are invited to participate in the movement.

As the Post-office affords an ebbing and flowing system, by which all the secret thoughts, feelings, and affections of a people are, or should be, safely, quickly, and confidentially imparted to each other, it certainly becomes us, as American citizens, to see that our system is in no respect behind that of the most favored nations. A very little examination will satisfy the intelligent observer that our postal system is very far behind, in its means for public accommodation, those of many European countries.

The Post-office of England, in the completeness of its working machinery, takes its position at the head of the list. Such are the facilities which it affords for correspondence, and so completely are the habits of the people assimilated to them, that over 443,000,000 letters were circulated in 1854, while in the United States the number was less than 120,000,000, or about one-quarter the number.

It must be borne in mind, at the same time, that the population of the two countries is about the same, while there is a much larger number in England than in this country who cannot read or write.

Can such a disparity be reconciled upon any other principle than that of a superiority of system? We hold that it cannot.

* The substance of this article was delivered as a lecture in Boston, and is now first published in the *Merchants' Magazine*.

In our judgment, those who speak the English language on this continent are developing the same necessity for an extension of intercourse, as their brethren on the other side of the Atlantic. Scholars speak of the English language as in itself a power. No people have spoken it, or can speak it, but a powerful people. No other language equals it. With a law and genius of its own, it levies contributions upon all other languages, and incorporates the power and beauty, the heart and core, of every other tongue into it. For perspicuity and force, for elegance and smoothness, poetry and science, metaphysics and theology, the pulpit or the forum, the Senate or the bar, for any and every use, there is no language which equals it. By the use of this common language, our country is bound together by a common sympathy; and by the same means—unity of language—we are allied to the most powerful nations of the earth.

The English language is rapidly spreading into all lands, and will, according to present indications, soon become the language of commerce in all nations.

The English and Americans are in the East Indies, in Australia, at the Cape of Good Hope, on the coast of China; in Asia, Africa, Europe, America; on all continents, seas, and islands; along all lines of travel, where they find or *leave* some who speak the language.

With a language of such powers, and representing such impulses, taken in connection with the fact that correspondence is the means of holding conversation with those at a distance, it follows that the machinery which gives scope to these powers, in order to answer the requirements of an advanced civilization, should be as free and perfect as the power of man can make it.

Our correspondence has been compared to the blood of the country, which resembles the arterial and venous circulation of the human system, while the electric telegraph represents the nervous system of the nation and of modern society. They spread over the land, interlinking distant parts, and making possible a perpetually higher co-operation among men, and higher social forms than have hitherto existed. By means of its life-like functions, the social body becomes a living whole, and each of its new applications marks a step in the organization of human life.

Viewed from this point, the Post-office is seen to be one of the most important institutions in civil society, serving and aiding all other institutions, and scattering its blessings among the whole people, alike to the rich and poor.

The postal system may be divided into three distinct eras. The first era was when governments established systems of posts, or royal couriers, not for the accommodation of the public, but only for the purposes of the government and the convenience of the court.

Second. When commerce began to flourish, and a necessity existed for a more general correspondence, letters had to be dispatched by messengers. As soon as it became a profitable business, governments took the control, abolished all private posts, claimed the business as a government monopoly, and wielded it almost exclusively as a means of raising revenue.

The third era was inaugurated under the auspices of Rowland Hill, which established the British Post-office upon the principle that its paramount object should be the convenience and accommodation of the universal public.

All progress in postal affairs refer themselves to one of these periods.

The first era extended over a period of about 2,000 years. The second, from 200 to 300 years. And the third covers a period of only about 16 years.

Although the working of the Post-office system under its new auspices is in a state of infancy, it has been sufficiently tested to show its vast powers as an agent in facilitating the operations of commerce, as well as that of all the great moral, social, and educational movements of the age. Among all the institutions of society there is none which more strikingly illustrates and marks the progress of civilization than the Post-office, in its successive states of progress. Notwithstanding this fact, it must be apparent to the careful observer, that its grand mission in ministering to the wants of humanity, have but just begun.

It may not be uninteresting to take a glance at the past, and to give a brief sketch of the Post-office from its earliest history. Such a survey presents a most striking picture of the world's progress in intercourse.

King Cyrus, of Persia, was the first to establish *posts* throughout his kingdom, with regular couriers, to obtain the latest news from his armies at the seat of war.

This was 560 years before Christ. Augustus introduced the same institution among the Romans, about the time of the Christian era. He also introduced post-chaises.

The same plan was introduced by Charlemagne in the year 800. None of the ancient governments, however highly cultivated, had anything like the modern Post-office Department. Neither Egypt, Greece, nor Rome, in their days of highest glory, had any such thing as a mail for the accommodation of the public. At the time of the Christian era, the Apostles had no other means of communicating their epistles to the churches than by messengers, and they are accordingly mentioned by nearly all of them.

Louis XI., of France, introduced posts in 1470, and this was the first of their appearance in Europe.

Edward IV., of England, in 1481, introduced them into that country with riders on post-horses, which went stages of twenty miles each, to procure the latest intelligence of the events that had passed in the war which he was carrying on with the Scots.

The first chief-postmaster in England was appointed by Queen Elizabeth in 1581—275 years ago.

Posts existed in the reign of Charles I., but were overturned in the civil wars which followed, but were re-established under the energetic government of Cromwell.

Mail-coaches were introduced into England by a Mr. Palmer, in 1784. Mr. P. introduced his plan to Mr. Pitt, then Prime Minister, which was adopted after much opposition from the functionaries of the Post-office Department. Mr. Palmer found the post, instead of the quickest, nearly the slowest conveyance in the country, the average speed being but three-and-a-half miles per hour.

Richard III. improved the system of couriers in 1483.

About the same time similar establishments were started in various portions of the German Empire.

As late as 102 years ago there was no regular stage-coach between the great metropolis of England and of Scotland.

In 1754, one Hosea Eastgate advertised to run between London and Edinburgh, "a new genteel two-end glass coach machine, hung on steel

springs, exceeding light and easy, to go in ten days in summer and twelve in winter," to leave London every other Tuesday. "Performed if God permits," so reads the advertisement, "by your dutiful servant, Hosea Eastgate."

The transition in travel from on horse-back to coaches was the cause of a large amount of lamentation, or, what is called in popular language, old fogyism. It has been supposed by some ardent disciples of Young America, that this age was in advance of all others, even in this class of exhibitions. A brief extract may aid those, curious in such matters, in forming a correct judgment on this point:—

In a pamphlet called "The Grand Concern of England Explained," published in 1673, the writer gravely depicted the miseries and the ruin of trade, occasioned by the introduction of coaches. The style of reasoning is worthy of notice, for the method of argument; and the political and social principles enunciated in it still find acceptance among a few in our own day. "Before the coaches were set up," he says, "travelers rode on horseback, and men had boots, spurs, saddles, bridles, saddle-cloths, and good riding suits, coats and cloaks, stockings and hats, whereby the wool and leather of the kingdom were consumed. Besides, most gentlemen, when they traveled on horseback, used to ride with swords, belts, pistols, holsters, portmanteaus, and hat-cases, which in these coaches they have little or no occasion for. For when they rode on horseback they rode in one suit and carried another, to wear when they came to their journey's end, or lag by the way; but in coaches they ride in a silk suit, with an Indian gown, with a sash, silk stockings, and the beaver-hats men ride in, and carry no other with them. This is because they escape the wet and dirt which on horseback they cannot avoid; whereas, in two or three journeys on horseback, these clothes and hats were *went to be spoiled*; which done, they were forced to have new very often, and *that increased the consumption of manufacture*. If they were women that traveled, they used to have safeguards, and hoods, side-saddles and pillions, with strappings, saddle or pillion cloths, which, for the most part, were laced and embroidered; to the making of which there went several trades, *now ruined*."

Another extract will serve to show the condition of roads in the past century:—

Arthur Young, an author of some note, who traveled in Lancashire about the year 1770, has left us a forcible and graphic, if not elegant, sketch of the state of the roads and of the means of communication. "I know not," he says, "in the whole range of language, terms sufficiently expressive to describe this infernal road. Let me most seriously caution all travelers who may accidentally propose to travel this terrible country, to avoid it as they would the devil; for a thousand to one they break their necks, or their limbs, by overthrows, or breakings down. They will here meet with ruts, which I actually measured, four feet deep, and floating with mud, only from a wet summer; what, therefore, must it be after a winter? The only mending it receives is tumbling in some loose stones, which serves no other purpose than jolting a carriage in the most intolerable manner. These are not merely opinions, but facts; for I actually passed three carts broken down, in these eighteen miles of execrable memory."

Subsequently, in speaking of a turnpike-road near Warrington, he says:

This a paved road, most infamously bad. Any person would imagine the people of the country had made it with a view to immediate destruction! for the breadth is only sufficient for one carriage; consequently, it is cut at once into ruts, and you may easily conceive what a break-down, dislocating road, with ruts cut through a pavement, must be.

Such was the style of traveling in Britain less than a century ago from the time we write.

One more sketch we will venture to give, and that is of a country postmaster :—

The country postmaster was generally an innkeeper ; and Taylor, the water-poet, in his "Penniless Pilgrimage," from the metropolis to Scotland, in the early part of the seventeenth century, describes one of these extortionate worthies :—"From Stamford," he says, "we rode to Huntingdon, where we lodged at the postmaster's house, at the sign of the Crown ; his name is Riggs. He was informed who I was, and wherefore I undertook this, my penniless progress ; wherefore he came up to our chamber and supped with us, and very bountifully called for three quarts of wine and sugar, and four jugs of beer. He did drink and begin healths like a horse-leech, and swallowed down his cups without feeling, as if he had the dropsy, or nine pounds of sponge in his maw. In a word, as he is a post, he drank post, striving and calling by all means to make the reckoning great, or to make us men of great reckoning. But in his payment he was tired like a jade, leaving the gentlemen that was with me to discharge the terrible shot, or else one of my horses must have laid in pawn for his superfluous calling and unmannerly intrusion."

Even so late as between 1730 and 1740, the post was only transmitted three days in a week between London and Edinburgh ; and the metropolis on one occasion sent only a single letter, which was for a banker.

In 1643 the English Post-office yielded a revenue of.....	£5,000
1653 it was farmed out to John Manly, Esq, for.....	10,000
1663 " " " Daniel O. Neal, for.....	21,500
1674 " " out for.....	43,000
1764.....	432,048
1800.....	745,313
1820 rising of.....	2,000,000

Here it reached its culminating point, and the revenue either remained stationary, or fell off, while population and correspondence was daily increasing.

An examination into the causes of this state of things disclosed the fact, that in consequence of high rates for carrying letters, an *outside* post-office had sprung into existence, which was carrying letters between all the large places for one penny (two cents) each. This outside post-office had as regular a system of exchanging bags as the regular office. The average rate of postage in England, as well as in this country, at that time, was about fourteen cents per letter, which was regarded as so exorbitant that public sympathy went with the outside, rather than with the government office.

It was the successful working of this outside office that went far to convince the people of the feasibility of Rowland Hill's plan. The intelligent and far-seeing statesmen of England were satisfied that any rate of postage over one penny per letter would give the letters on long routes to the Department, while the short ones would seek the outside office. The fact was conceded by them, that the only way to invite all correspondence to pass through the mails, was to put the price so low as to take away all motive for competition with the government.

In the debates in Parliament, Sir Francis Baring, Chancellor of the Exchequer, said, "that the whole authorities conclusively bear in favor of a penny postage," and he "conscientiously believed that the public ran less risk of loss by adopting it."

Referring to the petitions of the people, he said :—"The mass of them

present the most extraordinary combination I ever saw, of representations to one purpose, from all classes, unswayed by any political motive whatever, from persons of all shades of opinion, political and religious, and from the commercial and trading communities in all parts of the kingdom."

Mr. Goulburn, then one of the leaders of the opposition, opposed so great a sacrifice of revenue, in the existing state of the country, but admitted that it would "ultimately increase the wealth and prosperity of the country." And if the experiment was to be tried at all, "it would be best to make it to the extent proposed," for "the whole evidence went to show that a postage of two pence would fail, but a penny might succeed."

Mr. Wallace declared it "one of the greatest boons that could be conferred on the human race," and he begged that, as "England had the honor of the invention," they might not "lose the honor of being the first to execute" a plan, which he pronounced "essentially necessary to the comforts of the human race."

Sir Robert Peel, then at the head of the opposition, found much fault with the financial plans of Mr. Baring, but he "would not say one word in disparagement of the plans of Mr. Hill;" and if he wanted popularity, "he would at once give way to the public feeling in favor of the great moral and social advantages" of the plan, "the great stimulus it would afford to industry and commercial enterprise," and "the boon it presented to the lower classes."

Mr. O'Connell thought it would be "one of the most valuable legislative reliefs that had ever been given to the people." It was "impossible to exaggerate its benefits." And even if it would not pay the expense of the Post-office, he held that "*government ought to make a sacrifice for the purpose of facilitating communication.*"

Sir Robert Peel admitted that "great social and commercial advantages will arise from the change, independent of financial considerations."

The Duke of Wellington admitted "the expediency, and indeed the necessity" of the proposed change. He thought Mr. Hill's plan "the one most likely to succeed."

Lord Ashburton said "there could be no doubt that the country at large would derive an immense benefit, the consumption of paper would be increased considerably, and it was most probable the number of letters would be at least doubled." It appeared to him "that a tax upon communication between distant parties was, *of all taxes, the most objectionable.*" At one time he had been of the opinion "that the uniform charge of postage should be two pence, but *he found the mass of evidence so strongly in favor of one penny*, that he concluded the ministers were right in coming down to that rate."

The Earl of Lichfield, Postmaster-General, "assented to it on the simple ground that *the demand for it was universal.*" So obnoxious was the tax upon letters, that he was entitled to say that "the people had declared their *readiness to submit to any impost* that might be substituted in its stead."

This glance at the Parliamentary debates, brief as they are, will serve to show the overruling considerations which operated to induce the British government to adopt their present postal system—the most perfect that exists on the face of the globe.

It may be interesting, also, to glance at the past history of our own Post-office.

The first Post-office in the colonies was established in 1710 by act of Parliament, which continued until the Revolutionary War, when it was controlled by Congress.

Dr. FRANKLIN was commissioned as one of two Deputy Postmasters-General in 1753, at which time the length of post-roads was 1,532 miles. After improving and enlarging the service, and returning to the British crown three times as much clear revenue as the Post-office in Ireland, he was dismissed from office in 1774, as he says, "by a freak of ministers."

In 1790, the Department was organized, and Samuel Osgood, of Massachusetts, appointed Postmaster-General.

It is interesting to recur to this day of small things, for the purpose of comparing the past with the present. Mr. Osgood's first communication as Postmaster-General was addressed to Alexander Hamilton, then Secretary of the Treasury, and was dated January 20, 1790.

At this time there was one grand mail-route extending from Wiscasset, in Massachusetts, (now Maine,) to Savannah, Georgia, with ten "cross roads," as they were called, such as from Hartford to New London, Philadelphia to Pittsburg, New York to Albany, &c.

In 1791, Timothy Pickering was appointed Postmaster-General, and afterwards Secretary of State, under the administrations of Washington and John Adams. He was a man of great firmness, and not easily discouraged by obstacles. His first communication to Congress made known to that body a formidable difficulty which he had encountered in running the mail through the State of New Jersey. It consisted of an act passed by the Legislature of that State, "for raising a revenue from certain stages, &c.," and as the United States government had contracted to have the mail carried through the State by a line of stages, they were thus subject to taxation.

Mr. Pickering, in a communication to the government, says:—

"If the sums exacted from the proprietors of the stages were expended in extraordinary reparations of the road, no passengers would complain of paying enhanced prices for *safer and easier seats in the stages*; but such an appropriation is not even thought of; the avowed design is to increase the revenues of that State. And thus the citizens of the United States have to *purchase permission* to travel on the highways of New Jersey. At the same time, it is remarkable that the express object of one section of the act is 'to *prevent imposition on travelers*.' Having represented this tax, what I conceive it to be, an unwarrantable imposition, it is proper to add that, from information I have received, it originated in the voluntary offer of the proprietors of two lines of stages then running, designed thereby to make a monopoly of the business."

This taste for monopoly, and for taxing citizens of other States for purposes of revenue, it would thus seem, commenced in that State at an early period; and, as is well known to travelers, has not been eradicated even down to the present time.

The fourth Postmaster-General was Gideon Granger, of Connecticut. Very soon after entering upon his duties, he too perceived breakers ahead, which he lost no time in communicating to the Post-office Committee. This difficulty he characterized as of "too delicate a nature to engraft into a report which may become public, and yet too important to be omitted or passed over."

It related to *employing negroes in carrying the mails*, and is interesting in several points of view, and among them as illustrating some of the dangers which attend the acquisition of knowledge.

"Everything," he says, "which tends to increase their knowledge of natural rights, of men and things, or that affords them an opportunity of associating, acquiring, and communicating sentiments, and of establishing a chain or line of intelligence, must increase your hazard, because it increases their means of effecting their object.

"The most active and intelligent are employed as post-riders. These are the most *ready to learn*, and the most *able to execute*. By traveling from day to day, and hourly mixing with the people, they must, they will acquire information. They will learn that a man's rights do not depend upon his color. They will, in time, become teachers to their brethren. They become acquainted with each other on the line. Whenever the body, or a portion of them, wish to act, they are an organized corps, circulating our intelligence *openly*, their own *privately*."

This led to the passage of a law which removed all such dangers.

The extraordinary increase in the number of Post-offices in the United States, with the number of miles of post-roads, to meet the growing wants of our increasing population, as well as the increase in the revenue and expenses, and in the number of letters, may be seen by reference to the following table, commencing with 1790, at which time the Department was founded under the Constitution, and ending with 1854:—

STATISTICS OF THE UNITED STATES POST-OFFICE.

Date.	Post-offices.	Miles of post-roads.	Expenses of transportation.	Revenue.	Total expenses.	No. of letters.
1790	75	1,875	\$22,081	\$37,935	\$32,140	265,545
1791	89	1,905	23,293	46,294	36,697	324,058
1792	195	5,642	32,731	67,444	54,531	472,108
1793	209	5,642	44,734	104,747	72,040	733,229
1794	450	11,984	53,005	128,947	89,973	902,629
1795	453	13,207	75,359	160,620	117,893	1,124,340
1796	468	13,207	81,489	195,067	131,572	1,365,469
1797	554	16,180	89,382	213,998	150,114	1,497,986
1798	639	16,180	107,014	232,977	179,084	1,630,839
1799	677	16,180	109,475	264,846	188,038	1,853,922
1800	903	20,817	123,644	280,804	213,994	1,965,628
1801	1,025	22,309	152,450	320,443	255,151	2,243,101
1802	1,114	25,315	174,671	327,045	281,916	2,289,315
1803	1,258	25,315	205,110	351,823	322,364	2,462,761
1804	1,405	29,556	205,555	389,450	337,502	2,726,150
1805	1,558	31,076	239,635	421,373	377,367	2,949,651
1806	1,710	33,431	269,033	446,106	417,234	3,122,742
1807	1,848	33,755	292,751	478,763	453,885	3,351,341
1808	1,944	34,035	305,499	460,564	462,828	3,223,948
1809	2,012	34,035	332,917	506,634	498,012	3,546,438
1810	2,300	36,406	327,966	551,654	495,969	3,861,788
1811	2,403	36,406	319,166	587,247	499,099	4,110,729
1812	2,610	39,378	340,626	649,208	540,165	4,544,456
1813	2,740	39,540	438,559	703,155	681,012	4,922,085
1814	2,870	41,736	476,602	730,370	727,126	5,112,590
1815	3,000	43,966	487,779	1,043,065	748,121	7,301,455
1816	3,260	48,976	521,970	961,782	804,022	6,732,474
1817	3,459	51,600	589,189	1,002,973	916,515	8,023,784
1818	3,618	59,473	664,611	1,130,235	1,035,832	9,041,880
1819	4,000	67,586	717,881	1,204,737	1,117,861	9,637,896
1820	4,500	72,492	782,425	1,111,927	1,160,926	8,895,415
1821	4,650	78,808	815,681	1,056,658	1,182,923	8,453,264
1822	4,799	82,763	788,618	1,117,490	1,167,572	8,939,920
1823	5,043	84,860	767,464	1,114,345	1,169,886	8,914,760
1824	5,132	84,860	768,939	1,156,812	1,169,199	9,254,496
1825	5,677	94,052	785,646	1,252,061	1,206,584	10,016,488

Date.	Post-offices.	Miles of post-roads.	Expenses of transportation.	Revenue.	Total expenses.	No. of letters.
1826	6,150	94,052	885,100	1,388,417	1,309,316	11,110,336
1827	7,003	105,336	942,345	1,473,551	1,373,239	11,788,408
1828	7,661	114,536	1,086,312	1,598,134	1,623,333	12,785,072
1829	8,050	114,780	1,153,646	1,707,418	1,782,133	13,659,344
1830	8,450	115,176	1,274,009	1,850,583	1,932,708	13,804,664
1831	8,686	116,000	1,252,226	1,997,812	1,936,123	17,980,308
1832	9,205	104,467	1,482,507	2,258,570	2,266,172	20,327,130
1833	10,127	119,916	1,894,688	2,616,538	2,930,415	23,548,842
1834	10,693	112,500	1,922,431	2,823,707	2,896,591	25,443,363
1835	10,770	112,774	1,719,007	2,993,557	2,757,350	26,942,013
1836	11,091	113,264	1,638,052	3,398,455	2,755,624	30,586,095
1837	11,767	141,242	2,081,786	4,100,605	3,803,428	36,905,445
1838	12,519	134,818	3,131,308	4,235,078	4,621,837	38,115,702
1839	12,780	133,999	3,301,922	4,477,614	4,654,718	40,298,526
1840	13,468	155,739	3,213,043	4,543,522	4,718,236	40,891,698
1841	13,778	155,026	3,034,314	4,407,726	4,499,528	39,669,534
1842	13,773	149,732	4,192,196	5,029,507	5,674,752	45,265,563
1843	13,814	142,295	2,982,512	4,296,225	4,374,754	38,666,025
1844	14,103	144,687	2,912,947	4,237,288	4,296,513	38,135,592
1845	14,183	143,940	2,898,630	4,439,842	4,320,732	39,958,978
1846	14,601	149,679	2,597,455	4,089,090	4,084,332	41,879,731
1847	15,146	153,818	2,476,456	4,013,447	3,971,275	47,585,757
1848	16,159	163,208	2,448,766	4,161,078	4,326,850	52,364,819
1849	16,747	167,703	2,490,028	4,705,176	4,479,049	60,159,862
1850	18,417	178,672	3,095,974	5,552,971	5,212,953	69,426,452
1851	19,769	196,290	4,016,588	6,727,867	6,024,566	83,252,735
1852	20,901	214,284	4,136,907	6,828,982	7,108,459	95,790,524
1853	22,320	217,743	4,729,025	7,940,724	7,982,757	102,139,148
1854	23,548	219,935	4,925,785	6,683,537	8,577,424	119,634,418

RECAPITULATION—TOTALS.

Expenses of transportation..	\$86,453,415	Total expenses	\$135,090,314
Revenue.....	133,381,650	Number of letters.....	1,393,930,814

The following table will show the statistics of the British Post-office from 1839 (the last year under the old system) to 1855 :—

STATISTICS OF THE BRITISH POST-OFFICE—REVENUE, EXPENSES, NUMBER OF LETTERS, AND NUMBER AND AMOUNT OF MONEY-ORDERS.

Date.	Gross receipts.	Expenses.	Net revenue.	No. of letters.	No. of money-ordrs.	Amount of money-ordrs.
1839	\$11,953,818	\$3,784,997	\$8,168,821	82,470,596	188,921	\$1,565,623
1840	6,797,332	4,293,385	2,503,947	168,768,344	587,797	4,804,878
1841	7,497,093	4,690,845	2,806,248	196,500,191	1,552,845	15,637,538
1842	7,890,729	4,887,522	3,003,207	208,434,461	2,111,980	21,685,889
1843	8,104,338	4,903,252	3,201,086	220,450,306	2,501,523	25,564,204
1844	8,525,339	4,925,553	3,599,786	242,091,684	2,806,803	28,476,977
1845	9,437,883	5,627,971	3,809,912	271,410,789	3,176,126	32,066,805
1846	9,819,287	5,693,726	4,125,561	299,586,762	3,515,079	35,355,284
1847	10,905,084	5,982,600	4,922,484	322,146,243	4,031,185	39,515,886
1848	10,718,400	7,016,253	3,702,147	323,830,184	4,203,651	40,756,475
1849	10,826,749	6,622,814	4,203,935	337,399,199	4,248,891	40,763,219
1850	11,323,421	7,303,928	4,019,493	347,069,071	4,439,713	42,472,493
1851	12,110,841	6,520,818	5,590,023	360,647,187	4,661,025	44,402,104
1852	12,171,634	6,719,536	5,452,098	379,501,499	4,947,825	47,191,389
1853	12,872,039	7,003,399	5,868,640	410,817,439	5,215,290	49,580,976
1854	13,509,318	7,532,781	5,976,532	443,649,301	5,466,244	52,312,059
1855	13,582,100	.....	.....	456,216,176	5,807,412	55,046,400
	178,045,400	*93,509,380	*70,953,920	5,075,989,472	59,462,310	577,198,199

* Sixteen years.

It is instructive to trace the rate of increase in England, and the causes which operated to produce it.

The increase in the number of letters in the first eight years averaged over 40 per cent each year, although the third and fourth years it averaged but fourteen and eighteen per cent. The cause of this depression is explained by the London *Spectator*, to have been occasioned by the official torpor of the Chancellor, who had hardened his heart against faith in Post-office improvements, and curtailed its accommodations, on the ground that it was expensive. Hence the falling off. This led to parliamentary agitation, which caused the extension of accommodations to the public; and which brought both letters and revenue. "The moral taught," says the *Spectator*, "by this steady increase both of letters and revenue in the Post-office is, that increased facilities for the public bring a corresponding increase both of business and profit to the Department."

The first question that meets us from all quarters, in relation to the proposed system, is, *will it pay?* We submit that it will; and our opinion is based upon the following, among other reasons.

Before, however, proceeding to state these reasons, we would beg leave to ask, with all due deference, if there is any other one department of government that does sustain itself? Does the State, Navy, War, Judiciary, or Interior Departments pay their way? If not, why should we not mutilate and cripple *them*, as well as the Post-office? Our reasons for believing the Department can sustain itself, are—

1st. The receipts of the English Department are nearly double the expenses; which demonstrates that a rate of *one cent* per letter, instead of two, would sustain their Department. Hence it is inferred that if the British Post-office can sustain itself at a rate of *one cent*, the United States Post-office can certainly do so at twice the amount. Most things in England are conducted upon a more expensive scale than in this country. Are we prepared to concede, without trial, that postal machinery can be worked in England at less than one-half of what it can be done in this country? Our position is sustained, in part, by Major Hobbie, one of the Assistant Postmaster-Generals, in an able and satisfactory report upon the English system, made in 1848. He then took the ground, that, considering the vastness of our territory, and the magnitude of our system of mails, and the still greater extent to which they must be carried, three cents here will be a cheaper rate, in comparison to service performed, than in England. If, then, the two systems can sustain themselves in the proportion of three to two, as supposed by Major Hobbie, who is one of our most intelligent and experienced officers, there seems little room to hang a doubt upon, after experience has proved that the proportion is two to one.

2nd. The great reason why our Post-office is supposed to be more expensive than the English is, because of greater distances. This difficulty only needs a little examination to melt away. The idea that distance is the main element of expense, was thoroughly exposed by Rowland Hill. He showed before a Committee of the House of Commons, that it cost as much to send letters from London to Barnet, (11 miles,) as from London to Edinburgh, (397 miles.) The cost of transit from London to Edinburgh he showed to be only one thirty sixth part of a penny—or one-eighteenth part of one cent—and this was found to be a fair average of the cost of transportation in all the mails of the kingdom.

The profitable routes are always on the great thoroughfares, which command large quantities of letters; and the expensive routes are those through sparse settlements, with few letters, *irrespective of distance*. To illustrate this point, it is only necessary to cite a few cases.

The average weight of passengers is about 150 pounds, and with baggage, 230 pounds. The cost of transit between Boston and New York would be by railroad, \$5. By the sound, \$4. The cost of transit by express, including delivery, would be but \$1 25. Letters average about fifty to the pound, 230 pounds would, therefore, be equal to 11,500 letters. This, at two cents each, would amount to \$230. If we estimate the cost of a mail-bag of letters between Boston and New York, of 230 pounds, at passenger fare, the cost of transit is less than the two-hundredth part of one cent! If we estimate the same at the cost of express freight, it would be less than the eight-hundredth part of one cent. If we extend the same bag of letters to New Orleans at the cost of express freight, the cost is less than the eightieth part of one cent per letter. And last of all, if we extend the same bag of letters to San Francisco, across the Isthmus, what is the result? The price of express freight to that point is thirty cents per pound. Taking the average of letters to be fifty to the pound, this makes the cost of transit six mills each. If we add the cost of handling letters in England, seven mills, we make the total thirteen mills, which at two cents per letter would leave seven mills (thirty-five per cent) surplus for profit and contingencies.

In the face of facts like these, coupled with the additional consideration that government secures itself against competition, by making a monopoly of the whole business, can the question be seriously entertained, that a low rate of postage will not pay? The question is often asked, why attempt to reduce postage, when the Post-office Department does not pay its way? But *why* does not the Department sustain itself? The answer is very simple.

1st. It has too many burdens to carry; and 2nd, its facilities for accommodating the public are not up to the times.

Among its burdens are the *franking privilege*. From 1790 down to the present time, letter postage has had to pay not only its own way, but has *done all the government work for nothing*, in addition.

The expenses of the Department from 1790 to 1854 (64 years) were .. \$135,090,314
Amount of revenue same period ... 133,381,650

Balance against the Department..... \$1,708,664

If the government were to be charged its fair proportion, as in England, the balance would be shifted, and bring them from \$20,000,000 to \$40,000,000 in debt. The amount of free matter which leaves Washington alone is upwards of 5,000 tons per annum. The Post-office Committee estimated the franked matter, at the usual rates, at \$2,500,000 per year. If this franked matter had been paid for at the usual rates for the last fourteen years, there would now be a credit to the Department, instead of a deficit, of \$18,919,172, without reckoning interest. This is one class of burdens. Another has always been the desire on the part of persons in sparse settlements to have the mail carried in four-horse coaches instead of on horseback, or in sulkeys—thus introducing a more expensive kind of service. Why? Because the travel is insufficient to sustain lines of coaches, and if the burden can be thrown upon the Post-office in this way, it is regarded as so much gained.

A clerk, recently employed in the contract department, informed us that they had now got in the way of testing such applications, by requesting postmasters at certain points to weigh the mails every day for one week, and report. The result usually was something like this—say forty-five pounds one day, thirty-five the next, forty the third, and so on; which would show at once, the necessity for nothing more than horseback power.

Another burden, and a very heavy one, is the ocean service. The amount paid for transporting the mails in steamships, on the ocean, in 1854, was \$2,023,010 29. To the three lines crossing the Atlantic, viz.: Collins line, the Bremen and Southampton line, and the Havre lines, the amount paid was \$1,178,833 26. The total net revenue realized in postage on account of this sum, was but \$237,588 09, or less than twenty per cent of the amount paid. Loss on the three lines, \$941,245 17, or over eighty per cent. The Collins line is paid \$858,000 per year for twenty-six round trips, or \$33,000 per trip. Formerly it was \$19,250 per trip, but was raised to the former sum. The government got back for this in postage, in 1854, \$153,377 61; less than eighteen per cent of the amount paid for transportation. What service does Mr. Collins perform for this money? He carried in 1854, 1,086,495 letters, which was an average of 41,019 per trip. This makes, on an average of fifty letters to the pound, 820 pounds. He carried also 630,685 newspapers, or an average of 24,257 per trip, which at one-and-a-half ounces each, would weigh about 2,274 pounds. The aggregate, including bags, would make about one-and-a-half tons per trip. The bags charged as freight, either by the Collins or Cunard steamers, would amount to less than \$100. A round trip in the New York or Boston packets of the same bulk, would be charged about \$30. Mr. Collins thus receives from government \$33,000 for a service, for which he would charge a merchant less than \$100. He was paid about fifty cents for each letter and newspaper which he transported. The transit of the 630,685 newspapers sent in 1854 would, at this rate, cost \$315,342. For this government receives two cents each, which includes handling, amounting to \$12,613, showing a deficiency of over \$300,000 on this one item.

Would not such financiering bankrupt any business firm in Christendom? And yet, the first synopsis of the President's message, which came to us over the telegraphic wires, announced the important fact, that the Post-office was over \$2,500,000 in arrears.

We have thus presented some of the causes for this appearance—and shown, as we trust, that it is *only* an appearance. The question naturally arises, why pay steamships for transporting the mails more than five times the whole receipts of postage? The answer to this question is given in the following extract from the Postmaster-General's report:—

"The object of Congress," he says, "in the passage of this Act, [authorizing a contract to carry the ocean mails,] seems to have been to build a naval steam marine which might temporarily be employed for commercial purposes."

A naval steam marine may be all very well, but why, in the name of humanity, should it be saddled as a tax upon letter postage? Rev. Dr. Bacon, in an able article on the subject, asks:—

"Why should we, in the walks of private life, pay our own postage, and that of members of Congress beside? In great Britain, Mr. Hill's system has abolished franking. The Department is no respecter of persons. The queen herself, as we understand the case, pays her postage like an honest woman."

Nobody expects the State, War, Navy, Judiciary, or in short, any other department of government will sustain themselves; but the Post-office—the one which comes home to the business and affections of the great universal public, more than all the others combined, is, as now managed, made to carry, in addition to its own proper burdens, those of all the other departments. It has to carry over 5,000 tons of government correspondence and printed matter, amounting, at the usual rates, to over two-and-a-half millions of dollars annually. It is taxed to the amount of nearly \$2,000,000 a year to build up a naval steam marine. It wastes, according to the estimate of Mr. Miles, and which is partly corroborated by Major Hobbie, nearly \$1,000,000 annually in useless labor—to say nothing of its liability to be used as a vast political machine for rewarding friends, and *not* rewarding enemies; and yet it is held up to the world by officers high in the government, as running behind hand.

If such burdens were imposed, and such injustice practiced among individuals, our thoughts would at once recur to the machinery of courts, and government accommodations, as a means of redress.

Having gone over the ground with regard to the necessity for postal reform, it now remains to explain, as briefly as may be, the kind of reform proposed.

This subject has received a good deal of attention by large committees in New York and Boston. The principles adopted by them, and for which they have concluded to petition Congress, are the following, viz.:—

- No. 1. NO FRANKING. LET GOVERNMENT PAY ITS OWN POSTAGE.
2. UNIFORM POSTAGE, TWO CENTS, WHICH INCLUDES DELIVERY.
3. FREE LETTER DELIVERY.
4. NO COMPULSORY PREPAYMENT.
5. DEAD LETTERS TO BE RETURNED.
6. POST-OFFICE MONEY ORDERS.
7. CHEAP OCEAN POSTAGE.

With regard to the first proposition, there seems to be but little difference of opinion. The sentiment is nearly universal that government should pay its own postage.

2d. Uniform postage, two cents. Who can doubt, who carefully studies the facts, that this sum will be remunerating?

The Postmaster-General's estimate of expenses for the coming year, including all the extraordinary expenses for ocean service, &c., is \$10,199,024.

Are we asked how these expenses are to be met under the new system? We will answer by submitting an estimate, which, we believe, can be realized within a reasonable time, provided the new system is carried out in good faith. It is this:—

Estimate of income on 300,000,000 of letters (about two-thirds the number in England) at 2 cents	\$6,000,000
On newspapers and periodicals	1,500,000
On 5,000 tons of government matter	2,500,000
Amount to navy estimates	1,500,000
Aggregate.....	\$11,500,000

Which leaves a surplus of \$1,300,000 for contingencies. It also leaves out of view the \$1,000,000 expended in useless labor.

The postmaster of Liverpool was asked by the Parliamentary Commit-

tee, "the best way of increasing the revenue?" His answer was, "A great many deliveries, facilities for sending letters, and quickness of dispatch, must be the best way of raising revenue." Rowland Hill's propositions in 1837 were essentially the same, viz. :—

1. Uniform rate of postage.
2. Increased speed in delivering letters.
3. Greater facilities for their dispatch.
4. Simplification in operations in the Post-office.

Experience has demonstrated the practical character of all these propositions. By the simplification of operations, it actually cost the British Department less to handle the letters in 1845 than in 1839, although the increase was over threefold. The cost of handling letters in 1839 was 3 cents each, and in 1854 7 mills each; while in the United States it was 21 mills each. It takes twice the number of clerks, under our system, to do the same work as in England. It has been stated, as a striking illustration of the want of simplification under our system, that the number of rates of postage between a primer and Webster's Dictionary amounts to 1,224.

3d. Free delivery. This is the right arm of the English system. While it is a great public convenience, it is at the same time the most profitable branch of the service. In London there are 1,385 letter-carriers, 498 receiving-houses, and from 3 to 10 deliveries daily. The latter are to be increased to a delivery every hour. In Dublin there are 7 deliveries daily; and in Glasgow, Manchester, and Edinburgh, 4 daily. An American gentleman residing in England, writes that he has often dropped a letter in a receiving-house, had it delivered to his correspondent several miles away, and received an answer by a letter-carrier, at his door, in three hours. What are called the local or drop-letters in England comprise 47 per cent of their whole number.

The number of local or drop-letters in the six principal cities of England were 74,005,791; while in the six principal cities of this country the number was 290,694. Had the proportion been the same as in the British cities, it would have been 26,863,552—an increase of nearly 100 to 1. The expenses of these six English cities were but 18 per cent of the receipts, leaving a profit to the Department of \$1,518,348, or 82 per cent. The advantages of a well-arranged system of free delivery in our cities and large towns, can be hardly over-estimated in a merely economical point of view—to say nothing of its vast social and moral advantages. Upon the principle that "a penny saved is a penny earned," who can estimate the amount of saving in the number of useless steps taken in traveling to and from the post-office?

