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ART. I.—VENETIAN COMMERCE.

THE history of modern nations presents in the strongest light, and illustrates with irresistible force the truth of the proposition, that their commerce, and the political liberty they enjoy, have started into being, and hand in hand marched progressively onward; the one never declining without dragging the other along its downward course. Nor would it be difficult to explain why this mutual dependence exists, even were the reasons for it less perceptible than ages of experience have made them. Commercial employments, and the wealth and luxuries they bring, form the great lever by which those engaged in them are raised to the same broad platform before occupied exclusively by their superiors, who, having once enjoyed the rich fruits of mercantile enterprise, and the choice products of foreign climes, form new tastes, and indulge in pleasures before unknown, to which habit so strongly binds them, that they soon become dependent upon the class of men through whom these enjoyments are furnished, until, the scales of society gradually changing, the latter find themselves occupying a higher elevation than they had ever hoped to attain. As commerce opens path after path along which fortune leads those engaged in it, sometimes plunging them into bankruptcy, at others elevating them to wealth, and perchance to influence and power, the great mass of mankind, before bound down to poverty, compelled to toil hopelessly on, wearing out their lives on the broad estates of their titled masters, deriving from severe labor barely enough to furnish a meager subsistence, with no cheering promise that a happier future would in this world ever dawn upon them, without one single avenue by which they could escape from the mean and lowly stations in which birth and circumstances had bound them;—this part of the human race, comprising a vast proportion, are no longer confined to the degrading position occupied by their ancestors. Means are unfolded by which the humblest,—and who does not know that these are and ever have been the most eminent as merchants,—may rise to opulence and distinction, may acquire honor, and share the intercourse

and friendship of the noblest among their fellow-men. An immeasurable, a brilliant commercial field is before them, spreading over the wide seas and the broad rich plains of the whole world. Grasping the advantages thus held out, thousands from the lowest ranks have climbed to high and enviable stations, from which, but for the prosecution of commercial enterprises, they would have been forever excluded; while the great mass from whence they sprang, who had previously regarded the positions of those above them as unattainable, and their own menial condition as the irrevocable, unalterable decree of fate, soon become, in the estimation of themselves, immeasurably exalted, while their reverence and respect for rank and fortune proportionably diminish, as the possibility of attaining them becomes apparent. In this manner they learn their own strength, and by exerting it are enabled to exercise a powerful influence, as well in divesting rank of many of its most dangerous prerogatives, as in framing laws for promoting the political and social advantages of the great body of their race.

As that portion of men engaged in commercial pursuits become more numerous, and by the introduction of foreign commodities swell the wealth and add to the prosperity of their nation, they have in all modern times rapidly advanced to importance; for not only, as we have before remarked, do the wealthy and noble find the luxuries thus introduced indispensable to their comfort and enjoyment, but the revenue of the country is enlarged as its trade increases, until all classes are penetrated with the necessity of using every exertion for its continuance and improvement. Legislation thus falls into the hands of those anxious to raise up a vast and countervailing influence to resist that wielded by the landholders, the result of which is, that men from the middle and lower ranks of life, by whom the commerce of every nation is mainly carried on, soon acquire sufficient influence to send individuals from their own body to represent them in the council halls of their country, where meeting the rich and nobly born as peers, they learn to view them only as equals,—as men, who in all else save the fate of birth, are on the same broad level with themselves; and regarding them in this light, our new class of legislators make every effort to wrest from them their artificial distinctions, and to bury them forever beneath the broad and permanent fabric of social and political equality.

That the commerce of all enlightened nations of the present age has produced, and is now producing, in the social and political condition of their people, the important changes to which we have here briefly alluded, no one who bestows even a cursory glance upon their history will deny; and though the same fact may not be so strikingly illustrated by an examination of the chronicles of ancient kingdoms, yet we shall find that the political blessings and true freedom of their inhabitants were greatly enhanced by the magnitude and grandeur of their commerce, and maritime advantages. Venice was one of these, and although her people certainly understood but dimly the nature of that civil and political liberty, so well defined and appreciated in our own brilliant age, yet did they enjoy both to a degree unknown in most of the neighboring countries that slumbered during the heavy darkness of the period that marked her sway. And this was strange, nay, almost wonderful, for Venice was born and nursed in Italy's gloomiest age, when the Roman empire was suffering her most terrible reverses, and while all Europe was clad in barbarism. She grew

and flourished mid the wild and destructive elements of Gothic warfare, and still increased, while the most splendid cities in Italy were ravaged and burnt by the savage warriors that humbled and sacked imperial Rome. The barriers of nature walled out the foes that swarmed the shores of the Adriatic, while her isolated position hid the growing wealth that early glittered to invite the rapacious invader. To her secluded, and almost unknown position, she owed her preservation, and when her gorgeous riches were revealed to neighboring nations, the power she wielded was mighty enough to guard and protect them from every hostile aggression.

The birth of Venice was as ill-omened and unauspicious of future greatness, as in the prime of her years she was prominent and powerful. It was about the middle of the fifth century that Attila, the scourge of Rome, thundered along the fair plains of northern Italy. As he passed onward at the head of his fierce Goths, noble cities, which the morning sun had gilded in light, smoked, at its going down, a heap of ruins. Death and desolation alone were left behind, and as the barbarian host neared the great heart of the world, their natures seemed to grow more savage, and their swords more keen and bloodthirsty. Neither age nor sex were spared, and neither brave men nor stout walls could stay the course of northern Europe's terrible soldiery. The inhabitants of cities yet unsacked, trembling for their lives, left their homes and fled to the north-western shore of the Adriatic Gulf, and it is to these wretched fugitives that Venice owes her once unrivalled splendor and her glorious name. There, upon the small islands scattered along the mouths of the numerous rivers that discharge themselves into this gulf, did these wanderers rear their rude habitations, destined ere long to disappear, and be replaced by gorgeous palaces and magnificent temples.