It has been estimated by those having the means of judging in such matters, that of those who call at the post-office windows for letters that only about 1 in 4 obtain them. The letter-carrier, on his regular circuit, does the running for his whole district, and loses neither time nor steps. The loss of time, by a want of system in these things, is generally overlooked. An intelligent and active newspaper-carrier can earn from \$20 to \$30 per week in selling papers at 1 and 2 cents each. His profits are one-third and two-thirds of 1 cent on each paper, which includes the trouble of collecting and the risks of business. The government letter-carrier runs no risks. His collections are only for non-prepayment, which

is two postages, or 4 cents. A friend who lived one mile from the post-office, gave us the following estimate, which will farther illustrate this point:—

He visited the post-office twice each day, excepting Sundays, which visits averaged about one hour each. This was equal to 620 hours, or 62 days of 10 hours each per year; and if we estimate his time at 25 cents per hour—about the price of a hand-cartman's wages—it amounts to the modest sum of \$155 per annum!

We have no doubt, from estimates we have seen, that a free delivery system could be arranged, by which the twelve or fourteen cities and towns immediately around Boston could have their letters left at the door of each citizen, several times a day, at a cost not much exceeding that now paid for salaries and rents for postmasters. When we consider that there are some 7,000 persons doing business in Boston, who reside in its suburbs, and whose families would have constant occasion for intercourse by letter, who can estimate the vast social and economical advantages growing out of such a system?

The cities and large towns are points to which government must look mainly for letters as a means of revenue, and it is here that the number must be developed. While London contains but one-twelfth of the population of the kingdom, it furnishes one-fourth of the letters; and yet her number of letters to each individual is the least of the six principal cities of Great Britain. It is 43 to each person in London, while it is 57 in Bristol and Manchester, and in Dublin 46. Even the metropolis of old Ireland, with these enlarged postal facilities, looms above the metropolis of the world in the extent of its correspondence. The same rule holds good in this country. The mercantile, trading, and professional classes write the largest portion of the letters. In the six cities of New York, Philadelphia, Baltimore, Boston, New Orleans, and Cincinnati, the number of letters was 24 to each inhabitant, while in the rest of the country it was but 4.

It is estimated that 4,000,000 of inhabitants in the cities and large towns write 97,000,000 of the 120,000,000 of letters in this country, and pay \$3,840,000 of postal revenue; while the remaining 24,000,000 pay but \$2,415,000. It is, therefore, doing no injustice to the rural districts, but rather aiding them, to multiply facilities in the populous parts, as it is here that the surplus money is earned to make good the deficiency which always exists in running the mail through thinly settled portions of the country.

4th. No compulsory prepayment. The reason for this is, that stamps are often stolen, or drop off in the post-office, and it is thought too great a penalty to hold back a letter for this cause, which often proves of great value and importance to the parties concerned. The proposed penalty, therefore, for non-prepayment, is simply double postage. This has been thoroughly tested in England, and it is found that 97½ per cent of the letters are prepaid.

5th. Dead letters to be returned. This is done in England every six days, and when the name of the writer is on the seal or letter, they are returned to him unopened, instead of waiting six months, and then burned, as now practiced under our system. The number of dead letters in England is 5 to every 1,000, while in this country it is nearly 44 to 1,000.

This fact goes far to show the certainty, as well as promptness, of a system of free delivery.

6th. Post-office money-orders. The money-order system of England consists simply in a machinery which enables persons to transmit small sums, not exceeding \$25, through the medium of drafts from one post-office on another. It commenced in 1839, in which year the number of money-orders drawn was—

	No. of orders.	Amount.
1839	188,921	\$1,565,623
1847	4,031,185	39,515,886
1854	5,466,242	52,321,059
1855	5,807,412	55,046,400

The whole number of orders in 17 years was rising of 59,000,000, and the amount of money remitted was rising of \$577,000,000—a sum nearly equal to the valuation of Massachusetts in 1850. The system is there spoken of as a “gigantic auxiliary for carrying out the Penny Postage scheme,” and as a “necessity of their social fabric, as they facilitate trade and the comforts of society to an incalculable extent.” The amount of money transmitted in our mails is estimated at \$100,000,000 per year; of this, over \$2,000,000 finds its way into the dead letter office—to say nothing of the amount lost by fires, robberies, &c. The frequency of the latter is a subject of public concern. When it is considered that post-masters and their clerks form an army of 50,000 persons, with the temptation before them of purloining money, it can readily be seen that there are great facilities for demoralization, and that the money-order system, while it affords great facilities to the public, at the same time removes one of the main causes of temptation.

7th. Cheap ocean postage. It is well known that the cost of transit by water is the cheapest of all modes, and there is, therefore, no valid reason why ocean postage should be at higher rates than inland. The postage on ship letters used to be 6 cents; but when private parties, in connection with the government, conceived the idea of building up a steam marine, with as little expense as possible to the government, it was regarded as a *shrewd financial transaction* to raise as much of the amount required as possible by a tax on postage. Hence, the present rate of 24 cents.

That this rate is extortionary, will be sufficiently manifest in view of a few facts. A ton of freight by Train & Co's. packets averages about 20 shillings, or \$4; by the steamers it would be more. As letters average about 50 to the pound, a ton would make 112,000 letters. If we deduct even \$100 for transit and 7 mills for handling, we still have left \$1,360 for profit and contingencies. The amount of such profits may appear a little like homeopathic doses, but will, we submit, answer tolerably well when they come in showers, as must necessarily be the case between two such continents as Europe and America. Can a good reason be given why the transit of one ounce of paper across the Atlantic should cost more than a barrel of flour—an advance of 3,392 per cent? The London *Athenum* has an article, commencing with the question, “Would ocean postage pay?” Among the points made is one which is thus quaintly stated:—

Compared with the charge for goods and passengers, the letter rate is enormously high. A man weighing 200 pounds—not to speak of his trunks, boxes,

portmanteaus—will take up at least ten times as much room as a bag of letters of equal weight. He will consume no small quantity of ducks, fowls, bread, wine, beer, and vegetables; he will expect to be served with attention night and day; he will claim a right to quarrel with the officers and abuse the captain; he will, perhaps, smoke and swear, and otherwise worry the passengers in the cabin—yet he will have to pay for all these luxuries only some £30; while a harmless bag of letters of equal weight, content with a dark corner and with being left alone, is mulcted for its simple transport from Broadway to St. George's Pier, more than £230! We now speak of the actual and the possible. If 200 weight of whims and wants, flesh and phantasies, besides luggage, can be taken from Liverpool to New York for £30, by the mail packets, surely a bale of letters, like a bale of cotton, may be carried for a third of the money.

We have thus gone through with the various points presented by the New York and Boston committee.

We beg leave, therefore, to submit the question to your candid judgment. To all who are satisfied that the facts presented make out a case which calls for the action of government upon the question, we invoke their aid, not only in signing a petition to Congress themselves, but in inducing their neighbors to do the same—male and female—for this is a question that concerns the female sex as well as the lords of creation. It is believed that of the letters written outside of business circles, those which relate to family and social circles, those written and received by mothers and sisters—to say nothing of those of a more delicate nature—a large proportion are by the female sex. We submit, therefore, that as it is a question which directly concerns their daily life and wants, it is perfectly legitimate for them to make known those wants to the assembled wisdom of the nation.

To the people of New England, and of Massachusetts in particular, it is, we submit, a question of paramount importance. While her children are going forth to plant her principles and institutions in all portions of the broad West, the facilities for holding intercourse with them should be as free and easy as any that exist in the civilized world.

When Rowland Hill first published his plan, the merchants were the first to lead off in the matter. They associated for the purpose of collecting and diffusing information, which aroused the British mind and affections, and thus prompted petitions, with over 38,000 names, to pour into the House of Commons the first year. They proceeded from Town Councils, Chambers of Commerce, Commissioners of Supply, insurance offices, printing offices, banks, charities, mechanics' institutes, &c., &c. Government gave these petitions, the first year, the cold shoulder. The next year the agitation increased, and the number of petitions exceeded 200,000. The demand was so universal that the government yielded to the popular wish, and in so doing, have done more to satisfy her people and to consolidate the British empire, than any other one act within a century.

What has made England in times past the great workshop, as well as the great carrier, of the world? Is it not her economical, industrial, social, and moral machinery, which have been in advance of her neighbors? Is not this the source of her wealth and power? Mr. Stephenson, one of her most eminent engineers, in a recent address, recapitulates some of her economies. Among them is that of railroads. He contends that if they were suspended, the same amount of traffic could not be carried on under a cost of \$300,000,000 yearly—a saving of \$200,000,000 per

annum. To the public, he says, "time is money;" and in point of time, a farther saving is effected, for on every journey of 12 miles an hour is saved to 11,000,000 of passengers, which is equal to 38,000 years in the life of a man working 8 hours per day. This, at 75 cents per day, amounts to some \$10,000,000 in addition. The same law of economy holds good when applied to the post-office.

Shall we, her children, fold our arms and leave to her, uncontested, the proud supremacy she now occupies in these respects? Is not such a postal system, fraught with such means of good to the human race, worth importing and establishing in this favored land?

To the citizens of the United States, we beg to submit this question.

Art. III.—UNIFORM CURRENCY.

THE discovery of gold in California and Australia is producing changes and disturbances in every department of business. Its influence has already been decided and real, even in the brief period that has elapsed since it began to operate; in five or six years its effects could not be very large, but they have been sensible and measurable, indicating how great they will become when they have been allowed time for accumulation. The progress is slow and noiseless, but it is wide-spread and all-penetrating. As the annual supplies of the precious metals are poured into the channels of trade, they swell the magnitude of the current, change the prices of merchandise, interfere with the contracts between man and man, and disturb all the operations of commerce. By altering the relative proportions of gold and silver they encourage governments to call in their old coins, and stamp them with new values, or to change one standard for another, thus wronging their creditors and violating the contracts they have made with the people. As the advance in some products will take place sooner than in others, prices will be changed irregularly. Inequality and injustice will be introduced into almost every branch of trade, and where long contracts are made, as in railroad bonds or government stocks, the depreciation of the metallic currency cannot fail to work a large and serious injury.

Many questions of importance are suggested by these changes. The adoption of a single standard of value, instead of the double one of gold and silver, uniformity in the coinage of the different countries, the extension of the decimal system of France and United States to the several countries of Europe; these and other questions are important, because they relate to the subject of money, in which such deep interest is felt by all classes of society, and to the justice or injustice of governments, whose highest duty is to preserve honesty and good faith among the people.

It is doubted by some persons whether the large supplies of gold from the mines of Russia, California, and Australia have yet produced any appreciable effect upon its value. But the changes already effected in the currency of the United States and of France, and the knowledge we possess of the amount of coin in Europe and America, and of the annual supplies received from the mines, forbid us to indulge in any doubt on this subject. The history of our gold currency in the United States is of itself

decisive of this question; twenty-five years ago our gold eagle would not circulate with our silver dollar, although their comparative weight is nearly the same as now, when both metals are daily exchanged for each other. Before 1834 we had no gold coin in our currency, every eagle that was issued from the mint was immediately bought up and exported to foreign markets. The importer of French silks and wines could discharge more of his indebtedness by one hundred eagles than by a thousand silver dollars. When these were carried to the mint of Paris and melted down into bullion and re-stamped as French coin, the gold made a larger number of francs than the silver. The same was true at London, where the two metals had no legal relation to each other. The half-eagle was heavier than the English guinea, but five silver dollars would not sell for twenty-one shillings, sterling money. The New York merchant, therefore, who desired to pay his debt in England with coin, when the exchanges between New York and Liverpool were unfavorable, preferred to send eagles rather than dollars; in fact, the price of the ten-dollar gold piece was quoted from \$10 40 to \$10 60; that is, one hundred eagles were worth 1,040 to 1,060 dollars of silver.

At present, both our metallic coins circulate together, ten eagles are equivalent to one hundred silver dollars; neither is quoted at a discount. When an export of the precious metals takes place both are shipped together, the difference of value is so slight as to be inappreciable to the brokers, who are sending coin abroad to meet their bills of exchange or pay their foreign indebtedness. The quotations of bullion in the Liverpool market during the year 1855, placed gold of our standard at 75 shillings per ounce, and silver of the same fineness from 5 shillings to 5 shillings 1½ pence. The average of these quotations gives a ratio of 14.81 between the two precious metals; as our eagle contains 258 grains, and ten silver dollars contain 3,840 grains of the same fineness, their ratio is 14.89. The market value of bullion at Liverpool being thus nearly the same as the mint valuation, there is little if any choice which metal should be selected for exportation. At the average quotations just given, it would be best to remit silver, since gold is valued a little higher at the mint than at Liverpool, but the difference is too small to be of any importance. Under the old coinage law of 1792, which remained in force until 1834, the eagle contained 270 grains, 22 carats fine, and the dollar 416 grains of a fineness of 8,924 ten-thousandths. This gave a relative value of 15; that is, every thousand dollars of silver contained fifteen times as many grains of the pure metal as a thousand dollars of gold.

It thus appears that when our gold dollar was lighter than it now is compared with silver, containing of pure metal only 6⅔ per cent of the weight of the silver dollar, it was all exported as soon as it came from the mint, being sold in the market at 4 or 5 or 6 per cent premium, and that now, when it contains a larger proportion of gold, 6.71 per cent, it circulates freely with the silver, and is not preferred at all for exportation.

This history is decisive of the fall of gold or the rise of silver, because it shows that the price of gold, measured in silver, has declined in the last thirty years. As, however, the supply of silver has been nearly stationary, and the demand for it nearly the same, while the supply of gold has largely increased, it is evident that it is the gold which has depreciated, and not the silver that has risen in value.

The history of our currency from 1834 to 1853 is a confirmation of the

conclusion just mentioned. Under the influence of General Jackson and Col. Benton, our Congress passed a law in 1834, lessening the weight of the gold eagle from 270 to 258 grains. In 1837 its fineness was altered from 22 carats to 900 thousandths. The fineness of the silver dollar was also changed to 900 thousandths, but its weight was so altered that the amount of pure silver in the coin remained the same as before. The changes in the gold coin were, however, both in the same direction; it was made lighter and less pure, the alloy was increased from $\frac{1}{2}$ to $\frac{1}{10}$, and the weight was lessened twelve grains.

The effect of this alteration in the mint value of gold was to introduce it freely into our circulation. It did not come in rapidly so as to exclude the silver, but it came in abundantly. The two metals circulated together and were readily exchanged for each other; the country banks generally held the specie in silver, and often sold gold at a premium, but the city banks held both the precious metals in their vaults, and generally paid out both at their counters without any decided preference; everything moved on without disturbance until the discovery of the California mines in 1849. The treasures of Australia were opened in 1851, and the production of the two countries soon told upon our currency; the silver coin was rapidly bought up for export, the country merchants carried the dollars and half-dollars received at their stores to New York, and sold them at a premium; the banks, finding their silver above par, sold it for gold, gaining three or four per cent by the exchange; their vaults were replenished with eagles instead of dollars, to redeem their bills and pay their depositors. The brokers sent our silver abroad until all the channels of circulation were drained, and small change became so scarce that it caused great inconvenience in our daily transactions of business. In 1853, Congress interfered and reduced the weight of the dollar from $412\frac{1}{2}$ grains to 384, to prevent its exportation. The mint came into the market and by paying 3 or 4 or 5 per cent premium for the silver in circulation, and by stamping a less quantity than before with the old names of half-dollar and dime, it has supplied us again with a silver currency. This interference of Congress was an acknowledgement of the depreciation of gold. The object and intention of the act of 1853 was to prevent the exportation of the silver coin, and it effected this object by debasing the dollar, so as to put it on a par with the gold that had already been depreciated by its abundance.

These two periods in our history tell, therefore, the same story. In 1830 and 1856 the comparative weight of the gold and silver coins of the same name were nearly the same, but in 1830 the gold was withdrawn from circulation on account of its superior value, while in 1856 it circulates freely. In 1840 and in 1852 the two were of exactly the same comparative weight, but the silver was withdrawn in 1852, while both circulated together in 1840. In the first case, the mint valuation in 1830 was below the market price, but its depreciation in 1856 brought the two together. In the second case, the value at the mint and in the market in 1840 were the same, but the depreciation of the gold in 1852 brought it below the market price of silver, and drove the silver out of circulation. The movements of the currency in other countries accord with this conclusion. In England gold is the only legal tender, except for small sums under forty shillings, silver being estimated higher by the mint than it is in the bullion market, the depreciation in gold has not yet made itself apparent in the

withdrawal of the silver; the inferior currency, when both circulate together, will always drive out the superior. But the English silver of 1840, although inferior, could not displace the gold, because of its illegal character for large amounts, and the limited amount in circulation. By the act of Parliament passed in 1816, the silver crown of five shillings was made to contain 403.6 grains of pure silver, and as the pound contains 113 grains of pure gold, the ratio of the two metals at the mint is only 14.27, and as gold, although it has now depreciated considerably, is yet nearly 15 times higher than silver, its legal value in the current coin is so low that it is more profitable to export it than silver. No disturbance has therefore taken place in the English currency on account of the depreciation of gold in the markets of the world. The silver coin is never exported, because it is rated too high at the English mint; it cannot push out the gold from circulation, because it is not a legal tender for large amounts, and thus all is quiet and steady.

In France, however, where the two metals have both been legal currencies, the equilibrium has been disturbed precisely as in the United States. The mint price of gold is $15\frac{1}{2}$ times that of silver; before 1850, this was lower than the market value, and by consequence silver was the great medium of circulation, and gold was at a premium; the price of gold was but little higher in the market than at the mint, but still the excess was appreciable. The agio, or per centage above par, was seldom more than one or $1\frac{1}{4}$ per cent. Twelve-thousandths was a common quotation at Paris, and as gold was more convenient than silver for many of the uses of currency, this premium was readily given, silver was generally used in trade and in the small transactions of business, the gold by travelers and in the larger operations of commerce where bank notes might not be employed. The currency was therefore mainly of silver, on the principle well known and universally acknowledged, that if two mediums be both current the inferior will always exclude the superior. The exclusion was not complete, because gold was wanted for some purposes in which it was preferable to silver. The estimate of the circulating coin in France, by Mr. Leon Faucher, a banker and financier of high authority, gave 3,000 millions of silver in francs and 350 millions of gold, making a proportion of more than eight to one.

But since 1850 all this is changed, the agio on gold has entirely disappeared, and silver is now quoted at a premium. The bankers are now buying up the five-franc pieces, which have so long been the principal currency of France, and sending them abroad to meet their foreign indebtedness; gold is flowing into the country to supply its place. The Paris mint is busy coining Napoleons and not francs, slowly but surely the silver is drawn from the provincial channels of circulation, and its place supplied with the new treasures of California and Australia. During the year 1855 the exports of silver were 318,000,000 of francs against an import of 121, showing a loss of 197,000,000 in a single year; at the same time the imports of gold were 381,000,000 against an export of 163, showing a gain of 218,000,000, which slightly exceeds the loss of silver. During the last three years the imports of gold over silver were 923,000,000, and the exports of silver over gold were over 479,000,000.

For a long period of time the currency of France has been stable, when suddenly it is disturbed throughout the whole extent of the empire. The jewellers and manufacturers of plate have been melting down the silver

for the arts and the luxuries of the people, the friction of constant handling is abrading and lightening the circulating coin, and to meet these demands no new supply is introduced; on the contrary, the bankers are busy shipping it abroad and importing gold in its stead. The new gold has to supply the place not only of the silver exported, but of all that is consumed in the arts. Before 1850 the mint at Paris coined about 15,000,000 of gold francs every year; now it sends forth about 250,000,000. In the last five or six years probably one-fourth of the 3,000,000,000 of French silver coin has been changed by the substitution of gold; such a decided movement of specie furnishes an unanswerable argument for the depreciation of gold since the discoveries of California and Australia in 1849 and 1851.

Some idea may be formed of the amount of this depreciation by the quotations in the English market of the price of silver; gold being the only legal currency of Great Britain, silver is sold in the market as any other commodity is, at the best price that can be obtained. The immense commerce of London and Liverpool with the new world attracts to these ports nearly all the products of the American mines; this is the center where they are gathered and whence they are distributed to Europe and the East; the sales being large and frequent, and among many competitors, the market price approximates very nearly to the true value. As silver is easily moved from port to port, and the supply and demand both remarkably stable, the price is steady and without much fluctuation; one or two per cent in a year is the utmost range of prices. The sales being paid for in gold, which is the English standard of value, the price of silver will rise as gold depreciates, and this rise of one will measure the comparative depreciation of the other; the quotations for Mexican dollars per ounce on the first of January of the following years have been:—

1849.	1850.	1851.	1852.	1854.	1855.	1856.
58 $\frac{1}{2}$	58 $\frac{1}{4}$	59 $\frac{1}{8}$	59 $\frac{1}{4}$	60 $\frac{1}{2}$	61 $\frac{1}{8}$	60 $\frac{1}{4}$

pence. On the 20th of September of the present year they were 60 $\frac{1}{2}$, and on the 3d of October, 61 pence per ounce. If 60 $\frac{1}{4}$ be taken as the average rate for 1856, the rise, compared with 1849, would be nearly 3 $\frac{1}{2}$ per cent, or compared with 1850, about 3 $\frac{1}{4}$ per cent. Small as this is it will disturb the currencies of every country where both metals are a legal tender, causing an export of silver and a substitution of gold in its stead.

All these movements of the currency in the United States and France, and in other parts of the civilized world, do not establish a depreciation in the precious metals, but only an alteration in the relative value of gold and silver. We have spoken of the change as if it were caused by a depreciation in gold, because of the great increase in its production, while that of silver remained stationary; but nothing yet brought forward reaches the question whether the circulating coin, which is the legal measure of value, and the great standard by which all the transactions of trade and commerce are compared, has declined or advanced. Both may have risen, and silver more than gold; both may have declined, and then it must have been gold more than silver; but whether the whole mass of the precious metals has varied, so as to cause an advance or a decline in prices, or whether one has remained stationary, is another question, and one of great importance.

It is a common opinion that the recent large supplies of gold have already produced a marked effect on prices, that the high rates which have prevailed for corn, cotton, and slaves, for sugar, coffee, and iron, have been in part brought about by the enlargement of the currency of the world. The slight depreciation of gold compared with silver, which we have been hitherto discussing, could not have produced any considerable portion of these advances. A decline in gold of 3 or 4 per cent would only raise cotton a quarter of a cent per pound, and this is almost inappreciable in the many fluctuations to which it is liable. The average advance in cotton, for example, during the last five years is much greater than this.

Total exports of cotton from 1845 to 1850 were.....lbs.	3,744,000,000
Their official value was	\$276,318,098
Making an average price per pound of.....	7 cents 4 mills
In the five years from 1850 to 1855 the exports amounted to.....	4,745,000,000
Their official value was	\$475,010,289
Giving an average price of	10 cts. per lb.

There is a rise of two cents and six mills, which is thirty-five per cent on the average from 1845 to 1850.

Similar advances have taken place in many important articles of commerce, and it is obvious that the small depreciation of gold, compared with silver, amounting to 3 or 4 per cent, is insignificant and almost inappreciable, amongst the other disturbances to which the prices of all kinds of production are exposed.

Let us inquire, then, what is the amount of increase in the circulation? Has it caused an advance in prices, or has it been only one of many other causes? Have silver and gold both depreciated? And must the two be regarded as one in estimating their effect on prices?

Many estimates have been made of the amount of the metallic currency. Some of these have been made by bankers and financiers; some by ministers of government, by officers of the mint, by parliamentary committees, by writers on political economy; and some by statisticians who have studied this subject with much industry and labor. The facts that have been thus collected have not brought the different estimates very near each other, but they are sufficiently near for our present purpose. The results of the several authorities have fixed the currencies of Europe and America, for the year 1850, at from twelve to fifteen hundred millions of dollars. Since that time the supplies from the mines have furnished to the mints five or six hundred millions, thus making an increase of 30 or 40 per cent. As an increase of the circulating medium advances the price of commodities in the same ratio, if everything else remains the same, we have this astonishing result, that the mere change in the supply of the precious metals has raised the price of every article of consumption 30 or 40 per cent in the last six years. It is the common opinion that the gold of California has had some effect of this kind, and that a great enhancement of prices will soon take place under its influence, but few have supposed so large an effect already produced. It is desirable, therefore, to investigate the facts with care before so great a change can be admitted. A rise of one-third on lands, houses, and slaves, on all the productions of agricultural and manufacturing industry, on wages, rents, and profits, on everything that is bought and sold, on account of the mere

enlargement of the metallic currency, is so astounding a change that it will claim more particular attention.

At the commencement of the present century, the annual supply of gold and silver from the American mines was stated by Humboldt at 43,500,000 of dollars. This distinguished traveler visited the mining countries of the New World, and copied the official accounts of the mints, the treasuries, and the custom-houses. His history and his reputation opened to him records that had hitherto been kept secret from the rest of the world. He explored the mines, and learned the methods for smelting and purifying the silver. He visited the gold washings and the veins of precious ore, and inspected the machinery for crushing the quartz rock out of which the gold was gathered. His reports are, therefore, valuable and trustworthy. The valuable work of Mr. Jacob, on "the Production and Consumption of the Precious Metals," was published in 1831, and brings our knowledge on this subject down to 1830. By his statistics it appears that this American supply, after increasing a little up to 1810, fell off then very largely on account of the Mexican and South American revolutions. The mints of Mexico, which in 1800 coined more than half the amount from America, only issued 19 millions in 1810, and 11 millions in 1811, and 5 millions in 1812, against 26 millions in 1809. In 1813 this coinage advanced to 11 millions, and maintained this average up to 1830. Peace being now generally restored, and English capital extensively introduced, the Mexican mines began to improve. The reports furnished to the British Government by their several American consuls, in consequence of a motion of the British Parliament in 1830, and published by *McCullough* in his "*Commercial Dictionary*" in 1839, show that the supply from America was then 25 millions against 19½, the average product of the preceding ten years. Since that time the supply has advanced considerably. Several statements in *Hunt's Magazine*, and in the *London Atheneum*, and in the *London Times*, give the present production at 39 or 40 millions. This includes all the North American and South American mines except California. The old receipts from Hungary and Saxony, and the rest of Europe except Russia, and from the gold dust of Africa, is only five or six millions, and is nearly stationary. From Russia the production has largely and rapidly increased. In 1829 it was three millions; in 1835, four; in 1840, six; in 1842, ten; in 1844, thirteen; in 1846, seventeen; in 1848, twenty; and in 1850, twenty-one. The necessities of Russia during the last five years would encourage the workings of these Siberian mines, and thus prevent any decline. No increase, however, took place, as the coinage of the Russian mints during this period was nearly stationary. It was for:—

	1850.	1851.	1852.	1853.	1854.
Rubles.....	20,000,000	18,000,000	20,000,000	21,000,000	21,000,000

From California and Australia have come, however, the largest supplies. Gold was first discovered on our Pacific coast in 1848, but the first deposits for coinage that year were only \$44,177. They increased rapidly for the next three years, since which time they have remained nearly stationary. The total deposits of California gold at the United States mint, both for coin and for bars, up to the end of 1855, according to the reports of the director of the mint, have been \$313,234,507. The amount that had been mined and sent off from San Francisco, is, however, much above these de-

posits at the mint. For the year 1851, for example, by official returns in Chili, \$2,372,000 were received from California. The shipments to Europe by steamers and sailing vessels, as far as appears by their manifests, were in the same year \$4,600,000; the amounts carried by passengers to Europe and to the several countries of South America, were large; the consumption by jewellers in California and the United States, of uncoined dust, was considerable; and the amounts circulated on the Pacific coasts, of pieces stamped by private bankers, amounted to several millions. In 1853 the shipments to London alone were \$4,975,662, and in 1854 they were \$3,781,080. For the seven years ending with 1855 the total production must have exceeded four hundred millions. Probably 450 would be near the true production to the end of 1855, but to err, if at all, on the safe side, we will count it at only 400 millions.

The Australian gold fields were discovered in 1851. The exports to Great Britain in this year were £906,336. In 1852 they were £9,735,000. In 1853, 1854, and 1855, they were £10,347,000, £9,028,000, and £11,512,000. Here is an official export of more than two hundred millions of dollars. If to this be added the amounts exported to other countries, both of Europe and America, and those carried by passengers and not entered at the custom-house, the total supply must certainly exceed 210 millions. We have thus a total production for the six years from 1850 to 1855, inclusive, of a thousand millions of dollars, viz:—

From Mexico and South America.....	\$240,000,000
Europe and Africa.....	30,000,000
Russia.....	120,000,000
California.....	400,000,000
Australia.....	210,000,000
Total in Europe and America.....	\$1,000,000,000

Of this production, and of the silver coin previously existing, a large export has been made to India and China. From the time of Pliny, who styled the East "the great sink of the precious metals," the outgoings of specie from Europe to Asia have continued almost without interruption. In 1800 the annual remittances by the Cape of Good Hope and the Levant, and through Russia, was placed by Humboldt at \$25,500,000. The great extension of English manufactures, for a time nearly stopped this drain. In 1830 the exports of specie from Bengal to Europe and America exceeded the imports. The same was true for China in 1832. But recently the current has returned to its old course, and at the present time it has swelled to a greater magnitude than at any former period. For 1856 the exports from England alone have been at the rate of 50,000,000 per annum. Mr. Walsh, late Professor of Political Economy in the University of Dublin, says that over 105,000,000 have been exported from England in the five years from 1851 to 1855:—

For 1855 they were.....	£7,358,161	For 1852.....	£3,551,977
For 1854.....	4,800,302	For 1851.....	1,818,380
For 1853.....	4,590,867		

Counting in the year 1850, and making a small allowance for other countries besides Great Britain, and for the trade through Turkey and Russia, the result for the six years from 1850 to 1855, may possibly reach 140,000,000.

The wear of the coins, according to Jacob, would amount to 30,000,000

for the whole six years. The consumption in the arts for jewelry and plate have been estimated at 28,000,000 per annum by the same author; at 22,000,000 by Mr. Seaman, in his valuable work on the "Progress of the Nations in Industry and Wealth," published in 1850; at 18,000,000 by Humboldt; and at 17,000,000 by McCulloch. Taking the highest of these estimates, and allowing for an increase, the increase in population and wealth for the last five years, the consumption in the arts may be counted at 30,000,000 per annum. The total outgoings, then, from the thousand millions produced will be 350,000,000, viz. :—

For the exports to Asia	140,000,000
For the wear and loss of coin	30,000,000
For consumption in the arts	180,000,000
	<hr/>
Making a total of	350,000,000
And leaving for new coinage	650,000,000

No one can review these figures without perceiving that this result is the minimum addition that has been made to the metallic currency of 1850, the smallest allowances for supplies and the largest estimates for consumption having been uniformly adopted.

It might be a matter of interest to know where this accumulated treasure has gone. By reference to the coinage of our mints, and our exports of specie to foreign countries, as published by the Secretary of the Treasury, it will be seen that the coinage of gold in the six years ending 1855 amounted to \$313,932,820; while the excess of our exports of specie over the imports in the same period were only \$174,394,190. Besides this addition to our domestic coin of more than 135,000,000, it is well known that many millions more are brought in annually by immigrants from abroad, and this importation, unnoticed at the custom-house, far exceeds the consumption in the arts and the loss by wearing and by other causes, so that not less than 150,000,000 of the 650,000,000 added to the currency of the world are to be found in the United States. If this increase in other countries is only half as rapid as it is here, the whole of the new supply is easily accounted for.

In a recent report, made to the Emperor of the French by his Minister of Finance, we learn that the excess of imports over exports in France, since 1850, has been 160,000,000, so that even after allowing for losses and consumption in France, much more than 100,000,000 of the 650,000,000 is to be found in that country. The remainder is to be looked for in the rest of Europe.

The total amount of the precious metals used as coin was estimated by Jacob, in 1830, at \$1,500,000,000. They were then decreasing, but the revived working of the American mines, and the rapid advance of the Russian supply, soon put a stop to the decrease, and kept them nearly stationary until 1850. Humboldt's estimate for the year 1800 was lower than Jacob's; Seaman's, for 1830, and 1840, and 1850, is very nearly 1,200,000,000 for each of the three periods. If we take the largest of these, the addition of 650,000,000 is 43 per cent on the coin in circulation in 1850.

An enlargement of the currency, if everything else remained the same, would cause an advance of the price of commodities in precisely the same ratio. This principle we are familiar with in the expansion and contraction of our banks, and it is confirmed by all experience. Its operation is

readily seen when irredeemable paper money constitutes the currency; but the principle is precisely the same when the circulating medium consists of coin. In both cases, a decrease in the worth of the usual measure of value causes prices to advance. Just as a diminution of the length of a yard-stick would increase the number of yards in a piece of cloth, or a lightening of the pound weight would increase the number of pounds in a bag of cotton, so the reduction in the worth of a dollar would increase the number of dollars for which any article might be purchased—that is, would advance all the prices of merchandise. The yard is the unit of length, the pound of weight, and the dollar of value; and any diminution in either increases the number of times that the unit would be contained in the given magnitude. Money is not a perfect invariable measure of value, but it is the legal and the common one. The yard is subject to some changes from temperature, still it is the legal standard by which all linear distances are reckoned. The pound changes its true weight when the air that surrounds it expands or contracts, or when it is carried to different latitudes or elevations. These, then, are not perfect measures—in fact, for some of the exacter purposes of science, allowances are made for these variations, so as to obtain an unchangeable standard. In like manner is gold an imperfect and variable measure of value, though the legal and common standard by which all contracts are made.

Now, if this measure should be lessened—if the precious metals could be found as abundant as coal—if they could be procured as easily as iron, or copper, or lead—if the cost of producing them should decline—if the gold dust should descend on the earth in showers, and be gathered as water—the price of every commodity must advance in the same ratio as the standard declines. The price of a bag of cotton is the number of dollars it will command, and a decline in their worth would enlarge the number of dollars that would be required to purchase the cotton.

It does not always follow that an increased abundance of an article is an index of its decline. This is generally the case, however. The true average market value is determined by the cost of production. But when, in consequence of the discovery of new mines more easily and cheaply worked than those formerly known, the supply of any metal is rapidly increased, it indicates a decline in the cost of production; and the supply goes on increasing until the price falls to the exact cost of bringing the metal to market. The enlargement of the supply is a measure of the decreasing cost of production. So the increased amount of current coin is a measure of a decrease in its worth and of the advance in the price or money value of every article of merchandise.

These consequences are acknowledged by all writers on political economy, and confirmed by universal experience. The facts which we have brought together being once established, the conclusion is irresistible. The advance of 43 per cent is, however, only true if everything else remained the same.

But as the population of the world has increased a little in six years, and as commodities have been more or less multiplied, so that a larger amount of specie is needed to circulate them, the average advance in prices on account of the gold discoveries of 1848 and 1851 cannot be as large as 43 per cent, but must be reduced in proportion to the increased demand. Our population in the United States and in Canada has increased 15 or 20 per cent in that time, but the rate in Europe is very

different. The subjects of Queen Victoria are not 5 per cent more numerous than in 1850, and the inhabitants of the other countries of Europe not 2 per cent. The increase of commodities is not probably larger than that of population. And to balance these demands for additional currency we have the facilities furnished by new banks, which, by securing deposits from their customers and permitting them to transact their daily business by checks, lessens the demand for coin or bank-notes. But if we give to the enlarged demand its fullest influence, the 43 per cent advance cannot be reduced below 35 or 40; so that we are forced to the conclusion that under the influence of the new supplies of gold from California and Australia, an advance of more than a third has already taken place in the average prices of all the products of industry.

This is very large, but it is no more than the facts warrant, and the fullest reliance may be placed on the result. This change, great as it is already, is still going on. The receipts from California and Australia are only begun, and when other years have accumulated their influence, the effect will increase with time, and disturb still more those prices which are the basis of our business and our commerce.

It might be supposed at first sight that the percentage of increase in the precious metals should be counted on the whole circulation of specie and paper money. But a little reflection will correct any such action. An increased supply of coin permits the banks to expand their issues, and as self-interest always impels them to extend their circulation as much as possible, the paper money will be sure to enlarge *pari passu* with the specie. This expansion has taken place in the United States, as appears by the bank returns published by the Secretary of the Treasury, which show that the circulation of the paper money advanced in the six years between 1849 and 1855 from 115,000,000 to 187,000,000. The wars in Europe, and the consequent demand for specie for remittances to the East, and the want of confidence in paper money in the troublous times of the last few years, may not have permitted as large an advance there in bank-notes as in the specie; but the difference cannot be large—not enough to effect the conclusion that has just been established.

The great reduction in value which has been insisted on in regard to the circulating coin, may seem inconsistent with the slight depreciation of gold which was mentioned in a former part of this article; but the inconsistency is only apparent. The 3 or 4 per cent depreciation which has taken place in gold is entirely with reference to silver. As long as both metals circulate together at any large commercial points, as at Havre or Paris, a change in the value of one cannot take place without carrying the other with it—nor can any greater change than 2, or 3, or 4 per cent take place in one when measured by the other. Just as if wheat should rise in price in New York, it would bring up with it rye, and corn, and buckwheat, and other grains that could be used in its place. If the ordinary price of wheat were \$1, while the three other grains just mentioned were ordinarily 60 cents, a rise of 50 cents in wheat would cause an advance of nearly 30 cents in the others. The price of rye, measured in wheat, would be three-fifths—or nearly three-fifths—at all times; the comparative worth of one, measured in the other, would remain nearly invariable. Six bushels of wheat would buy ten of corn, both when wheat was scarce and when it was plenty. The rise is in wheat, but it extends

to the other grains. So it would be, if instead of a rise, a decline should take place.

These principles are exactly the same for money. There is no depreciation in silver of itself. The present production is not equal to the consumption, and the arts, and the exportation to the East. The abundant supplies from California make gold depreciate 2 or 3 per cent at first, and immediately this metal is transferred to where silver can be found. By taking the place of the silver, and driving it out of circulation, the silver becomes abundant, compared with the demand for it, and depreciates. The two currencies would be then nearly together again, until a farther depreciation of gold takes place by a new supply. A second substitution, a second release of silver, and a second decline succeed each other. If the decline in gold is only one per cent this substitution is made slowly; a difference of two or three per cent accelerates it very much; and four or five per cent is the maximum depreciation that can possibly occur while both metals are used together as a circulating medium. But this two or three, or four or five per cent is not the measure of the total depreciation of the gold, but only the temporary excess of its depreciation over that of silver. The future progress of this decline in the value of the precious metals, and of the rise in prices, will go on in precisely the same manner for the future as it has in the past. It was felt first in the United States, because of our excessive mint valuation of gold under the laws of 1834 and 1837. We counted it worth sixteen times as much as silver, and its depreciation was felt here soonest. When our silver was nearly all carried, Congress interfered and lowered the mint value of gold to fifteen times that of silver. The ratio in France is $15\frac{1}{2}$, and the abstraction of silver is now going on there. The amount in circulation being very large, and commerce in France being comparatively sluggish, the displacement goes on slowly. But unless a change is soon made in the mint regulations of Paris, the silver will disappear as it did here, and force the government to adjust the mint value of the two metals to the market rates. This may be done by raising the amount of gold in the Napoleon, or reducing the weight of the silver piece of five francs. The latter was the plan adopted in the United States, but either would produce the same effect. If the government should make this alteration, then the demand for the East and for the arts, exceeding as it does the annual supply of silver from the mines, must be met by the coins of Germany or other countries where silver is in circulation. When the mint pieces of the two precious metals in these countries shall be altered so as to prevent the exportation of the silver, new calls will be made on the United States, or on France, and another lightening of the silver coins will be required. The value of gold being only ten or twelve times that of silver in the market of the East, the exports of the precious metals thither must long continue to be of silver only. Nowhere in Asia is gold a legal tender, silver being everywhere the only lawful currency. There was for many years a tendency to introduce the gold mohur into circulation in India through the influence of the East India Company. It was authorized to be received in the payment of taxes, and was beginning to have general circulation. It never had, however, the sanction of the government, as a legal coin. When the depreciation of gold commenced in 1850 and 1851, the people of India began to pay their dues to government, and to other persons, more and more largely in gold. They refused, however, to receive it back from the government because it was not as valuable as silver, and

because the government was obliged, in good faith and by law, to pay in silver. The Indian Government perceiving the inextricable difficulties into which they were likely to fall, by having all their receipts in one metal while compelled to make their payments in another, issued a notification in December, 1852, that from the first of January following no more gold should be received into the treasury. Thus ended for the present all the prospect of stopping the Eastern drain of silver, and confined to Europe the new treasures of California and Australia. The great channels of circulation in all these countries of Europe, where gold and silver both circulate by law, must be filled with gold, and from time to time new changes must be introduced to retain the silver. After one or two alterations have been made in the mint valuations of silver in France, and in the United States, and in other countries of Europe, England must receive her call for silver, and her shilling token must be given up. By her laws gold is only 14.4 more valuable than silver, but the abundant production of gold, and the increased need for silver, will bring the more precious metal down to this ratio, and force England at last to the same changes that had been found necessary in other countries. This course must be continued until the depreciation of gold and the rise in prices shall prevent the working of some of the mines, by so diminishing the amount of commodities that can be obtained for the labor employed in mining, that it can be more profitably employed in other pursuits. When this withdrawal of labor and capital from the mines shall so reduce the supply that the production shall equal the consumption of the world, both for the arts and for the wear and loss of coin, then the equilibrium will be restored, the depreciation will cease, and prices will no longer advance. The tendency towards this equilibrium will be in both directions. The decline in gold will lessen the profits of the miners and discourage production. At the same time it will increase the demand for ornaments and watches and plate, and because of the enlarged amount of coin in circulation, made necessary by the rise in prices, it will also increase the loss by wear and by shipwreck. This enlargement of the demand for annual supplies of gold, as well as the decrease of supplies from the mines, will unite, therefore, in restoring the equilibrium between the production and the consumption of the precious metals.

Although this progress must go on, it will not continue as rapid hereafter as it is at present. Every enlargement of the currency lessens the percentage which the annual supplies bear to the whole coin in circulation, so that the rise in prices will be in a diminished ratio. The advance in the money value of European merchandise will increase the demand for the products of the East. If cotton shall continue to be worth nine or ten cents a pound, or shall advance to still higher rates, the imports of East India cotton will increase. If silks shall advance at Lyons, new activity will be given to the commerce with Asia. If the price of coffee rises, the enlarged consumption of tea will cause more extensive shipments from the Chinese Empire. These new imports into Europe must be met by larger shipments of specie, and thus the annual demand from the mines will be increased, and the equilibrium of supply and demand hastened.

In the present and prospective disturbances of the currencies of the world, the most favorable opportunity is presented to the governments of Europe and America to adopt a uniform coinage. In the United States we have twice changed our coins during the last quarter of a century; why did we not accommodate them to the coins of England and France, with which

countries our commerce is so large? In 1834 our half-eagle contained 123.75 grains of pure gold. It now has 116.1. Why was it not changed to 113.001, so as to correspond to the English sovereign? In 1850 our dollar contained $381\frac{1}{2}$ grains of pure silver. It now has 345.6. Why was it not made exactly equal to the five-franc piece of France, which has 347.364 grains? These accommodations could easily have been made, and would have afforded great facilities for trade and commerce. As France will soon be forced to change her mint values of gold and silver, why not invite her to a treaty arrangement by which uniformity in coinage will be secured between the two countries? As England is anxious to secure a decimal currency, why shall not the three countries work together and adopt a common system, in which a dollar and an eagle, a franc and a Napoleon, a shilling and a sovereign, shall be of the same fineness and exact multiples of a common unit, so that they can be readily exchanged for each other?

Such an arrangement is called for by strong interests, and it can be effected without any violation of good faith, or any interference with the contracts between the citizens of their respective countries. The losses and inconvenience of the existing arrangements are very great. We are large exporters of gold, and our eagles and half-eagles are shipped by every steamer to Liverpool, and then transported to London, the great center of the commerce of the world. As our coins are not current in Great Britain, the Directors of the Bank of England send these coins at once to the mint, new and beautiful as they are; and no seignorage being required by the government, they are sent without hesitation or delay. Here they are remelted and refined. A new and different amount of alloy is mixed with the pure metal, and the gold is re-issued in the shape of sovereigns, having the stamp of England on them instead of that of the United States. The coin is returned to the bank only to be transferred to Paris, where it is again uncurrent. Fresh and new and pure as sterling coin can be, it is transmitted to the French mint, melted and purified again, alloyed with a different per centage of copper, and returned to the Bank of France. There is no rest for it here. It must be sent to Germany or Spain, to Austria or Russia, to be melted, alloyed, and stamped again with new names, devices, and weights, and at every transfer there is a loss in value, at every recoinage there is an appenditure of capital and labor, a waste of metal, of time, and of interest. The government, the people, and the merchant, all lose, and nothing is gained by any one. Not even the money-changers are benefited by the operations, for they have to give their time and their skill and their industry, for the charges they make for exchange.

These losses are small compared with the inconvenience to the merchants and the injury to commerce. The price of exchange would be largely decreased by a uniform currency. As it is impossible in any part of the United States that exchange on New York or Boston should rise or fall more than a quarter or a half per cent, or at the farthest one per cent, so exchanges between New York and Havre, or New York and Liverpool, could only vary a fraction of one per cent, if the coins of the two countries were current in both, or if their exact value was generally known. The price of exchange would then be the mere cost of transporting the coin, while now it varies two or three per cent, or more. The general ignorance of the exact value of foreign coins tends to narrow the trade to a few merchants engaged in that particular branch of commerce, and thus interferes with the free competition which is the life of business, and the best

security for justice among merchants, and for prosperity and activity in commerce. When cotton is quoted at Havre as worth so many francs per hundred kilogrammes, or as having risen or fallen so many centimmes per half-kilogramme, few persons understand the quotations or the amount of the advance or of the decline. Business is thus shackled and restrained, because only a few know how to act on account of the difference of coins and the mysteries of exchange. Free trade, free interchange of commodities, free intercourse between the business men of every country, is the great discovery of modern politics, and everything that tends to promote it is to be cherished and encouraged. Uniformity of weights and measures would be a great *desideratum* also, and every aid should be given to bringing about a "consummation so devoutly wished for." But as governments move slowly, and as so radical a change in the ideas and names and magnitudes, as is implied in a uniformity of weights and measures, can only be effected with difficulty, there is no reason to delay the changes in the currency till all shall be rendered uniform. The reasons for making the coins uniform are much stronger than those which favor uniformity of weight and of measure. The object can be effected with ease, with simplicity, without disturbing names, and without violating contracts. Some changes are absolutely necessary, and in making them it is just as easy to stop where some neighboring nation has stopped, as to go beyond or to fall short of their limit. Besides, the coin itself is exported while weights and measures are not. Cloth and wine and iron are shipped from one country to another, and are then bought and sold by different measures than before. But the measures themselves are not transferred beyond the boundaries of the State which employs them. When coins, however, are carried abroad, they are not only merchandise, but standards of value, and to deprive them of this last quality is to lessen their utility, injure the exporter, and disturb the transactions of commerce.

The present time being so suitable for this reformation, when changes in the currency are made indispensable in consequence of disturbances in the values of the precious metals, by the opening of new sources of supply, it is important that this change should be made on correct principles, in good faith with the people of the several countries, and with as great advantage as possible to the interests of commerce, of free trade, and of international brotherhood.

In any reformation of the coinage of different countries, it is of the highest and most indispensable importance that justice between man and man, and between the governments and the people, should be preserved inviolate. Very slight changes in the current coins may, however, be made without violating this principle. In 1834, 1837, and 1853, the United States altered the value of their coins, but a severe scrutiny of the several acts of Congress will not establish any unfair or unjust principle in our legislation on this subject. If any wrong was done, it was too slight to be worthy of notice. The debasement of the coinage has been the disgrace of kings and emperors in dark and barbarous ages and countries, and the iniquities of a depreciated and irredeemable paper money have been sanctioned in modern times by nearly every country in the civilized world. These wrong doings have not been confined to Europe or America, to the present century or to the preceding one. But whether approved by sovereigns or by the people, they are none the less dishonorable and wicked. Let the public faith be kept pure, untarnished, inviolate. No repudiation, no payments of obligations in

name and not in reality, can be tolerated or approved by the three great nations who are at the head of the commerce and the civilization of the present age.

In any change that may be made it is most desirable to retain as much as possible of the present state of things. This is important in all reformations; but in matters of business it is especially important. Nothing enters so completely into our daily life and thoughts as money. Not that all persons are absorbed in the pursuit of gain, or in the accumulation of wealth; but the price of every article of food and clothing, of everything we consume or produce, is of necessity often presented to our minds. Our habits of thought and action in regard to cost and prices are thus deeply fixed in our nature, and to uproot them will be difficult, if not impossible.

It is greatly to be desired that the French *gramme* should be employed as the unit by which all the coins shall be weighed. This weight was adopted by France at the suggestion of her men of science, under the influence of the strongest feelings of fraternity among all nations. It was not obtained by weighing a grain of wheat from the valleys of the Seine, or by measuring the foot or the arm of a French Emperor, but from the great earth herself, which being the common property of all nations and people, furnishes an appropriate metre for a universal standard. The gramme is not dependent on an arbitrary weight deposited at the State Archives, which may be lost or destroyed. The circumference of the earth supplies the metre, and the weight of a certain measure of water determines the gramme. The English and American pound, or ounce, or grain have no such claims to preservation. Perfectly arbitrary, dependent on a standard pound kept in the tower at London, they present no claims to recognition out of the country where they have been adopted. A Frenchman or an Italian, a Mexican or a Brazilian, sees nothing in them that he can appreciate, while for the metre and the gramme every civilized people of the globe admires the science and skill with which they have been determined, and approves of them as good and proper means for the use of all mankind.

It is also desirable to preserve, as far as possible, the decimal system. This has been adopted in France and the United States, and its advantages are so great that it would be impossible to induce us to return to the old system of pounds, shillings, and pence, of livres, deniers, and sols. The English have not yet adopted this system, but an earnest desire among the merchants, the politicians, and the scientific men, has been expressed in its favor. A commission of distinguished statesmen and men of science has been appointed by Parliament on this subject, and the witnesses examined, as well as the commission, have been unanimous in recommending it. Many difficulties are presented to its general introduction, especially as to weights and measures, but a slight effort will overcome them all as far as relates to the coinage.

A fifth point, not less important and indispensable, is the preservation of the common names, applying them as near as possible to the same absolute values. If a shilling, or a pound, or a dollar, or a franc were abrogated entirely, no force of law in a free country like ours could drive them out of use. In spite of pains and penalties, the people would still employ them in their daily business transactions; in their private calculations and estimates; in their books and accounts, and sales, and purchases. And if the law should affix these names to new coins of different values, the confusion between the old and new systems would lead to misunderstandings and disputes, and hardships and injustice, so that trouble and wrong instead of

peace and equity would follow the efforts to introduce harmony and uniformity among all nations.

6. In making any new system it should conform to the recent change in the comparative value of gold and silver, and advance a little below the existing ratio, so as to anticipate any slight deterioration of gold which may take place hereafter.

The increased supply of gold from California and Australia has produced as yet but little effect on the comparative value of gold and silver. The market value of gold before 1850 was $15\frac{1}{2}$ or 16, but it has now receded to $14\frac{3}{4}$ or 15. The quotations for the last report of the London market were for—

Foreign gold in bars (standard).....per ounce	£3 17 9
Silver in bars (standard)	0 5 8½

The standards for the two metals are different.

The gold was one-twelfth alloy, the silver seven-and-a-half per cent. The ratio between the two then becomes 14.89. It would not, therefore, be well to rate the gold higher than $14\frac{3}{4}$ times the value of silver.

7. It is desirable that the fineness of all the coins should be the same, and that this fineness should not be expressed in the antiquated nomenclature of the English, as so many carats, quarters, and fractions of a quarter, but in per centage, as has been done in France since 1816, and as has been done in the United States since 1837. This fineness is 90 per cent in both countries, and there is no good reason why this should not be adopted by all.

8. All changes in the coinage of the two metals should be made in that metal which, even though legal, is not current. In England, gold only is a legal tender, and the principal metal employed as a currency. From 1717 to 1816 gold was overvalued at the British mint, and silver was therefore excluded from circulation. In 1816 a change was made in the silver coin, and gold was undervalued, but silver, not being made a legal tender for more than 40 shillings, was kept out of circulation; the change in England ought then to be in silver.

In France, before the re-coinage of 1785, as well as since that period, gold was undervalued at the mint, and was therefore excluded from circulation. The present change should therefore be in gold, but it must be made soon if made at all, for the depreciation now going on in gold has brought it below the mint value in France, and it is flowing thither rapidly, and driving the silver out of circulation.

In the United States, since 1853, gold is the only lawful standard of value, silver not being a legal tender for more than five dollars. This important change in our currency was made in the recent bill for lightening our silver coin. Any change that shall be made, ought therefore to be in our silver, which though current has no legal value except for the purposes of small change.

By following out this condition the governments will act in good faith with their citizens. When gold does not circulate any alterations in it will be neither inconvenient nor unjust, and so of silver. If only one metal is current or legal, the understanding and intention in every agreement and in every obligation is to pay a certain number of dollars or francs or pounds in the legal or current coin, and any changes that may be made in the other uncurrent or illegal metal will not interfere with the contracts or engagements of the citizens.

9. It is important to preserve the franc as the unit for silver, and the

pound as the unit for gold. These have many claims for preservation which the dollar and the eagle have not; the franc is intimately connected with the metrical system introduced by the scientific men of France, and founded on the measure of the earth's circumference, it is legalized in Belgium, and extensively used in Italy and other countries of Europe. The present pound has been preserved unchanged for more than a hundred years. It was introduced with the house of Hanover, and since 1717 has been the only unit of account; it survived unaltered the suspension of specie payments during the French revolution, and the violent changes in the currency of Great Britain, made by Sir Robert Peel in 1819. Since that time the sovereign has been the only legal and the only current unit of the United Kingdom. The silver dollar and the gold eagle of the United States have neither been made sacred by time nor by uniformity. The dollar has recently been diminished seven per cent, and the eagle has been three times changed in less than a quarter of a century. Our country is new and our people flexible and ready for reformation and improvement; used to change, we cannot claim that our coinage should be adopted as the model for old, stable, and conservative countries, where innovation is a crime, and reform the signal of danger and alarm.

It might seem difficult at first sight to retain all these important requisites, and secure uniformity without disturbing the existing system to an inconvenient and alarming extent, to preserve the gramme, the pound, the franc, and the decimal system, the present names and values, and the recent ratio between gold and silver, without violating good faith, or interfering with the obligations between man and man. But though difficult it is not impossible.

If the franc is retained as the silver unit, it will be easy to accommodate our dollar to this, by making it exactly equal to five francs. This would increase its present amount of pure silver only about one-half of one per cent, and as we have, but three years since, reduced it seven per cent, so small a change is unexceptionable.

If $14\frac{3}{4}$ be taken as the proper ratio between gold and silver, the weight of twenty-five francs in gold will be readily determined. The pure silver would weigh $112\frac{1}{2}$ grammes, and the gold 7.62712; this would equal 117.7505 grains, and agrees almost exactly with 1,000 English farthings. An ounce of standard gold, or 440 grains of pure gold, is coined at the English mint into £3 17s 10½d. So that a pound contains 113.0016 grains, and 1,000 farthings, 117.7100. This differs from the 25 francs only three-hundredths of one per cent. If the 25 francs of gold were made to weigh exactly $7\frac{5}{8}$ grammes, the agreement would be still more complete, although the ratio between the two metals would then be a trifle less than $14\frac{3}{4}$. The number of grains in $7\frac{5}{8}$ grammes is 117.7178, which differs from 1,000 farthings of the present English standard pound less than the two-thousandth part. By counting 25 francs a guinea, or a thousand farthings, and by making the franc and the guinea of these two weights, viz.: 5 grammes of silver and $7\frac{5}{8}$ grammes of gold, the currencies of France and England could be brought into harmony with each other, and with the market rates of gold and silver. By increasing our half-eagle from 116.1 grains of pure gold to 117.7178, the coins of the three nations would become identical. These are all the changes that are necessary to bring the three currencies into harmony.

1. As to the gold coins; to make the American half-eagle and the French piece of 25 francs identical with a new English coin containing one thousand

sterling farthings, to be called a guinea. Its weight to be $7\frac{5}{8}$ grammes of pure gold, or $8\frac{1}{3}\frac{7}{8}$ of standard gold of 90 per cent fineness.

As to the silver coins; to make the American dollar and the English four-shilling piece, which they purpose to denominate a double-florin, (but which ought to be called a dollar,) identical with the five-franc piece; viz.: $22\frac{1}{2}$ grammes of pure silver, or 25 grammes of standard silver of 90 per cent fineness.

These changes cannot be objected to in the United States, because they are too slight to be noticed in the ordinary transactions of commerce, and because they tend to repair the slight injustice of our legislation of 1853, by increasing the dollar, which was then made 7 per cent lighter than it had been, and by increasing the eagle about one per cent, which by its real depreciation had made the change of 1853 necessary.

It ought not to be objected to in England, because their principal currency is in gold, and that is retained unaltered. The new proposed coins—a florin and a guinea—would be exactly equal to 100 and 1,000 farthings, and would thus permit them to introduce the decimal system without changing their unit or altering their common names. The present money of account could easily be reduced to the new coins, and existing contracts settled with simplicity and justice. Thus £3 5s. 6d. reduced to farthings, would give 3,144 farthings, or 3.144 guineas, or 3 guineas 1 florin and 44 farthings. The shilling might be made to contain $12\frac{1}{2}$ pence of fifty farthings, and be exactly half the florin. The guinea is not of exactly the same weight as the coin formerly used of that name, but as the name is familiar, and the new coin nearly of the same value as the present guinea, the name might be retained.

The greatest difficulty would probably come from France. Her five-franc silver piece is indeed retained unaltered. The gramme is made the unit by which all the coins are to be weighed. The decimal system, for which she has made so many exertions and sacrifices, is extended to England. The standard of fineness, long since adopted by her, and then by the United States, is made universal. By all these alterations the pride and self-love of the French would be gratified, but as she would be required to call in her present gold coins, and substitute in their stead new ones of greater weight, opposition and objection might be expected. The present Napoleon of 20 francs is $15\frac{1}{2}$ times lighter than 20 silver francs. The proposed coin of 25 francs (which ought to be called an eagle) is only $14\frac{3}{4}$ times lighter. The present gold franc weighs 322.58 milligrammes, and the proposed one is to weigh 338 $\frac{3}{8}$. The old coins will have to be re-melted, and re-issued about one-twentieth heavier than before. This is made necessary by the depreciation of gold, and is therefore just to the people and just to the government creditors. But though all these reasons favor this change, it is to be feared that the desire to depreciate rather than to improve the weight of the coin, which is so natural to Sovereigns who have debts to pay, will outweigh all these considerations, and induce them to reject every such proposition. We have changed our coins three times in the United States, but have always debased them. The English have changed their silver coins 19 times in the last eight hundred years, and only twice have they made them contain more metal than before, the increase being then only one or two per cent. So has their gold coin been depreciated 22 out of the 24 times it has been altered. The same is true in the history of other countries, and it is to be feared that such will be the future history of governments. If the French Emperor

should rise superior to these unholy motives, and consent to give to his people a larger amount of gold than was promised when gold was more valuable than it now is, all difficulties might be removed.

Here is a table containing the changes proposed with the percentage of difference between the old and new coins.

Pure metal.	Weight of present coins in grains.	Weight of new coins in grammes.	Change of value. Per cent.
Silver five-franc.....	347.36	22½	0
Silver dollar.....	345.60	22½	0½+
Silver florin (100 farthings).....	336.36	22½	3½+
Gold guinea (1,000 farthings).....	117.71	7⅞	0
Gold eagle.....	116.10	7⅞	1⅞+
Gold eagle of 25 francs.....	112.05	7⅞	5+

The extension of this system to the other countries of Europe would not be difficult. The Russian imperial would correspond to our eagle, the sequin of Tuscany, the ducat of Austria, Denmark, Sweden, Bavaria, Hanover, Saxony, Wurtemberg, and Holland would be very nearly the same as eleven francs. And so the other coins of Europe could be declared equal to a certain number of dollars or francs or shillings, and new coins issued containing such a multiple of the unit adopted by the three great commercial nations of the world as might be approved by the rulers or by the people of each particular country.

Never in the history of commerce was so favorable an opportunity presented for securing a uniform coinage, exchangeable everywhere without objection or delay or expense, by name and by weight according to law and to custom. Commerce has been extended wider and farther than ever before in the history of the world, the coins of different countries approximate already to simple multiples of a common unit, the discoveries of California and Australia are disturbing the relative values of the precious metals, the true principles on which the coinage of money depends are everywhere understood, the desire for free trade and universal brotherhood among nations is to be found among the rulers and the people of every portion of the civilized world, and everything favors the prompt and speedy establishment of a single uniform currency for every nation in Europe and America.

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CHARTER PARTY—AUSTRALIAN SHIPPERS.

In United States Circuit Court, October 3, 1855. Before Justice NELSON. John C. Erlen vs. the ship Brewer. His Honor delivered the opinion of the Court as follows:—

The libel in this case sets out a charter party between the libelant and the owner, bearing date the 16th June, 1853, by which the ship Brewer was chartered for a voyage from the port of New York to Melbourne, Australia, upon certain terms and conditions therein specified. That the libelant took possession of the vessel with the knowledge and assent of the owner, and has never since relinquished the same, that by the terms of the contract, he, the libelant, was bound to man, victual, and navigate the said ship at his own expense, and by his own procurements, whereby he became owner of the vessel during the time covered by the charter party, and had expended large sums, and much time, and had incurred heavy responsibilities in and about the procurement of passengers, and outfits for the ship, her crew and passengers, and had entered into contracts of affreightment

for the outward and homeward voyage. That the libelant is disturbed, hindered, and molested in his possession of said ship, and in putting her cargo on board, and in the enjoyment of his rights, secured to him under the charter party, by a person placed on board by the owner, as master, and who, as such, is bound to obey the instructions of the libelant, according to the terms of the contract; but refuses to obey the same, and is upheld and encouraged in the disturbance and molestation of the possession by the owner. The libel then prays a decree for the possession, or damages for withholding it. The answer admits the charter parties as set out; and the complaint alleges that the delivery was conditional, and to become absolute only in case the owner (the respondent in the suit) should, after inquiry for that purpose, be satisfied as to the sufficiency of one Samuel D. Jones, who undertook, by an indorsement on the charter party, to guaranty performance on the part of the libelant, the charterer; and that it was understood and agreed at the time of the execution and delivery, that the guaranty was not to be considered sufficient till the respondent should declare his satisfaction with the responsibility of Jones, and that being unable to obtain any reliable information as to his responsibility or sufficiency, notice was given to the libelant the next day (the 17th June,) of the insufficiency of the guaranty; and that he then and there agreed to procure other person or persons to secure the performance on his part to the satisfaction of the respondent, but wholly neglected and failed so to do. The answer, also, denies that the possession of the ship was delivered to the libelant, or to any person on his behalf; but alleges that the charter became null and void on account of the non-fulfillment of the covenants on the part of the libelant. Among the covenants in the charter party, the charterer agreed to pay the owner of the ship for the charter during the voyage, \$1,200 per month, and to pay all the wages of the master, officers, and crew; also, all foreign port charges, including consul's fees, wharfages, and pilotage, and to furnish sufficient provisions and water for the use of passengers and crew, and all incidental expenses (except repairs) during the voyage, one thousand dollars to be paid on the 20th of June, two thousand at the expiration of sixty days, four thousand on the arrival of the ship at Melbourne, or in New York within thirty days after advices of her arrival, and the balance on the arrival and discharge of cargo in the United States. There is also this further covenant:—"And it is also understood and agreed that this charter party shall be guarantied to the entire satisfaction of the party of the first part." The charter party was signed and delivered on the day it bears date, June 26, 1853, and underwritten the signatures, is the following:—

I hereby guaranty the fulfillment of the within contract. New York, June 16, 1853.

SAMUEL D. JONES.

Witness, B. E. ARROWSMITH.

And also the following indorsement:—

This charter party commences on the sixteenth instant. New York, June 16, 1853.

J. N. M. BREWER.

This statement of the pleadings and parts of the charter party will be sufficient to present the material questions involved in the case. The first case, and which concerns the merits of it, whether or not the owner agreed, either expressly or by necessary implication, from his silence at the execution and delivery of the charter party, to accept Jones as guarantor within the covenant? This is a question of fact, and must be decided upon the weight of the evidence. Edwin R. Jones, the broker who negotiated the charter for the libelant, with B. E. Arrowsmith, a broker, on behalf of Brewer, the owner, states that he was present when the guaranty was signed by Jones; that Brewer was present, and that the witness proposed at the time that the parties should go to the Atlantic dock, where the ship lay, and put her in possession of the libelant; that Brewer said that he would not go at that time, but assigned no other reason; that the witness then proposed that he should put on the charter party some stipulations that would answer the same purpose, which he agreed to, and wrote the indorsement signed by him,

which we have already referred to. He further states that when the writings were completed, he inquired of all the parties if they were satisfactory, and all agreed that they were, and that no dissatisfaction was expressed by Brewer. Sylvanus Pickering, a commission merchant, was present, and concurs, substantially, with Ives; also, McLorid, clerk of the libelant, and R. H. Lockwood, who was present. The latter was to be supercargo of the ship in her voyage to Australia.

At the time of the execution and delivery, a draft by the libelant, accepted by Jones, the guarantor, for \$2,000, payable in sixty days, was given to Brewer, to cover the second payment, and a receipt given for the same.

B. E. Arrowsmith, the broker on the side of the owners in the negotiations, states that when they went to the office of the libelant, where the charter party was executed, he met the latter at the entrance of the inner office; that he and Brewer conversed together on the subject, and that Brewer stated that he did not know about Jones. The libelant said it should be made satisfactory. It was all right in regard to Jones. The conversation had been that other security should be given, if required. He admits that when the draft was handed to Brewer, and he had signed the receipt, the libelant asked if it was all satisfactory, and the former answered in the affirmative; but the witness states that Brewer sent him the same day to the libelant to say to him that the matter was not satisfactory; he said that he should endeavor to get other names as security, and advise him as soon as possible. Other names were offered, but on inquiry were rejected. The witness also states that he made inquiries about Jones, and could not get anything satisfactory concerning him. Brewer authorized this witness, as late as the 21st and 22nd of June, to accept sufficient security, and carry into effect the charter party, but refused to give up possession of the ship till the security was given.

This is the substance of the testimony bearing upon the main question involved, except it has been shown by evidence in this court that the libelant was insolvent at the time he entered into the charter; and I can find nothing in the proofs, either in the court below or in this, to show that Jones was a man of any responsibility.

It is quite clear, therefore, that whatever may have been the form and solemnities with which this contract was entered into, and even, if in a way to blind, in judgement of law, the parties, so far as Brewer, the owner, is concerned, there has been, in reality and substance, no fulfillment of the most material covenant in his favor, on the part of the charterer. The guarantor, for ought that appears, was a man of straw, and the charterer himself insolvent. This inference against Jones is not a harsh one; for after the evidence that inquiries had been made, and nothing satisfactory could be obtained concerning him, the burden lay upon the libelant to show that he was a man of responsibility. I admit he may rest his case, as he has, upon the agreement of Brewer to accept him as satisfactory, whether possessed of any responsibility or not; but if there is any doubt about this agreement upon the testimony, the fact of his want of responsibility is an element that cannot be overlooked. The equity and justice of the case must have its weight in deciding the question. The importance of this evidence was, no doubt, fully appreciated by the learned counsel for the libelant, and the omission to produce it leaves the unavoidable inference that it was in his power.

The case, then, on the part of the libelant, must be upheld, if upheld at all, upon the naked fact that Brewer agreed to accept Jones as security, whether of any responsibility or not,—either supposing at the time, that he was, or so indifferent to his interest that he would not take the trouble to make the inquiry.

The witnesses examined for the libelant go far to establish this view of the case. But they do not directly, nor even by necessary inference. No one of them ventures to say that Brewer expressed himself satisfied with Jones as guarantor or surety, or anything to that effect. They speak in very general terms on the subject,—that it was all satisfactory,—appeared to be perfectly satisfied,—expressed no dissatisfaction,—and the like.

But I agree, taking into consideration the execution of the charter party, the indorsement of Jones as surety, and of Brewer, as the time when the articles were to commence, in connection with the evidence of satisfaction expressed by him at the time, would be sufficient to foreclose the case, if there was nothing else in it.

The conclusion would be irresistible that he had agreed to accept Jones as satisfactory.

Arrowsmith, however, who knew as much about this transaction as any one, being the broker of Brewer, states that in an interview between the parties, just previous to the meeting to execute the articles, Brewer expressed his doubts as to the responsibility of Jones; and that thereupon the libelant promised that it should be made satisfactory, and added that it was all right in regard to Jones. Now, it was after this assurance and representation by the libelant, that the articles were executed and delivered, and the expressions of satisfaction made. What strengthens the evidence of this witness, and shows that he could not well be mistaken, he states that, afterward, on the same day, Brewer sent him to the libelant to say that Jones was not satisfactory, and that he thereupon promised to get other names, and others were subsequently furnished, but rejected as insufficient.

This evidence explains the expression of satisfaction of Brewer at the time of the execution of the charter party, as the question of the sufficiency of the surety was left open between the parties, and the instrument not to be binding, which is the fair inference, till that matter was determined. This explains, also, the taking of the draft accepted by this same man Jones, and receipt given, as the whole was to be dependent upon the event of the satisfactory security.

It has been said that there is a great preponderance of witnesses in favor of the libelant on the question of the acceptance of Jones. But this is a mistake. There is no discrepancy between these witnesses and Arrowsmith. The interview between the parties when he was present, was at a different period of the transaction, and of which they had no knowledge. There is no contradiction of this witness.

Take the case, therefore, in any aspect in which it can be properly presented, and the libelant must fail. There was either a false representation of the pecuniary ability of Jones to induce Brewer to accept him, or there was an understanding between them that other names should be procured, and that the articles should be considered open till this matter was determined.

This case is somewhat interesting. A party utterly insolvent, with a friend as surety for him, equally irresponsible, undertakes to charter a ship for passengers and freight to Australia for large hire, agreeing with the owner in the charter party that its fulfillment shall be guaranteed to his entire satisfaction.

The articles are entered into, and formally guaranteed by his friend in the presence of his clerk, broker, and person appointed supercargo of the ship, all of whom with another witness, are called to prove that it was agreed this friend should be considered satisfactory. No proof is offered of his pecuniary ability, but from the course of the trial, on the contrary, it was conceded that he was a man of straw; and the case put upon the naked fact of the acceptance of this sort of security.

In addition to this, a payment of two thousand dollars of the hire of the vessel is sought to be made by a draft at sixty days, drawn by the charterer, and accepted by the same friend.

The thousand dollars that were to be paid in a few days, was more embarrassing; when called on for that sum it was not paid, for the reason as assigned, that he had not finished his contracts for freight, and, therefore, had not the money. This is not an isolated case. Other vessels have been chartered for these gold regions that have come under our notice, evincing similar ingenuity and financial skill; but, unfortunately, the enterprise was not checked as early as the present one.

Plausible and specious as has been the attempt here to get the possession and control of this ship under the pretext of security, to enable the libelant to raise money upon her freight and passengers, it is impossible not to see, if it had been successful, the transaction must in all human probability have resulted in a fraud, either upon the shipowner or passengers, or both. The whole capital out of which to pay the hire and bear the expenses of the ship during the voyage was dependent upon the fare and freight. If the libelant could have got possession of the ship, he probably might have procured passengers, and received passage and freight money, but whether the owner would have received the hire for his ship, or the passengers reached the gold regions of Australia, is not so certain. The

ship itself was all the security of either for the undertaking, or any undertaking entered into by the libellant in connection with the enterprise.

I am also of opinion that the libellant had not at any time, or for any time, acquired the actual possession of this vessel under the charter party; and if the question had become material, I should have deemed further inquiry necessary to satisfy me that the Court of Admiralty had jurisdiction of the case. But I do not go into this question, and prefer placing the decision upon the grounds above stated.

As the decree below was for the libellant, I must reverse it, and direct a decree for the respondent, with costs.

QUESTION OF PARTNERSHIP.

Supreme Court of California. Before Judge Shattuck. *Guy vs. David, Jr.* (July 16th, 1856.)

This was a motion to set aside sale judgment by default, and for leave to answer.

The plaintiff sued the defendant, as a general partner, for some \$6,000 indebtedness, and verified his complaint. The defendant failed to answer, a default was taken, judgment entered, and the property—a candle manufactory and fixtures—sold under execution. Jean B. Dennis now comes forward, and, by affidavit, alleges that he was a silent partner in the manufactory and business; that the judgment was obtained by collusion between the plaintiff and defendant to defraud him; that the firm did not owe the amount for which judgment was entered; that the property was sold without due advertisement, and for half its value; that he has a meritorious defense to the action, and prays for the sale and judgment to be set aside, and that he be made a party and have leave to defend. The plaintiff, upon a rule, shows cause.

He admits that Dennis is a silent partner, denies the merits, re-asserts underneath the amount of the judgment to be justly due, which is likewise verified by the oath of his cashier, and asserts that the sale of the property was fairly made.

Judge Shattuck, in giving his decision says :—

The suit was properly brought against the general partner only, (Revised Code 124, sec. 11.) and therefore Dennis has nothing to complain of unless injustice has been done him by the alleged collusion. He swears that the firm did not owe the plaintiff so much, but this is more than counterbalanced by the oath of the plaintiff and his cashier, and is not a solitary instance of one's indebtedness being greater than he had supposed. The sale was made by the Sheriff, and the presumption of law is that it was legally advertised and sold; and this, too, is sustained by the affidavit of the plaintiff. I cannot, therefore, see any cause for setting aside the proceedings, admitting that Dennis has only now learned of the suit. I find, however, by the papers filed, that by his contract he was himself a laborer in the manufactory, that the whole establishment was attached at the commencement of the suit, and held by the Sheriff until the judgment and sale; and how he, being there, could be ignorant of it, is inexplicable to me. I see nothing to complain of unless it be in the cost bill, which seems large; but if this is erroneous it does Dennis no injury, as there is no personal judgment against him, and his capital in the concern would be swallowed up without this.

The motion is denied.

CONTRACTS—RESCISSION—TENDER MUST BE CONTINUOUS.

If the vendor refuses to accept the property when the purchaser offers to return it, this will dispense with a more formal tender; but the purchaser, if he still retains the property in his possession, must yield it up on the reasonable demand of the vendor, and his refusal to surrender on such demand, even after suit brought, will destroy the effect of his previous tender. *Bennett vs. Fail & Patterson.*—*Supreme Court, Alabama.*

COMMERCIAL CHRONICLE AND REVIEW.

THE MONEY MARKET AND ITS CHANGES—FINANCIAL TROUBLES IN EUROPE—CONSERVATISM OF THE UNITED STATES—THE NEW CHANNEL OF TRADE, VIA THE ISTHMUS OF PANAMA, AND ITS EFFECT UPON THE COMMERCE OF THE WORLD—RECEIPTS OF GOLD FROM CALIFORNIA, AND BUSINESS AT THE MINT AND ASSAY OFFICE—THE BANK MOVEMENT—IMPORTS AND EXPORTS AT NEW YORK FOR OCTOBER, AND FROM JANUARY 1ST—RECEIPTS FOR CASH DUTIES—MOVEMENT IN PRODUCE, ETC., ETC.

THE stringency in the money market, noticed in our last, became more severe after that report was sent to the press, and continued without much mitigation throughout the largest portion of the month under review. The principal pressure was in the commencement at the North and West; and although it was at first most intense at the seaboard, it soon extended throughout the interior, setting the current of specie toward the principal money centers, where the drain of the precious metals for export had been greatest. Under this pressure, a large number of small dealers and second-class financial operators were compelled to suspend; and occasionally one of more note was added to the list of bankrupts. In general, however, the demand for money was met by capitalists wherever the borrower had prime securities to offer, and none who could make a solvent exhibit were compelled to succumb. Toward the close of the month the pressure at the South increased, the banks not daring to grant full accommodations, on the present aspect of commercial affairs.

The news from Europe has continued unfavorable in a financial point of view, the money pressure having been severely felt both in England and France. Rates of interest have accordingly advanced on both sides of the water, and there has been almost a scramble after specie. Opinions are divided as to the future course of monetary affairs in Europe, but those who have the highest reputation for sagacity predict a fierce struggle, and a general break-down of credit in France. The *Credit Mobilier* has thus far increased the speculative mania, which seems to have extended over the entire continent, and to have seized upon all classes of people who have anything to venture in the game. That gigantic organization has thus far stood firmly against every assault; some look for its immediate overthrow, while others, who are acquainted with the master minds that control its movements, are more confident of its stability. A portion of the London capitalists denounce its operations as verging on the extreme of recklessness, and it is difficult to judge how far these assaults are the result of jealousy of its unparalleled success. It has certainly taken a wonderful stride in developing the internal resources of the continent, and there can be no doubt but what its influence will be widely felt for good throughout the remainder of this century, even though it should now go down, carrying with it a multitude of those who hoped to grow rich under its shadow. The Emperor of France has a will of his own in financial as well as political matters; and hitherto his financial and commercial policy has been approved by the judicious of all countries.