Upon the whole continent of Europe, hardly a spot could have been found less likely to attract an enemy, whether in search of glory, or what in those times more frequently invited conquest, empire and wealth; for though the islands they had chosen were numerous, yet were they barren, and with few exceptions uninhabited. From agriculture, the most meager subsistence even for a few could not have been derived; and nature, which in Italy on every feature wore an aspect that promised and gave all the enjoyments which the most delicious of climes and the richest soil, with its varied and luxuriant products could bestow, frowned threateningly upon the exiles in their new home: and had prophecy,—linked with all the mysterious agencies and strange accidents which those who pretend to scan futurity and read the ways of its coming call to their aid, to render more sublimely solemn and seemingly true the predictions they utter,—foretold the greatness that should one day grow up on those little isles, and rise until the whole Christian world should contemplate its magnitude and feel its power; had it foretold that from the little band of refugees gathered together on those drear spots, so small and sea-girt that the waves almost embraced each other as they travelled along their surface, there would, in the lapse of time, spring up a nation so mighty, that kingdoms should be awed and shaken by its strength, and that Rome herself should receive from it the aid to hurl one pontiff from his seat, and with a rival claimant fill anew the papal throne; had it been foretold that from the clustering huts of its childhood should arise the Venice of the twelveth, thirteenth, and fourteenth centuries, the storehouse, the commercial heart, the great and almost sole factor of southern and western Europe, the queen of the

Adriatic, clad in gold and jewels like the fabled hero of some fairy tale;—had this prophecy been uttered, how many would have deemed it less likely of fulfilment, than the wildest fancy of a disturbed dream!

If the spot to which these outcasts fled possessed so few advantages calculated to awaken desires of conquest in the minds of warriors who would otherwise have directed their arms against it, the obstacles to be overcome in reaching it, and the natural barriers with which it was surrounded, afforded the most powerful means of defending it against the attacks of an invading foe. The islands we have mentioned were protected against the waves and the open sea by long slips of land, formed by the deposit of innumerable rivers, while communication with the shore was rendered extremely difficult by a vast bed of soft mud, extending a number of miles from the land, covered with water to the depth of not more than two or three feet, and navigable for light skiffs only; except along the narrow beds of the rivers that traversed this *lagune*, where the water was much deeper: and these estuaries which led to the open sea, whether entered from the outer barrier or from the shore, were as difficult to find as to pursue, and to a pilot not perfectly acquainted with their deviating course, their navigation was extremely dangerous. Through these narrow time-deepened channels, that wound secretly along among the little spots thickly grouped above the surface of the sea, did the exiles pioneer their way, and amid the intricate places where the mariner's bark had seldom before ventured, necessity taught them a safe and rapid navigation.

And this stern, all-powerful master, to whose creative hand every age is indebted for the development of some brilliant genius, the fuller ripening of some noble intellect, the germs of new nations and of new laws, and the beginning and end of vast revolutions among men; to which individuals owe their darkest vices and most terrible crimes, and without which, their noblest virtues and rarest talents would remain hidden from themselves, and to the world unknown;—this fashioner of mankind, and sculptor of men's fortunes, had fastened its iron grasp upon the Venetian wanderers; had chained them to their barren new-found home, and taught them to look upon it as the sole world of their ambition, the boundary of their hopes, the limit of their greatness, the source of their subsistence, and the only patrimony they could bequeath their children. Thus regarding it, and with no alternative save the fate they had so recently escaped, they settled upon the islands that clustered nearest to each other, and there engaged in the only employments their situation afforded, consisting of the manufacture of salt and fishing.

Years rolled on, and with scanty returns following these laborious avocations, the colonists advanced slowly upward, overcoming a thousand obstacles, and increasing gradually in wealth and importance. Fresh continental outrages swelled their numbers, by driving from their native land new exiles, who on the bosom of the Adriatic found that security and quiet of which Italy was deprived; and for this they were willing to endure the privations that frowned upon them in their adopted home. New islands were in this manner peopled, and upon them arose new habitations, until the few dwellings, from whence had ascended the smoke of the earliest settlers, spread into the wide and permanent foundation of a great city, and the handful of refugees who had originally sought an asylum there, gave birth to a new European nation.

The interests of this colony, during the first stages of its existence,

were neither multifarious nor important, and for their management and preservation few laws were necessary. From the earliest periods of society, however, legislation, either patriarchal or otherwise, has been found indispensable to the happiness and well-being of every community; and the source from whence that of the isles proceeded, furnishes strong testimony of its impartiality and purity. Their form of government was in that age a perfect anomaly, and in our own would be considered one of the most extreme simplicity and republicanism. For extraordinary purposes, a general assembly was called, where a majority of the people passed upon the measures proposed for their consideration, while each island of any note chose a tribune or judicial magistrate, whose duty it was to administer, expound, and sometimes declare the law, being responsible to the general assembly for the faithful discharge of his trust.

Such was the simple machinery by which these islands,—inhabited by men born and educated in different communities, and thus strangely thrown together,—were politically linked to each other, and notwithstanding their varied and conflicting prejudices, engendered by birth, and fostered by the nurture and associations of that dark period, the interests, like the fate of the colonists, were soon harmoniously blended. Circumstances unforeseen and too powerful to be resisted, had forced them together for mutual protection;—necessity compelled them to regard each other as friends,—to unite their scattered strength for the safety of all, and to strive zealously and with a single mind for the common weal. They had made their homes on the wide sea, and reared their dwellings from its bosom,—they had found security and peace, were beyond the reach of tyranny, feared not the sword or the axe of military murderers, were contented with their condition, and before many generations were prospered beyond all parallel. Their numbers were continually enlarging, for the mild laws and tolerant government they enjoyed, so different from the political slavery and despotic institutions that prevailed upon the continent, strongly invited the oppressed and discontented to take refuge within their jurisdiction. As the inhabitants increased, the employments their predecessors had engaged in, would no longer support them. New channels of industry must be sought out, and a more prolific source of subsistence discovered. And here again necessity carved the way, and with one hand pointing to starvation and want, with the other guided them on to a golden future.

Commerce, with her thousand treasures since unlocked, then slumbered from one end of Europe to the other. Her rich stores of wealth lay hidden and unexplored, and judging from the education and habits of men, centuries would probably elapse, ere commercial pursuits would be generally engaged in. Indeed, at that time, nothing appeared more improbable. The grand trade in which mankind were employed, was in wielding the sword against their fellows, and nations, while they regarded each other as natural enemies, seldom wanted a pretext for open warfare. Blood flowed freely on all sides, and the strong man overcame and plundered the weak. To have found permanent security in any kingdom either for person or property would have been impossible, for the power that guarded them to-day, might, by the strong arm of some foreign or domestic foe, be swept away and levelled with the dust to-morrow. Great risk was incurred in the transportation of merchandise from one country to another, it being exposed to seizure upon the land

by hordes of robbers, and upon the sea by pirates; while the intercourse between different nations was so defectively regulated by treaty, and so little governed by the modern principles of international law, that the rights of foreigners were seldom protected; and instead of being allowed the secure enjoyment of their property, it was frequently wrested from them, without the hope or prospect of remuneration. It is not surprising, then, that few in that age ventured to embark in traffic, nor could it be expected that many would have hazarded their fortunes upon the chances of a pursuit so uncertain. To prudent men, it seemed a dangerous method of attempting to better their fortunes, while to the timid, it presented obstacles almost insurmountable. Our refugees of the Adriatic knew the fate to which commercial enterprises were exposed, and could but poorly appreciate the immense advantages to be derived from them. Something must be undertaken, however, to support the population that daily pressed more strongly upon the means of subsistence, and to open a trade with the countries around, and become the carriers of neighboring nations, was a project that, impracticable as it appeared, was the only one of any description within their reach. And this they adopted, and slowly commenced their commercial career. Ships were built,—rough, rude, and ill-shaped, as were most ancient craft, but no less able to bear their burdens and plough the wave; and these, awkwardly equipped, and manned by those to whom the roaring of the sea had been familiar music all their lives, were sent to neighboring ports and distant cities, with goodly freights, to be exchanged for products intended for the marts of other nations. And thus in time, and for those days and that warlike age, speedily too, did the commerce of these islands increase. Many a voyage, long and hazardous, full of risk and danger, was undertaken, and upon nearly all of these, old Neptune and Fortune jointly smiled. It was at first strange to see noble ships, heavily and richly laden, bounding onward to those once desolate isles, and stranger still to see their inhabitants, so recently the poor and hunted refugees, unloading from these ships, and piling upon their shores the costly merchandise of far-off climes. But it soon became no uncommon sight, and the novelty had scarce passed away ere Venice arose glittering in her newly acquired wealth, and assumed a proud station among the cities of the earth. Surrounding nations could not but perceive the new rival that had appeared to dispute the palm of maritime greatness,—they saw the elevation to which she aspired, and marked the strides with which she was hastening towards it. The vast wealth she possessed, would soon have marked her for their prey, but when the prize promised the cost of seizure, it was too well guarded to be captured by an enemy of ordinary strength. Her natural position, too, so inaccessible, and girt about with difficulties, was strengthened by artificial barriers and military defences; and instead of leaving each island isolated and exposed to the separate attacks of an invading foe, sixty of them, which clustered about Rialto, the principal one in the group, were connected with that and each other by convenient well-constructed bridges.

As Venice advanced thus rapidly in the scale of wealth and strength and commercial importance, her citizens lost none of that vigor, industry, and enterprise, which had formed the sole elements of their prosperity. Their ambition seemed to increase with their numbers, and every accession to the commerce and wealth of their city, served but to sharpen

their minds for new maritime undertakings. Their entire thoughts were devoted to schemes of traffic, and their souls absorbed in the contemplation of anticipated gains. To increase the riches and add to the distinction of their city, all the energies they possessed were employed; and a circumstance of no little importance in the history of Venice, shows for how much of her wealth and grandeur she was indebted to the religious enthusiasm and popish superstition, that prevailed throughout Europe during the dark ages.

In the early part of the ninth century, while some ten or twelve Venetian ships were lying in the harbor of Alexandria unloading and receiving cargoes, a plan was formed for carrying off the body of Saint Mark, whose remains were said to repose in a church of that city, the walls of which, being composed of rare and elegant marble, the inhabitants were tearing down, and with their rich materials, were erecting a costly and spacious palace. To these holy relics, so pursueth the historian, the populace were devotedly attached, as well by reason of the mysterious veneration usually inspired in superstitious minds, by the contemplation of remains of such supposed sacredness, as by the performance of sundry miracles, gravely alleged to have been effected by their superhuman virtue and ghostly influence. To the scandal of those robed in the holy orders of that early period, we are sorry to write,—though a regard for truth, and for the words of our chronicler compels us,—that the priests appointed to guard and watch over these precious relics, seem to have entertained a lower estimate of their value, than men of such professed godliness should have done; for so dazzled were they by a liberal offer in gold, made to them by the captains of these vessels, that they sold the defunct saint, which was conveyed on board one of them by the following stratagem. These traitorous priests, being the only persons allowed to approach the body, cut a huge slit in the cerements in which it lay, and having abstracted it therefrom, a female saint was deposited in its stead: though this substitution, as we are gravely told, came near being discovered, for no sooner were the sacred robes of Saint Mark disturbed, than a perfume of such surpassing richness proceeded from them, that crowds assembled to inhale its rare sweetness; who becoming somewhat clamorous about the safety of their favorite saint, and entertaining suspicions that all was not right, could only be appeased by an examination of the substituted relics, which, appearing like the real ones,—for the slit in the cerecloth had been perpetrated behind,—they retired satisfied; while the saint, which had in the mean time been placed in a basket and covered with large joints of pork, was conveyed on board the vessel by porters, who kept the populace at a distance by lustily crying that abomination of all good mussulmen for sale.

Possessed of so rich a freight, the fleet, after undergoing a strict search for contraband goods, sailed for Venice, and on the voyage were overtaken by a storm so terrible, that but for the timely appearance of the saint, who solemnly stalked the deck, and commanded the captain to furl his sails, all would have been lost. They at length arrived at their destined port, when the joy of the Venetians in the acquisition of so renowned a saint was unbounded. Their city was solemnly consigned to its protection, the saint or his lion was wrought and emblazoned upon her standards, and impressed upon her coinage, and the war-cry of her citizens ever after has been *Viva San Marco!* In honor of this saint, a

fair was afterward instituted, and this, combining commercial pursuits with religious devotions, brought vast numbers to Venice, whose immense expenditures, added to the traffic they engaged in, greatly enriched the Venetians, who perceiving the benefit to be derived from canonized remains, purchased them at extravagant prices; and when this could not be done, they were not unfrequently stolen. The rage for these at length became so ungovernable, that fierce and bloody conflicts sometimes ensued between rival claimants; one of which was fought between a Venetian and Pisan armament, the cause of the quarrel being, that the former had refused to share with the latter, one half the body of a saint, which had been pilfered from a neighboring island by their joint exertions. In this engagement, the Pisans suffered terribly, losing besides the holy relics they coveted, some twenty galleys, and about five thousand prisoners.

Rendering the religious enthusiasm of that dark period subservient to their insatiable thirst for wealth and commercial pursuits, the Venetians were continually extending their maritime enterprises, swelling the amount of their shipping, strengthening their naval armament, and daily weighing heavier in the scale of nations. Venice had already, in the tenth century, taken a high stand among the kingdoms of the earth. She was the emporium of Italy and Greece; and while Pisa, Genoa, and Amalfi, which in time arose to be her principal rivals, were scarcely known, she had become the exclusive factor between Europe and the Levant. By the establishment of treaties, she had acquired jurisdiction over many of the neighboring ports, while by negotiations and alliances with the Greek emperor and the sultans of Egypt and Turkey, extensive and valuable privileges and exemptions had been secured to her numerous merchants trading to those countries.