The financial troubles in Europe have had a tendency to limit the speculations in raw silk, and to reduce the price; and our importers have thus been enabled to place their orders at prices considerably below the rates demanded a few weeks ago. This will encourage the importation for next spring, which it was feared would fall below the demand for consumption.

It is not a little singular that the United States which have been classed by all financial writers among the most adventurous speculators of the age, should now occupy a more conservative position than any other country having a foreign commerce upon the face of the globe. If this position can be maintained for a few years, it will carry the United States to a pitch of commercial greatness, the present statement of which would seem almost fabulous.

No other enterprise undertaken by the American people has done so much to

change the established currents of the world's commerce as is now promised in the completion of the railroad across the Isthmus of Panama, formerly called Darien. The near approach of the Atlantic and Pacific at this Isthmus, led the early explorers of Central America to conceive the project of a ship canal which should practically unite the two oceans, and thus save the weary and dangerous voyage around Cape Horn. Each one of the principal European nations has, at one time or other, attempted this work, and at least three of them have believed themselves upon the point of carrying it to a successful issue. Not a few preliminary surveys of the Isthmus have been full of promise, but in every instance a further acquaintance with the difficulties of the route has led to the abandonment of the attempt. The Atrato route, lower down, is still cherished, and may one day result in good. The Panama Railroad is strictly an American enterprise. After all hopes of a canal at this point were given up, the project of a railroad was originated, and amid difficulties, and in the face of obstacles which would have daunted ordinary courage, has been carried to a successful issue. And, marvellous as it may seem in railroad annals, this has been accomplished without the sacrifice of either principle or dignity, every pecuniary obligation of the company having been promptly met from the beginning, and that without the resort to any illegitimate methods of obtaining money, although the cost was far beyond the original estimates. The expenditure to complete the road is nearly eight millions of dollars, and the total investment will probably exceed this sum by two or three hundred thousand dollars, when the outfit is perfected. The road is now in good running order, and is regarded in all parts of the United States as a national work, although it has been carried to completion by private capital. The vast changes which are to follow the opening of this route have now commenced. Their very magnitude has interfered with the rapidity of the result. It was a new channel for commerce, and not a mere improvement of an old thoroughfare. It broke through the barrier of unsubdued wilderness, and for the first time, since the continent was discovered, opened a broad pathway from the Atlantic to the Pacific. The old channel of trade swept for 10,000 miles around Cape Horn, and could not be diverted in a day. Thousands of eager passengers poured over the Isthmus, in their transit to and from California, as soon as an avenue was opened, but commerce could not buy a ticket and set out at once upon its travels. It needed ships of established lines, including regularity and certainty of conveyance; it hesitated for precedents of safe voyages and speedy deliveries; it waited to disencumber itself of the trappings and dead weight of the old thoroughfares. Merchants were ready to ship their goods by the new route, but where were the vessels to take them? Shipowners were anxious to send their vessels, but the freight was not already stored upon the wharf, and they could not at once count upon a cargo without collecting it. The whole trade could not be combined like a clock, and set in motion on a given day, and thus its progress has been slow from the outset; but the change is none the less sure, nor its results less momentous. The company which built the road, might have been excused if it had given up in exhaustion of its means, when the link was completed, and called upon other adventurers to perfect the connections. Through steamship lines, already established in communication with New York and San Francisco, it had a growing trade, yielding a profit of from ten to fifteen per cent upon its capital stock. But it has not been satisfied with this; with far-reaching sagacity it has been the pioneer in the enterprise of demonstrating the advantages of this route to the world. It has loaded its coffee at Costa Rica, brought it across the road, and taken it to New York, where it has been sold, retailed, roasted, and drank, before the tattered vessel that carried a rival cargo around the stormy Cape in the old track appeared off Sandy Hook. It has returned Yankee calicoes to the western coast, where they have faded into dinginess before the cargo that preceded them had doubled the Horn and gained its destination. It has been almost ubiquitous in combating the fears of the timid; encouraging the spirit of the pioneer adventurers, whose fugitive ships came like white-winged heralds into the strange harbors; and making known to the Atlantic nations, that the Pacific, whose waves once rolled on the other side of the world, was now harnessed by an iron band at their very

doors. This has been the work of eighteen months, and although not yet consummated, is steadily conducing to the grand result.

The road being finished, the greatest difficulty was, perhaps, in the want of freighting vessels in the Pacific. Nearly all the craft sent to the western coast, went there for a specific purpose, and not like numbers of ships in our ports, commissioned to look for business. This evil is being slowly cured, by dispatching freighting vessels and steamers around the Horn on that particular errand. Already large amounts of the produce of the South-west Coast, consisting of Peruvian bark, cocoa, pearl shells, India-rubber, and hides, have been brought over the road, together with some coffee. The latter will now come forward in the new direction in larger quantities, a contract having been made to transport, by the new route, a considerable portion of the new crop from Costa Rica to New York. The service on the Pacific side will be performed by the steamer *Columbus*, which will run regularly between the principal ports of Central America, and on this side by sailing vessels. Two regular lines of vessels have been established between Aspinwall (the Atlantic terminus of the road) and England, one of which connects with Liverpool, and the other with London. A steamship line has also been established between Liverpool and Aspinwall; the pioneer steamer, the *Saladin*, is now on her first voyage, and is advertised to leave Liverpool again in February.

The attention of the United States government has been called to this channel of communication with the Pacific. Several companies of troops and supplies of provisions and munitions of war have been sent out over the road for California and Oregon. The brig *Abby Taylor* sailed November 18th from New York, with a full cargo of stores for the Pacific Squadron, and merchandise for Costa Rica; and the steam-frigate *Wabash*, bearing the broad pennant of Commodore Paulding, has sailed for Aspinwall, taking out a full crew for the *St. Mary's*, in exchange for those whose term of service has now expired. Hereafter, it is probable that none of the vessels of the government squadron in the Pacific will be sent home. A large portion of the period for which the outfit is made has heretofore been consumed in going out and returning; and a great saving can be effected by making the necessary changes across the little belt of land now traversed by this road; while the dock at San Francisco, even if the government should not establish a naval station near Panama, would be quite sufficient for the purpose of repairs.

We have been thus particular in directing the attention of our readers to the changes this new channel of commerce is likely to produce, because of the magnitude of interests involved, and because there is no rival enterprise to complain of favoritism or injustice. We hazard nothing in predicting for this point an increase of consequence far beyond any past estimates of its importance. Less than 50 miles in length, the Panama Railroad is one of the most important lines ever completed. By steam, it is only 9 days from New York, 12 days from San Francisco, and 18 days from Valparaiso; and it is thus made the center of an enormous trade, the lines of which must radiate from it, or be altogether lost in the distance. It is also in the direct route of Australian commerce; and in the course of another year or two, a regular line of steam packets will open a communication between Great Britain and her Australian colonies, via the Isthmus. Whether in the progress of this ever-increasing trade, the United States will become possessed, by purchase, of the whole State of Panama in fee simple, as some have suggested; or only acquire the right of police regulation over a narrow tract occupied by the road; or the whole remain under the government of New Granada, it is not safe to predict. In either case, the rights of transit and property are guaranteed in the strongest terms by treaty stipulation, and cannot be legally infringed.

The receipts of gold at the Atlantic seaboard from California continue about the same. We annex a statement of the business for the last month, at the New York Assay Office:—

DEPOSITS AT THE ASSAY OFFICE, NEW YORK, FOR THE MONTH OF OCTOBER.

	Gold.	Silver.	Total.
Foreign coins.....	\$4,000 00	\$15,000 00	\$19,000 00
Foreign bullion	4,800 00	5,500 00	10,300 00
Domestic bullion	2,291,200 00	19,000 00	2,310,200 00
Total deposits.....	\$2,300,000 00	\$39,500 00	\$2,339,500 00
Deposits payable in bars			2,809,500 00
Deposits payable in coin.....			30,000 00
Gold bars stamped.....			2,177,845 64
Transmitted to U. States Mint, Philadelphia, for coinage.....			25,229 37

The following is a statement of deposits and coinage at the United States Mint in the city of Philadelphia during the month of October, 1856:—Gold deposits, \$130,810; silver, including purchases, \$60,370; total deposits, \$191,180. The coinage executed was—

GOLD DEPOSITS.

	No. of pieces.	Value.
Fine bars	50	\$12,321 00
Dollars	319,763	319,763 00
Total.....	319,818	\$322,089 00

SILVER DEPOSITS.

Quarter dollars	316,000	94,000 00
Dimes	680,000	68,000 00
Half dimes	640,000	32,000 00
Three-cent pieces	86,000	2,530 00
Fine Bars.....	58	7,269 68
Total.....	1,782,058	\$203,849 68

COPPER.

Cents	223,356	2,233 56
Total.....	2,325,232	\$538,172 24

Denomination of coins on hand at the Mint of the United States, at Philadelphia, at the close of business for the day, October 31st, 1856:—

GOLD.		SILVER.	
Double eagles	\$591,960 00	Bars	\$7,175 67
Eagles.....	55,220 00	Dollars	10,786 00
Half-eagles	12,220 00	Half dollars.....	451,901 00
Quarter-eagles	121,060 00	Quarter-dollars.....	536,366 00
Three-dollar pieces..	21,531 00	Dimes	66,931 50
Dollars.....	219,503 00	Half-dimes.....	105,691 75
Bars.....	8,875 75	Three-cent pieces ..	35,392 74
		Cents	1 32
	\$1,027,969 75		\$1,264,245 98

Total amount of balance on hand..... \$2,292,215 73

The banks have generally continued their contractions. At New York, the discount lines have run down, but the specie has fluctuated, the stream having turned again from the interior. At the South the banks have been in a comparatively easy position, but having noticed a disposition among their customers to hold on to produce at the current high rates, they declined to issue their circulation freely, and thus for their own safety, as well as for the good of the

country, they will compel the speculators to hurry the cotton and other produce to market. We annex a statement of the New York banks, showing the weekly changes since the opening of the year :—

WEEKLY AVERAGES NEW YORK CITY BANKS.

Date.	Capital.	Loans and Discounts.	Specie.	Circulation.	Deposits.
Jan. 5, 1856.	49,453,660	95,863,390	11,687,209	7,903,656	83,534,893
Jan. 12.	49,453,660	96,145,408	11,777,711	7,612,507	77,931,498
Jan. 19.	49,453,660	96,382,968	13,385,260	7,462,706	82,652,828
Jan. 26.	49,692,900	96,887,221	12,733,059	7,506,986	78,918,315
Feb. 2.	49,692,900	97,970,611	13,640,437	7,622,827	82,269,061
Feb. 9.	49,692,900	98,344,077	14,233,329	7,819,122	82,848,152
Feb. 16.	49,692,900	99,401,315	15,678,736	7,693,441	88,085,944
Feb. 23.	49,883,420	100,745,447	15,835,874	7,664,688	87,680,478
March 1.	49,784,288	102,632,235	15,640,687	7,754,392	88,604,377
March 8.	49,784,288	103,909,688	15,170,946	7,888,176	88,749,625
March 15.	49,784,288	104,528,298	14,045,024	7,863,148	88,621,176
March 22.	49,784,288	104,533,576	14,369,556	7,912,581	89,390,261
March 29.	51,113,025	104,745,307	14,216,841	7,943,253	88,186,648
April 5.	51,113,025	106,962,018	13,381,454	8,347,498	91,008,408
April 12.	51,113,025	107,840,435	12,626,094	8,281,525	91,081,975
April 19.	51,113,025	106,765,085	12,958,132	8,221,518	90,875,737
April 26.	51,113,025	105,538,864	13,102,857	8,246,120	89,627,280
May 3.	51,113,025	105,325,962	12,850,227	8,715,163	92,816,063
May 10.	51,113,025	103,803,793	13,317,365	8,662,485	89,476,262
May 17.	51,113,025	103,002,320	12,796,451	8,488,152	88,720,415
May 24.	51,113,025	102,207,767	13,850,333	8,335,097	87,094,300
May 31.	51,458,508	102,451,275	14,021,289	8,269,151	86,775,313
June 7.	51,458,508	103,474,921	16,166,180	8,430,252	90,609,243
June 14.	51,458,508	104,168,881	17,414,680	8,360,735	91,602,245
June 21.	52,705,017	105,626,995	17,871,955	8,278,002	93,715,837
June 28.	52,705,017	107,087,525	17,069,687	8,250,289	93,239,243
July 5.	53,170,317	109,267,582	16,829,236	8,637,471	100,140,420
July 12.	53,170,317	109,748,042	14,793,409	8,405,756	95,663,460
July 19.	53,170,317	110,873,494	15,326,131	8,346,243	95,932,105
July 26.	53,170,317	111,346,589	13,910,858	8,386,285	92,365,040
Aug. 2.	53,658,039	112,221,563	14,328,253	8,646,443	93,847,317
Aug. 9.	53,658,039	112,192,322	13,270,603	8,676,759	92,220,370
Aug. 16.	53,658,039	111,406,756	12,806,672	8,584,499	92,013,229
Aug. 23.	53,985,068	110,168,005	12,914,732	8,588,413	90,127,223
Aug. 30.	53,985,068	109,373,911	12,965,236	8,589,745	87,776,242
Sept. 6.	53,985,068	109,560,943	13,098,876	8,887,860	89,350,154
Sept. 13.	53,985,068	109,579,776	12,281,387	8,741,064	88,044,074
Sept. 20.	54,243,043	109,715,435	12,270,685	8,760,383	90,563,865
Sept. 27.	54,243,043	108,992,205	10,873,220	8,665,193	88,453,795
Oct. 4.	54,243,043	107,931,707	11,015,184	8,330,628	88,730,804
Oct. 11.	54,243,043	107,147,392	10,382,751	8,748,930	86,078,142
Oct. 18.	54,443,043	105,918,836	10,847,010	8,697,417	86,902,852
Oct. 25.	54,497,718	104,156,433	10,580,795	8,649,802	83,465,152
Nov. 1.	54,497,718	103,142,093	11,057,675	8,686,935	86,522,891
Nov. 8.	54,697,718	102,508,639	11,516,420	8,946,721	86,827,821
Nov. 15.	55,197,718	103,554,450	12,253,737	8,856,977	87,520,900

The following summary shows the aggregate of the resources and liabilities of the banks of the State of New York, as exhibited by the reports to the Superintendent of the Banking Department, of their condition on the morning of June 14 and September 20, 1856. At the date of the June report there were 296 banks in full operation, and at the September, 303—an increase of 7. The State Bank at Sackett's Harbor has failed since the June report, and is therefore not included in the last report. All the banks that were in operation at the date of the September call reported :—

RESOURCES.		
	June 14.	September 20.
Loans and discounts.....	\$174,141,775	\$183,888,670
Overdrafts.....	495,204	482,734
Due from banks.....	12,255,098	12,179,169
Due from directors.....	8,020,916	8,137,237
Due from brokers.....	4,474,172	4,571,829
Real estate.....	6,724,163	6,868,945
Specie.....	18,510,835	12,899,771
Cash items.....	20,158,335	22,678,628
Stocks and promissory notes.....	23,511,223	24,027,533
Bonds and mortgages.....	8,381,501	8,806,415
Bills of solvent banks.....	3,085,996	2,935,205
Bills of suspended banks.....	1,106	1,312
Loss and expense account.....	1,191,994	978,838
Add for cents.....	947	928
Total resources.....	\$268,458,177	\$275,747,148

LIABILITIES.		
Capital.....	92,334,172	96,381,301
Circulation.....	30,705,084	34,619,633
Profits.....	12,945,901	12,656,237
Due to banks.....	29,730,686	29,014,135
Due to individuals and corporations other than banks and depositors.....	1,031,641	1,150,504
Due Treasurer of the State of New York.....	3,254,421	3,433,496
Due depositors on demand.....	96,267,287	96,907,976
Due others, not included under the above heads..	2,188,456	2,183,403
Add for cents.....	529	550
Total liabilities.....	\$268,458,177	\$257,747,148

Since the June report \$4,047,129 banking capital has been added to the State. There was at the date of this report an increase in the circulation of \$3,314,549, and in loans and discounts of \$9,746,895. The most noted feature is the withdrawal from the banks of \$5,512,064 in specie, nearly one-third of the amount in the banks at the date of the June report.

We also annex our usual comparative summary of the weekly statements of the Boston banks:—

WEEKLY AVERAGES AT BOSTON.

	October 20.	October 27.	November 3.	November 10.	November 17.
Capital.....	\$31,960,000	\$31,960,000	\$31,960,000	\$31,960,000	\$31,960,000
Loans and discounts..	52,599,388	52,415,827	52,231,943	52,142,800	51,752,000
Specie.....	3,487,041	3,506,290	3,467,699	3,318,700	2,992,800
Due from other banks	7,382,232	6,990,811	7,404,840	7,420,000	7,459,000
Due to other banks..	4,433,750	4,363,981	4,201,226	4,258,000	4,137,000
Deposits.....	16,889,890	16,749,417	16,869,964	16,446,600	16,099,600
Circulation.....	7,607,471	7,271,185	7,325,644	7,596,700	7,337,000

The following is the statement of the condition of the Massachusetts banks, as reported to the Secretary of State on the 3d of November:—

LIABILITIES.			
	36 city.	136 country.	Total.
Capital.....	\$31,960,000	\$26,639,362	\$58,599,362
Net circulation.....	4,122,030	13,750,751	17,872,781
Deposits.....	16,869,964	7,353,875	24,223,839
Profit on hand.....	3,366,865	2,247,864	5,614,719
Total.....	\$56,318,849	\$49,991,852	\$106,310,701

RESOURCES.

Notes, bills of exchange, &c.....	\$52,231,943	\$48,254,709	\$100,486,652
Specie.....	3,467,699	1,106,008	4,578,707
Real estate.....	619,207	631,135	1,250,342
Total.....	\$56,318,849	\$49,991,852	\$106,310,701

The above statement exhibits, upon comparison with the 1st day of January last, an increase in the amount of capital of \$412,362; of deposits, of \$3,493,622; of loans, \$3,268,776; and of specie, \$75,976; and a decrease in the item of net circulation of \$184,981.

We noticed in our last that the foreign imports had received a check, and the tide at New York turned in October. Each previous month from January 1st showed an increase upon the comparative total of the preceding year, until on the 1st of October the increase had amounted to about fifty-eight-and-a-half millions. In October the imports show a decrease of \$1,779,439, as compared with last year, but an increase of \$2,794,554, as compared with October, 1854, and of \$1,642,667, as compared with October, 1853, as will appear from the annexed summary:—

FOREIGN IMPORTS AT NEW YORK IN OCTOBER.

	1853.	1854.	1855.	1856.
Entered for consumption....	\$9,637,601	\$7,645,071	\$12,088,621	\$9,932,001
Entered for warehousing....	1,866,866	2,210,646	2,379,886	2,836,781
Free goods.....	422,156	1,086,467	1,082,125	961,781
Specie and bullion.....	256,302	88,854	54,399	95,029
Total entered at the port....	\$12,182,925	\$11,031,038	\$15,605,031	\$13,825,592
Withdrawn from warehouse.	1,188,983	2,070,544	1,597,437	3,273,982

The total imports of foreign merchandise and specie at New York since January 1st are \$56,683,329 greater than for the corresponding ten months of last year, \$23,640,076 greater than the same period of 1854, and \$19,488,427 greater than for the same period of 1853.

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

	1853.	1854.	1855.	1856.
Entered for consumption....	\$134,775,790	\$120,408,905	\$96,753,676	\$133,832,192
Entered for warehousing....	19,258,112	26,780,359	21,567,338	31,331,443
Free goods.....	11,386,972	14,204,525	11,335,119	15,663,426
Specie and bullion.....	2,163,559	2,029,995	733,398	1,245,799
Total entered at the port....	\$167,584,433	\$163,423,784	\$130,389,531	\$187,072,860
Withdrawn from warehouse.	12,871,001	19,607,761	21,068,896	22,371,624

How long this turn in the current of imports will continue it is, of course, impossible to tell; but the stringency in the foreign money markets, instead of checking shipments, as one writer has predicted, will evidently have the effect of increasing the exports of merchandise. We look, however, for a general diminution of imports throughout the next eleven months.

Nearly the whole of the decline in imports for October, as shown in the above summary, is made up of dry goods. The total of this description landed at New York in October was \$1,753,050 less than for October of last year, but \$1,365,280 greater than for October, 1854, and \$736,156 less than for October, 1853. The falling off has extended to all descriptions of goods, as will appear from the annexed comparative summary:—

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

ENTERED FOR CONSUMPTION.

	1853.	1854.	1855.	1856.
Manufactures of wool.....	\$1,270,014	\$578,508	\$1,738,240	\$910,699
Manufactures of cotton.....	505,323	256,956	770,574	594,649
Manufactures of silk.....	1,397,424	631,959	1,666,267	1,007,771
Manufactures of flax.....	436,059	342,655	718,110	408,254
Miscellaneous dry goods.....	292,485	245,993	426,027	586,998
Total.....	\$3,901,305	\$2,056,071	\$5,319,218	\$3,306,471

WITHDRAWN FROM WAREHOUSE.

	1853.	1854.	1855.	1856.
Manufactures of wool.....	\$114,578	\$336,435	\$59,112	\$169,765
Manufactures of cotton.....	49,881	62,319	57,360	69,032
Manufactures of silk.....	53,824	166,019	136,651	59,091
Manufactures of flax.....	22,597	45,483	43,912	62,416
Miscellaneous dry goods.....	17,964	18,863	32,447	31,133
Total.....	\$258,844	\$629,119	\$329,482	\$391,437
Add entered for consumption.....	3,901,305	2,056,071	5,319,218	3,306,471
Total thrown on the market..	\$4,160,149	\$2,685,190	\$5,648,700	\$3,697,908

ENTERED FOR WAREHOUSING.

	1853.	1854.	1855.	1856.
Manufactures of wool.....	\$208,609	\$193,851	\$120,575	\$155,399
Manufactures of cotton.....	244,155	70,586	188,752	361,681
Manufactures of silk.....	278,991	111,091	69,525	67,424
Manufactures of flax.....	155,144	179,705	108,412	159,846
Miscellaneous dry goods.....	22,624	98,088	21,240	83,851
Total.....	\$909,523	\$653,321	\$508,504	\$768,201
Add entered for consumption.....	3,901,305	2,056,071	5,319,218	3,306,471
Total entered at the port.....	\$4,810,828	\$2,709,392	\$5,827,722	\$4,074,672

The total of dry goods landed at New York for ten months, from January 1st, was \$26,786,014 greater than for the same period of 1855, \$7,423,414 greater than for the same period of 1854, and \$992,754 greater than for the same period of 1853.

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

ENTERED FOR CONSUMPTION.

	1853.	1854.	1855.	1856.
Manufactures of wool.....	\$22,989,636	\$17,209,293	\$14,762,483	\$22,225,997
Manufactures of cotton.....	12,722,383	12,559,194	7,284,754	13,357,725
Manufactures of silk.....	28,922,551	23,398,759	18,878,589	26,260,353
Manufactures of flax.....	6,835,193	5,921,826	4,893,680	7,057,713
Miscellaneous dry goods.....	4,750,538	4,932,265	4,503,056	6,260,955
Total.....	\$76,220,301	\$64,021,337	\$50,322,562	\$75,162,743

WITHDRAWN FROM WAREHOUSE.

	1853.	1854.	1855.	1856.
Manufactures of wool.....	\$1,912,709	\$3,879,052	\$2,271,944	\$2,487,694
Manufactures of cotton.....	931,970	2,451,505	2,041,920	1,888,943
Manufactures of silk.....	1,217,435	2,780,003	2,485,211	1,823,401
Manufactures of flax.....	230,754	771,476	1,107,080	927,274
Miscellaneous dry goods.....	399,697	350,425	740,646	367,108
Total withdrawn.....	\$4,592,565	\$10,232,461	\$8,646,801	\$7,494,420
Add entered for consumption...	76,220,301	64,021,337	50,322,562	75,162,743
Total thrown upon the market.	\$50,812,866	\$74,253,798	\$58,969,363	\$82,657,163

ENTERED FOR WAREHOUSING.

	1853.	1854.	1855.	1856.
Manufactures of wool	\$2,410,638	\$4,599,887	\$1,569,684	\$2,926,688
Manufactures of cotton.....	1,404,349	2,424,134	1,440,562	1,889,732
Manufactures of silk.....	1,614,669	3,358,043	1,815,763	1,937,818
Manufactures of flax.....	453,823	1,076,589	880,309	940,312
Miscellaneous dry goods.....	337,157	530,287	618,797	576,398
Total.....	\$6,220,636	\$11,988,940	\$6,325,115	\$8,270,948
Add entered for consumption....	76,220,301	64,021,337	50,322,562	75,162,743
Total entered at the port ...	\$82,440,937	\$76,010,277	\$56,647,677	\$83,433,691

The exports from New York to foreign ports show an increase including specie, but a decrease (exclusive of specie) of \$515,245 from the total of the corresponding month of last year; there is a gain, however, of \$1,215,536 as compared with October, 1854, and of \$89,723 as compared with October, 1853.

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

	1853.	1854.	1855.	1856.
Domestic produce.....	\$5,459,401	\$4,672,017	\$6,614,146	\$6,129,837
Foreign merchandise (free).....	63,687	128,780	31,505	71,931
Foreign merchandise (dutiable)..	719,534	316,012	201,939	130,577
Specie.....	4,757,972	3,359,398	1,188,109	4,996,660
Total exports.....	\$11,000,594	\$8,476,207	\$8,035,699	\$11,329,005
Total, exclusive of specie.....	6,242,622	5,116,809	6,847,590	6,332,345

The total exports, exclusive of specie and bullion, from New York to foreign ports for ten months since January 1st, are \$13,075,870 greater than for the same period of last year, \$13,712,373 greater than for the corresponding period of 1854, and \$15,757,073 greater than for the same period of 1853.

EXPORTS FROM THE PORT OF NEW YORK TO FOREIGN PORTS FOR TEN MONTHS, FROM JANUARY 1ST.

	1853.	1854.	1855.	1856.
Domestic produce.....	\$45,884,119	\$47,897,861	\$46,422,445	\$63,466,032
Foreign merchandise (free).....	1,217,683	1,445,079	3,489,470	820,006
Foreign merchandise (dutiable)..	4,112,093	3,915,655	3,983,183	2,684,930
Specie.....	19,765,730	33,563,141	25,627,305	32,433,746
Total exports.....	\$70,979,625	\$86,821,736	\$79,522,403	\$99,454,714
Total, exclusive of specie.....	51,213,895	53,258,595	53,895,098	66,970,968

Notwithstanding the falling off in the imports of dutiable merchandise in October, the receipts for cash duties have increased, in consequence of the large

amount withdrawn from warehouse, the goods stored being generally those subject to the higher rates of duty. We annex a comparative summary since the opening of the year :—

CASH DUTIES RECEIVED AT NEW YORK.

	1853.	1854.	1855.	1856.
First quarter.....	\$11,125,500 47	\$10,873,699 31	\$7,588,288 21	\$11,642,681 46
Second quarter....	10,041,829 03	8,864,261 45	6,711,657 50	10,898,464 29
Third quarter.....	13,613,105 14	12,699,868 05	11,601,517 60	14,430,078 08
In October.....	2,705,694 33	2,402,115 10	3,329,194 95	3,391,230 97
Total since Jan. 1.	\$37,486,128 97	\$34,839,943 91	\$29,230,658 26	\$40,362,454 80

There has been a very large and important movement in produce, the shipments of grain from New York have been on a scale almost unparalleled for magnitude. The work still goes on, and, although the rates abroad have slightly declined, they are still sufficiently high to pay a remunerating price to producers in this country. We annex a comparative summary of the exports of certain leading articles of produce from New York to foreign ports, from January 1st to November 17th :—

EXPORTS OF CERTAIN ARTICLES OF DOMESTIC PRODUCE FROM NEW YORK TO FOREIGN PORTS FROM JANUARY 1ST TO NOVEMBER 17TH:—

	1855.	1856.		1855.	1856.
Ashes—pots...bbls	11,977	7,754	Naval stores...bbls.	578,892	447,297
pearls.....	2,158	1,178	Oils—whale...galls.	257,150	38,656
Beeswax.....lbs.	148,081	191,659	sperm.....	703,845	519,349
<i>Breadstuffs—</i>			lard.....	95,908	44,745
Wheat flour..bbls.	711,319	1,662,205	linseed.....	11,000	5,006
Rye flour.....	19,631	11,305	<i>Provisions—</i>		
Corn meal.....	47,377	70,213	Pork.....bbls.	139,817	130,950
Wheat.....bush.	2,118,458	7,669,308	Beef.....	59,343	63,113
Rye.....	342,365	1,228,186	Cut meats,lbs.	15,315,193	26,453,867
Oats.....	30,082	17,032	Butter.....	897,781	1,036,738
Corn.....	3,493,894	3,685,720	Cheese.....	6,705,116	3,132,247
Candles—mold..boxes	50,847	42,442	Lard.....	7,891,997	9,472,915
sperm.....	9,781	4,260	Rice.....tres	19,581	33,633
Coal.....tons	13,121	6,838	Tallow.....lbs.	1,191,808	1,106,915
Cotton.....bales	260,045	170,903	Tobacco,crude..pkgs	29,173	31,299
Hay.....	5,222	4,100	Do.,manufactured,lbs	4,550,592	4,584,392
Hops.....	8,786	3,854	Whalebone.....	1,920,032	1,729,877

The shipments of flour from New York alone have more than doubled, but the exports of wheat have increased the most rapidly, the total being nearly eight millions of bushels against about two millions for the corresponding date of last year. The prejudice in Europe against American flour, which we have already noticed, and of which we warned our readers last year, has limited the shipments of flour as compared with wheat. The inspection at New York, it will be remembered, ran down so low, that much of the flour branded as superfine was unfit for human food. This has now been remedied to a great extent, the crop of wheat being so good that but little poor flour has been made, so that the standard is necessarily higher. Still, it will take several seasons to overcome the prejudice. It is now established that this country is to take her place in feeding the world, and our millers and merchants should be cautious in endeavoring to maintain the character of American produce.

JOURNAL OF BANKING, CURRENCY, AND FINANCE.

PHOTOGRAPHIC COUNTERFEITING OF BANK NOTES.
SEROPIAN'S METHOD OF PREVENTION.

Having carefully examined Mr. Seropyan's patent for preventing the counterfeiting of bank notes, we cheerfully give place to the subjoined communication from a reliable source. The New Haven Bank, Elm City Bank in New Haven, and the Artisans' Bank in the city of New York, have adopted the new plan of the inventor. Dr. Porter, in his "*Principles of Chemistry*," a text-book for schools and colleges, (section 844, page 313,) recently published by A. S. Barnes & Co., refers to Mr. Seropyan's patent, and after mature investigation, agrees with other scientific and practical chemists, in pronouncing it "an effectual means of protection against counterfeiting."

FREEMAN HUNT, *Editor of the Merchants' Magazine*:—

DEAR SIR:—The attention of the financial world has of late been much directed to the subject of counterfeit bank notes, and the process which seems to challenge most scrutiny, and is truly becoming formidable, is that of photographic counterfeiting. The principles and laws of light and colors are now so well understood, and the ordinary operators in chemistry are so easily able to make exact copies of objects, that in the hands of dishonest men this knowledge and skill must excite the apprehension of the entire commercial world.

It is very well known that photographic counterfeiting has been and can be done. For example, not long since a skillful artist in Paris took a photographic copy of a bank note of large denomination, and gave notice to the bank that he should send it in on a given day. The officials of the bank of course closely scrutinized every note of the given amount, and supposed it had not been presented, till the artist appeared and selected from those taken, the copy he had made. Thus M. Agrado passed a photographic counterfeit upon some of the most experienced and competent judges of paper currency, and that, too, after forewarning that he should do so. The Bank of France has been extensively imposed upon in this way; and it has often been impossible, on the closest deliberate examination, to distinguish between the copy and the original. Now, if such judges, under such circumstances, are at the mercy of the counterfeiter, what must be expected in smaller establishments, where less caution is habitual? In short, what safety is there? What security or pledge has any banking institution that it is not flooding itself with undetectable counterfeits? Who shall distinguish the true from the false? The holder of the counterfeit stands at the counter by the side of the holder of the true original note, but who shall say which is to be redeemed? What can hinder any bank from suddenly finding itself responsible to the public for more than double its real circulation?

These things are not said to excite unnecessary alarm. But in view of experiments already made, and in view of the indubitable facts of science, too careful, thorough, and immediate attention cannot be given this subject. It will be too late to begin when business is bewildered by the utter uncertainty of paper money.

No one who keeps himself tolerably well informed upon the different branches of practical science can need to be reassured of the facility with which photographic copying can be done. There are several processes, two or three of which may be referred to by way of illustration.

First. There is the Photo-Galvanographic process of engraving by Paul Pretsch, of Vienna. He proceeds to take a negative copy of the engraving on glass, and from that produces the intaglio or relieve electrotype plates from which

he prints. Every one knows that such a perfect negative copy can be taken, and only a very slight knowledge of a few simple chemicals is requisite to make the proper transfer. A full account of Pretsch's process may be found in the *Practical Mechanic's Journal* for April, 1856. Then there is the mode practiced by Mr. Robert McPherson, viz. : Photo-Lithographing. He transfers his negative copy at once upon stone by another photographic process, from which the printing is done. Professor Ramsay, in speaking of this process before the British Association, in Glasgow, stated that "the above process modified had been employed with success to etch plates of steel or copper without the use of the burin." And in further explanation of it he remarked that "a negative, on glass or waxed paper, is applied to the sensitive coating of bitumen, and exposed to the full rays of the sun," whereby of course a complete transfer of the copy is made without the loss of a single line or shade. For more full particulars upon this process see *Annual of Scientific Discovery* for 1856.

Now, with these tried and successful processes before us, what is to be done? The counterfeiter may very readily make himself acquainted with one or all of these processes. And then he has only to supply himself with a glass, a stone, and some bitumen, and two or three simple chemical ingredients, avail himself of the universal sunlight, and the work is accomplished. The bank note has so perfect a fac-simile that the best judges are deceived.

The question then naturally arises, whether no one has or can invent some protection against this formidable undermining of our paper currency. In view of this, chemists, supposing there was *no chemical contrast* between the red and black of the bank note, suggested the idea of printing the original bill in these two colors, in order to prevent the taking of a negative copy. But recent experiments have conclusively demonstrated that in those colors there is a chemical contrast, and therefore a copy of the note printed in *red* can be taken, and of course that *supposed* protection becomes no protection at all.

But while all such efforts have heretofore proved ineffectual, there has appeared, of late, a process that bids fair to accomplish all that is desired. I refer to the Seropyan Patent. Much has been said and written concerning this process, and full scientific explanations of it have been given elsewhere, which are accessible to all readers.

Proceeding upon the basis of the chemical contrast, in respect to which preceding inventors and experimenters failed, Mr. Seropyan has succeeded in a plan of making bank notes, whose colors have *not* a chemical contrast, and cannot, therefore, be photographed. Now, it may seem a bold assertion, that the notes of this patent cannot be counterfeited. But let us consider for a moment the basis on which such a statement is made. His plan, after being matured by a most patient, thorough, and extensive series of experiments, wherein all conceivable opposite tests were used, was submitted to eminent professors of Yale College and New York. Such leaders in science as Silliman, Dana, and Torrey, have given their attention to the subject, and have publicly asserted their belief, that it is a complete protection against all counterfeiting in which chemistry is involved. They distinctly affirmed, that "it is the best actual, if not the best possible protection." Certainly, no higher authority upon a scientific question can be desired or obtained; and it is quite unnecessary to say that these gentlemen are not in the habit of presenting to the public idle theories or rash conjectures.

Moreover, attempts to counterfeit Seropyan's notes have repeatedly been made, and have in every instance utterly failed. So that, although they have been before the public some time, no copy of them has been taken, and in fact, as all photographic copying depends upon the chemical contrast ordinarily existing in colors, his notes cannot be copied, inasmuch as they are *without such contrast*. And of course, so long as *no distinct negative copy* of them can be taken it is *impossible to counterfeit* them by any of the processes already referred to in this article. And to prove that this is *practically* true, read the following letter from Mr. J. A. Whipple, an eminent photographic artist of Boston, to Prof. B. Silliman, Jr. :—

PROF. B. SILLIMAN, JR.,

Boston, July 21st, 1856.

DEAR SIR:—Yours of July 9th came duly to hand, with the bank notes printed by Mr. Seropyan's patent process, of which you desired to have photographic copies made. Our attempts thus far have been a complete failure, as you will see by the results I send you, *and it is my opinion that it is impossible to copy them by any photographic process now known.*

Yours, truly,

JOHN A. WHIPPLE.

At the same time, these notes present a very pleasant visual contrast, and are in no way inferior to the best heretofore made. So that while this patent becomes a protection against counterfeiting, it furnishes a currency in every other respect equal, if not superior, to that already existing.

Besides the processes we have spoken of above, might be mentioned what is called the Anastatic process, in which a copy is transferred upon a zinc plate, from which printing is done in the same manner as from a lithographic transfer, or from it can be made an electrotype plate for the same purpose.

And again, there is a process of transferring from the bill directly upon the stone, and printing from that. Now, against these also, the Seropyan patent furnishes a complete protection.

So that all the kindred processes of photography by which the bank-note system is endangered, are individually and collectively met by Seropyan's patent. Other chemists who had given attention to the subject, while they may have succeeded in some one particular, failed in making such combination as should cover the entire ground. While fortifying one part, another was left exposed; but Mr. Seropyan, in the most simple and beautiful manner, has so thoroughly and yet so comprehensively matured his plan, that while it is entirely successful in the particular, it is broad and far-reaching enough to embrace the whole difficulty. Herein his plan differs from all others; he has achieved a whole where others may have only succeeded in a part.