Down to a period so late as the very last of the tenth century, Venice, content with the absolute sovereignty of her hundred isles, had entirely abstained from all attempts at foreign conquest. To all her citizens, ample employment had been afforded in carrying on commercial enterprises of unrivalled magnitude, and being entirely engrossed in those pursuits, so congenial to their tastes and inclinations, and so immensely profitable withal, they had escaped the influence of that warlike spirit, which raged to so fearful an extent upon the continent of Europe. It was to the peaceful relations which they had succeeded in cultivating and maintaining with neighboring and distant ports, that they in a great measure owed their wealth and elevation; and to preserve these unimpaired from the destructive influence of warfare, formed a marked feature in their foreign policy; so much so indeed, that for a long time, they had consented to pay a large sum of money annually to the pirates of Narenta, to purchase an exemption from the plunders of that fierce people. But the attitude of Venice, which had so long been of the most neutral and peaceable character, was about to undergo a vast change. Her citizens were gorged with wealth, and loaded with the costly luxuries of all climes. Their individual riches would have purchased principalities, and the gold which their fathers had toiled through many generations to amass, had, as in time, and in all nations it ever will, reared a proud aristocracy, whose ambitious minds sought to grasp a territory, commensurate with the fast growing strength of the wave-washed republic. That spirit of the simplest democracy, which had of necessity prevailed among the Venetians during their earlier history,—which had bound them together as one great family—that desire

of mutual preservation, which had caused them to forget all distinction of rank and wealth and country, which had compelled them all to engage in the same humble employments, and had introduced, as far as such a thing is practicable, a pure and harmonious equality throughout their narrow borders, were rapidly disappearing, or had ceased to be altogether. Many families, claiming to be noble, had sprung up, and forgetful that their ancestors had been fishermen and mariners and makers of salt, regarded the middle and lower orders with contempt, and already assumed and wielded some portion of that power, which in the hands of an aristocracy is ever dangerous and threatening to the liberties of any people.

If ambition to extend their territory prevailed among the higher orders, the middle and lower classes required little urging to embrace a scheme which promised to add so immensely to the numerous commercial advantages they had already acquired. There were many among them, too, as there ever is in populous cities, of discontented minds and desperate fortunes,—such men as in peaceful times are useless—nay, a positive curse to the community in which they live, but who in times of strife and danger, fight with a brave heart and a stout arm;—less for their country, it is true, than for gold and their own individual advantage. By these, a military expedition against any nation or people, was sure to be hailed as the road to honor and fortune, and every warlike demonstration by the government, met with their unqualified approbation.

It was under the influence of this state of public feeling, that Venice enrolled her warriors for the first expedition ever undertaken by her for foreign conquest:—and this was near the expiration of the tenth century, after more than four hundred years of peace with all nations;—a length of time, we venture to say, that no other people on earth ever succeeded in maintaining uninterrupted neutrality.

And even this expedition, the Venetians declared, was not intended for the acquisition of foreign territory, but to chastise the Narentine pirates, whose depredations upon their commerce had at length become intolerable. This formed the pretence for fitting it out, but the result showed that to humble these sea-robbers was a part only of the objects to be achieved. The fleet sailed from Venice in the spring of 997. For those early days it was a powerful armament, and was commanded by the doge in person. The progress of this naval force was a succession of triumphs, many of which were accomplished without striking a blow. Numerous islands, some of considerable magnitude, were captured, while every town along a wide-stretching coast was reduced to subjection. The Dalmatian towns, which the fierce Narentines had long pillaged without mercy, hailed the approach of the Venetian fleet with acclamations of joy, and proffered oaths of fealty and subjection to the doge, as their deliverer and sovereign; and it was not until the fleet anchored off the islands of Conzola and Lesina, the outworks of the Bay of Narenta, that any resistance was encountered. The latter of these, in particular, was defended with the most desperate bravery. It was naturally a place of great strength, and was strongly fortified and garrisoned. But the skill and courage of the Venetians overcame every obstacle, and both these important strongholds were at length compelled to yield. The Bay of Narenta was now open to the victorious fleet, which sailed in and desolated the surrounding country with fire and the sword.

The conquest of these territories once effected, their permanent subjection

to the government of Venice was not for one moment lost sight off. Their importance in a commercial point of view was of great magnitude, while the influence of the republic would be much increased by this broad addition to its former limited domain. The government of the conquered towns was accordingly administered by a *podesta*, appointed to preside over each, and these officers were chosen from the principal families in Venice, and ruled in its name, while the native inhabitants were entirely excluded from all participation in public affairs.

The brilliant successes that attended this expedition, not only surprised the Venetians themselves, but excited the astonishment of other nations. To them she appeared a new-born giant, leaping from the cradle to strength and empire; for though her citizens had long been famed for their wealth, and the extent of their shipping, yet they had never been deemed skilled in warfare, or men to be feared in battle. This first achievement then, so bold in its conception, and so rapid and effectual in its execution, performed too by a people unknown in arms, was regarded with much the same wonder as would have been lavished upon the exploits of some mailed champion of superhuman prowess, who in the golden days of chivalry should have suddenly and mysteriously appeared, to challenge and unhorse all knights who dared to appear in the field against him. The importance of the little republic was vastly increased by this indication of strength, and the pride of its citizens was elevated in proportion. Like the citizens of imperial Rome in her palmyest days, those of Venice boasted of the might of their sea-girt home, which even in distant lands often served as a shield to protect them from injuries and oppressions.

Wide-spread and numerous as were the commercial advantages of the Venetians, they were yet too few and narrow to gratify the spirit of this wonderful people for maritime adventure. Towards the end of the tenth century, a new and far-stretching field was opened to them, by a series of skilful negotiations with Comnenus, the Greek emperor. This monarch not only renounced in favor of Venice the pretensions to nominal sovereignty which he had previously asserted over Dalmatia, but granted to her shipping free entrance into all his ports, naturalized her residents at Constantinople, and compelled the merchants of Amalfi to pay a heavy annual tribute to the cathedral of St. Mark. The vast opportunities thus presenting for engrossing the commerce of the east, were monopolized by the Venetians at every point. The prerogatives her negotiations had secured, over those possessed by any other maritime power, gave to her merchants the most important advantages, and enabled them in all their commercial undertakings to grasp facilities which were in many instances denied to those of other nations.

The enjoyment of this eastern trade was a source of immense profit to the Venetians, and soon rendered them anxious to extend it beyond even the broad limits which had been granted them by the Greek emperor. To attempt this by negotiation with the warlike nations inhabiting the countries of the east, was, at the period we have mentioned, utterly impracticable; to secure further privileges by force, alone and unaided, was apparently impossible. The only mode then by which this could be effected, was to join the crusading host, which, composed of the most splendid chivalry on earth, was then marching and glittering along the plains of southern Europe, ready to burst, with the fury of ten thousand thunderbolts, upon the turbaned infidels of Palestine. Let it not be supposed that a de-

sire to redeem the land of the cross from the tramp of unbelievers, promptly Venice to engage in the holy war which drenched the cities of the east in Christian and Saracen blood, and deprived Europe of thousands of her bravest knights. The religious fanaticism which prevailed at this time throughout the vast limits of the papal world, was here met and overcome by the stronger passion of gain, which rendered all things subservient to its influence. Unless, then, wealth or dominion were to be acquired, mid the grand conflict into which the whole world seemed rushing, the politic Venetians would have been careful to keep aloof from its raging; but when both were promised, they no longer hesitated to enter upon the holy quarrel, that, under pretence of crushing the infidel power in Palestine, they could enlarge their territories, and swell the bounds of their oriental commerce. But one obstacle to prevent this existed. The Greek emperor was highly incensed that the crusaders should make his territories the highway to Asia; and Venice was bound to support the views of this monarch by the strongest ties of self-interest. This consideration prevented her for a period of two years from furnishing an armament to support the Christian host in the east, and caused her to waver between the desire to preserve unimpaired the commercial privileges she had already acquired, and the ambition to seize upon new territories. The latter at length prevailed, and the rich land of holy Syria, with its varied elements from which to form a vast oriental commerce, was the prize for which Venice armed her fleets, and sent forth her armies.

Two hundred vessels were fitted out, well armed and provisioned, and these, officered by able men, sailed for the Holy Land. This naval armament, if we remember the early period at which it was furnished, may well be deemed one of immense magnitude. It attracted the attention of the whole Christian world, and was regarded as one of the most important resources possessed by the crusaders. It may very properly be considered too, as no inaccurate indication of what the commercial navy of Venice was at that period, for the vessels of war she possessed were originally constructed to protect the shipping of her citizens from the depredations of piratical and other cruisers, and were probably by no means too numerous to effect this object. Nor is it by any means likely that the ever politic and cautious Venetians would part with so many of their armed ships, as to leave their commerce wholly unprotected; and this again shows how vast their navy must have been, when so many as two hundred vessels could be detached from it, and sent upon a distant foreign service.

The services performed by this armament during the first campaign were of very little importance; and the second one passed away without shedding much glory upon the Venetian arms. During the third, however, they accomplished a number of brilliant achievements, and evinced the most distinguished prowess in the assault and capture of the strongly defended towns of Sidon, Berythus, and Acre. The crusaders, victorious at every point, advanced into the Holy Land, and their brave and chivalrous commander Baldwin, then more envied than the most powerful crowned head in Europe, distributed among his allies the conquests he made with a liberal hand. In this parcelling out of territory and bestowment of privileges, Venice was not forgotten. One fourth part of the city of Acre was assigned to her, a free commerce throughout the new kingdom of Jerusalem, and within its limits an absolute exemption from all jurisdiction, save that of her own magistrates. And yet she was dissatisfied, and regarded

with ill-concealed jealousy and discontent, the territories that were given to other members of the Christian host.

Twenty years succeeding this campaign rolled on, and the Venetians, who during that period had been actively engaged in a wide-spread and lucrative commerce, were again called upon to arm and aid the Christian cause in Palestine. The infidels were then victorious, the second Baldwin had met with the most terrible reverses, a thousand fierce assaults had thinned the shining ranks of his mailed warriors, the swords of the Saracen host gleamed before the battlements of Jerusalem, and all Christendom trembled for the fate of the Holy City. Upon Venice, possessing a navy the most powerful and efficient of any kingdom on earth, and which was then indispensably necessary if the Saracens were to be met on any thing like equal terms, the eyes of all Europe were directed; and she was supplicated to save the knights of Baldwin from total destruction, and the Christian cause in the east from utter annihilation and defeat, by again embarking her goodly battle-ships for the Holy Land. The same feeling of self-interest, the same desire for conquest which had before prevailed, again entered the council chamber of the Venetians, and, shrouded in the guise of Christianity, another mighty armament was fitted out, consisting of more than two hundred vessels, some of which were banked with a hundred oars, each requiring two men. This mighty force sailed upon its consecrated mission, and entering the Bay of Jaffa, then filled with an immense Saracen fleet, bore down upon it in order of battle. The conflict that ensued was terrible and bloody, and historians relate that for two or three miles around, the sea was crimsoned with gore. The Saracens were defeated with dreadful loss, and the victory thus acquired by the Venetians, placed their influence paramount in the councils of the crusaders. The doge proceeded at once to Jerusalem, where he succeeded in obtaining, in addition to the extensive privileges already possessed by his country, an entire street in each city in the kingdom of Jerusalem, together with a bath, bakehouse, market, and church; and besides this, all the imports of Venice were to pass free of duty, no taxes were to be paid by her citizens, and a trial before their own magistrates was solemnly secured to them.

The grand object of the republic,—the extension and security of her commerce, the safety and prosperity of her citizens engaged in it, and a desire to render them independent of the laws and judicial tribunals of the foreign lands into which the spirit of enterprise and adventure led their steps,—was here secured upon what seemed to be an enduring basis; and while the great mass of the crusading host thought only of accomplishing their spiritual mission of driving the infidels from the holy places they had so long desecrated, the Venetians never for one moment forgot their temporal welfare, but were continually grasping those civil and commercial advantages, which placed their glittering city of the isles upon the very pinnacle of earthly grandeur. Their energy, their bravery, and more than all, the untiring perseverance they possessed, had accomplished results of the most important and brilliant character, had made them the wonder and admiration of the world, the fear and envy of surrounding nations. As champions of the cross, none were reputed more valiant; and resolved to maintain a reputation which brought with it wealth, territory, and national strength and grandeur, they thirsted for new conquests, and eagerly embraced a proposition to assist the crusaders in the reduction of

Ascalon and Tyre ; one third of each with their dependencies being promised to the Venetians in case of success.