If these things are so, and that they are abundant proof is had, certainly it is a matter of vital concern to our banking institutions. That our paper currency is in imminent danger by photographic counterfeiting and other chemical means, is most evident. Who knows, at this very hour, what multitudes of copies the benign rays of the sun may be furnishing to the hands of knaves? So subtle, and yet so easy is the course of this dishonesty, that every holder of paper money may well feel his suspicion aroused.

It is, however, a favorable omen, that so much attention is even now given to the method of preventing counterfeits; but the urgency of the matter, the absolute necessity of arousing the financial world to a sense of its condition, cannot be overstated. A protection is offered in the Seropyan patent, and truly it would be little short of madness to allow anything which so simply promises relief, to remain a day untested.

If it succeeds, as it seems certain to, photographic counterfeiters will find their "occupation gone," and the people will fold up their notes with a conscious security and trust.

Yours, truly,

FINANCIER.

NEW YORK, Oct. 6th, 1856.

THE JOINT-STOCK BANKS IN LONDON.

The number of joint-stock banks in London is already large, and continually increasing; yet, notwithstanding the increased competition to which they are exposed, they continue to show a most extraordinary growth of prosperity. For the six months just passed, the increase in the one item of customers' deposits has been £6,739,000, and the total of customers' deposits now held among eight establishments is nearly forty millions sterling, or about two hundred millions of dollars. The London and Westminster Bank, of which James William Gilbert

is, and has been from its institution, the efficient manager, enjoys the largest business, its paid-up capital being £1,000,000, its deposits £11,170,000, and its guaranty-fund (formed from undivided profits) £147,000. Out of the eight banks, the five senior ones pay dividends ranging from 10 to 22½ per cent per annum, and at the same time the safety of the principles on which they are conducted, and the soundness of their position, are beyond even a shadow of question. The remaining three banks likewise pay respectable dividends.

NEW METHOD OF COMPUTING STERLING EXCHANGE.

FREEMAN HUNT, Esq., *Editor of the Merchants' Magazine, etc.*—

SIR:—Being satisfied that many who buy sterling exchange have no other guide but the printed tables to satisfy themselves whether the amounts paid are correct or not, I beg to point out a new and original method of computation; namely, adding the rate of exchange to forty dollars, (the nominal value of £9,) multiplying that amount with the amount of the exchange or bills, and dividing the product with nine, viz. :—

£498 4s. 6d.	at 10½ per cent.	40
44.20		10½ per cent.... 4.20
		44.20
9960		
1992		
1992		
884 4s.		
110 0s. 6d.		
9 J 2202154		
\$2446.84		

Very respectfully, yours,

ALGEBRA.

NEW YORK, September 23d, 1856.

VALUATION OF PROPERTY IN BOSTON.

The value of real and personal estate in Boston, and the total tax in each of the past eleven years, was as follows :—

	Real.	Personal.	Total valuation.	Total tax.
1846	\$90,119,600	\$58,720,000	\$148,839,600	\$931,998
1847	97,764,500	64,595,900	162,360,400	1,014,674
1848	100,403,200	67,324,800	167,728,000	1,131,821
1849	102,827,500	71,352,700	174,180,200	1,174,715
1850	105,093,400	74,907,100	180,000,500	1,266,030
1851	109,358,500	78,588,500	187,947,000	1,353,296
1852	110,699,200	76,980,800	187,680,000	1,244,626
1853	116,090,900	90,423,300	206,514,200	1,614,446
1854	127,730,200	99,283,000	227,013,200	2,125,222
1855	136,351,300	105,580,900	241,932,200	1,910,280
1856	143,574,300	105,146,800	248,721,100	2,039,051

In 1855 the rate of taxation in Boston was 77 cents on the \$100; and in 1856, 80 cents on the \$100. The increased valuation of the present year, compared with last, is partially due to the annexation of Washington village, which has added \$902,200 to the real estate, and \$71,400 to the personal estate—total, \$973,600.

PAPER CURRENCY OF ENGLAND, FRANCE, AND THE UNITED STATES.

	Outstanding bank circulation.	Specie in bank.
England	\$189,730,000	\$72,980,000
France.....	122,419,000	33,320,000
United States.....	165,838,000	60,072,000

BANKING IN LONDON, PARIS, AND NEW YORK.

	London.	Paris.	New York.
Capital.....	\$92,515,000	\$18,250,000	\$56,047,000
Surplus.....	20,513,000	2,596,000	7,000,000
Private deposits.....	240,813,000	23,613,000	58,696,000
Public money.....	38,795,000	20,282,000	13,816,000
Circulation.....	107,420,000	110,395,000	8,649,000
Miscellaneous.....	4,526,000	.....	.....
Total movement.....	\$504,582,000	\$180,036,000	\$144,268,000
Loans and discounts.....	375,787,000	143,572,000	104,156,000
Specie in bank.....	53,920,000	15,412,000	10,580,000
In government treasury.....	Nil.	Nil.	13,816,000
Public stocks.....	74,875,000	13,596,000	5,514,000
Real estate and miscellaneous..	.....	7,456,000	10,204,000
Total, as above.....	\$504,582,000	\$180,036,000	\$144,268,000

COMPARATIVE SPECIE BASIS.

Movement.....	\$504,582,000	\$180,036,000	\$144,268,000
Specie.....	53,920,000	15,412,000	24,396,000
Percentage.....	10½	8½	17

Without meaning to question the intimate and mutually dependent money relations between this country and France and England, we deem it appropriate to present the foregoing carefully-prepared figures, as illustrating the relative banking position of the United States.

JOINT-STOCK BANKS IN LONDON AND NEW YORK.

	London.	New York.
Capital.....	\$21,338,000	\$56,047,000
Deposits.....	189,218,000	58,696,000
Together.....	\$210,556,000	\$114,743,000
Loans.....	210,557,000	104,156,000
Specie.....	Nil.	10,580,000
Together.....	\$210,557,000	\$114,736,000

We omit the item of circulation in both instances. That of New York is secured, for the greater part, by public stocks. That of the London Joint-Stock Banks is not reported separately from the private and provincial banks. Altogether, the circulation authorized by the Peel Act of 1844, as amended in 1855, is \$37,625,000, without bullion security, Bank of England notes being a legal tender. The British paper currency is therefore comprised in the issues of the—

	Notes.	Specie.
Bank of England.....	\$107,420,000	\$53,920,000
Joint-Stock.....	32,395,000	Nil.
Irish and Scotch.....	49,915,000	19,060,000
Together.....	\$189,730,000	\$72,980,000

VALUATION OF TAXABLE PROPERTY IN NEW HAMPSHIRE.

We compile, from a table prepared by the Assessors in New Hampshire, showing the valuation of real and personal property in each town of that State for 1856, the subjoined summary of the taxable property in the several counties, as follows:—

Rockingham.....	\$20,788,320	Stafford	\$11,324,303
Belknap	5,457,765	Carroll	4,760,750
Merrimac	15,548,299	Cheshire.....	11,750,894
Hillsborough	27,498,821	Sullivan.....	7,867,350
Grafton.....	13,076,152	Coos	3,326,774
Total.....	\$82,369,357	Total.....	\$88,780,071

Showing a total valuation for the State of \$121,149,428

The city of Manchester, in Hillsborough county, is the highest on the list—its valuation amounting to \$9,279,438. In Nashua, in the same county, the value of property amounts to \$4,483,567; both are manufacturing towns. In Portsmouth, (the most commercial town in the State,) the valuation is put down at \$6,242,624.

THE BANK OF FRANCE AND FRENCH COINAGE.

The Bank of France issues notes to the amount of 10,000, 5,000, 1,000, 500, 300, 200, and 100 francs. The 200-franc notes were first circulated in 1846, the 100-franc notes in 1848, and the 10,000 and 5,000 franc notes have been issued since 1843, which are payable in specie on demand by the holder. Its capital, which consists of 67,900 shares, at 1,000 francs, making a total of 67,900,000 francs, is employed in discounting bills of exchange, in making advances of money in government securities, and in deposits of bullion or foreign coin, diamonds, shares in public companies, at the rate of 1 per cent per annum. Not less than the value of 10,000 francs is received as a deposit, and discount for forty-five days is deducted from the amount of the sum advanced; nor, if the deposit be redeemed the next day, is any part of the discount refunded. The paper of the Bank of France chiefly circulates in Paris and the neighborhood; at a distance from Paris its notes pass at a discount of $1\frac{1}{2}$ per cent, as they are not received in payment of taxes or custom-house duties in seaports; so that remittances to Paris must be made in cash, for which a charge of 5 per cent is made at the post-office; the dividend of the bank on each share has been three francs, half-yearly, or at the rate of 6 per cent per annum.

The Bank of France has now *comptoirs*, or branch banks, in from twenty to twenty-five of the principal cities of France. The issue of these branch banks was limited to 356,000,000 francs by a decree of 1848. The shares of the bank, which, antecedent to this decree, under the government of Louis Phillippe, had risen to 3,550 francs, become depreciate, and fell to 1,250 francs. In January, 1852, these *actions*, or shares, were quoted at 3,100 francs. In August, 1850, the Bank of France was authorized to resume its payments in specie. A decree of the 12th of August, 1850, suppressed the *cour force* of the notes, and extended the circulation. These two decrees restored confidence, augmented by the weekly publication of the accounts of the establishment. The end, we have in the present reported suspension.

The recent gold coinage of France has been limited to the Napoleon, of twenty francs value, and the double Napoleon, of forty francs, called under the Bourbon regime the Louis and the double Louis. The silver coin are the five-franc piece, the franc, and the demi-franc.

It is now stated that, in consequence of the extent of the exportation of the silver coin, and its consequent scarcity, the issue of gold five-franc pieces is authorized, and that the Bank of France has made a contract with the mint for the coinage of ten millions of these coins, amounting to 50,000,000 francs, and to furnish them at the rate of 175,000 francs a day. The value of these coins, if of the same standard and comparative weight as the Napoleon, as they doubtless will be, will be 96 cents and 65-100 of our currency, or 3.37 per cent less than the American dollar.

The following statement shows the coinage issued from the mint at Paris from 1849 to 1855 inclusive, and the average amount of gold and silver held by the Bank of France during the same period :—

	COINAGE.		HELD BY BANK OF FRANCE.	
	Gold.	Silver.	Gold.	Silver.
1849	27,100,000	206,500,000	4,060,000	429,270,000
1850	85,200,000	86,500,000	11,980,000	446,840,000
1851	285,200,000	68,560,000	82,260,000	486,460,000
1852	27,000,000	71,700,000	68,935,000	434,994,000
1853	330,500,000	20,100,000	103,598,000	214,482,000
1854	526,500,000	2,100,000	193,337,000	193,723,000
1855	460,000,000	7,000,000	112,500,000	87,500,000
	1,741,500,000	462,400,000	576,671,000	2,298,269,000

From this statement it appears that the gold coinage in seven years reached 1,741,500,000 francs, while the silver in the bank in 1855, as compared with 1851, was reduced 400,000,000 francs. In 1849, 206,500,000 francs of silver were coined, while in 1855, the mint furnished but 7,000,000.

LIABILITIES OF BROKERS IN THE NEGOTIATION OF FORGED NOTES.

It has been generally supposed hitherto, that there was no liability on the part of a note broker to any person to whom he sells forged paper—that the broker is merely the medium of communication between the holder or seller of the paper and the buyer—and that no guaranty of genuineness is given by such broker. This view was generally entertained, both in this country and in England, until the recent case of Gurney, the celebrated bill broker in London, tried in the Court of Queen's Bench, in which it was decided by Lord Campbell "that the vender of a bill of exchange, though no party to the bill, is responsible for its genuineness, and if it turns out that the names of any of the parties to it are forged, he is responsible to the vendees." The defendants in that case were bill brokers, who received the bill to be discounted, and took it to the plaintiffs who were money lenders. The defendants did not disclose their principals, and were themselves regarded as principals, the paper having been forged.

A case of a similar kind was decided in November, 1856, before the Superior Court of Baltimore city. Mr. William Fisher, a note broker, negotiated a promissory note, which afterwards proved a forgery, for \$861; and upon discovery of the fraud, Messrs. H. Rieman & Sons, the purchasers, claimed the amount from

Mr. F. Under the law of New York, such a transaction, being at usurious rates of interest, would be void: but in Maryland the law is not so severe. Upon a trial of the case before Judge Lee of the Superior Court, he instructed the jury to the effect:—

That if they find from the evidence that the defendant sold to the plaintiffs the paper offered in evidence by the plaintiffs, purposing to be the promissory note of Edward Dunn, in favor and indorsed by J. P. Kridler, and also purporting to be indorsed by Henry Shirk; and if they further find that the names of Edward Dunn and Henry Shirk as drawer and indorser of said note were forgeries, that then the plaintiffs are entitled to recover such sum as they may find was paid by them to the defendant for said paper, notwithstanding they may find that the defendant acted as an agent in said sale, unless they also find that the defendant at the time of such sale disclosed the name of the person or persons for whom he acted as agent in such transaction.

A verdict was rendered for the plaintiffs accordingly. This is a very important case as a precedent, and should be duly considered both by brokers and bankers.

DEBT OF THE CITY OF SAN FRANCISCO.

ANDREW J. MOULDER, the City Controller, gives, in his annual report to the Common Council of the city, the following brief synopsis of the city debt, funded and unfunded:—

Debt.	Amount outstanding.	Interest to be raised annually.	Sinking fund to be raised annually.
First Funded Debt.....	\$1,509,500 00	\$150,000 00	\$50,000 00
School Bonds.....	60,000 00	4,200 00	5,000 00
Fire Bonds.....	200,000 00	20,000 00	16,666 66
New Bonds (of 1855).....	324,500 00	19,470 00	None.
Audited accounts of 1855-56.....	167,585 80	.....	.....
Mortgage on City Hall.....	27,792 19	7,503 84	.....
Total.....	\$2,289,377 99	\$201,173 84	\$71,666 66

The Controller states, in the same report, that the interest upon all the city bonds has been paid regularly during the year, and further, that funds were transmitted to New York in time to pay the coupons upon the fire bonds and new bonds, due on the 1st of July, 1856, in the city of New York.

DISPLACEMENT OF SILVER BY GOLD IN EUROPE.

A London correspondent says:—

“The displacement of silver by gold, which is now going on with extraordinary rapidity in all the principal countries of the continent, is an independent question. The movement has been in progress ever since the discovery of gold in California and Australia, although it receives an additional impulse from existing circumstances. The only remedy for it will be the adoption of a silver coinage of debased value; and this could not only be effected without difficulty, but it might be a source of large profit to the French and other governments.

“The margin, indeed, must necessarily be large, since, if it were less than 8 or 10 per cent, there would be a prospect of another alteration becoming requisite at a future period. In England the silver coinage was originally 8 per cent below its nominal value as compared with gold; but owing to the depreciation of gold, the difference is now only 3½ per cent, and there is, consequently, a possibility that before long the inequality, even in this country, may entirely disappear, so as to render a new debasement necessary in order to prevent it from being sent out of the country.”

BRITISH IMPORT AND EXPORT OF SILVER.

According to a table which we find in the Liverpool *Albion*, the imports of silver from Mexico and South America, for the first eight months of 1856, by the Royal Mail Steamers, at Southampton, amounted to \$20,962,000, equal, in round numbers, to £4,100,000. The exports of silver to India and China, by the semi-monthly steamers to the former and monthly steamers to China, for the first eight months of 1856, that is, from January to August, both inclusive, were as follows:—

India.	Singapore, Penang, &c.	China.	Total.
£5,034,388	£416,392	£1,715,113	£7,165,893

Here is at once an excess in the exports over the imports of upwards of £3,000,000; but this is not all, for England has been exporting silver to the continent in the same period.

The exports of silver from London to the continent, as per customs entries, for the first eight months of 1856, amounted to 2,036,000 ounces.

JOURNAL OF INSURANCE.

NEW ORLEANS INSURANCE COMPANIES.

Concurrent with the great interests of the city and of the State, says the writer of the financial review in the New Orleans *Crescent*, auxiliary to the commerce and trade of New Orleans, blended with the protection of all the great and varied interests of commerce, agriculture, and life, guarding and supporting and affording the very essence, as it were, forming the basis and foundation of all mercantile transactions—and in fact they may be termed the very elements of commerce and trade—are the insurance offices of the country; among which we do not find any possessing more strength and solidity, more faithful and punctual in their engagements, than the insurance companies of New Orleans. Among these the *Crescent* enumerates—

The New Orleans Insurance Company, incorporated in the year 1805, with a capital of \$200,000, but now augmented and working on a capital of \$442,000.

The Merchants' Insurance Company, now the Mutual, organized in 1829, and now working on assets, all good and sound, of \$592,000.

The Crescent Insurance Company, organized in 1850, and now working on \$1,130,000.

The Home Mutual Insurance Company, incorporated in January, 1852, and working on assets, exclusive of premium notes, of \$645,000.

The Louisiana Mutual Insurance Company, working on assets, exclusive of capital, of \$287,000. Organized in 1853.

The Sun Mutual Insurance Company, organized in January, 1856. Subscription and assets, \$531,241; total, \$3,637,241.

There are no insurance companies in the United States which keep so much ready cash on hand as the insurance offices of New Orleans. For instance, the Crescent Insurance Company had on hand, at its last annual report, only sixty days since, \$108,000; the Home Mutual, at its last annual report, \$86,000. All

the assets of the various companies can be converted into cash at short order. We think that New Orleans can boast of one thing—that it has an insurance company (the New Orleans) the organization of which dates as far back as fifty-years. If there is an older institution in the nation, which has maintained its credit and punctuality for the same period of time, we shall be glad to record the fact in the *Merchants' Magazine*.

MARINE INSURANCE.

The *Journal of Commerce* devotes an article to the difficulties and the losses in which this business is involved, and adds another to the list of causes which lead to the troubles that may be enumerated. This is the combination for a uniform tariff among the offices, which crowds the best business into the strongest offices, giving them the pick of all the risks, and the next strongest class the second selection, until the weaker offices find no business but the poorest, upon which they can never prosper, but must ultimately sink under the disadvantages of their position. This is the reason, the *Journal of Commerce* thinks, why the first-class risks are monopolized by a few of the strongest offices which are crowded with business, while other offices of less strength are unable to obtain a share of the safest business to keep them in a profitable or even safe condition.

The combination of the numerous companies, with their varied degrees of strength and position, for a uniform rate of premium is likened to a combination of mechanics to compel the payment of a uniform rate of wages for a day's labor, without regard to the ability or skill of the individuals. The consequence is that the best workmen get full employment, but the less competent are thrown out of employment, or obtain only a small proportion of work, being only employed at those periods when there is a more than ordinary demand for labor.

There is much force in this view taken by the *Journal*, and the whole subject demands the attention of capitalists and business men, for the matter of insurance is now in an unfavorable condition for shipowners and for underwriters too, if we except a few of the most prosperous companies. While the rates of premiums are extremely high, many companies are in a weak condition, and notwithstanding the payment of exorbitant premiums, there is no efficient security to the assured that losses will be paid. A reform is imperiously demanded in the system, and the plan which strikes us most favorably, is the establishment of strong stock companies, with sufficient paid-up capital to command good managers, and take an independent position.

NEW FEATURE IN FIRE INSURANCE.

The *Evening Post* notices a new feature in fire insurance, which is worthy of attention. It says:—"The heavy rates charged for fire insurance are becoming more and more complained of. It is observed that the high rates charged have no justification in the risks incurred or covered; for the gains resulting from such charges are not saved to form a fund to meet any losses from a large conflagration, such as ere now have happened in New York, and the fear of which alone would justify heavy premiums, but on the contrary are annually divided; so that capital invested in insurance companies derives more than the usual profits of stock. The dividends declared amount to 20, 30, or even 40 per cent per annum,

and this after an extravagant expenditure of some 30 per cent of the earnings. Such profits as these are more—much more—than adequate to the risks incurred by the companies. Some reform is needed. If the premiums are to continue heavy, the assured should share in them, and this seems to be the true principle.

“The Continental Insurance Company has recently adopted this principle, though it has earned and divided as large profits as any company. In future, however, and from the 1st of July last, it gives the holders of its policies a share in the profits. The stockholders are insured first, out of these profits an annual interest of 7 per cent; and then concede three-fourths of the remainder to policy holders, for which scrip, bearing interest at 6 per cent per annum, shall be granted. This scrip fund is to be allowed to accumulate to \$500,000—thus doubling the capital of the company, which is \$500,000—and all amounts beyond the \$500,000 thus accumulated, are to be divided from time to time in payment of the principal of the scrip.

“This plan gives a two-fold security to the insured—one by the capital subscribed, and one by the scrip fund allowed to be accumulated; which in other companies is divided year by year among the stockholders; and a security is also furnished to the stockholders—the large fund being a breakwater for the protection of their capital stock, which cannot be touched until this fund is exhausted, and which is only likely to become less in some rare occurrence of a grand conflagration. The plan, too, is of a direct advantage to the insured, in rendering back to them all excess of charges beyond a fair amount for benefit derived, and it affords a strong inducement for persons to effect insurance, the doing which, indeed, is a sort of moral obligation on them, for their families and creditors.

“We have alluded to this novelty in insurance as an important and desirable one, and deserving encouragement.”

INSURANCE LAW OF LOUISIANA.

We give below the provisions of an act of the Legislature of Louisiana, passed at the session of 1855, with “reference to foreign insurance companies not incorporated by the State of Louisiana.”

SEC. 5. That every person acting as agent of an insurance company not incorporated by the laws of this State, and doing fire, river, or marine insurance within the city of New Orleans, shall during the month of January of each year, cause a full statement upon oath of the business of the agency to be published, in the manner and form and for the term as specified in the preceding section, (see local offices,) and for the neglect or refusal so to do shall forfeit and pay into the city treasury the sum of one thousand dollars for each and every neglect or refusal. Wherever the parent or principal office of the agency shall publish an annual statement of its affairs, the time mentioned in the first part of this section, for the publication of the affairs of the agency shall be so far changed as to correspond with the annual statement of the insurance company, and shall then be published as aforesaid within one month from the date of publication.

SEC. 6. That each incorporated insurance company and agency of any foreign insurance company in the city of New Orleans shall be taxed five hundred dollars per annum, said tax to be collected by the State Tax Collector in the parish of Orleans, and as soon as collected shall be paid into the city treasury to the credit of the fire department, to be divided equally between the different fire, hose, hook-and-ladder companies, in such manner as may be determined by a majority of the firemen of such companies.

SEC. 4. (As referred to in Section 5.) That the officers of each insurance

company, incorporated by the laws of this State, shall within one month or the close or expiration of each year of the corporation, cause to be published in two or more daily newspapers published in the city of New Orleans, and for the term of at least one month, a full statement, under oath, of the business of the company, which statement shall contain—first, the amount of the premium received during the previous year, specifying what amount was received for life insurance, for insurance against fire, what on marine policies, and what on river policies; second, the amount of losses received during the year, specifying and designating what amount of losses have been incurred by the different kind of policies as aforesaid; third, the amount of capital, stating the portion of the same invested in securities, and the nature of the securities.

STATISTICS OF TRADE AND COMMERCE.

AMERICAN PROVISIONS AND BREADSTUFFS IN LIVERPOOL.

We are indebted to James M'Henry & Co., American Produce Commission Merchants, Liverpool, England, for an account of sales in Liverpool of provisions and breadstuffs, at prices equivalent to cost free on board in the United States, (exchange 108,) with monthly variations for eleven years, and statement of imports for ten years. From the pamphlet accompanying J. M'Henry & Co.'s circular, we compile the following table of

IMPORTS FROM THE UNITED STATES INTO LIVERPOOL DURING TEN YEARS, COMMENCING IN 1847.

	Flour. Bbls.	Wheat. Qrs.	Corn. Qrs.	Rice. Tres.	Beef. Equal to tea.
1847.....	.....	.....	.....	.....	19,446
1848.....	.....	.....	.....	.....	16,428
1849.....	.....	.....	.....	.....	26,558
1850.....	.....	.....	.....	.....	21,081
1851.....	886,559	154,290	222,239	202	27,519
1852.....	737,688	259,906	121,680	5,338	24,814
1853.....	975,121	538,202	140,269	7,066	38,499
1854.....	1,174,859	482,219	673,892	5,066	26,195
1855.....	80,978	27,816	670,799	877	35,584
1856.....	958,291	719,029	742,764	3,810	37,920

	Pork. Bbls.	Bacon. Cwts.	Lard. Tons.	Cheese. Boxes.	Butter. Firkins.
1847.....	35,634	53,523	4,893	105,284	9,622
1848.....	31,511	119,158	9,572	106,155	3,430
1849.....	37,152	224,794	4,892	113,780	8,599
1850.....	20,177	156,347	10,049	108,696	7,973
1851.....	5,762	66,161	3,749	67,479	12,124
1852.....	1,629	26,103	3,349	38,900	5,029
1853.....	10,419	117,806	3,718	57,855	5,235
1854.....	17,171	203,801	10,760	69,222	13,630
1855.....	31,313	144,750	4,660	85,524	210
1856.....	17,497	232,170	5,508	109,104	5,911

SALES IN LIVERPOOL OF PROVISIONS AND BREADSTUFFS AT PRICES EQUIVALENT TO COST FREE ON BOARD IN THE UNITED STATES—EXCHANGE 108.

Cost.	BEEF.	Sold.		Cost.	PORK.	Sold.	
		Per tierce.				Per bbl.	
		s.	d.			s.	d.
\$30	per tierce of 304 lbs.	142	6	\$18	per bbl. of 200 lbs.	86	0
28	"	133		17	"	81	6
26	"	124	6	16	"	77	
25	"	120		15	"	72	6
23	"	111		14	"	68	
20	"	97	6	13	"	63	6
18	"	88	6	12	"	59	
16	"	79	6	10	"	50	

Duty free. Terms of sale equal to 6 months' and 14 days' credit. If sold from the quay, 1s. 6d. per tierce or barrel less. Marine insurance estimated at 1 per cent; freight, 5s. per tierce, 3s. per barrel.

Cost.	BACON.	Sold.		Cost.	HAMS & SHOULDERS.	Sold.	
		Per 112 lbs.				Per 112 lbs.	
		s.	d.			s.	d.
11 cents	per lb.	59	0	11 cents	per lb.	61	0
10	"	54		10	"	56	
9	"	49		9	"	50	6
8	"	44		8	"	45	3
7	"	38	9	7	"	40	
6	"	33	6	6	"	34	9
				5	"	29	6
				4	"	24	

All duty free. Estimated loss in weight: Bacon, in salt, 2 per cent; singed sides, 3 to 5 per cent; hams and shoulders, 5 per cent. Estimated freight, 30s. per ton gross. Insurance, 1½ per cent. If sold ex-ship, a saving of 6d. per cwt. will be effected. Terms of sale equal to 4 months' credit.

Cost.	CHEESE.	Sold.		Cost.	BUTTER.	Sold.	
		Per 112 lbs.				Per 112 lbs.	
		s.	d.			s.	d.
11 cents	per lb.	63	6	14 cents	per lb.	81	0
10	"	58		13	"	76	
9	"	53		12	"	70	6
8	"	47	6	11	"	65	6
7	"	42	9	10	"	60	3
6	"	37	6	9	"	55	

CHEESE. Estimated loss in weight, 3 to 4 lbs. per cwt.; duty, 2s. 6d. per cwt.; insurance calculated at 1½ per cent. Terms of sale equal to 4 months' credit.

BUTTER. Estimated loss in weight, 3 lbs. per cwt.; duty, 5s. per cwt.; insurance calculated at 1½ per cent; freight, 30s. per ton of 2,240 lbs. gross.

LARD.

Cost.		Sold.		Cost.		Sold.	
		Per 112 lbs.				Per 112 lbs.	
		s.	d.			s.	d.
12 cents	per lb.	66	0	9 cents	per lb.	50	3
11	"	60	9	8	"	45	
10	"	55	6	7	"	39	9

Duty free. Estimated loss in weight, 1½ lbs. per cwt.; freight, 30s. per ton gross; insurance, 1½ per cent; if sold ex-ship, 6d. less will give same cost; terms of sale equal to 6 months' and 14 days' credit.

FLOUR.			CORN-MEAL.		
Cost per barrel.		Sold.	Cost per barrel.		Sold.
Federal.	£0 16 8	Sterling. £1 1 1	Federal.	£0 12 6	Sterling. £0 16 8
\$4 00			\$3 25	0 13 7	0 17 8
4 25	0 17 9	1 2 2	3 50	0 14 7	0 18 10
4 50	0 18 9	1 3 3	3 75	0 15 8	1 0 0
4 75	0 19 10	1 4 5	4 00	0 16 8	1 1 1
5 00	1 0 10	1 5 6	....	.....	.....
5 25	1 1 11	1 6 8	....	.....	.....
5 50	1 2 11	1 7 9	....	.....	.....
5 75	1 4 0	1 8 9	....	.....	.....
6 00	1 5 0	1 10 0	....	.....	.....

Duty, 7½d. per bbl., all re-weighed here, and 20 lbs. tare allowed per bbl. when the gross is under 1 cwt. 3 qrs. 20 lbs.; freight, 1s. 6d. per bbl.; insurance, 1½ per cent; if sold ex-ship, a saving of 6d. per bbl. is effected; terms of sale, 3 months' credit, or equal thereto.

WHEAT.			INDIAN-CORN.		
Per bushel 60 lbs. Federal.	Cost. Per bushel 70 lbs. £0 3 10	Sold. Including all charges. Sterling. £0 5 1	Per bushel 56 lbs. Federal.	Cost. Per quarter 460 lbs. £0 16 1	Sold. Including all charges. Sterling. £1 3 6
\$0 80			\$0 45	£0 16 1	£1 3 6
0 90	0 4 4	0 5 7	0 50	0 17 10	1 5 5
1 00	0 4 10	0 6 1	0 55	0 19 7	1 7 5
1 5	0 5 1	0 6 5	0 60	1 1 5	1 9 4
1 10	0 5 4	0 6 8	0 65	1 3 2	1 11 3
1 15	0 5 7	0 6 11	0 70	1 5 0	1 13 3
1 20	0 5 10	0 7 2	0 75	1 6 9	1 15 2
1 25	0 6 1	0 7 5	0 80	1 8 7	1 17 0

Duty, 1s. per quarter of 8 measured bushels; insurance estimated at 1½ per cent; freight, 4d. per bushel; terms of sale equal to 3 months' credit.

We now quote, from the same authentic source, the monthly variations of prices of American produce in the Liverpool market during eleven years, commencing October, 1846, and ending September 30th, 1856:—

PRICES OF BACON, BEEF, PORK, LARD, AND CHEESE IN LIVERPOOL FOR ELEVEN YEARS.

	BACON. Shillings.	BEEF. Shillings.	PORK. Shillings.	LARD. Shillings.	*CHEESE. Shillings.
October, 1846	38 a 44	70 a 76	56 a 60	40 a 44	50 a 56
November	38 44	65 72½	56 60	43 45	50 56
December	35 44	65 75	50 56	43 44	50 54
January, 1847	53 54	80 85	50 60	43 44	50 53
February	53 60	85 95	60 72½	50 54	50 53
March	50 55	90 97½	65 75	52 54	47 52
April	50 65	90 97½	65 75	45 50	50 54
May	57 67½	90 95	70 80	44 48	50 56
June	57 67½	90 95	70 76	46 50	53 60
July	57 66½	90 95	70 76	46 48	52 57
August	45 60	85 90	65 70	46 48	50 53
September	40 60	80 90	60 70	46 54	43 50
October	40 60	75 85	60 70	54 57	50 56
November	40 50	75 85	60 70	52 55	45 50
December	None	65 80	45 60	48 54	48 52

* Only fine quoted.

	BACON. Shillings.	BEEF. Shillings.	PORK. Shillings.	LARD. Shillings.	CHEESE. Shillings.
January, 1848.....	45 a 54	65 a 75	40 a 50	54 a 58	45 a 48
February	50 54	65 75	40 50	52 58	46 50
March	50 55	65 75	65 75	47 51	46 50
April	50 56	70 80	65 75	38 43	46 50
May	50 54	70 80	60 70	36 40	50 52
June	48 52	70 85	50 60	38 40	None
July	None	70 88	40 50	38 40	None
August	None	70 88	45 52	40 44	None
September	None	70 90	48 52	41 44	45 50
October	None	70 80	50 52	40 44	48 55
November	None	70 80	None	38 40	46 48
December	40 50	None	.. 72	36 39	46 48
January, 1849.....	40 45	85 90	68 70	34 36	46 48
February	40 44	70 88	68 72	35 36	44 46
March	40 42	60 80	60 65	34 35	44 46
April	40 42	60 80	60 65	34 35	42 45
May	35 40	60 80	60 65	34 35	42 44
June	32 38	60 80	55 60	34 35	None
July	32 40	60 80	50 56	34 35	None
August	30 36	70 80	50 52	33 35	36 40
September	30 33	65 80	50 60	35 37	36 40
October	30 33	65 80	50 60	35 37	40 44
November	28 33	65 75	50 60	35 36	40 42
December	32 34	65 75	50 56	33 35	40 42
January, 1850.....	32 36	65 75	50 56	33 34	40 42
February.....	34 36	65 85	52 56	33 34	40 48
March	32 35	65 80	52 55	31 32	42 44
April	30 33	65 80	52 55	30 32	40 44
May.....	28 34	70 85	52 55	30 31	40 42
June	29 35	70 85	48 50	31 32	40 42
July.....	28 32	70 80	48 50	32 33	40 42
August.....	29 33	70 80	44 47	33 34	None
September.....	30 32	70 90	44 47	33 34	None
October.....	31 34	65 80	40 45	34 35	40 44
November.....	31 34	65 75	40 45	36 38	40 44
December	34 36	65 75	37 42	37 38	40 42
January, 1851.....	35 36	70 80	40 42	38 40	40 43
February.....	36 39	65 80	42 45	40 42	42 45
March	40 43	70 80	45 50	43 45	44 46
April	40 42	65 80	62 65	45 46	44 46
May	40 42	65 80	62 65	48 50	44 46
June	40 42	65 80	56 60	48 50	45 47
July.....	40 42	65 80	50 54	44 46	None
August	40 44	65 80	54 60	43 45	None
September	None	60 75	46 54	46 48	40 42
October.....	None	60 75	46 54	43 50	40 44
November	None	55 70	46 54	44 48	40 44
December	38 42	55 70	46 56	40 44	40 42
January, 1852.....	38 42	55 70	50 56	42 44	40 42
February	40 44	65 90	None	44 46	38 40
March	40 44	70 90	None	46 48	None
April	40 44	70 90	None	46 48	None
May	42 46	90 100	70 75	46 48	None
June	46 50	100 110	80 85	48 52	None
July	50 52	105 120	80 90	52 58	None
August	45 50	100 120	65 80	56 58	None
September	45 48	90 110	65 75	58 63	None
October	None	80 100	None	60 63	None
November	None	80 100	None	58 60	None
December.....	None	85 100	75 80	58 60	None

	BACON. Shillings.	BEEF. Shillings.	PORK. Shillings.	LARD. Shillings.	CHEESE. Shillings.
January, 1853.....	None	95a110	80 a 85	62 a 64	50 a 54
February.....	50 a 52	97 112	85 90	62 64	50 52
March.....	50 54	94 110	80 85	52 58	56 60
April.....	50 54	85 100	75 85	50 52	56 58
May.....	50 52	85 100	70 80	52 54	58 62
June.....	50 52	85 100	70 75	52 53	58 62
July.....	None	75 90	70 75	52 54	58 60
August.....	None	75 85	70 75	56 58	56 60
September.....	None	75 85	70 75	57 59	56 60
October.....	None	75 85	70 75	57 59	54 56
November.....	None	75 90	70 75	52 58	54 56
December.....	None	75 90	70 75	54 56	52 54
January, 1854.....	44 46	80 100	65 70	52 54	50 56
February.....	45 48	85 110	75 80	55 57	58 60
March.....	42 45	100 120	75 80	52 54	None
April.....	42 44	105 120	75 80	52 54	None
May.....	42 46	105 125	75 80	48 50	None
June.....	42 46	105 125	75 85	46 48	None
July.....	40 42	105 125	75 80	50 53	54 58
August.....	36 40	105 125	65 80	52 54	50 56
September.....	36 40	110 125	50 70	50 52	50 56
October.....	36 38	110 125	40 60	50 52	56 60
November.....	35 40	115 135	45 70	52 54	56 60
December.....	33 38	120 140	50 75	50 52	50 54
January, 1855.....	32 38	120 140	75 85	50 51	50 54
February.....	34 38	115 130	80 85	48 50	52 56
March.....	44 46	105 125	75 80	46 50	56 58
April.....	40 43	105 125	75 80	45 47	56 58
May.....	44 48	105 125	75 80	48 50	56 58
June.....	46 50	110 125	75 80	48 50	56 58
July.....	48 51	110 125	75 80	50 54	56 58
August.....	46 51	110 125	75 80	54 56	56 60
September.....	48 52	110 125	80 85	66 68	56 60
October.....	None	105 125	75 85	66 68	56 60
November.....	56 58	105 120	75 80	67 70	56 58
December.....	56 58	100 120	75 80	67 70	50 56
January, 1856.....	56 57	100 120	80 90	65 66	54 58
February.....	51 55	80 100	80 85	54 60	54 58
March.....	51 55	90 110	85 90	52 55	55 58
April.....	52 54	90 120	85 90	53 55	56 60
May.....	53 56	90 120	85 90	53 55	58 62
June.....	54 56	70 115	75 80	55 65	56 64
July.....	54 57	70 115	70 80	65 68	52 56
August.....	52 56	70 115	70 80	68 75	53 58
September.....	54 56	65 110	65 75	75 80	53 58

Cost of yield of hogs costing \$4 per 100 lbs. net, including cutting, salt, curing, and packages. Also, 1 per cent per month for 3 months' cost of money and fire insurance, ready for shipment at the packing-house :—

Long middles, boneless, rib in, or Cumberland, in boxes.....	6½c. a 6½¢.
Lard, best kettle rendered, in tierces.....	7½c. a 8c.
Lard, cured in dry salt, and packed in casks.....	6½c. a 7c.

To which add freight (Northern route) to New York, \$1 per 100 lbs. gross ; marine insurance (if any) to New York, 1 per cent ; cost of putting on board at New York.

OUR TRADE WITH PORTUGAL.

The following statistics were compiled for the *Merchants' Magazine* from the latest official sources published. The commerce of the Portuguese possessions has been estimated at three different periods as follows:—

	Importations.	Exportations.	Total.
1843.....	12,314,511 : 062	8,830,655 : 639	21,145,166 : 701
1848.....	10,805,767 : 229	11,324,024 : 471	22,129,791 : 700
1851.....	13,749,231 : 301	10,691,633 : 028	24,440,864 : 329

EXPORTATIONS TO UNITED STATES.

	Value.	Duties.
Wines, liquors, vinegar*	550,235 : 200	11,604 : 677
Fish*	47 : 400	: 050
Swine*	200 : 000	: 115
Lard, salt provisions,* honey*	336 : 300	1 : 814
Leather, shoes*	1,592 : 000	7 : 590
Silk fabrics.....	400 : 000	1 : 384
Wool, blankets*	800 : 800	4 : 332
Linen fabrics,* sail-cloth, cordage.....	509 : 200	2 : 446
Cotton fabrics.....	241 : 000	: 269
Corks, furniture,* firewood,* toothpicks*	7,995 : 890	18 : 761
Chemicals*	1,162 : 000	18 : 162
Sweet-oil, gum copal.....	4,446 : 000	34 : 931
Chocolate,* perfumes*	34 : 600	: 276
Sweetmeats*	861 : 000	4 : 826
Oranges, lemons, dried fruits*	16,772 : 762	97 : 314
Ironware,* shot*	288 : 400	: 760
Glass,* earthenware*	590 : 000	: 662
Bricks,* plaster of Paris,* carved stone.....	5,005 : 600	10 : 971
Canes,* mats,* osiers, paintings.....	178 : 400	4 : 415
Specie.....	4,470 : 000	24 : 696
	596,064 : 552	11,838 : 501

IMPORTATIONS FROM UNITED STATES.

	Value.	Duties.
Wines, liquors, ice.....	57 : 500	185 : 076
Whalebone, candles, fish, oysters.....	5,777 : 400	327 : 331
Salt provisions, lard, butter, cheese.....	5,571 : 080	1,137 : 355
Trunks, leather, stationery.....	11 : 900	3 : 242
Silks, ribbons, &c.....	47 : 000	17 : 705
Woolen fabrics.....	74 : 360	29 : 602
Linen fabrics, sail-cloth, cordage.....	1,074 : 200	224 : 429
Cotton fabrics.....	8,090 : 890	1,253 : 624
Books, maps, paper-hangings.....	176 : 000	22 : 590
Lumber, casks, staves, spars, &c.....	182,496 : 780	6,037 : 928
Chemicals, drugs, medicines.....	647 : 540	123 : 013
Dyestuffs, paints, varnish.....	5,464 : 700	1,149 : 613
Oil, tar.....	12,972 : 000	2,305 : 446
Materia Medica.....	82 : 424	6 : 471
Chocolate, mustard, leeches.....	161 : 200	26 : 638
Sugar, tea, coffee, cinnamon, sweetmeats.....	3,879 : 180	1,239 : 315
Tobacco.....	59,076 : 000	51,147 : 500
Flour, rice, sago, biscuit.....	62,110 : 840	11,451 : 623
Fruits, seeds.....	136 : 080	53 : 038
Ironware, cutlery.....	3,130 : 800	1,453 : 000
Glass, earthenware.....	374 : 540	203 : 030
Plaster of Paris, bitumen, grindstones.....	1,285 : 000	6 : 066
Musical and other instruments, clocks, fancy goods..	589 : 910	143 : 986
Specie.....	10,887 : 500	.....
	364,173 : 724	78,548 : 346

* Articles thus marked were exported chiefly or wholly to California.

RE-EXPORTATIONS.

	Value.	Duties.
Whalebone and fish.....	12,635 : 000	63 : 564
Salt provisions and candles.....	6,352 : 460	22 : 808
Cotton, woolen, and silk fabrics.....	285 : 200	4 : 066
Chemicals and medicines.....	104 : 000	: 535
Oil.....	121,748 : 800	220 : 609
Perfumes, condiments, &c.....	214 : 600	3 : 965
Flour and rice.....	392 : 700	3 : 365
Fruits, dry or preserved.....	430 : 750	4 : 812
	142,268 : 510	321 : 269

The vessels entered and cleared in all Portuguese ports were, in 1851, as follows:—

	Entered.	Tonnage.	Cleared.	Tonnage.
Portuguese.....	5,447	315,708	5,777	319,834
Foreign.....	2,891	327,675	3,010	365,658
	8,338	643,383	8,787	685,492

The American vessels entered and cleared at the different ports in 1851 were as follows:—

	Entered.	Tonnage.	Cleared.	Tonnage.
Lisbon.....	9	2,549	6	1,609
Oporto.....	3	660	2	348
Funchal (Madeira).....	22	4,067	20	3,889
Fayal and Flores.....	82	25,030	86	25,882
Other Azores.....	4	524	11	3,197
	120	32,830	125	34,925

It may not be amiss to remark that several of the above ports are Anglicized on our maps; as *Lisboa*, *Faial*, *San Miguel*, and *Porto*; *o-porto* meaning simply "the harbor." There is another port called *Setubal*, which is scarcely to be recognized under our blundering version of *St. Ubes*.

PRICES OF PRODUCE AND MERCHANDISE AT CINCINNATI.

In the *Merchants' Magazine* for November, (vol. xxxv. pages 608, 609,) we published the average prices of butter, cheese, and coffee, on the last day of each week of the year, commencing with September 5, 1855, and ending August 27, 1856. We now subjoin the average prices of flour, corn, wheat, and rye, for the same time:—

The following table shows the price of superfine flour at the close of each week during the year:—

September 5.....	\$ 00	January 9.....	6 80	May 14.....	5 25
12.....	6 25	16.....	6 60	21.....	5 35
19.....	6 50	23.....	7 20	28.....	5 30
26.....	6 60	30.....	7 25	June 4.....	5 30
October 3.....	6 60	February 6.....	7 00	11.....	5 35
10.....	7 25	13.....	6 75	18.....	5 00
17.....	7 10	20.....	6 50	25.....	5 10
24.....	7 65	27.....	6 00	July 2.....	5 50
31.....	8 00	March 5.....	5 75	9.....	6 15
November 7.....	8 10	12.....	6 10	16.....	5 80
14.....	8 00	19.....	5 50	23.....	5 40
21.....	7 95	26.....	5 75	30.....	6 10
28.....	8 10	April 2.....	6 00	August 6.....	6 05
December 5.....	8 00	9.....	5 60	13.....	5 50
12.....	7 75	16.....	5 25	20.....	5 60
19.....	7 50	23.....	5 50	27.....	5 85
26.....	7 50	30.....	5 60		
January 2.....	7 25	May 7.....	5 20		

The following table shows the price of mixed and yellow corn at the close of each week during the year :—

September 5.....	55	January 9.....	40	May 7.....	33
12.....	55	16.....	40	14.....	33
19.....	55	23.....	40	21.....	35
26.....	55	30.....	40	28.....	34
October 3.....	55	February 6.....	40	June 4.....	36
10.....	55	13.....	40	11.....	35
17.....	55	20.....	40	18.....	35
24.....	63	27.....	38	25.....	37
31.....	63	March 5.....	38	July 2.....	38
November 7.....	60	12.....	33	9.....	38
14.....	55	19.....	33	16.....	40
21.....	43	26.....	32	23.....	39
28.....	43	April 2.....	35	30.....	42
December 5.....	43	9.....	35	August 6.....	45
12.....	42	16.....	35	13.....	45
19.....	40	23.....	32	20.....	50
26.....	40	30.....	32	27.....	53
January 2.....	40				

The following table shows the price of prime red wheat at the close of each week during the year :—

September 5.....	\$1 15	January 9.....	\$1 45	May 14.....	\$1 20
12.....	1 21	16.....	1 35	21.....	1 10
19.....	1 22	23.....	1 35	28.....	1 10
26.....	1 30	30.....	1 40	June 4.....	1 10
October 3.....	1 33	February 6.....	1 35	11.....	1 05
10.....	1 40	13.....	1 35	18.....	95
17.....	1 50	20.....	1 35	25.....	90
24.....	1 55	27.....	1 20	July 2.....	95
31.....	1 65	March 5.....	1 14	9.....	1 00
November 7.....	1 70	12.....	1 20	16.....	1 00
14.....	1 65	19.....	1 15	23.....	1 05
21.....	1 69	26.....	1 15	30.....	1 10
28.....	1 65	April 2.....	1 15	August 6.....	1 16
December 5.....	1 63	9.....	1 15	13.....	1 13
12.....	1 60	16.....	1 00	20.....	1 05
19.....	1 50	23.....	1 10	27.....	1 10
26.....	1 50	30.....	1 10		
January 2.....	1 50	May 7.....	1 10		

The following table shows the price of rye at the close of each week during the year :—

September 5.....	60	January 9.....	75	May 14.....	62
12.....	60	16.....	75	21.....	65
19.....	60	23.....	70	28.....	60
26.....	65	30.....	70	June 4.....	62
October 3.....	70	February 6.....	75	11.....	64
10.....	75	13.....	75	18.....	62
17.....	80	20.....	75	25.....	65
24.....	90	27.....	75	July 2.....	65
31.....	90	March 5.....	75	9.....	65
November 7.....	83	12.....	68	16.....	61
14.....	84	19.....	65	23.....	61
21.....	84	26.....	65	30.....	62
28.....	83	April 2.....	65	August 6.....	65
December 5.....	83	9.....	60	13.....	67
12.....	83	16.....	62	20.....	73
19.....	75	23.....	62	27.....	85
26.....	75	30.....	60		
January 2.....	70	May 7.....	65		

EXPORT OF TEA FROM CHINA.

The following remarks on the trade of China with Great Britain and the United States were designed as a note for article on the Pacific Railway, (page 662, line 27th from top,) but was furnished too late for insertion in its proper place :

The commerce between Great Britain and the United States, on one side, and India, China, and the shores of the Pacific, is rapidly increasing. In 1846, before the discovery of gold in California and Australia, the number of tons which cleared for India, China, and ports in the Pacific, was 608,515. Since that period, in addition to the impetus given to commerce by the gold fields of Australia and California, the shipment of tea from China has increased as follows :—

1849	Pounds of tea shipped from China to Great Britain.....	47,242,000
1856	“ “ “ “	91,035,000
1849	“ “ “ “ United States	18,072,000
1856	“ “ “ “ “	40,246,000

This vast increase explains the increasing shipments of silver to Asia. In 1789, an eminent shipowner estimated the consumption of tea in the United States at one million of pounds per annum.

COMMERCIAL REGULATIONS.

KÆPPELIN'S HYDROSTAT FOR WEIGHING.

The *Moniteur Industriel* (Paris) describes a new weighing instrument, which has just been invented by Professor Kæppelin, and called by him the “Hydrostat.” It is based on the same principle as Nicholson’s Ærometer. The “hydrostat” consists of a cylindrical case filled with air, hermetically closed on all sides, and entirely immersed in a vessel containing water, where it forms, as it were, a float. (In places in which the temperature is at freezing point, alcohol must be substituted for water.) Two plated steel wires are connected to the air case or float, and rise out of the water vertically. These wires are fixed to the extremities of a horizontal beam, having at its center a rod, to which are suspended two dishes, placed one over the other. One of these dishes is for the weights which have been required to immerse the float; the other is intended to hold the substances to be weighed. The instrument is made use of in the following manner: First, the fixed point at which the horizontal beam is stopped must be noted; then the substance to be weighed is placed on the proper dish, and weights removed from the other dish till the instrument returns to the original point of immersion. The weights removed will indicate the weight of the substance weighed. The precision of the instrument will depend on the thickness of the steel wires, as the water displaced by them regulates the last and smallest fractions of the course of the float. The nicety of the instrument arises from the absence of all friction except that from the contact of the water against the surface of the float. It is, therefore, especially applicable for weighing precious stones, &c. Changes of temperature affect the volume of the float, as well as the density of the water; the “hydrostat” must, therefore, always be brought back to the fixed point, whenever it has departed from it. The instrument has been applied with success by Messrs. Haussman, Jordan, Hirn & Co., of Colmar, for weighing cotton in the manufacture of table-cloths.

PILOTAGE REGULATIONS OF BELFAST, IRELAND.

The *Mercantile Journal*, published under the auspices of the Belfast, Ireland, Board of Trade, furnishes the new tug and pilotage regulations recently adopted by the Belfast Harbor Commissioners. The rules are simple, the whole alteration, as we learn from our cotemporary, made from the previous system, consists in making pilotage optional instead of compulsory, when a vessel is towed by a tug-steamer. We copy the regulations as printed by the Board:—

NEW REGULATIONS RESPECTING PILOTAGE.

1. All inward-bound vessels, when hailed by the pilot smack, must make their election to be either tugged or piloted, under a penalty not exceeding £5.
2. Every master or owner of a vessel, sailing up or down the channel, shall be at liberty to engage either a pilot or tug-boat at his own option.
3. In case a vessel is brought up or down the channel by a tug-steamer, no charge for pilotage shall be made, unless a pilot has been employed; but $\frac{1}{4}$ d. per ton is payable for lights if a pilot is not employed.
4. No vessel inward-bound shall be at liberty to come up past the lighthouse, at Holywood, without being in charge of either a pilot or tug-boat; and any vessel, violating this rule, shall be charged double pilotage.
5. The master may have the assistance of a pilot in addition to a tug-boat; but, in such case, the pilotage must also be paid as hitherto.
6. No pilot is to be put on board an inward-bound vessel, whilst sailing up the lough, without the consent of the master, unless such vessel perseveres in sailing up the channel beyond the Holywood lighthouse, when it becomes imperative to take a pilot or come to anchor.

It is the duty of a pilot, on boarding a vessel, to present a copy of these rules to the master, and we understand they have been in force for some time, and that much satisfaction has resulted from the new and improved class of tug-boats attracted to this port by the employment afforded under the liberal invitation of the Commissioners. We should be sorry if the income hitherto derived by our pilots be interfered with—a result, we believe, more apprehended than yet realized; but where a great public advantage is to be attained, personal and individual interests must frequently suffer. Should the emoluments of these old and weather-beaten servants of the public be ultimately reduced, we are sure the Commissioners will be ready and willing to consider and amend such injury, by whatever means may be in their power, consistent with their duty to the public, and the legitimate encouragement of the town and trade of the port.

REGULATIONS OF THE JAPAN TRADE.

According to the *Moniteur de la Flotte*, the last accounts from the Chinese seas record the highly interesting fact, that “the Emperor of Japan, being anxious to adjust various questions connected with the recent treaties he has concluded with the several governments of Europe and America, held on the 22d of June, 1856, at Jeddo, the capital of his empire, a solemn assembly of the principal lords and most influential personages of his court. It was decided at the meeting that two ports of the empire, those of Nangasaki and Hakodadi, should be open to the vessels of all nations. There they might repair, renew their provisions, establish depots of coal, &c. The other ports of the empire, moreover,

are to be accessible to vessels in distress, which may take refuge in them, but will have to put to sea the moment the danger is over. No foreigner to be allowed to penetrate into the interior of the country without a special permission from the chief of the State. No decision had yet been come to with regard to the commercial question. The right of trading with Japan is still exclusively maintained in favor of the Dutch and Chinese, who have long possessed it on very onerous terms, having but one market open to them, that of Nangasaki. The new policy adopted by the government of Japan will be productive of incalculable results. Hitherto no foreign vessel could enter the ports of the country to refit or renew its provisions. The last decision of the court of Jeddo accordingly constitutes a great progress. Should China, Cochin-China, the empire of Asam, and all the other neighboring States follow the example of Japan, the intercourse between the extreme east and the rest of the world would be completely changed."

DECISIONS OF THE ATTORNEY-GENERAL OF THE UNITED STATES.

WASHINGTON, Thursday, October 23, 1856.

1. Shipmasters in foreign ports are subject to the requisition of the consul to take on board and carry to the United States distressed mariners, but not seamen or other persons accused of crimes, and to be transported to the United States for prosecution.

2. Officers and crews of the public ships of the United States are not entitled to salvage, civil or military, as of complete legal right. The allowance of salvage, civil or military, in such cases, like the allowance of prize money on captures, is against public policy, and ought to be abolished in the sea service as it was long ago in the land service.

3. District Courts of the United States have power to provide specially for the confinement of persons convicted by Federal Courts, if refused admittance into the jails of the State. In such cases the persons may be confined in the penitentiary of the District of Columbia.

4. There is punishment by statute for the act of a shipmaster in unlawfully putting a seaman on shore in a foreign port; but not for an assault on a seaman on board ship or otherwise in a foreign port.

MEASURES OF THE ZOLLVEREIN.

The Zollverein conference, now continuing its deliberations at Weimar, appears to have adopted, or rather to have determined, two or three measures which may be regarded as important to external commerce. The one is a resolution to reduce the import duties on rice; the second, to reject the plan for augmenting those on tobacco, home-grown or foreign; and the third, not to reduce the duties on iron, as specially proposed by the Prussian government, by that of Brunswick, and one or two others. The opposition to all reductions principally emanates from Midland and Southern States, which are doggedly wedded to protective systems, and are as jealous of Prussian industry as of those of foreign nations.

WEIGHTS AND MEASURES IN ILLINOIS.

AN ACT OF THE LAST ILLINOIS LEGISLATURE.

Be it enacted, &c., That whenever any of the following articles shall be contracted for, or sold, or delivered, and no special contract or agreement shall be made to the contrary, the weight per bushel shall be as follows :—

Wheat.....lbs.	60	Clover seed ....lbs.	60	Salt ..... .lbs.	50
Shelled corn	56	Timothy-seed	45	Stone coal.....	80
Corn in the ear....	70	Flaxseed	56	Malt.....	38
Rye	56	Hemp-seed	44	Bran.....	20
Oats.....	32	Blue-grass seed....	14	Turnips.....	55
Barley.....	47	Buckwheat	52	Plastering hair....	8
Irish potatoes.....	60	Dried peaches.....	33	Unslacked lime....	80
Sweet potatoes....	55	Dried apples.....	24	Corn meal.....	48
White beans	60	Onions.....	57	Fine salt	55
Castor beans.....	46				

NAUTICAL INTELLIGENCE.

EMERSON'S WINDLASS FOR SHIPPING.

This is an iron windlass, worked by a capstan placed above it on the topgallant forecastle. It has two purchases, one quick, for ordinary work, and the other slow, when great power is required. The bight of the chain passes over the ends of the windlass into a notched groove, so that every link as it is hoive in is secured beyond the possibility of surging or running out. But should it be required to let the chain run, the windlass can be ungeared in a second, and left to revolve forward, carrying the chain with it until the required scope has been paid out. The windlass is always under perfect control. No matter how rapidly the chain may run out, it can be stopped, and that, too, either gradually or at once. The advantages of this windlass over every other now in use, are—1st. Increased power, by which one man performs as much labor as three can with the common windlass. 2d. Perpect control of the chain under every circumstances. 3d. Double purchase, one independent of the other. 4th. Compactness, as it occupies less than half the space required for the common windlass; and 5th, it is very strong.

It is now applied to the steamer R. B. Forbes, and on Saturday was tested by several severe experiments, and found perfect in every one. Com. Stringham, Capt. Pearson, several underwriters, and others interested in shipping, went down the bay in the steamer, and had the windlass applied in every conceivable circumstance in which a ship could be placed, and the anchor, in every case, was hove up with ease. Captain Morris, of the steamer, for whose opinions in matters pertaining to shipping we have the highest respect, says, that "it is the best windlass he has ever seen." We may add that its cost is little, if any, greater than that of the common windlass. We unhesitatingly recommend it to our ship-owners. Com. Stringham said he would have it on board the first vessel built at the navy-yard.—*Boston Atlas.*

NEW MODE OF COPPERING VESSELS.

English papers state that M. Oudry has made preliminary experiments for applying electrotpe on an enormous scale—no other than the coppering of wood and iron ships, of whatever tonnage. The vessel should be coated with an adherent species of varnish, then placed in a dock to which the cupriferous solution would be admitted; and then by a series of plies, the requisite thickness of copper

would be deposited in from eight to ten days. The advantages promised are diminution of cost and perfection of result; for, there being no joints in the copper, destructive animals could not penetrate, neither would there be such an accumulation of weeds on the bottom as now takes place.

VOYAGE OF A BOTTLE—THE CURRENTS OF THE OCEAN.

We copy the following letter to Lieutenant Maury from the *Nautical Intelligence*, of November 13, 1856.

ARANSAS, TEXAS, Oct. 25.

SIR:—The inclosed memorandum came ashore on the gulf beach yesterday about noon, in a wine bottle. It landed some six or seven miles northwest of the lighthouse at this pass; wind at the time S. E. Supposing it might be of interest to you, I take the liberty of forwarding it, with my respects.

Yours, &c.,

D. M. HASTINGS, Postmaster.

Lieutenant Maury, National Observatory, Washington.

“Ship *Admiral*, for London, Samuel Pistren, Commander. On the equator, Long. 30 deg. 45 min., W.; sixty-five days out from Melbourn. All well.

“FEBRUARY 17, 1856.”

PUTTING TALLIES ON THE CURRENTS OF THE SEA.

This bottle was afloat 252 days, and performed a voyage measuring, according to the shortest route, a distance of at least 4,950 statute miles. This is another illustration of the fact that the Amazon, as well as the Mississippi, casts a drift into the Gulf of Mexico. This bottle passed the offing of the Amazon on its way, traveled across the Caribbean Sea, and entered the Gulf of Mexico by the Yucatan Pass.

Could this bottle speak, it would have quite an interesting tale to tell. It would, we imagine, commence somewhat in this wise:—“It was Sunday; the crew were dressed in their best clothes, and all hands were in the highest spirits, for the ship had within the last 65 days performed the remarkable feat of running about 12,000 miles. She came flying around Cape Horn before the ‘brave west winds’ of the southern hemisphere. Another three weeks of such winds and she would be in the London docks. At dinner I was emptied to a toast of sweethearts and wives, and after three times three for old England and a speedy run, launched overboard.”

LATITUDE AND LONGITUDE.

Mr. Ayling recently delivered a lecture on Longitude on board ship Patrick Henry, Captain Hurlburt. The portions of the lecture are thus briefly stated by a writer in the *Herald*, who listened to Mr. Ayling’s lecture. He says:—

“Mr. Ayling clearly defined the principle of his newly-invented solameter, giving satisfaction to all, and eliciting the wonder and admiration of every captain and scientific man present. The solameter, it appears, gives two views—the real and its shadow—the shadow separating and changing its position as we alter our meridian, the difference so changed being equal to the distance traveled, and is indicated on the vernier scale. Mr. Ayling had two large diagrams of the earth, upon which were drawn the degrees of latitude and longitude—an imaginary line or visible horizon with the secant of the earth’s exterior—the angle of which, viz.: the dip or depression being the true demonstrated longitude, being in verity the difference of two meridians. Mr. A. then explained his mode of obtaining altitude for latitude without the aid of a marine horizon, hitherto considered an impossibility, but which he has undoubtedly accomplished, and for which he received far greater applause than even his longitude.”

LIGHTHOUSE AND BEACON ON WANGEROOGE ISLAND.

WEST SIDE OF THE ENTRANCE TO THE RIVER WESER.

Official information has been received at this office, through the Department of State, that the government of Oldenburg has given notice that a light would be exhibited on the 1st of October, 1856, from the new tower recently erected on the eastern extremity of the Island of Wangerooge, in lat. $53^{\circ} 47' 26''$ north, long. $7^{\circ} 54' 14''$ east of Greenwich, as a substitute for the old light at that place. The light is a fourth-order revolving one, on the system of Fresnel, showing a bright flash once in every two minutes; it is elevated one hundred feet above the level of the sea, and should be seen, under ordinary states of the atmosphere, fourteen nautical miles. A beacon is erected on the sand hill 1,700 feet E. by N. from the new tower, making the lighthouse, beacon, and Key buoy (the first buoy) in range. The lightship, No. 1, in the Weser, is placed E. $\frac{1}{4}$ S. from the beacon, in range with the beacon and the large church steeple on the western part of the island. By order of the Lighthouse Board,

THORNTON A. JENKINS, Secretary

TREASURY DEPARTMENT, OFFICE LIGHTHOUSE BOARD, }
WASHINGTON, October 27, 1856.

GAY HEAD LIGHTHOUSE, MARTHA'S VINEYARD SOUND, MASS.

In conformity with the notice dated July 22, 1856, the new light at Gay Head will be exhibited at sunset on December 1st, 1856, and will be kept burning during every night thereafter from sunset to sunrise. The focal plane of the light is 43 feet above the ground, and 170 feet above the level of the sea. The tower is of brick, colored brown, and stands about 12 feet from the center of the rear of the dwelling-houses, with which it is connected. The lantern is painted black. The dwelling-houses are brick color. The illuminating apparatus is a revolving Fresnel lens of the first order, showing a bright flash of the natural color every ten seconds. The light should be visible in good weather, from the deck of a vessel, 19 nautical or 21 statute miles. The light now shown at Gay Head will be discontinued from the above-named date, and in the course of the next season the old tower will be removed. By order of the Lighthouse Board,

W. B. FRANKLIN, L. H. Engineer 1st and 2d Districts.

BOSTON, MASS., Oct. 22, 1856.

STATISTICS OF AGRICULTURE, &c.

PROFITS OF PEAR CULTURE.

BY EDGAR SANDERS.

Albany has long been noticed for its fine Gansel's Bergamot Pear. Dennison's old farm on Elm-street, and the garden from which we write, have each some fine specimens of this tree, and those of the latter evidently forty or fifty years old. Besides these, many other gardens contain a few trees of moderate growth. Those under our charge are nine in number, five of which have a circumference of from *four feet six to five feet*, just above the graft, which is easily discernible from the stock, being from nine inches to a foot larger round, and of very unequal surface. The remainder are much smaller and apparently planted more recently. Altogether these nine trees have borne the past season seventy-five bushels of gathered fruit, slightly below the medium size of the past three years.

In 1853-4, these trees were sadly cut up with the "fire blight," which did not, however, seem to have the slightest effect in ripening the fruit, except on those

branches killed outright. Last year the blight was light, while this year there were but few branches affected, and that early in the season, which were, as in the before-mentioned cases, cut away as fast as shown. Besides these nine trees of Bergamot, there are seven trees of White Doyenne or Virgalieu, which this year bore some thirty-one bushels of tolerably fair fruit, having been the three preceding years badly subject to mildew.(?) This makes a total on the sixteen trees of 106 bushels of fruit.

Seventy-five bushels of these were sold nearly as they grew on the trees (that is without picking out inferior fruit) for \$300, or four dollars per bushel. The remainder being reserved for home use and presents, which, if valued at the above rate, would swell the amount to the large sum of *four hundred and twenty-four dollars*. This gives an average value of \$26 50 per tree, which, if multiplied by one hundred, the usual number reckoned to the acre for standard pears, we have the respectable sum of \$2,650 as the worth of an acre of pear trees at the same rates. If we take it another way, that is, according to the value of an acre of trees yielding similar to one of the Bergamot trees, thirteen bushels to the tree, \$52 as its worth, and one acre \$5,200.

It will be readily seen that half such crops would be large returns, and these old trees never fail of a fair crop. Both kinds have attained nearly the same altitude, the highest of which are some thirty-two feet.

It is somewhat singular that the bulk of the Bergamot Pears have to be consumed in Albany, from the strange fact that New York does not appreciate this luscious fruit, but will take the Virgalieu at any price.

THE CULTURE OF THE GRAPE, AND WINE MAKING.

The *American Farmer* says, that while the making of the best wine requires much care, skill, and experience, there is no such mystery in the art as may not be readily overcome by ordinary intelligence, and a due degree of attention. Well ripened and sound fruit is essential for the best quality of wine. The pressing is a simple business. After pressing, success depends upon the proper fermentation of the juice. New, clean casks, soaked with clean water for a week, or casks used for wine previously, but thoroughly cleansed by scalding with water, and fumigating with sulphur. Into these the juice is put until within six inches of the bung, and the bung put in loosely, so that the gas can escape. In two or three weeks, usually, the fermentation will cease, and the wine become clear. The casks are then to be filled, and the bung tightened. A second, but more moderate fermentation, takes place late in the spring. It is better not to bottle for a year or longer after the wine is made. It is, after this, fit for use and sale. Where the vine is extensively cultivated, wine-houses and cellars are established, and it is better that the small cultivator should sell his newly pressed juice to the regular wine-maker. That the cultivation of the vine may prove profitable in the United States, there is little doubt. The average annual yield of the crop in the neighborhood of Cincinnati is stated at 200 gallons of the juice to the acre. This is worth at the vineyard 80 cents to \$1 per gallon; the wine-maker purchasing and making a profitable business of preparing it for market—a profit which very many cultivators may secure to themselves by exercising the requisite skill and care in the manufacture of the wine.

PRICES OF WHEAT IN ENGLAND.

Below will be found a table of the annual average prices of wheat in Great Britain for 214 years—that is to say, back to the times of Cromwell. The table presents many curious facts. The average of the past year, says the *Economist*, has been higher than in any year since 1819, and is about the same as in 1796, when it was higher than it had before been during 147 years, that is to say, back to 1648. A point of interest in the table is the continual fluctuations, showing a gradual rise through several years to a maximum, and a more rapid decline. It is to be remarked that the rise generally continued five years. These periods of rise were as follows:—

	Shillings.	Shillings.	Shillings.	Shillings.	Shillings.	Shings.
1654-59.....	23	29	38	41	57	58
1666-69.....	32	32	35	39	..	..
1706-10.....	23	25	36	69	69	..
1732-35.....	23	25	30	38	..	..
1750-53.....	28	34	37	39	..	..
1761-65.....	26	34	36	41	48	..
1769-74.....	40	43	47	50	51	52
1779-83.....	33	35	44	47	52	..
1787-90.....	38	41	45	51	54	..
1791-96.....	41	43	49	52	75	78
1798-01.....	51	69	113	119	..	..
1807-10.....	75	81	97	106	..	..
1814-17.....	65	78	96	..	..	..
1822-25.....	44	53	63	68	..	..
1835-39.....	39	48	55	64	70	..
1845-47.....	50	54	69	..	..	..
1851-55.....	38	41	53	72	74	75

The exorbitant prices of the periods 1796 and 1810, were those of paper money. It is observable that the rise commenced always after an extreme fall, and continued always four years, with the exception of 1845-47, when the price culminated in the third year. It might be curious to investigate in how for this short period might be due to free trade in corn. Up to the close of the last century not only was England, as a whole, an exporter of wheat, but the interior communication was so difficult as to make prices far from uniform. Indeed, in some counties crops would rot on the ground, while in others famine prevailed, yet transportation was almost impossible. Hence, in the first century of the table, prices were not so regular, but prices touched lower points than in the present century. It is remarkable that 1851 was the lowest average year of the present century, and it was in that year the full effect of the high prices of 1847—followed by the abolition of the corn duties—was felt. The table shows that in the five years, 1847 to 1851, prices fell annually 69s. to 38s. In the five years which have since elapsed, they rose annually 38s. to 74s. This prolonged rise is doubtless due to the influence of war, which has cut off many of the supplies before depended upon to check an extreme advance. That difficulty has now passed away, and the prolonged high prices must have exercised their usual effect in stimulating production, and, consequently, bringing about that decline in prices which has inevitably, under all circumstances, succeeded a rise. It will be seen, on inspecting the table of annual prices that the most rapid fall has always followed the highest prices, and this result has been more marked as communication has become more prompt and duties have been removed. It follows inevitably from this table of over two centuries of experience that the present is the year of culminating prices, and that the next five years will be of falling prices, in relation to other commodities. The apparent decline will be counteracted by the decline in the value of the gold currency, which must now probably become more marked. When the mines of America were discovered in 1520, there was no apparent effect upon prices until the close of the century. From 1570 to 1640 the depre-

ciation of silver was marked, and it then ceased. The evidence in the price of wheat is as follows :—

	s.	d.		s.	d.
Average 12 years to 1451.....	21	3	Average 12 years to 1601.....	47	7
“ 1497.....	14	0	“ 20 “ 1621.....	41	7
“ 1560.....	10	6	“ 16 “ 1636.....	50	0

Thus the value of wheat, under the influence of enhanced supplies of silver, quadrupled from 1560 to 1640, from which time (as will be seen in the table of annual averages) the effect ceased. It is now highly probable that the effect of gold will begin to manifest itself, and the prices of wheat will take a higher level, and this will apparently counteract the decline which should result naturally from the high prices that have prevailed, and the stimulus those prices have given to production. Hence, it follows, that two powerful elements of prosperity are coming into operation, viz. :—abundance of gold and relatively cheap food.

YEARLY AVERAGE PRICE OF WHEAT IN GREAT BRITAIN FROM 1641 TO 1856.

Year.	s.	d.	Year.	s.	d.	Year.	s.	d.	Year.	s.	d.	Year.	s.	d.
1641	57	1	1685	41	5	1729	41	7	1773	51	0	1816	78	6
1642	60	2	1686	30	2	1730	32	5	1774	52	8	1817	96	11
1643	59	10	1687	22	4	1731	29	2	1775	48	4	1818	86	3
1644	61	3	1688	40	10	1732	23	8	1776	38	2	1819	74	6
1645	51	3	1689	26	8	1733	25	2	1777	45	6	1820	67	10
1646	42	8	1690	30	9	1734	30	9	1778	42	0	1821	56	1
1647	65	5	1691	30	2	1735	38	2	1779	33	8	1822	44	7
1648	75	6	1692	41	5	1736	35	10	1780	35	8	1823	53	4
1649	71	1	1693	60	1	1737	33	9	1781	44	8	1824	63	11
1650	68	1	1694	56	10	1738	31	6	1782	47	10	1825	68	6
1651	65	2	1695	47	1	1739	34	2	1783	52	8	1826	58	8
1652	44	0	1696	63	1	1740	45	1	1784	48	10	1827	58	6
1653	31	6	1697	53	4	1741	41	5	1785	51	10	1828	60	5
1654	23	1	1698	60	9	1742	30	2	1786	38	10	1829	66	3
1655	29	7	1699	56	10	1743	22	1	1787	41	2	1830	64	3
1656	38	2	1700	35	6	1744	22	1	1788	45	0	1831	66	4
1657	41	5	1701	33	5	1745	24	5	1789	51	2	1832	58	8
1658	57	9	1702	26	2	1746	34	8	1790	54	9	1833	52	11
1659	58	8	1703	32	0	1747	30	11	1791	41	7	1834	46	2
1660	50	2	1704	41	4	1748	32	10	1792	43	0	1835	39	4
1661	62	2	1705	26	8	1749	32	10	1793	49	3	1836	48	9
1662	65	9	1706	23	1	1750	28	10	1794	52	3	1837	55	10
1663	50	8	1707	25	4	1751	34	2	1795	75	2	1838	64	4
1664	36	0	1708	36	10	1752	37	2	1796	78	7	1839	70	6
1665	43	10	1709	69	9	1753	39	8	1797	53	9	1840	66	4
1666	32	0	1710	69	4	1754	39	0	1798	51	10	1841	64	5
1667	32	0	1711	48	0	1755	30	1	1899	69	0	1842	57	5
1668	35	6	1712	41	2	1756	40	1	1800	113	10	1843	50	2
1669	39	5	1713	45	4	1757	53	4	1801	119	6	1844	51	3
1670	37	0	1714	44	9	1758	44	5	1802	69	10	1845	50	9
1671	37	4	1715	38	2	1759	35	3	1803	58	10	1846	54	9
1672	36	5	1716	42	8	1760	32	5	1804	62	3	1847	69	5
1673	41	5	1717	40	7	1761	26	9	1805	89	9	1848	50	6
1674	61	0	1718	34	6	1762	24	8	1806	79	1	1849	44	6
1675	57	5	1719	31	1	1763	36	1	1807	75	4	1850	40	4
1676	33	9	1720	32	10	1764	41	5	1808	81	4	1851	38	7
1677	37	4	1721	33	4	1765	48	0	1809	97	4	1852	41	0
1678	52	5	1722	32	0	1766	43	1	1810	106	5	1853	53	3
1679	53	4	1723	30	10	1767	47	4	1811	95	3	1854	72	7
1680	40	0	1724	32	10	1768	53	9	1812	126	6	1855	74	9
1681	41	5	1725	43	1	1769	40	7	1813	109	9	1856	73	0
1682	39	1	1726	40	10	1770	43	6	1814	74	4			
1683	35	6	1727	37	4	1771	47	2	1815	65	7			
1684	39	1	1728	48	5	1772	50	8						

THE CULTIVATED AND UNCULTIVATED LAND IN IRELAND.

We learn from the Belfast (Ireland) *Commercial Journal*, that the Census Commissioners have just issued their sixth and concluding series of the census returns. We condense from the returns as given in the *Journal*, the following particulars respecting the agricultural and domestic progress of Ireland :—

The number of acres cultivated and uncultivated in the years 1841 and 1851 compare as follows :—

	ARABLE.		UNCULTIVATED.	
	1841.	1851.	1841.	1851.
Leinster	3,961,188	4,037,717	731,886	665,997
Munster.....	3,874,613	4,310,452	1,893,477	1,484,843
Ulster	3,407,539	3,994,259	1,764,370	1,198,797
Connaught.....	2,220,960	2,460,153	1,906,002	1,674,347
Total.....	13,464,300	14,803,581	6,295,735	5,023,984

These figures speak most favorably for the industry of the people within the ten years ; and as the returns are continued to 1854, we find that the work of bringing waste lands into cultivation proceeds in a most gratifying manner. The decrease in the proportion of waste or uncultivated land since 1851 will be seen from the following table :—

	1851.	1852.	1853.	1854.
Leinster.....	698,212	665,071	636,760	640,119
Munster.....	1,520,671	1,486,470	1,396,940	1,410,193
Ulster	1,258,422	1,263,961	1,211,619	1,237,018
Connaught.....	1,732,187	1,618,572	1,584,664	1,564,468
Total.....	5,209,492	5,034,074	4,829,983	4,851,793

The total area of Ireland is 20,811,774 statute acres, and the proportion under cereal and other crops, in 1851, was 28.16 per cent ; grass, 42.04 per cent ; woods or plantations, 1.47 per cent ; fallow, 1.47 per cent ; and under bog or waste, 24.14.