Roused into full action by this golden offer, Venice again manned, armed, and sent forth a powerful fleet, and an imposing force was enacted to learn upon which city the God of battles willed their avenging arms first to fall. Two scrolls, upon one of which was written Ascalon, and upon the other Tyre, were deposited in an urn, and this was solemnly placed upon the altar. Mass was then celebrated; after which an orphan, chosen for the purpose, drew forth one of the fatal scrolls, containing the name of Tyre. Towards this ancient and doomed city, which had been captured by Alexander fourteen hundred years before, the Christian host advanced, and encircling its vast walls by land and sea, the siege commenced. The defence was long, desperate, and bloody, but Tyre at length fell, and Ascalon, a place of much less strength, soon afterward surrendered to the Christian force.

The immense possessions embraced within the dominions of the republic, and the vast amount of foreign territory over which she was continually extending her authority, at last awakened the jealousy and fear of the Greek emperor. So powerful a neighbor on the European frontier was dangerous to his own sovereignty, and he dared to provoke the ire of Venice, by committing the first act of unprovoked aggression upon her citizens. This was immediately and terribly revenged. The doge with a mighty fleet swept the whole imperial coast. The entire Archipelago was visited, and many of its islands captured. The shores of the Morea experienced his vengeance, and the rebellious towns of Dalmatia were chastised.

Defeated at every point, and overwhelmed with losses on all sides, the emperor deemed himself fortunate in securing a peace with his powerful adversary on any terms; and the Venetians, relieved from the prosecution of foreign warfare, again resumed those commercial employments from which had sprung their pre-eminent wealth and strength. The maritime field which their enterprise and bravery had opened was almost boundless. Spreading far away into the eastern world, it placed within their reach the rarest products of oriental climes; and these, while they ministered to the cupidity of the merchant, and by their ready sale at an immense profit, repaid him a hundred fold for the gold expended and the risk incurred in their purchase, gratified the gorgeous tastes and luxurious habits of that half barbarous, yet glittering age. The ports of all nations gladly welcomed the deep-freighted ships of Venice to their waters, and the rich cargoes of rarest foreign manufacture they brought, were eagerly sought after by the inhabitants of every land. The City of the Isles was literally filled with magnificence and gold. Her streets were crowded with palaces, and blazing domes rose loftily up on every side. With every sun the treasury of the state increased, its citizens multiplied, its power enlarged. Peace liberally strewed its blessings, and bestowed its gifts with a lavish hand. But war again came,—another holy war of a most novel and unseemly character,—a strife between two holy prelates, each claiming St. Peter's keys and the papal chair, in which the republic engaged, and gained more glory than had descended upon it in all its previous battles.

In the middle of the twelfth century, to the great scandal of the Catholic church, a double election called two successors to infallibility and the chair

of St. Peter. These holy rivals thundered their respective claims throughout Christendom; but while Alexander the Third derived his title from the almost unanimous voice of the whole sacred electoral college, Victor the Fourth, with scarce the shadow of legitimate right, clutched the sacred seat by force, backed and supported by the vast power of Frederick Barbarossa the emperor. Alexander, after suffering personal outrage and imprisonment, at length escaped from the imperial city, and when years of wandering and bitter exile had passed, he landed obscure and alone in the streets of Venice, and threw himself upon the generosity of the doge. He was joyfully received, and though demanded as a fugitive by the emperor, the Venetians braved his threatened vengeance and refused to deliver up their distinguished guest. Preparations for war were immediately commenced, and Alexander, after buckling on the sword of the doge with his own hand, and bestowing upon him the pontifical blessing, saw the Venetian armament depart to fight his cause against a hostile force of twice its size and strength. The two fleets met off the Istrian coast, and after a terrific conflict of more than six hours duration, the Venetians were victorious, and forty-eight galleys, with Otho the emperor's son who commanded them, fell into their hands. The doge returned in triumph, and at Lido was met by Alexander in person, when a solemn ceremony was performed, which continued to be celebrated during the existence of the republic.

The holy father, as soon as the doge touched the land, presented him with a ring of gold, and said, "Take this ring, and with it take on my authority the sea as your subject. Every year on the return of this happy day, you and your successors shall make known to all posterity, that the right of conquest has subjugated the Adriatic to Venice, as a spouse to her husband."

The pride with which the Venetians cherished the papal grant bestowed by these figurative nuptials, is most forcibly exhibited by their celebration for the long period of more than six hundred years upon every fresh return of the feast of Ascension; and that this celebration must have been both splendid and imposing, let the language of the historian testify. "The doge and his clarissimi," saith he, "having heard mass in the church of San Nicolo, embarked on board the gorgeous Bucentaur, a state galley, blazing with gold, enriched with costly ornaments, and preserving such fanciful identity with the original fabric, as could be obtained by perpetual repair without total reconstruction. Gliding through the canals amid festive shouts and triumphal music, this superb pageant arrived at the shore of Lido, near the mouth of the harbor, and there the princely bridegroom, dropping a golden ring into the bosom of his betrothed, espoused her with this brief but significant greeting, "We wed thee with this ring in token of our true and perpetual sovereignty."

The destruction of the emperor's fleet was soon followed by the defeat and total rout of his entire army, and humbled on all sides, he sued for peace. Negotiations were opened with Alexander, and the emperor, humiliated in the dust, and loaded with the dreaded curse of excommunication, sought an interview with him in Venice. There, in the magnificent cathedral of St. Mark, they met: Alexander, with the triple crown blazing upon his brow, clothed in the vestments of his holy office, surrounded by a glittering throng of cardinals, prelates, and ambassadors, encircled by all the imposing grandeur of ecclesiastical pomp; the emperor, with uncovered

head, and purple mantle cast aside, prostrate, and creeping onward to kiss the feet of his former enemy. With imperious pride and a thirst for revenge that casts a dark shade over the character of one claiming to be the only earthly vicar of Christ, the haughty pontiff trode upon the emperor's neck, and when the latter dared to murmur at this foul indignity, it was again repeated more firmly than before. But his degradation, deep as it was, did not end here, for we are told that when the pope left the cathedral, and prepared to mount his charger, the emperor held his stirrup, and assisted him into the saddle.

With his once mighty enemies powerless at his feet, Alexander, accompanied by the doge, and surrounded by a magnificent train, proceeded to Rome, where the latter was entertained in all the gorgeous splendor that could be lavished upon the most honored guest of the imperial city. The high and brilliant reputation which Venice had now acquired, was unsurpassed by that of the mightiest nation in Europe. She was hailed as the deliverer of Italy, the champion and protector of the holy see. The power of the emperor in the Italian cities had been crushed by her, and while this secured to the Venetians the gratitude of the Lombard towns, it also relieved them from all apprehensions of their once powerful and dangerous neighbor.