The improved *status* of the people is best ascertained by reference to the class of dwellings occupied by them at the decennial periods above named. The Commissioners have divided the houses of the country into four classes. The fourth, or lowest class, comprises mud cabins of one room ; the third, mud cottages of more than one room ; the second, farm-houses, or in towns, houses having from five to nine rooms and windows ; and the first or highest class, all houses of a better description than those already specified. The houses of the first class had increased from 40,080, in 1841, to 50,164, in 1851 ; those of the second class had increased from 264,184 to 318,758 ; the third-class dwellings increased from 533,297 to 541,712 ; and the number of the one-room mud cabins, which stood at 491,278, in 1841, fell to 135,589, in 1851, showing that within this period fully 355,689 of those wretched hovels disappeared from Ireland. The decrease was greatest in Ulster, and least in Leinster. This shows that the advancement of the population in better house accommodation has been most satisfactory, notwithstanding the great diminution caused by famine and emigration. The returns of education, and of the numbers of persons not dependent on manual labor for support, also show considerable increase.

It appears by one of these tables that the inhabitants of Ireland have, by emigration, decreased by 475,102 persons from the 30th March, 1851, to the 31st

December, 1855, so that at the present time there are, probably, not more than six million people in Ireland altogether; and as emigration is still going on with considerable activity, a further important diminution in our population may be looked for, ere the tide again turns in our favor, as turn it must, for the rich and fertile soil of the Emerald Isle contains a mine of exhaustless wealth for generations yet unborn. Already the effects of this diminution in the population is beginning to be seriously felt in the scarcity of labor and wages, which have been gradually advancing, for all classes of workmen, and it would seem, are destined, ere no very distant period, to be placed on an equality with those of the sister kingdom.

The *morale* of these comprehensive and elaborate tables is, that the potato disease, which in 1847, was considered to have been sent as a judgment against this devoted country from an offended God, has, under His inscrutable and all-merciful providence, turned out its greatest blessing. The Encumbered Estates Court—one of the rich fruits of this visitation—has been the happy means of relieving the country from a pack of insolvent landlords and useless drones, who for centuries have hung like a night-mare over the land.

Judging of the future, says our cotemporary, from the experience of the last two or three years, we have good reason for anticipating a glorious regeneration for Ireland, ere another deceptual period has passed away.

GRAIN ELEVATORS IN BUFFALO.

There are already ten grain elevators in Buffalo, with power to raise from 2,000 to 2,500 bushels per hour, and to store from 80,000 to 270,000 bushels each. Their aggregate capacity is 1,475,000 bushels of grain. The Buffalo *Commercial Advertiser*, referring to this subject, says:—

“We learn that excavations for a new elevator on the west side of the creek, opposite the custom-house, have been commenced, and considerable progress already made. The plan and drawings of the building are nearly completed. It is designed to be of the capacity of about 500,000 bushels, and to have two elevators, one on the creek facing east, and one on the cut facing west, each capable of raising 4,500 bushels per hour. It will be eventually walled in with brick. The elevators will, of course, be able to unload two vessels at a time, and in addition to the usual facilities for loading canal boats, a slip for boats is arranged under each elevator, whereby boats can be run in and loaded while vessels are unloading. This elevator, together with the one building on Peck-slip, opposite the foot of Main-street, will add 900,000 bushels to the capacity of the elevators of the harbor, making an aggregate of 2,400,000 bushels. We also learn that there is a proposition to build another of brick on the north side of Peacock-slip, Erie Basin, but the project is not yet definitely determined upon. The bins of the Dart Elevator, which are now able to hold 150,000 bushels, are in the process of enlargement, in order to make their practical capacity 175,000.”

PROFITS OF GRAPES.

In the neighborhood of Cincinnati there are more than two thousand acres of grapes. The profits per acre average, taking one year with another, about \$300 per acre. Much, of course, depends on management. The cost of planting ranges from \$100 to \$300 per acre. The expense with ordinary land need not exceed \$150 per acre. When trenching machines come into use on land clear of stones, the cost of planting will be materially reduced. Better profits are made on the grapes sold in the market than on those used for wine.—*Pittsburg Dispatch*.

STATISTICS OF POPULATION, &c.

THE PROGRESS OF POPULATION IN MAINE.

The *State of Maine* infers from the data below, that the principal increase in the population of that State has been in the railroad towns, rather than along the seaboard. The large vote cast in Maine at the election in August, 1856, is an interesting fact, showing, as it does, the great progress of Maine for the last few years. We quote what follows from our Portland cotemporary :—

The aggregate vote for Governor exceeds 121,000, or 30,000 more votes than were thrown at the State election of 1840. There was a full vote at that time, and in November following, more so than at any election since that year. The population of Maine in 1840, according to the returns of the United States census, was 501,706. The vote thrown for Governor in that year was 91,179. Of this number, 45,574 were for Kent, and 45,507 for Fairfield, and 98 scattering. Gov. Kent failing of an election by 31 votes. In November of that year Harrison had 46,612 votes to 46,201 for Van Buren, or a majority of only 411 votes in a ticket of 92,813.

The canvass of 1840 was, if possible, more exciting than that of 1856, and called out an equally full vote in proportion to the number of voters in the State. With a population of 501,706 in 1840, we threw for President 92,813 votes. As we threw rising 121,000 votes in 1856, we can fairly estimate at this time, allowing the same ratio of votes to inhabitants, a population of 665,000 persons.

The population of Maine at different periods has been as follows :—

1790.....	96,540		
1800.....	151,719	57	per cent in 10 years.
1810.....	228,705	52	“ “
1820.....	298,335	30	“ “
1830.....	399,995	33	“ “
1840.....	501,793	25	“ “
1850.....	583,656	17	“ “

Estimating the population at 665,000, it gives an increase of 82,000 in six years, or more than 14 per cent increase in six years. This is certainly a gratifying fact in face of a large emigration from the State. We think the estimate for 1856 is below, rather than above, the truth. The closeness of the vote for Governor in September, 1840, stimulated both parties to obtain every possible vote at the November election, while the canvass this year was not equally thorough, in all parts of the State. This will appear by comparing the aggregate vote of each Congressional district this year for members of Congress :—

No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 6.
21,089	22,556	19,072	20,429	21,010	15,983

Each district had substantially the same amount of population in 1850, while the difference between the votes in the second and sixth districts this year is 6,573. We can hardly suppose that this difference of vote is entirely due to the greater increase of voters in the 2d district over the 6th, but to the fact that a closer canvass was had in the former than in the latter. Still we think it shows that the growth of the State has been greatest along the lines of our railways. Portland, Bangor, Bath, and the large cities have each increased very rapidly; we think there is no doubt the progress of Maine the last six years has been mainly due to her railways. The 2d district includes the towns of Cumberland, Oxford, and Androscoggin counties, on the line of the Montreal and Waterville railroads, in every one of which there is a large increase of population, greater probably than in the seaboard towns. The third district is made up of the county of Waldo and that part of Lincoln east of the Kennebec River, does not contain a mile of

railway in it. The contest was very sharp, in that district, and drew out a full vote. Yet it threw 3,484 votes less than the 2d district.

The 4th district, which includes Bath and the towns in Kennebec and Sagadahock counties on the line of the Kennebec and Portland Railroad, threw 1,367 more votes than the 3d district.

The vote of Portland would indicate a population of about 30,000, that of Bangor about 19,000, and Bath 12,000. From 1840 to 1850 the greatest increase was in the lumbering districts in the counties of Penobscot and Washington. Since 1850, Cumberland and Oxford have increased more than any other counties in the State.

EMIGRANTS FROM ENGLAND.

The Liverpool *Northern Times*, in an article on the character of the most numerous classes of emigrants from that country, the object of which is to show that a large proportion of them are industrious and skilled mechanics, who leave the country for the purpose of seeking employment where industry is more fully rewarded, presents the following alphabetical table of the trades to which a portion of the emigrants of the last two years belonged :—

	1854.	1855.
Blacksmiths and farriers.....	1,574	381
Braziers, tinsmiths, and whitesmiths.....	313	148
Brick and tile makers, potters, &c.....	111	82
Bricklayers, masons, plasterers, and slaters.....	3,984	1,814
Builders.....	69	35
Cabinetmakers and upholsterers.....	182	81
Carpenters and joiners.....	5,185	2,541
Carvers and gilders.....	65	64
Coachmakers, &c.....	50	25
Coal miners.....	177	62
Coopers.....	269	171
Engineers.....	317	285
Millwrights.....	36	10
Miners and quarrymen.....	4,112	1,673
Painters, plumbers, paper-hangers, and glaziers.....	697	661
Sawyers.....	213	141
Shipwrights.....	61	15
Smiths (general).....	216	258
Surveyors.....	27	32
Turners.....	45	25
Wheelwrights.....	196	106
Mechanics not before specified.....	3,398	2,545
Total.....	21,347	11,155

To this statement the *Times* remarks :—

The total number of such adults who emigrated in the two years having been respectively 134,789 and 65,363, it follows that the mechanics and skilled workmen, connected with the building and constructive trades, who leave the country, form the proportion of about one-sixth of the whole number. Farmers, agricultural and general laborers, and those identified with land, constitute one-half of the bulk of emigrants. The tide of emigration, as regards the mechanics enumerated, sets chiefly to Australia and the United States. Last year there was an unusually small amount of emigration, owing to the war, the drafts for the army and navy, increased employment at home, and the check given to emigration to the United States by the stringent American regulation and the political objections to Catholics and the Irish, and to naturalization, which had before been freely granted. The employment of many large steamers now disengaged from the transport service, and reduced fares, coupled with the prosperous state of Canada and Australia, will lead to an increased emigration next spring.

RAILROAD, CANAL, AND STEAMBOAT STATISTICS.

PROGRESS OF RAILWAY CONSTRUCTION.

The first railway which was opened for public traffic and the carriage of passengers was the Stockton and Darlington, in 1825.

The Quincy Railway, built in 1827, was the first constructed in the United States. The Maunch Chunk, 9 miles long, was built in 1827, in 63 days, at a cost of \$27,000. The first passenger railway was the Baltimore and Ohio, which was opened with horse-power, for fifteen miles, in 1830. The Mohawk and Hudson Road was opened for public travel with horse-power in the summer of 1831. The South Carolina Road, commenced in 1830, was opened for public travel in 1832 for a distance of 62 miles.

Locomotives were first used in this country in 1831 on the Mohawk and Hudson Road, and the next year upon the Baltimore and Ohio, and on the South Carolina Road. The first engines were built by the West Point Foundry, and weighed about 4 tons, and ran 20 miles an hour.

In 1804 a locomotive engine was tried upon a railway in Wales, but it was unsuccessful, in consequence of a difficulty of obtaining sufficient adhesion upon the rail. This was remedied in 1811 by the application of the power to a rack or toothed rail.

The celebrated trial of locomotives on the Liverpool and Manchester Railway in 1829, resulted in determining the successful application of the locomotive engine to railway transport. The increased rate of speed which the locomotive attained at several periods will be seen from the following table:—

In 1824 the locomotive ran.....	6	miles an hour.
In 1829 "	15	"
In 1834 "	20	"
In 1839 "	37	"
In 1847 "	70	"
In 1853 "	106	"

The following table shows the length of railways in operation, and the miles of surface and number of inhabitants to one mile of railway, in the principal countries of Europe and North America.

Name of country.	Miles of road in operation.	Miles of surface to one mile of road.	No. of inhabitants to one mile of road.
Great Britain and Ireland.....	8,054	15	3,411
Belgium	1,095	10	4,024
Germany and Austria.....	5,340	17	7,251
Prussia	2,290	48	7,131
France.....	2,480	83	14,400
Italy	170	797	132,353
Russia.....	422	4,740	142,915
Spain	60	3,038	236,934
Cuba	300	144	4,155
Canada	1,031	337	1,787
United States, east of the Mississippi	21,440	38	1,075
Northwestern States	7,966	30	731
Northeastern States.....	3,923	16	776
Middle States.....	5,044	20	1,300
Southern States.....	5,463	74	1,336
Western States	739	110	2,950
New York	2,615	10	1,327

If the whole cost of the railways of the United States were equally distributed among the people, it would average thirty dollars to each man, woman, and child, or one hundred and fifty dollars to each family.

Some adequate idea of the importance of the railway interests in the State of New York may be had from the following proportions which it bears to all other interests, as estimated in the New York Railway Commissioners' Report:—

It forms one-tenth of the whole assessed valuation of real and personal estate.

The capital invested is equal to an average of \$40 to each inhabitant, or \$215 to each voter.

The number of persons directly employed on the running roads is equal to one-thirty-sixth of the voters in the State; and if to these are added those employed in constructing new roads, and those whose business is directly dependent upon this interest, in furnishing supplies, etc., it is equal to one-thirteenth of the voters, and with their families, they form one-fourteenth of the whole population.

The amount of passenger travel in the cars is equal to seven hundred and twenty-five miles per year, of every voter, and one hundred and thirty-five miles for every man, woman, and child in the State.

There are forty thousand persons who travel every day, and there are twenty of these daily moving over every mile of railway.

There are 750,000 tons of engine, cars, passengers, and freight carried annually over each mile of road, or 2,400 tons daily, or 100 tons hourly over each mile of road.

The cost of transportation of passengers and freight to the railway companies would be equal to a little more than three dollars to each inhabitant, or seventeen dollars to each voter per annum; and including the payments for construction, interest, and dividends, a sum equal to twice these amounts is paid.

THE CONDITION OF THE RAILROAD INTERESTS.

With twenty-four thousand miles of railroad in this country, and all of it so recent in construction as to furnish little actual experience, it is not surprising that there are great changes going on in the management and the results of the system. Some of them are so obvious, and the experience so valuable, that they should be put on record, as instructive for the future.

1. That railroads, when complete, even with a single track, cost much more than was at first supposed, is now quite obvious. A railroad may, for example, in a flat country, be made passible, with a locomotive, for \$20,000 per mile; and because the locomotive could be set going on it, that was the estimated cost; but that road will never be complete under \$35,000 per mile. In a hard country, or with an entrance to a great city, of course it will be much more than that. At present, the cost of some of the most important roads has been as follows:—

	Per mile.		Per mile.
New York Central.....	\$70,000	Little Miami.....	\$40,000
Pennsylvania Central.....	70,000	Georgia Central.....	20,000

Now each of these roads cost, when it was first put in operation, but a little more than half this sum. The chief sources of expenditure over the original cost were:—

(1.) Relaying; for till very recently all American railroads were laid with light iron, but must now have very heavy iron, to meet the wear and tear of increased freights.

(2.) Increased equipment; for the business became much greater than was anticipated. More locomotives, more cars, more machinery of all kinds were required.

(3.) Increased conveniences became necessary; for the road with a large business must have machine shops, depots, and conveniences of all sorts.

2. The railroad business has enormously increased. No man in the United States, ten years since, expected a railroad business to be what it is. Indeed no adequate idea could be formed of the capacity and power of a railroad. It was

first assumed that they could carry no freight, but would be profitable for passengers on long passenger routes. Next, it was deemed perfectly certain that their freight business would be confined only to light traffic, and canals must yet be made to carry heavy produce. But even the last has been exploded. Most railroads now make most of their profit from freight traffic. One direct consequence of this is in the increased expenses to which we have referred; for such a heavy business requires rails and machinery of a much stronger and more expensive character.

3. Another idea was, that a through business was the one which furnished the profit; and accordingly the prospectus of every new railroad enterprise for the last five years has announced that it was certain of a great through business; and in operating roads this *ignis fatuus* has almost bankrupted many of them. The shadow was taken for the substance. But it is now discovered and proved that in nine roads out of ten, the best and most profitable business is a local traffic. To this there are exceptions, but they are peculiar cases, and in general it is the interest of railroad companies to cultivate their local traffic.

4. As a consequence of this increase of business, and of local traffic, the gross receipts of railroad companies have been immensely increased from year to year. Take the following examples, which are put down in round numbers, and are near enough for comparison:—

NEW YORK AND ERIE.

		Increase.
In 1852.....	\$3,318,000	.....
In 1853.....	4,321,000	31 per cent.
In 1855.....	5,488,000	26 "
In 1856.....	6,200,000	13 "
From 1852 to 1856.....	.....	90 "
Per annum, average.....	.....	22 "

LITTLE MIAMI RAILROAD.

		Increase.
In 1852.....	\$526,000	.....
In 1853.....	667,000	26 per cent.
In 1854.....	721,000	8 "
In 1856.....	860,000	20 "
From 1852 to 1856.....	.....	60 "
Per annum, average.....	.....	15 "

These examples correspond with those of most of the large roads. The result is that the gross receipts of the roads have exceeded anything that has been conceived. In 1856 this is more manifest than ever. The average increase of receipts in 1856, on the old and good road, will approach 20 per cent; so that in this respect 1856 will be the most prosperous railroad year ever known.

5. On the other hand, the net proceeds have also increased largely; for, as the roads are older, and have more experience, they are more economized. There are many expenses which are reduced by the permanency and self-adjustment of the roads.

6. The ultimate consequence of these changes and principles is that the intrinsic value of railroad property is rapidly and largely increased. It is true that the cost of the roads has been enlarged, and that much of the income of the roads has been absorbed in enlarging the capital; but it is also true that this enlargement has given far greater power to the machine, and that its work is far more profitable. Although, then, the fancy value of railroad stock may have diminished, and it may not be so marketable, yet it is most undoubtedly worth a great deal more as a permanent investment. The year 1856 alone has added many per cent to the value of stock in all the solvent railroad companies of the country. The time is near when most of them will pay large cash dividends; and when they do the stocks will all fly up, as bank stocks have from the same cause.—

Cincinnati Railroad Record.

RAILROADS IN OHIO.

The *Railroad Record*, one of the most reliable and best conducted journals of its class in the Union, furnishes a list of the railroads in Ohio, with the names of the presidents and their places of residence, &c., from which we compile the following table, exhibiting the length of the several roads and their present condition:—

Road.	Miles.	Condition.
Ashtabula and New Lisbon.....	84	In progress.
Bellefontaine and Indiana.....	123	Complete.
Cincinnati and Chicago.....	...	In progress.
Cincinnati and Fort Wayne.....	94	"
Four Mile Valley.....	31	"
Cincinnati, Hamilton, and Dayton.....	60	Complete.
Cincinnati and Mackinaw.....	430	In progress.
Cincinnati and Hillsborough.....	37	Complete.
Marietta and Cincinnati.....	258	In progress, 120 miles com.
Cincinnati, Peru, and Chicago.....	97	In progress.
Cincinnati, Wilmington, and Zanesville.....	131	Complete.
Cleveland, Columbus, and Cincinnati.....	135	"
Columbus and Xenia.....	55	"
Cleveland, Painesville, and Ashtabula.....	95	"
Cleveland and Pittsburgh.....	101	"
Cleveland and Pittsburgh extensions.....	95	"
Cleveland and Toledo.....	194	"
Cleveland and Mahoning.....	85	In progress.
Cleveland, Zanesville, and Cincinnati.....	140	" 61 miles complete
Clinton Line.....	...	"
Clinton Extension.....	...	"
Columbus, Piqua, and Indiana.....	102	Complete.
Dayton and Cincinnati Short Line.....	52	In progress.
Cleveland, Painesville, and Ashtabula.....	140	"
Northern Indiana.....	89	Complete.
Toledo and Illinois.....	76	"
Dayton and Michigan.....	120	In progress, 28 miles com.
Dayton and Western.....	40	Complete.
Dayton, Xenia, and Belpier.....	70	16 miles complete.
Eaton and Hamilton.....	45	Complete.
Tremont and Indiana.....	120	"
Greenville and Miami.....	47	"
Iron Railroad.....	13	"
Little Miami.....	84	"
Mad River and Lake Erie.....	153	"
Ohio Central.....	141	"
Ohio and Mississippi.....	191	In progress, 84 miles com.
Sandusky, Mansfield, and Newark.....	116	Complete.
Springfield and Columbus.....	19	"
Springfield, Mount Vernon, and Pittsburgh.....	114	In progress, 49 miles com.
Steuvenville and Indiana.....	116	Complete.
Tiffin and Fort Wayne.....	102	"
Sciota and Hocking Valley.....	56	"
Ohio and Pennsylvania.....	187	"
Ohio and Indiana.....	131	"
Cleveland, Medina, and Tuscarawas.....	130	In progress.
Columbus and Hocking Valley.....	70	"
Pittsburgh, Maysville, and Cincinnati.....	69	"
46 roads.....	4,687	2,593 miles completed. 2,094 miles in progress.

Some small portions of the above lines run into other States; but, on the other hand, there are some small branches not included, which will be quite equal to them. Several of the unfinished lines are rapidly progressing.

JOURNAL OF MINING AND MANUFACTURES.

THE IRON TRADE AND RESOURCES OF THE UNITED STATES.

The production of iron in the United States, for the year ending June 30, 1850, as estimated by the last census, was as follows:—

	Tons.	Value.
Pig-iron	564,755	\$12,748,777
Castings	322,745	25,108,155
Wrought-iron.....	278,044	16,747,074
Total.....	1,165,544	\$54,604,005

The number of establishments operated in this production was 2,190, employing about \$50,000,000 of capital, and a little more than 57,000 hands.

The value of the product of some of the largest producing States was as follows:—

	Pig.	Cast.	Wrought.
Massachusetts.....	\$295,123	\$2,235,635	\$428,320
Connecticut	415,600	931,400	667,560
New York	597,920	5,921,980	1,423,968
Pennsylvania	6,071,513	5,354,881	8,902,907
Ohio	1,255,850	3,069,350	1,076,152
Maryland.....	1,056,400	685,000	771,431
Virginia.....	521,924	674,416	1,254,995
Tennessee	676,100	264,325	670,618
Missouri.....	314,600	336,495	68,700
Kentucky	604,037	744,316	299,700

The amount of capital employed in the above States, in 1850, was the largest in Pennsylvania, being between nineteen and twenty millions of dollars. In New York it was about \$6,300,000; Connecticut, \$1,300,000; Massachusetts, \$1,578,350; Ohio, \$4,200,000; Missouri, \$850,000, &c.

The amount of 1,165,544 tons, valued at \$54,604,006, being the total production of iron in a single year within the limits of the Union, is a large yield in this one article of our manufactures. Fifty-four millions of dollars is enough to pay Uncle Sam's yearly expenses, were they brought within the limits, which they should be, and would be, if all the drones and treasury speculators could be turned out of office and faithful men put in their places. But this yield is only as a grain of sand on the sea-shore, when the whole iron resources of the Union are considered. The recent geological survey of Missouri, now one of the smallest iron-producing States, sets forth that there is ore enough of the very best quality, within a few miles of Pilot Knob and iron mountains, above the surface of the valleys, to furnish one hundred millions of tons per annum of manufactured iron for the next two hundred years! And to work this inexhaustible quantity of ore, that State alone can furnish one hundred million tons of excellent coal per annum for the next 1,300 years! Add to this, the immense iron and coal resources of Pennsylvania, Maryland, Virginia, Kentucky, Tennessee, Ohio, and other Alleghany States, and to that product the resources of those which will soon border on the Rocky Mountains, and we have a good prospect that iron and coal will not fail us until some time after our gold mines have given out and our forests disappeared.

So much for the production of iron in the United States, and our resources for increasing it. The great necessity for so doing is made apparent by turning our attention to the large amount which has been imported during the last fifteen years. We have shown that the census of 1850 estimated the yield of that year (ending June 30) at something over \$54,000,000 in value. From interesting statistical tables, published in connection with the last report of the Secretary of the Treasury, it appears that we imported during that year \$16,333,145 worth,

which in 1854 had swollen to \$29,341,755, or more than half the whole amount produced in 1850, with all our great resources. The value imported in 1845 seems to have decreased from six to seven millions, being \$22,980,728. This may result from a decreased demand, caused by the completion of railway projects, but with the settlement of the great West, the demand is destined soon to be greater than ever. With a population of little less than twenty millions in 1850, it has been estimated that the completion of another half century will usher in the year 1900 upon not less than one hundred million souls inhabiting Uncle Sam's domicil, embraced between the Atlantic and the Pacific! This vast people will have occasion for a very large supply of iron, which they cannot import.

We compile the annexed interesting table of the value of iron imported and exported, from 1840 to 1855 inclusive, from the Treasury Statistics already referred to. It embraces iron and manufactures of iron:—

Year.	Foreign imported.	Foreign exported.	Domestic exported.
1840.....	\$6,750,099	\$156,115	\$1,104,455
1841.....	8,914,425	134,316	1,045,264
1842.....	6,988,965	177,381	1,109,522
1843.....	1,903,858	50,802	532,693
1844.....	5,227,484	107,956	716,332
1845.....	8,294,878	91,966	845,017
1846.....	7,835,832	122,587	1,151,782
1847.....	8,781,252	63,596	1,167,484
1848.....	12,526,854	98,295	1,259,632
1849.....	13,831,823	109,439	1,096,172
1850.....	16,333,145	100,746	1,911,320
1851.....	17,306,700	100,290	2,255,698
1852.....	18,957,993	134,937	2,303,819
1853.....	27,255,425	262,343	2,499,652
1854.....	29,341,775	795,872	4,210,350
1855.....	22,980,728	1,565,523	3,753,472

These figures show an increase in the iron importations of the past fifteen years, from six-and-a-half up to twenty-nine millions. There is a marked variation between the years 1842 and 1843. With this exception, the importations seem to have uniformly increased until last year, (1855,) when they fell off more than \$6,000,000 from those of 1854, while there was a large ratio of increase in the export of domestic iron. This would seem to augur favorably for the increasing prosperity of our iron manufacturers.—*Boston Journal.*

AMERICAN CUTLERY.

It is to be regretted that so many persons are accustomed, under the influence of early association, or rather of ignorance, to unthinkingly give the preference in many matters of small purchase to English or European goods, without inquiring whether the same article cannot be had of equal quality of American make. The dealer in many cases undoubtedly knows better than his customer, but the dealer's business is to supply the demand, not to inform the community. Besides, it is undoubtedly true that in many cases the retailer is not really aware of what he could obtain of American manufacture if he were to order it.

The consequence of this demand for the far-fetched and dearly-bought, is that we meet every day with dry goods, jewelry, perfumes, and fancy ware of the most varied descriptions, and of real excellence, stamped and labeled as if of foreign manufacture, while in reality they proceed from numerous "retired and shady" factories or ateliers in our Atlantic cities, whence they are spread profusely through the South and West, and especially through Spanish America. But the real marvel of these pseudo-imports is not their quantity so much as their quality, and the degree in which they approach the original fabrics. Quietly but rapidly we are day by day gaining on the Old World, and the time is not far distant when it will be discovered that the majority of our manufactures are actually superior to those of Europe.

As an illustration of this, we will venture to assert that there are very few persons not concerned in the business who are aware of the degree of excellence which the manufacture of cutlery has attained in the United States, or that, if it were generally known and encouraged, we should in all probability be entirely self-dependent as regards its production. On this subject, Fleischmann, whose work on the Branches of Industry in the United States has contributed more than any other book to enlighten Germany as to our country, remarks as follows :

“The manufacturers of cutlery in the United States have far surpassed those of the old world in the manufacture of tools, and that not merely in the excellence of the metal used, but especially in the practical utility of their patterns, and in the remarkable degree of finish of their work.”

It is a somewhat remarkable fact that American hardware is every year developing in its shapes a practical economy of material and a straight-forward adaptation to the end in view which are unknown to the greater part of Europe. The American laborer or mechanic, it is well known, even where not gifted with a greater degree of physical ability, will still, as a rule, turn out more work in a day than a foreigner under the same circumstances. With such men, who go directly at their work and stick to it, there is no play and no trifling with labor. A result of this is shown in the fact that the American ax, which, in its well-known form, is entirely a native American pattern, is far more practically useful than the miserable European ax which it has supplanted. And not in axes alone, but in many other implements there has been a marked progress and a gradual though unnoticed communication of practical patterns to English manufactories. In our factories, which are themselves very generally proofs of the same principle of economy and of keeping directly at the object proposed, there is actually more of the first quality English steel used, than in England itself. Of Hoop L, the best quality of English steel, there is annually ten times as much used as in England, though that country manufactures about fifty times as much cutlery as we do.

Could our American mechanics receive the credit so justly their due, for the improvements which they have gradually introduced into the shape of carpenters' tools, and could the world be made aware of the degree to which of late years the English trade has been indebted to them for these improvements, we will venture to state that there are few who would not be amazed. The European—especially the continental—suffers in this respect under a tyranny of “old custom,” which no Yankee mechanic would believe. If we look through Paris, if we examine the pattern plates published, we are amazed at the luxuriance of beautiful and practical forms annually produced, which glitter in shop windows or are displayed at exhibitions. But go into the country, and we find the same clumsy, unpractical old implements which were used three centuries ago. The seed falls on stony ground.

At the present day, American cutlery is extensively imitated in Germany, even to the marks and names of our manufacturers. This is also done by English goods, but the complimentary fraud has been of late years greatly on the increase as regards our own. We will not assert that there is not, especially in England, a vast amount of inventiveness, nor that a corresponding degree of improvements has not been made. But a practical invention is less likely to die in the birth in America, and we confidently assert, without fear of refutation, that if any one will study the history of cutlery patterns adopted for the last fifty years, including all the allied branches of iron manufacture, he will find that by far the greater proportion of practical improvements have been of American origin.

IMPROVEMENT IN WEAVING.

The primary idea of the loom, as improved by Mr. William Talbot, a Connecticut inventor, is that of the jacquard and the endless chain modified and compacted. The improvement can be so arranged in a very short period of time as to weave bags, twilled or plain, of exactly uniform length, or of an exactly equal number of picks, day after day, or rather through beam after beam, making a

real and strong bottom to each. The cards of the jacquard and the endless chain are dispensed with by Mr. Talbot in weaving large patterns, their places being supplied by two cylinders, the rotary action of one being used in making the body of the bag, and the action of the other being used in making the bottom of the same, the action of the one cylinder giving motion to the other cylinder when the first is desired to be motionless and the second is desired to be in action. In addition to this improvement, mention is made of an English invention for preventing broken warp-threads becoming entangled in the shed of a loom. The inventor employs an extra leaf of healds placed behind the ordinary harness, and gives to this leaf a motion backward and forward between the yarn, making them act like a comb to throw back any ends of broken yarn from being carried forward to obstruct the proper shedding of the warp.

MERCANTILE MISCELLANIES.

WHAT YOUNG MEN IN STORES SHOULD DO.

The Boston *Herald*, a penny paper of large circulation, and conducted with ability, occasionally publishes editorial leaders on matters pertaining to mercantile life. These papers are written, as we understand, by a gentleman of large experience in business affairs. We have given the readers of the *Merchants' Magazine* the benefit of the writer's wholesome advice or wise suggestions. The few words to young men who are employed in stores, which follow, are from the same source:—

The fall business has commenced, and your employers have quite as much to attend to as they are capable of discharging. They cannot overlook all your operations and give you minute directions as to your duty, but they know when you do your work properly and promptly. During the business season you have the opportunity to show, in various ways, that you have the interest of your employers at heart. You will, perhaps, have your own evenings at your disposal, but notwithstanding this, you should never let your amusements prevent your giving to your employers, now and then, an evening, whenever the custom during the day makes your services indispensable in the evening.

Whenever two or more of you are in a store, do not quarrel with each other as to the performance of a specific duty. Let him who is the nearest and can do it the quickest, perform that duty. When a man has two clerks or apprentices, one of whom is always ready to do more than his share of the work, and the other insists upon shirking everything which he can, the former is advanced and recommended, while the latter loses his place, or is kept in a subordinate position, at a low salary.

While our city is overrun with clerks seeking employment, our merchants are really in want of young men who will come into their stores, do the work, and learn, step by step, practically, the whole routine of their business. This kind of young men are our future merchants, while a majority of clerks who want to act the gentleman during their minority, and loiter about a counting-room, doing nothing, with a pen behind their ear, find themselves in after life nothing but the servants of our mercantile firms, without any chance of ever getting into business on their own account.

One smart boy in a store, who will work and practically learn all the routine of a business, is worth more, both to his employer and to himself, than a score of boys who procure situations in which they can act the gentleman, and do as nearly nothing as possible. If a boy does not learn to work, and work hard, when necessity requires it, during his minority, he seldom ever learns to work at all. If, when he arrives at age, he is furnished with capital by parents or friends, he knows nothing about the work to be done in a store, and having no practical

experience, he cannot direct his employees. Of course, his servants neglect their duty, and his business goes to ruin.

Many young men refuse to take any extra pains for their employers, because, as they say, they receive no extra compensation therefor. But such young men should recollect that if they neglect to give extra attention to their employers' business, when that business demands it, they contract a habit of neglect which will be fatal to their own business which they may thereafter prosecute. It is a mistake to suppose that a clerk or an apprentice works only for his employer. He works as well for himself as for his employer. Every exertion which he makes for that employer gives him experience, and creates a habit of industry. Every care which he bestows upon his employer's property induces a habit of carefulness which in after years will be available to himself. Every dollar he can save to his employer, becomes a lesson in economy, a virtue which is as indispensable to his own success in after life, as to his employer at the present time.

Much has been said about the lowness of wages among our clerks and apprentices, and, as a general rule, those wages are low, much too low. But still there are very many instances where clerks, salesmen, and apprentices receive two or three times as much for their services as the general average. The reason is perfectly evident. The latter class have never been content with doing merely what was prescribed for them. They volunteered to do what they saw the business demanded, whether they were directed to do it or not. Thus they made themselves indispensable to their employers, and after a while, those employers voluntarily raised their wages. But the class who shirk everything, of course get low wages, and when they lose their places, find it extremely difficult to get another situation.

DEPENDENCE AND EQUALITY OF BUSINESS MEN.

A correspondent of the *Philadelphia Merchant*, dating from Hagerstown, Ohio, over the signature of "H. L. C.," writes after this manner upon the subject of mercantile dependence. He is probably a better thinker than writer, as the readers of the *Merchants' Magazine* will readily infer:—

The history of past events, contrasted with the present, affords a very striking illustration of the degree of equality and dependence existing in the various departments of business that have and are now being transacted throughout the entire world, by the great variety of characters thus engaged. By observation, we readily perceive that at one time one class of the above-named department is enabled, by economy and the condition of external circumstances, to have and to hold, apparently, for a short period, the entire control of every feature connected with its branch of business. But no one class is permitted to occupy this position longer at one time than is necessary to produce that change consequent on the dependence that man sustains to his fellow-man.

The merchant may be seen at one time commanding a very elevated position in this respect; having at his control the larger part of community, including the farmer and mechanic, speculating on the proceeds of their labor, in consequence of an increased demand for their articles of trade. This was the state of things but a few years since. At present the scale is turned, and those who were then depressed in consequence of the inadequate remuneration for their labor have risen in the scale of prosperity, and are now enjoying the fruits of their industry and economy.

All kinds of produce constitute the coin with which the farmer fills his coffers. So every specimen of mechanical ingenuity useful to man meets a welcome reception, the proceeds duly rewarding the workman for his skill and labor. Hence, we can readily perceive that all classes of mankind are mutually dependent on each other, no man being entirely independent, but sustaining the same relation to his fellow-man, that one member of the body sustains to the grand system composing the human frame. Whenever a member of this system is crippled, or defective in the performance of the various functions assigned it in the physical economy, the whole organism is sympathetically affected, and harmonious action

throughout the system cannot be restored until the affected member recovers its former tone.

Just so in the business world. Thus, the farmer is dependent on the merchant, the manufacturer, and the mechanic, for the means by which he can convert the proceeds of his labor into that which is necessary to render him comfortable in life. The manufacturer is dependent on the merchant for a ready sale of the products of his labor. The merchant and mechanic are dependent upon all classes of community for their success in business. But upon the labor of the farmer does the whole complicated machinery of society depend for its motive power—the physical wants of man, though less ennobling in their gratification than those of his higher nature, are not less important. Upon the labors of the intellect, and the busy fingers of the printer, which give voice to its utterances, do all classes acknowledge dependence. To this source is the world indebted for the higher essentials of life, for that which is truly elevating.

THE TRAFFIC IN CIRCASSIAN WOMEN.

The correspondent of the London *Morning Post* thus describes the present depressed condition of the market in Turkey:—

There has been lately an unusually large number of Circassians going about the streets of Constantinople. Many of them, no doubt, belonged to the deputation which came to petition the Porte that their country might be taken under suzerainty of the Sultan. A considerable portion, however, of the Circassians now in the capital, have quite another mission than a political one to fulfill. They are here as slave-dealers, charged with the disposal of the numerous parcels of Circassian girls that have been for some time pouring into this market. Perceiving that when the Russians shall have re-occupied the coast of the Caucasus this traffic in white slaves will be over, the Circassian dealers have redoubled their efforts, ever since the commencement of the peace conferences, to introduce into Turkey the greatest possible number of women while the opportunity of doing so lasted.

They have been so successful, notwithstanding the prohibition of the trade by the Porte, and the presence of so many of her Majesty's ships in the Black Sea, that never, perhaps, at any former period, was white flesh so cheap as it is at this moment. There is an absolute glut in the market, and dealers are obliged to throw away their goods, owing to the extent of the supply, which in many instances has been brought by steam under the British flag. In former times a "good middling" Circassian girl was thought very cheap at £100, but at the present moment the same description of goods may be had for £5! In fact, the creatures are eating their heads off, and must be disposed of at any sacrifice, however alarming. Independent of all humane and Christian objections to this abominable state of things, there are several practical ones which have even forced themselves on the attention of the Turks. With low prices, a low class of purchasers come into the market.

Formerly a Circassian slave girl was pretty sure of being bought into a good family, where not only good treatment, but often rank and fortune, awaited her; but at present low rates she may be taken by any huckster who never thought of keeping a slave before. Another evil is that of the temptation to possess a Circassian girl at such low prices, is so great in the minds of the Turks, that many who cannot afford to keep several slaves have been sending their slaves to market, in order to make room for a newly purchased white girl. The consequence is, that numbers of black women, after being as many as eight or ten years in the same hands, have lately been consigned to the broker for disposal. Not a few of these wretched creatures are in a state quite unfit for being sold.

I have it on the authority of a respectable slave broker, that at the present moment there have been thrown on the market unusually large numbers of negroes in the family way, some of them even slaves of pashas and men of rank. He finds them so unsaleable that he has been obliged to decline to receive any more. A single observation will explain the reason of this, which might appear

strange when compared with the value that is attached even to an unborn black baby in some countries. In Constantinople it is evident that there is a very large number of negresses living and having habitual intercourse with their Turkish masters—yet it is a rare thing to see a mulatto. What becomes of the progeny of such intercourse? I have no hesitation in saying that it is got rid of by infanticide, and that there is hardly a family in Stramboul where infanticide is not practiced in such cases as a mere matter of necessity, and without the least remorse or dread.