A short time after this, and while Venice was in the full blaze of her glory and ranked as the first maritime state on earth, the infatuated followers of the cross started the fourth crusade. A naval force must be furnished and ships supplied to convey the crusading host to the Holy Land, and ambassadors were despatched to Venice, the only nation able to raise and equip an armament of the requisite size and strength. They were received by the doge in a manner suited to their distinguished rank, and as the proposition they bore was of the utmost importance to the whole republic, a grand meeting of more than ten thousand citizens was held to deliberate upon its acceptance. Before this vast assembly the ambassadors appeared, and falling upon their knees, as the chronicler saith, with many tears implored the Venetians to look with pity upon the Holy City in the bondage of the infidels, and for God's sake to join in avenging the wrongs of Jesus Christ. The tears shed and supplications uttered upon this occasion, would probably have effected little towards inducing the republic to extend the required aid, had they not been backed and supported by the most substantial considerations. Eighty-five thousand marks was offered for the use of the necessary fleet, and this, with the prospect that existed of securing both territory and treasure by the expedition, proved a temptation too strong to be resisted by the Venetians, who promised to furnish palanders for the transport of four thousand five hundred horse and nine thousand esquires; ships for four thousand five hundred knights, twenty thousand sergeants on foot, with provisions for this vast force for the space of nine months; in addition to which they agreed to equip fifty galleys for the love of God, free of expense; tacked to which apparently generous and disinterested offer, was the extraordinary condition, that all conquests made by land or sea, should be divided equally between the contracting parties.

This business-like and truly mercantile arrangement, requiring an immense outlay, and involving preparations upon a scale of gigantic magnitude, was most faithfully carried out on the part of the Venetians. The entire armament stipulated for was furnished, and although some difficulty

was experienced by the captains of the crusading force in raising a sum large enough to comply with the agreement on their part, yet, after some concessions made by the doge to enable them to effect this object, it was finally accomplished, and nearly five hundred vessels, having on board forty thousand troops, together with stores, provisions, and a powerful train of the stupendous artillery of that period, sailed for the Holy Land.

It is not within our purpose to give the history of this crusade, nor shall we describe the wide-spread operations and immense conquests of those engaged in it. Our readers are no doubt familiar with the startling events and chivalrous actions of those times, and to fill our pages with them here, would be but a repetition of what may be found in the numerous volumes of both truth and fiction that chronicle the splendid exploits of that romantic and gorgeous age. The results of the expedition were, in a commercial aspect, of vast importance to the republic, and it is of these only that we shall make brief mention.

The mighty armament departed from Venice, but it was not destined to transport its warriors to scourge the infidels on the plains of Palestine. Against the Christian city of Zara, which had thrown off the Venetian yoke, the doge and barons, in opposition to the interdict of the pope, first directed their arms; and when its walls were battered down, and its streets, deserted of their inhabitants, were occupied by the besieging force, the city was pillaged of its treasures, and these were divided between the allied forces. The crusading host next advanced upon Constantinople, also under the dominion of the cross, and celebrated as the magnificent capital of the Greek empire—the lesser Rome of the eastern world. This vast city was attacked, and after a host of glorious exploits performed by the Venetians upon their favorite element the sea, and by the mailed chivalry of France upon the land, its huge walls and enormous batteries were finally carried by storm, and the Christian force poured into the devoted town. The amount of treasure that fell into their hands is almost incredible. The most splendid temples were rifled of their rich ornaments, and holy churches despoiled of their consecrated plate. The entire city was given up to universal pillage, and a division of the spoils, determined upon with the most scrupulous exactness, was then made between the French and Venetian armies. This accomplished, Baldwin, Count of Flanders, a descendant of Charlemagne, and one of the most distinguished leaders of which the crusaders could boast, was chosen emperor, and the doge, after being invested in the name of his country with an immense territory, in which were comprised the familiar names of Egospotamus, Nicomedia, Adrianople, part of Eubea, Egina, Megalopolis, Methone, Patras, the Cyclades, Sporades, and numerous other isles of the Archipelago and Adriatic, besides a long line of ports stretching along the entire shores of the empire, returned to his native city, clothed in addition to his former title with the imposing style of Despot of Romania, and lord of one fourth and one eighth of the Roman empire.

Adding these territories to the possessions the Venetians had previously acquired, and they present a foreign domain of vast extent, with commercial resources of incalculable value. Much of this was in time reconquered by its old masters, or willingly surrendered by the republic, too politic to weaken its strength at home, by the maintenance of a military force in foreign lands; but as these kingdoms were released from its sway, care was taken that the commercial privileges its citizens had acquired

from their enjoyment, should be preserved. Nor was this often difficult to accomplish, for Venice gathered and dispensed through the agency of her vast shipping almost the entire luxuries of the known world, and the trade of her citizens was on this account eagerly courted by all nations.

At the close of the fifteenth century, Venice was in the meridian of her glory,—at the very summit of her power. Nearly one hundred years before this, and her annual exports and imports to and from the *lagune* had amounted to the enormous sum of twenty-eight millions eight hundred thousand ducats; worth in those days many times what it would be at present; and even this was now prodigiously increased. Her dominions, too, embraced a wide range of territory; her riches were immeasurable, and her resources various and powerful. From the Po to the eastern boundary of the Mediterranean and the Don, stretched her long line of close-linked maritime stations; filled with the rich merchandise of all climes, enabling her to grasp almost the exclusive monopoly of trade throughout the European and eastern world. At home, her manufactures flourished a century in advance of the age. The culture of silk, introduced into the *lagune* from Constantinople, was most successfully prosecuted; and while its domestic use was interdicted to all save the high magistrates of the republic, her looms supplied the remainder of christendom with the most splendid specimens of this delicate and costly fabric. Her cloths, composed of the finest fleeces of Spain and England, were unrivalled in their beauty; and for the creation of her rich linens, the flax of Lombardy afforded ample materials. From the manufacture of gilt leather alone, one hundred thousand ducats were annually produced, while liquors, confectionery, and waxen tapers, the last of which were consumed to a great extent in the performance of holy services at Rome, increased and swelled the varied exports of the Ocean Queen. Costly mirrors from the glass-houses of Murano adorned the gorgeous palaces of Europe; and while the choicest luxuries of the age were profusely manufactured on every hand, in the laboratories of Venice were distilled and sublimated the rarest chemical preparations required either by medicine or the arts.