OMNIPRESENCE OF COMMERCE.

At a reception dinner given to Mr. PEABODY, the London Banker, in his native town of Danvers, Mass., on the 9th of October, 1856, the Hon. EDWARD EVERETT made a most brilliant episode upon commerce, from which we make the subjoined extract:—

“What is it that gives vigor to the civilization of the present day but the world-wide extension of commercial intercourse, by which all the products of the earth and of the ocean—of the soil, the mine, of the loom, of the forge, of bounteous nature, creative art, and untiring industry—are brought by the agencies of commerce into the universal market of demand and supply. No matter in what region the desirable product is bestowed on man by a liberal Providence, or fabricated by human skill. It may clothe the hills of China with its fragrant foliage; it may glitter in the golden sands of California; it may wallow in the depths of the Arctic Seas; it may ripen and whiten in the fertile plains of the sunny South; it may spring forth from the flying shuttles of Manchester in England, or Manchester in America—the great world-magnet of commerce attracts it all alike, and gathers it all up for the service of man. I do not speak of English commerce, or American commerce. Such distinctions belittle our conceptions. I speak of commerce in the aggregate—the great ebbing and flowing tides of the commercial world—the great gulf-streams of traffic which flow round from hemisphere to hemisphere—the mighty trade-winds of commerce which sweep from the old world to the new—the vast aggregate system which embraces the whole family of man, and brings the overflowing treasures of nature and art into kindly relation with human want, convenience, and taste.

“In carrying on this system, think for a moment of the stupendous agencies that are put in motion. Think for a moment of all the ships that navigate the sea. An old Latin poet, who knew no waters beyond those of the Mediterranean and Levant, says that the man must have had a triple casing of oak and brass about his bosom, who first trusted his frail bark on the raging sea. How many thousands of vessels, laden by commerce, are at this moment navigating, not the narrow seas frequented by the nations, but those world encompassing oceans. Think next of the mountains of brick, and stone, and iron, built up into the great commercial cities of the world, and of all the mighty works of ancient and modern contrivance and structure—the moles, the lighthouses, the bridges, the canals, the roads, the railways, the depth of mines, the titanic force of enginery, the delving plows, the scythes, the reapers, the looms, the electric telegraphs, the vehicles of all descriptions, which, directly or indirectly, are employed, or put in motion, by commerce—and last, and most important, the millions of human beings that conduct, and regulate, and combine these inanimate, organic, and mechanical forces.

“And now, sir, is it anything less than a liberal profession, which carries a quick intelligence, a prophetic forecast, and industry that never tires, and more than all, a stainless probity beyond reproach and beyond suspicion, into this vast and complicated system, and by the blessing of Providence, works out a prosperous result? Such is the vocation of the merchant—the man of business—pursued in many departments of foreign and domestic trade—of finance, of exchange—but all comprehended under the general name of commerce—all concerned in weaving the mighty network of mutually beneficial exchanges which enwraps the world.”

SPECULATION IN PRUSSIA.

A Berlin letter says:—A new principle is gradually becoming prevalent. Materialism in a crude form is gradually superseding ideality; money-making is now becoming the primary object of man's life, that is, under the form of speculation. Persons of high rank, who stood aloof from such matter in former days, are now foremost in the promotion of speculative undertakings, and there is scarcely one of the great aristocracy who is not more or less engaged therein; not with a view of turning his mind or his money to the specialities of industry as a permanent investment, but as a medium for obtaining increase of wealth by gain, and then leaving the working out of undertakings to the last bidder.

MONEY-GETTING—CAUSES OF FAILURE IN BUSINESS.

To FREEMAN HUNT, *Editor of the Merchants' Magazine*.—

It is said that the proportion of successes to failures in the mercantile line is but *three per cent*. A momentous question here presents itself for the consideration of the business adventurer and every parent. Why this unsuccessful termination of *ninety-seven* out of every hundred mercantile undertakings? There is evidently some general defect here unnoticed by the young and inexperienced. Not only the poor, but the comparatively rich, who, by kind parents, have been placed in possession of every advantage, are wrecked upon this dangerous sea; and thus it becomes of momentous interest to every parent that a minute survey be made, and every shoal be clearly mapped out. Could such a chart be secured, it would be a more enduring legacy than whole blocks of real estate.

It is said that "not more than one per cent of the honest-class merchants succeeded without failing in Philadelphia," and that not more than *two per cent* of those of New York ultimately retire on an independence, after having submitted to the usual ordeal of failure.

In commencing business, men are apt to count upon success as a sort of "fore-ordained" necessary consequence of their supposed plenary talents. They look upon failures as the lot of others—as the exceptions rather than the rule. To suppose that self is thus liable is "out of the question." This conceit or self-assurance is oftentimes a "decoy duck," leading to danger and final ruin.

A haste to grow rich—an over-impatience to be "respectable"—to acquire in a short time what is properly the work of time and industry, is often a vortex of folly and ruin into which many fall. It is better to "make haste slowly," and to be sure in our getting. "What is worth doing, is worth doing well." To do all things well will require all our time; and in proportion as we slight our work do we make work for the future. A house poorly built is oftentimes worse than none. Should it prove unsafe, and crush its owner in the fall, surely it will be labor lost. Not only will the labor be lost, but the old walls and rubbish are to be removed before the work can be begun anew. Thus a failure generally leaves its victim worse off than in the beginning. He has not only lost time and his first investment, but, worse than all, his reputation as a man of business.

The first thing to be gained in business is reputation. This will generally serve as capital to the young aspirant. Time, industry, and a constant practice of righteousness in all things, will alone achieve this great boon. A slight taint upon it is hard to remove. Like the stain upon the murderer's garment, it eats into the fabric, and stands an indelible mark of weakness or crime.

There are a class of failures which deserve a general condemnation; we allude to those which follow a reckless, unprincipled determination to become rich by fair means, if convenient, and foul, if necessary. These are the *highwaymen of trade*. With too little ambition and patience to labor honestly for the boon, and an avariciousness which knows no bounds, they rush into the highways of commerce, and resolve upon an easy acquisition at every hazard. They are reckless in the extreme; they "cut a figure," make a great noise, secure a "name," and

suddenly "stop," to the surprise of all. By taking advantage of deficient laws, and feeding unprincipled attorneys, they swindle themselves into affluence upon the earnings of others. These have secured what they bargained for; but did they know it—they have bartered away, with suicidal recklessness, a jewel of more value than gold—ininitely more precious and necessary to life's enjoyment than all the real estate that it is possible to possess. He has "victimized" his fellow; but he has more effectually robbed his own immortal individuality of its greatest adornment and capacity to enjoy life.

A disposition to speculate beyond their means has been a prevalent cause of failure with many. In doing this we hesitate not to risk our creditor's interest with our own. Many failures can be traced to this cause. In speculation we should ever observe a cautiousness proportionate with our means. It is questionable whether we have a right to risk either our creditor's or our family's interest in uncertain speculation.

These are some of the causes of failure. There are other and greater ones, which we will reserve for our next.

FRANKLIN.

THE HAVANA CIGAR TRADE.

The Havana correspondent of the New Orleans *Delta* writes:—

The number of cigars stated in the *Balanza* to have been exported from the whole island in 1854 is 251,313,000, which are valued at one million one hundred and thirty thousand five hundred and eighty-seven dollars, eighty-seven-and-a-half cents.

I have a pretty intimate personal knowledge of the cigar trade, and substantially state my belief that the lowest average value that can be put upon the cigars exported from this city is fifteen dollars per thousand, whilst the *Price Current* for 1854 (a very reliable authority) places the number of cigars exported from this city alone, in that year, at nearly 264,000,000; and I believe the same rule would apply to almost every article exported. Then there are millions of cigars of which no entry is made at the custom-house, to avoid the seventy-five cents per thousand export duty.

It will scarcely answer for me to let the public into all the little secrets of our trade in cigars, but I positively affirm that not one-tenth of the things retailed in the United States as Havana cigars have been manufactured in this city.

BUTTER ADULTERATED WITH FLINT STONE.

ASTOUNDING as is the announcement at the heading of this paragraph, says an English paper, it is nevertheless true. Butter is adulterated with flint stones. This heartless and wicked fraud is especially practiced in the low kinds of butter usually sold in large manufacturing towns to the poorer and industrious population. The flint stones are ground and then chemically manipulated until they are reduced into a soluble substance, which is known by the denomination of "soluble silica." When this latter preparation is dissolved in water, it becomes a stiff gelatinous body, somewhat resembling strong jelly. This jelly is mixed to a considerable extent with butter of low quality, to which fresh salt and coloring matter are added. The product of this villainous adulteration is a compound which resembles a very good-looking dairy-made butter. But it has not the firmness or bright appearance of genuine butter, and is devoid of the richness and wholesome qualities of the latter. We have seen this gross adulteration at the laboratories of the Northern Analytical College, Sheffield, and we are credibly informed that Professor Calvert, of Manchester, has detected this fraud recently and frequently.

BOSTON HALL OF ARTS.

A Boston merchant, of the progressive school, has proposed, under the title above, a new institution for bringing inventors and the public together—a museum, not of dead curiosities, but of living utilities. It appeals not to the sense of wonder alone, but to all the passions and interests that go to make up life. A museum of the mechanical improvements of the age, showing what life may be and is to be, rather than what it has been, is the idea, and if not new as a thought, it has yet to be accomplished as a fact. World's exhibitions, or "Crystal Palaces of Industry," have been the royal forms of this idea, but like soap bubbles blown to their utmost iridescence, they have suddenly disappeared, and left the world dazzled, and industry rather confounded than enlightened. The Boston plan studies economy, utility, and permanence. The terms are made easy to the exhibitors, if not directly profitable, and at the same time a moderate remuneration is secured to the proprietor. The enterprise is to commence immediately, with rooms that comprise about half an acre of floor, to be increased as soon as more space is required. Those who have any invention or product of art, for which they are seeking public appreciation, will be interested to know the details of this scheme, which may be had on application to the Superintendent, ELIZUR WRIGHT, Esq., of Boston.

THE ALUM OF CHINA.

It appears by Dr. Mackgowen's Chinese Serial, that the mineral known in commerce as alum, is largely employed by the Chinese in dyeing; and to some extent in paper-making, as with us. Surgeons apply it variously, after depriving it of its water of crystalization, and in domestic life it is used for precipitating vegetable substances suspended in potable water. It is used also by the Chinese in a manner peculiar to themselves. Fishermen are usually provided with it, and when they take one of those huge *Rhizostoma* which abound on the coast, they rub the animal with the pulverized styptic, to give a degree of coherence to the gelatinous mass. Architects employ it as a cement in those airy bridges which span the water-courses. It is poured in a molten state into the interstices of the stones; and in structures not exposed to constant moisture, the cohesion is perfect; but in damp situations it becomes a hydrate, and crumbles. Alum was first introduced into China from the west; and until a comparatively recent period, the best kind, called sometimes Persian, and at others Roman alum, was brought from Western Asia. Numerous localities where an inferior article is manufactured are mentioned in the pharmacopœia. That from Sz'-chuen is represented as having the property of converting iron into copper, or of coating iron with copper, by placing the former metal in a solution of rice-liquor and alum, the stone of that province.

SPECULATION—MONEY MAKING.

To make money, and to make it rapidly, is one of the accredited social sciences of which the great multitude are the dull students, and the select few the practiced adepts. But its spirit is, nevertheless, universal; and, without any exaggeration, it may be said to form a part of the life and active aspiration of the present generation. It pervades all classes, from the noble, in his palace, to the artisan, in his cottage. Its generic form is speculation; and if we cast a glance around

society, we shall be amazed at its extent and influence. Everybody in these days speculates. The man who "has no speculation in his eye" is considered as only fit to be a hermit, we were going to say a parson, but as the cloth is well died in the yellow of Mammon, we will say a Bedlamite, or a philosopher with "spectacles on nose," who look at ships and cotton-mills, and wonders what they are. We find the merchant, in his counting-house, is a speculator. He subscribes to great adventures for the sake of great gains, probably otherwise. He knows he cannot trade without risking much, and the profit and loss account in his ledger is consequently the fervid page on which his attention is constantly fixed. It is the same with the banker: "he lends at usury," under the disguise of discount, so that he is pre-eminently a speculator, morally obnoxious, but expediently useful. The manufacturer and trader follow in succession; then come the intermediate and lower classes, the catalogue of whose doings would fill the largest blue-book that ever was imagined by the most enthusiastic collector of statistics. Finally, we have the gambling fraternity—men "who work the oracle" in the city as well as at the "corner." This is the lowest and vilest description of speculation, for we find the betting-and-dice-throwing vagabonds robbing and murdering one another; the city men forging dock-warrants, embezzling the money of depositors in their banks, and crossing ledgers to delude an unsuspecting proprietary.

HOW TO TREAT ROBBERS.

We are inclined to think that Rowland Hill's remarkable conduct to a highway robber, whom he reclaimed with great kindness, and took into his employ, might, in many instances, be adopted by merchants and others, towards dishonest salesmen or clerks. In a funeral sermon, preached at the decease of the reformed "highway robber," Mr. Hill said:—

"Many persons present were acquainted with the deceased, and have had it in their power to observe his character and conduct. They can bear witness that I speak the truth when I assert, that, for a considerable number of years past, he has proved himself a perfectly sober, honest, industrious, and religious man; faithfully performing, as far as lay in his power, the duties of his station in life, and serving God with constancy and zeal. And yet this very man—this virtuous and pious man—was once a robber on the highway. More than thirty years ago, he stopped me on the public road, and demanded my money. Not at all intimidated, I argued with him; I asked what could induce him to pursue so iniquitous and dangerous a course of life. "I have been a coachman," said he, "but am now out of place; and not being able to get a character, can obtain no employment, and therefore am obliged to resort to this means of gaining a subsistence." I desired him to call upon me; he promised he would; and he kept his word. I talked further with him, and offered to take him into my service. He consented; and, ever since that period, he has served me faithfully; and not me only, but he has faithfully served his God. And instead of finishing his life in a public, ignominious manner, with a depraved and hardened mind, as he probably would have done, he has died in peace, rejoicing in hope, and prepared, we trust, for the society "of just men made perfect." "Till this day, this extraordinary occurrence has been confined to his breast and mine: I have never mentioned it, even to my dearest friend."

HOW THE ENGLISH GROCERS ADULTERATE PEPPER.

A new discovery has been made by the English grocers, who are always alive to an opportunity of advantage in trade. They have discovered that from ten to twenty per cent of hard wood raspings may be added to a quantity of pepper

without danger of discovery, excepting by chemical analysis; and hard wood being a great deal cheaper than the genuine article, it has come to be extensively used. In a recent police case in London, it was proved that a considerable amount of brownish colored powder, which had been sold as pepper, consisted, in reality, of only fifty parts of pepper, mingled with forty parts of rice and ten parts of wood.

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**NEW YORK COTTON MARKET FOR THE MONTH ENDING NOVEMBER 28.**

PREPARED FOR THE MERCHANTS' MAGAZINE BY CHARLES W. FREDERICKSON, BROKER, NEW YORK.

Since the date of my last monthly report, October 24th, our market has—with the exception of the week closing at date—been excessively dull and heavy, at a decline of  $\frac{1}{4}$ c. to  $\frac{5}{8}$ c. per pound. The transactions for the home trade have been less than actual consumption, and the export demand has been confined in its operations to a small circle. Prices here and at the receiving ports have suffered from the continued heavy receipts and the good quotations of cottons, neither of which was anticipated by the early purchasers and believers in a crop of 2,800,000 bales.

The foreign markets, under stringent monetary circumstances, have been well supported, and have aided materially to strengthen the position of holders here, under the influence of large receipts. Our stock on hand is estimated at 50,000 bales, but is not likely to be increased while the present high prices exist at the Southern ports.

The sales for the week ending October 31st were 6,000 bales, market closing quiet at the following:—

PRICES ADOPTED OCTOBER 31ST FOR THE FOLLOWING QUALITIES:—

|                    | Upland.          | Florida.         | Mobile.          | N. O. & Texas.   |
|--------------------|------------------|------------------|------------------|------------------|
| Ordinary.....      | 10 $\frac{1}{2}$ | 10 $\frac{1}{2}$ | 10 $\frac{1}{2}$ | 10 $\frac{3}{4}$ |
| Middling.....      | 12 $\frac{3}{4}$ | 12 $\frac{1}{2}$ | 12 $\frac{3}{4}$ | 12 $\frac{7}{8}$ |
| Middling fair..... | 12 $\frac{1}{2}$ | 13               | 13 $\frac{1}{2}$ | 13 $\frac{1}{2}$ |
| Fair.....          | 13               | 13 $\frac{1}{4}$ | 13 $\frac{1}{2}$ | 14               |

The operations for the week ensuing were 7,500 bales, the market closing with more tone than at which it opened, under favorable foreign advices and frost accounts from the South. Holders, however, were not unwilling sellers at the annexed quotations:—

PRICES ADOPTED NOVEMBER 7TH FOR THE FOLLOWING QUALITIES:—

|                    | Upland.          | Florida.         | Mobile.          | N. O. & Texas.   |
|--------------------|------------------|------------------|------------------|------------------|
| Ordinary.....      | 10 $\frac{1}{2}$ | 10 $\frac{1}{2}$ | 10 $\frac{1}{2}$ | 10 $\frac{3}{4}$ |
| Middling.....      | 12 $\frac{1}{2}$ | 12 $\frac{1}{2}$ | 12 $\frac{1}{2}$ | 12 $\frac{3}{4}$ |
| Middling fair..... | 12 $\frac{3}{4}$ | 12 $\frac{7}{8}$ | 13 $\frac{1}{8}$ | 13 $\frac{1}{2}$ |
| Fair.....          | 13               | 13 $\frac{1}{2}$ | 13 $\frac{1}{2}$ | 14               |

The demand for the week ending November 14th did not exceed 5,000 bales, at a decline of fully  $\frac{1}{4}$ c. per pound. Holders were anxious to realize at the following figures, but buyers were not disposed to proceed, under unfavorable foreign accounts and large arrivals at the South. The market closed heavy at the following:—

PRICES ADOPTED NOVEMBER 14TH FOR THE FOLLOWING QUALITIES:—

|                    | Upland.          | Florida.         | Mobile.          | N. O. & Texas.   |
|--------------------|------------------|------------------|------------------|------------------|
| Ordinary.....      | 10 $\frac{1}{4}$ | 10 $\frac{1}{4}$ | 10 $\frac{1}{4}$ | 10 $\frac{1}{2}$ |
| Middling.....      | 12               | 12               | 12 $\frac{1}{2}$ | 12 $\frac{1}{2}$ |
| Middling fair..... | 12 $\frac{1}{2}$ | 12 $\frac{3}{4}$ | 12 $\frac{3}{4}$ | 13               |
| Fair.....          | 12 $\frac{3}{4}$ | 13               | 13 $\frac{1}{2}$ | 13 $\frac{1}{2}$ |

For the week ending November 21st the sales were 6,500 bales, principally for export, at prices slightly in buyers' favor. At the close of the week our market assumed more firmness, as the quantity on sale lessened, and the annexed quotations were more readily obtained :—

PRICES ADOPTED NOVEMBER 21ST FOR THE FOLLOWING QUALITIES:—

|                    | Upland. | Florida. | Mobile. | N. O. & Texas. |
|--------------------|---------|----------|---------|----------------|
| Ordinary.....      | 10½     | 10½      | 10½     | 10½            |
| Middling.....      | 12      | 12       | 12½     | 12½            |
| Middling fair..... | 12½     | 12½      | 12½     | 13             |
| Fair.....          | 12½     | 13       | 13½     | 13½            |

The transactions for the week closing at date have been large, the sales reaching 12,000 bales, without alteration in price from those last quoted. Any disposition to advance is checked by the continued large receipts, and which are now in excess of last year by 8,000 bales. Our market closes steady at the following :—

PRICES ADOPTED NOVEMBER 28TH FOR THE FOLLOWING QUALITIES:—

|                              | Upland. | Florida. | Mobile.  | N. O. & Texas. |
|------------------------------|---------|----------|----------|----------------|
| Ordinary.....                | 10½     | 10½      | 10½      | 10½            |
| Middling.....                | 12      | 12       | 12½      | 12½            |
| Middling fair.....           | 12½     | 12½      | 12½      | 13             |
| Fair.....                    | 12½     | 13       | 13½      | 13½            |
| Receipts to date.....bales   | 732,000 |          | Increase | 8,000          |
| Export to Great Britain..... | 122,000 |          | Decrease | 143,000        |
| Export to France.....        | 64,000  |          | Decrease | 15,000         |
| Stock on hand.....           | 428,000 |          | Increase | 96,000         |

## THE BOOK TRADE.

1.—*Arctic Explorations; The Second Grinnell Expedition in search of Sir John Franklin, 1853, '54, '55.* By ELISHA KENT KANE, M. D., U. S. N. Illustrated with upwards of three hundred Engravings, from Sketches by the Author. 2 vols., 8vo., pp. 463 and 467. Philadelphia: Childs & Peterson.

The Second Grinnell Exploration, as recorded in the present volume, possesses a value and interest scarcely less than the first. It is not a record of scientific investigations; for Dr. Kane while engaged, under the orders of the Navy Department, in arranging and elaborating the results of the late expedition to the Arctic Seas, availed himself of the permission of the Secretary to connect together the passages of his journal of interest to the general reader, and has now presented the adventures of the party in an exceedingly attractive form. The volume is copiously illustrated with engravings from sketches made on the spot. We cannot too highly commend the fine taste and liberality of Messrs. Childs & Peterson, for the more than creditable manner in which they have produced the present work. It is an honor to the genius of the country. The engravings on steel and wood are as faultless as human skill could produce them. We are gratified to learn that Messrs. Childs & Peterson have purchased the stereotype plates of the "First Grinnell Expedition," by the same author, which they have improved by the addition of new illustrations, together with a fine steel portrait of Sir John Franklin, and a sketch of his life, from Allibone's forthcoming Dictionary of Literature and Authors, and will hereafter issue it in a style to correspond with the volumes before us. We have no hesitation in saying that the publishers of these volumes are taking the lead in the production of modern works, which are sure to stand the "test of time."

- 2.—*Cyclopædia of Modern Travel; A Record of Adventure, Exploration, and Discovery, for the past fifty years.* Comprising Narratives of the most distinguished Travels since the beginning of this Century. Prepared and arranged by BAYARD TAYLOR. Illustrated with maps and engravings. 8vo., pp. 955. Cincinnati: Moore, Wilstack, Keys & Co.,

Bayard Taylor is well and favorably known as one of the most successful and enterprising travelers of the present century. He is still quite a young man, but has already acquired a reputation as a faithful and graphic limner of men and things in foreign lands, which entitle him to the first rank in the catalogue of modern tourists. The enterprising publishers acted wisely in securing his aid in the preparation of the present work. The achievements of modern exploration, including the present half-century, and covered in the present work, are distinctly marked by Mr. Taylor. Within that time our own vast regions have been accurately determined, the great fields of Central Asia have been traversed in various directions, the half-known river systems of South America have been explored and surveyed; the icy continent around the Southern Pole has been discovered; the North Western Passage has been found, the Dead Sea stripped of its fabulous terrors, &c., &c. But we have not space to enumerate the results which it is the design of this book to present in a compact and, as far as possible, complete and satisfactory form. The book opens with the life and travels of Humboldt, and embraces the lives of some fifty travelers and explorers. The volume is copiously illustrated with maps and numerous fine engravings. The plan is excellent, and we regard it as one of the most comprehensive works of its class added to our literature during the last half-century.

- 3.—*A Biographical Sketch of Henry A. Wise; with a History of the Political Campaign in Virginia in 1855.* To which is added a Review of the Position of Parties in the Union, and a Statement of the Political Issues, distinguishing them on the Eve of the Presidential Campaign of 1856. By JAMES P. HAMBLETON, M. D. 8vo., pp. 519. Richmond: J. W. Randolph.

The biographical sketch of the distinguished Virginian is quite brief, covering only some forty of the five hundred pages of the volume. He however presents a comprehensive sketch of his political life to the present time. Dr. Hambleton leaves, he informs us, the interim of Governor Wise's life, with the particulars of his antecedents and his subsequent course, to "be chronicled," as the author modestly adds, "by one more skilled, more competent, and more practiced." The aim of the author was to present a full account of the operations of the secret political society, known as the Know-Nothing Party, in Virginia in 1855. This Dr. Hambleton has pretty fully done, in the hope, as he adds, of presenting "something useful to the living, and which may guard the unthinking, in after generations, against the machinations of any secret sect, clique, or party, that may have for its object a usurpation of the government and its spoils, by any other course than the popular voice." He accordingly presents the arguments of the ablest men in the land, both as speakers and writers against Know-Nothingism, coupled with their defense of the principles of the Democratic party. This account of Know-Nothingism in Virginia and other sections of the Union may hereafter form an interesting chapter in the political history of the past. It is an "ism" which will not stand the test of our free republican institutions.

- 4.—*Lorimer Littlegood, Esq.: A Young Gentleman who wanted to see Life and saw it accordingly.* By FRANK E. SMEDLEY, Esq., author of "Louis Arundel," "Frank Farleigh," etc. 12mo., pp. 322. New York: E. D. Long.

The title indicates pretty clearly the idea of this work, and that idea is clearly and graphically developed in the life of Lorimer Littlegood. We read "Frank Farleigh," by the same author, some years ago, with more than ordinary interest, and that is saying a good deal, as we do not average the perusal of one novel a year, our time being too much occupied with the realities of this "work-day world" to indulge in such luxuries. It has one *striking* illustration.

- 5.—*The British Essayists*; with Prefaces, Historical and Biographical. By A. CHALMERS, F. S. A. Volumes xix., xx., xxi. Boston: Little, Brown & Flagg.

We have noticed, as they appeared, the eighteen preceding volumes, (including "The Tattler," "The Rambler," "The Spectator," &c.) of this fine edition of the English Essayists. The present volumes, covering some nine hundred pages, are devoted to the "Adventurer," which was projected in 1752, soon after the "Rambler" was concluded. The authors of these essays were among the most accomplished scholars of the times, and there is a rich vein of thought and an elegance of diction running through the whole series, that have contributed largely to secure for them an enduring place among the standards of old English literature, and a value which must ever be held in the highest esteem by the cultivated minds of our own time. We cannot too highly commend the enterprising publishers for reproducing the entire series, in a style so well adapted to the wants of those who can afford the outlay of a cheap and valuable "family library."

- 6.—*Audubon, the Naturalist of the New World*; His Adventures and Discoveries. By Mrs. HORACE ST. JOHN. Revised and corrected, with additions, and illustrated with engravings by J. W. Orr, from original designs. 12mo., pp. 311. New York: C. S. Francis & Co.

The materials of this interesting narrative appear to have been derived from Audubon's more elaborate works, from the recollections of his friends, and from fragments published in the United States. The writer follows the adventurous American through these episodes of romance and discovery, which constituted the most interesting features of his character and career as a naturalist. The ardor and enthusiasm of Audubon give freshness, and vigour, and an almost natural coloring to his descriptions. In early life, Audubon engaged in various branches of commerce, and it is not matter of surprise, that with one whose mind was enamored of opposite pursuits, they did not prove profitable. It is a capital reading book, not only for the young, but for those who are fond of the beauties of nature, which are often more wonderful than romance.

- 7.—*The British Essayists*; with Prefaces, Historical and Biographical. By A. CHALMERS, F. S. A. Vols. xxii., xxiii., xxiv. Boston: Little, Brown & Co.

The three volumes before us contain the papers published under the general title of "The World." These essays differ somewhat in scope and character from other essayists embraced in this collection. Fun, says Mr. Chalmers, the accomplished editor, is the predominant feature; a figure of rhetoric, and an expression of contempt, which requires delicacy in order to be successful, and pure intention, in order to be safe. The World affected to consider the follies of their day as beneath their serious notice, and therefore tried what good might be done by turning them into ridicule, under the mask of defense or apology. The second edition of "The World" was published in six volumes, to each of which was prepared a dedication. In all subsequent editions it was published in four; and three of the dedications prefixed to the last volume. In the present edition they are reprinted together, as have been done with the Tattler, Spectator, and Guardian.

- 8.—*Worth and Wealth*; a Collection of Maxims, Morals, and Miscellanies for Merchants. By FREEMAN HUNT, Editor of the "Merchants' Magazine," "Lives of American Merchants," etc., etc. New York: Stringer & Townsend.

We are too nearly connected with this book to speak of it with perfect disinterestedness; but we may be permitted to say, without egotism, that its success, in a mercantile point of view, has thus far more than realized our expectations, (which are never over sanguine,) and further, that we think the principles inculcated in its pages are calculated to improve the character and advance the best interests of the commercial and industrial classes. Our publishers have just issued a sixth edition in a very beautiful style, designed expressly as a gift book, which we hope the merchants throughout the country will put into the hands of young men in their employ.

- 9.—*The Russian Empire: Its Resources, Government, and Policy.* By a "Looker on" from America. 12mo., pp. 390. Cincinnati: Moore, Wilstack, Keys & Co.

Russia, whatever may be said in Republican America of its absolutism, has ever been friendly to the United States. In the opening chapter the author maintains with reason, that there should be an American opinion of Russia, founded, not upon European prejudices, but on facts. We are strongly inclined to the opinion elucidated in this volume, that England, and particularly France, were actuated in the "Eastern Question" by a national ambition, rather than any regard for human liberty; and that they were anxious not only to check Russia, in the East, but to repress also the growth of the American States beyond the limits which they choose to assign. If this opinion is well founded, we, as Americans, should study Russia for ourselves, and not trust hereafter, as we have done, to representations which reach us through channels likely to distort or discolor the truth. Although this work was written during the struggle of the allied powers with Russia, it presents statements and principles of permanent interest. Such, for instance, as are contained in the chapters on the Self-Development Policy of Russia, the Future Relations of Russia and America to each other and the World; the Commerce of Russia and the East, &c. It is, on the whole, a well-written and well-considered work, containing a large amount of reliable information, and not, in our judgment, of course, the less valuable on account of that portion, in one or two chapters, which is borrowed from the pages of the *Merchants' Magazine*, but not without credit or compliment on the part of the author.

- 10.—*Early History of the University of Virginia*; as contained in the Letters of Thomas Jefferson and Joseph C. Cabell, hitherto unpublished. With an Appendix, consisting of Mr. Jefferson's Bill for a complete system of Education, and other illustrative documents; and an Introduction, comprising a brief Historical Sketch of the University, and a Biographical Notice of Joseph C. Cabell. 8vo., pp. 528. Richmond: J. W. Randolph.

This volume contains a full and complete history of the University of Virginia, and particularly of the early efforts to establish that famed seat of learning. The correspondence between Mr. Cabell, the Rector of that institution, and Mr. Jefferson, embodied in the present volume, give ample details of these efforts. But few of Mr. Jefferson's letters in this series are to be found in the editions of his works heretofore published under the auspices of the government. It is well remarked by the compiler of the work, that the letters will be read principally for their matter; yet their unstudied character give them a present and life-like interest, which often evaporates from more formal documents. These of Mr. Jefferson, present certain traits of the patriot, and of the man, in as favorable, if not more attractive light, than does any former publication. We were ever sincere admirers of the political principles of Mr. Jefferson, and prize the present volume as a rich contribution to our own collection of American books, and shall place it along with the two editions of his works on the shelves of our library.

- 11.—*Altha, or Shells from the Strand.* By Mrs. ADA M. FIELD. 12mo., pp. 300. Boston: James French & Co.

A pleasant offering of "love, hope, and duty," as our fair countrywomen expresses it, of love for "noble hearts, unchanged by time's stern teachings; hope that may strengthen some fond heart yearning for the good, yet lingering by the way-side; and duty, that whispers in spirit-voices, on, ever on, toward the right, where shines the Eastern Star, emblem of God and nature's light and love." These "pictures of home life" appear to be drawn from her own experience or imagination. The volume is dedicated "to the esteemed friends and respected citizens who generously encouraged the authoress to publish the manuscript." These pure and delicate "thoughts and things" are impressed in distinct type on snow-white paper, and altogether form a fittingly beautiful book—one that may be read with delight by all who would "keep innocency and take heed to things that are right," as the good book has it.

- 12.—*California in Doors and Out*: or how we Farm, Mine, and Live generally in the Golden State. By ELIZA W. FARNHAM. 12mo., pp. 505. New York: Dix, Edwards & Co.

It will be recollected by some of our readers that Mrs. Farnham, the writer of this book, lost her husband, who died in San Francisco in September, 1848, a circumstance that seemed to render her visit to California in the following year expedient. With a desire to accomplish some greater good by her journey thither than the necessary attention connected with the private affairs of her husband, and correctly believing that the presence of woman would be one of the surest checks upon many of the evils that were apprehended there, she attempted to form a company of lady emigrants, but in consequence of ill-health she only succeeded in taking out three. The present volume embraces the in-door and out-door life of an accomplished, energetic, strong-minded woman, and a variety of information relating to California farming and mining. Her delineations of the anomalous, unique life of the Californians, do not appear exaggerated; indeed we are inclined to think, from our personal knowledge of the sound judgment and integrity of Mrs. Farnham, that she has "fallen short of conveying the full impression, which actual, every-day facts make upon thoughtful minds" in California. It is nevertheless the most faithful and graphic description of the "Golden State" we have seen, and it is as readable as (it is undoubtedly) reliable.

- 13.—*Knights and their Days*. By DR. DORAN, author of "Lives of the Queens of England of the House of Hanover," "Table Traits" "Habits and Men." 12mo., pp. 479. New York: J. S. Redfield.

The whole spirit and genius of knighthood is historically and, we may say, picturesquely portrayed in a very clever style by the author of the present volume. We have the kings of England as knights, from the Normans to the Stuarts, and to Brunswick and the knights who "grew tired of it," and a great variety of curious matter pertaining to the character of knightly men and women. The author excels in writing books that furnish food for interesting, if not profitable table talk.

- 14.—*Second Class Reader*. By HON. G. S. HILLARD.

We have just been delighted by examining the proofsheets of this addition to the First Class Reader, issued by Mr. H. a few years ago, and now in use in so many of the best seminaries. Our eye was attracted to some excellent pieces by the editor of this magazine, and never rested till it had explored the whole from beginning to end. We are able to say, understandingly, there is no better Second Class Reader in existence—nor do we ever expect to see another so good. And, pleasant indeed it is, to see men of Hilliard's talent, taste, reputation, learning, experience, devote themselves to so humble a task in so noble a spirit.

- 15.—*Vagabond Life in Mexico*. By GABRIEL FERRY, for seven years a Resident in that Country. 12mo., pp. 344. Harper & Brothers.

The opportunities afforded a seven-years' resident of a country for acquiring a knowledge of the life and character of the people, &c., are much better than that of the traveler who hastens from place to place, and only "jots down" first impressions, which are more or less liable to be tainted with the peculiar prejudices of the traveler. Mr. Ferry's book is amusing, and possesses many of the attractions of a romance.

- 16.—*Anthony Burns: A History*. By CHARLES EMERY STEVENS. 12mo., pp. 295. Boston; J. P. Jewett & Co.

The extradition of Anthony Burns, a fugitive slave, is the most memorable case of the kind that has ever occurred (or probably ever will) since the adoption of the Federal Constitution. The author was present at the Faneuil Hall meeting, and witnessed the attack on the Court House, and throughout the trial of Burns had a seat within the bar. In short, he seems to have taken a deep interest in the whole matter, and has given a well-written history of it from first to last.

- 17.—*Ancient History*: Containing the History of the Egyptians, Assyrians, Chaldeans, Medes, Lydians, Carthaginians, Russians, Macedonians, the Seleucids in Syria, and Parthians, from Rollin and other Authentic Sources, both Ancient and Modern. By EDWARD FARR. In four Volumes. 12mo., 1200. Cincinnati: Moore, Wilstack, Keys & Co.

That portion of this history which has been derived from Rollin is entirely rewritten, to which Mr. Farr has added much additional information, accumulated since the time of that historian. The information derived from other sources than Rollin is of a two-fold character, geographical and historical. All the best ancient and modern geographers and historians appear to have been consulted and the best results of their labors included in the present volume. A distinguishing feature of the work is the concentrated view it affords of the countries and cities which the different nations inhabited, which are to be found in the various physical and topographical sections. Great as are the uncertainties of history, this work, in all probability, contains the most reliable history to be found of events transpiring during the period it covers.

- 18.—*Memoir of the Life of Harriet Preble*: containing portions of her Correspondence, Journal, and other Writings, Literary and Religious. By Prof. R. H. LEE, L.L. D. 12mo., pp. 409. New York: G. P. Putnam & Co.

The childhood and youth of the interesting subject of these memoirs were passed in Paris. She was educated in the celebrated female institution of the famous Madame Campan, in which so many of the most accomplished French and English females were educated. At school she was marked for her literary attainments. She removed to this country, where she died February 4th, 1854. This is a most excellent volume, calculated to benefit all who feel an interest in the lives of the wise and good. The first portion of the book presents the literary life, studies, and writings of Miss Preble; the last portion exhibits her religious life, character, and writings. She was eminent for great literary talent and fervent piety. The many incidents in lives of celebrated persons, and Miss Preble's correspondence with eminent individuals, makes the book attractive as well as beneficial to the general reader.

- 19.—*Theological Essays from Various Authors*. By G. R. NOYES, D. D. American Unitarian Association. Boston, 1856.

This thick duodecimo is an exceedingly interesting, valuable, and able exposition of the progress of theology. It furnishes at a low price the cream of several recent English works, which are not likely to be published on this side of the water. Professors Jewett and Powell, the statesman Guizot, Stanley, the Canon of Canterbury, furnish the better part in amount as well as spirit. Nine-tenths are from the Church of England, showing its thorough sympathy with the more advanced religionists in America. We wish this collection an extensive circulation, because many of its topics have never been handled with so much learning, liberality, candor, and spirituality before.

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ERRATA.—In the table of contents to the November number, article on the "Cotton Trade," our printer inadvertently spelt the name of our esteemed correspondent wrong, substituting "Griddle" for Gribble. An important typographical error occurs in the article of Mr. Gribble, on page 552 of the Magazine, where the author is made to say, "250,000 bales were kept back by the lowness of the prices," instead of the rivers.

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