The republic was not at this period more distinguished for its far-stretching commerce, the perfection of its manufactures, its internal strength, and the wide-spread dominions over which its sovereignty extended, than for its elegant literature, and the number of its citizens celebrated for their genius and learning. Among these, the names of Erasmus, Bembo, Gaunto, Navagero, Sabellico, and several others, are surrounded with associations and a fame of the most glittering character. Venice had now arrived at the epoch of her loftiest elevation, from which she gradually fell, until at last she was blotted out from the scale of nations. To follow her darkening fortunes, and trace out the causes of her fall, is not within our present purpose. Civilization and the arts, borne onward by the mighty science of printing, slowly traversed the slumbering states of Europe, awakening their dark-minded inhabitants to a knowledge of the resources within their reach; and as other nations, under the influence of this new light, arose from their long sleep, shook off the lethargy of ages, and started in the race of improvement, Venice, surrounded by rivals, where she had before known no competition, commenced her downward course. Long and hard she struggled to maintain her brilliant stand as the first maritime power on earth, and many and fierce were the battles she fought to preserve her hard-earned conquests; but one after

another were wrested from her, until at last the islands of the *lagune* bounded her once vast sovereignty. The reformation spread its blazing light throughout Europe, and in its track followed the arts and sciences; barbarism fled at its approach, industry in its thousand branches was awakened, new maritime states arose, and England, with all her energies and half her wealth applied to the extension of her commerce, and the increase of her naval strength, soon occupied that pre-eminent rank as a maritime power, which the arm and the policy of Venice had become impotent to retain.

And thus did her glory and strength fade away, while her citizens, too proud to engage in the commercial employment to which they owed all their former greatness, passed their lives in continual dissipation and the most enervating pleasures. Many of ancient families and noble blood, who had in this manner expended their entire fortunes, were reduced to abject want; and to these, begging licenses were officially granted by the state, and assuming a particular dress, with a hood drawn over the face to conceal their features, these noble beggars, under the name of the shamefaced, walked abroad and asked alms. That stern independence which for centuries had prevailed in the Venetian councils, elevating them beyond the reach of foreign influence, had departed; and with it had gone the honor, the dignity, and the virtues of her nobles and her citizens. The once mighty elements of her power had fled, her shipping had disappeared, her commercial interests were rapidly decaying, her once proud navy was no more, and the vast line of maritime stations she had formerly possessed, no longer acknowledged the sway of the Adriatic Queen. Stript of her strength, and regarded with contempt by kingdoms once her slaves, Venice, for a century before she was blotted from the catalogue of nations, slumbered on nerveless and inactive, unheeded by her neighbors, and becoming weaker and less formidable as every successive year rolled by; until at last, when Napoleon, holding the entire north of Italy in his grasp, presented himself before her, and haughtily demanded her surrender, the members of the grand council, carried away by fear, precipitately and without a struggle delivered their country into his hands. Three thousand French soldiers at once marched into the city; every vestige of its independence was swept away, and in the division of territory that ensued, Venice was transferred to Austria; and on the 18th of January, 1798, the Austrian emperor assumed the control of his newly acquired domain. And in this manner did a maritime power, boasting an unbroken sway of more than eleven hundred years, sink into the grave of departed empires; and thus passed away that republic which had withstood the revolutions, battled with the shocks, and endured the changes of centuries.

We have called Venice a republic, and yet for many centuries before her fall, she hardly deserved the name. The doge was early invested with an irresponsible power, which on some occasions he exercised in the most despotic manner; and after the lapse of a few hundred years, the great body of the people ceased to exercise any important influence in matters of state. The prerogatives of the doge at length became dangerous to the interests of the nobility, and one after another were lopped off, until at last he became a mere puppet in their hands. Then commenced the reign of the Forty and the Ten; and finally was erected that fearful tribunal, the Grand Inquisition of State. These mighty arms of the government, acting with mysterious secrecy, and enforcing a code of laws

whose mildest provisions sanctioned poison and the dagger, upon even the suspicion of crime, wielded the destinies of Venice; and yet she preserved the name and outward semblance of a republic. Her citizens were seized, tortured, imprisoned, secretly tried and executed, and yet they boasted of freedom, the supremacy and purity of their laws, and of the wisdom of their institutions. But with all the imperfections and deformities of her political and moral system, sanctioning, as they unquestionably did, the darkest crimes, and the most terrible punishments, Venice, during the long line of centuries through which she flourished, stood in the front rank of nations, surpassed by few in the justice and humanity of her government, excelled by none in her knowledge of the arts and sciences, and in the perfection of her manufactures, and outstripping all in the magnitude of her commercial interests, and in the extent and splendor of her maritime power.

ART. II.—THERMOMETRICAL OBSERVATIONS AS CONNECTED WITH NAVIGATION.

THE UTILITY OF THERMOMETRICAL OBSERVATIONS IN ASCERTAINING THE RELATIVE HEAT OF THE SEA-WATER FROM TIME TO TIME, TO DISCOVER THE PASSAGE OF A VESSEL THROUGH THE GULF STREAM, AND FROM DEEP WATER INTO SOUNDINGS,—BANKS AND ROCKS, IN TIME TO AVOID DANGER, ALTHOUGH, OWING TO TEMPESTUOUS WEATHER, IT MAY BE IMPOSSIBLE TO HEAVE THE LEAD, OR OBSERVE THE HEAVENLY BODIES;—AND ON PRESERVING VESSELS FROM LIGHTNING.

THE Merchants' Magazine has been so well conducted, and contains so much useful matter, which "comes home to the business and bosoms of mankind," that I am pleased by making it the vehicle of my remarks upon two of the most important subjects to which the attention of the nautical and mercantile community can be called.

The first head of my paper is the title of one which was read before the American Philosophical Society of Philadelphia, in the year 1790,* by the late General Jonathan Williams of the United States army,† whose

* Trans., vol. II, p. 82.

† I cannot permit this opportunity to pass without bearing testimony to the great merits of this excellent man. Like his relation Dr. Franklin, the tendency of his thoughts and actions was utility to his fellow creatures, to whom he also set an example of refined manners, uprightness of conduct, and good will, which can never be forgotten by those who had the happiness of his acquaintance. He entered the American army in the year 1801, and rose to the rank of colonel of engineers. It is to him that our country is indebted for the idea of the military academy at West Point, and for its organization, a task of no ordinary difficulty. His admirable, mild, but firm discipline, subdued tempers disposed to be unruly, eradicated bad habits from among the pupils, while he stimulated all to an honorable ambition to excel in their private deportment and in their official duties. His government was parental, and he was beloved as a father by the youth under his command. Science has seldom been applied more beneficially to forwarding the business of mankind, than in the instance of Mr. Williams' experiments,

attention was first called to the subject under consideration, from having made, in the year 1785, by the direction of his relation Dr. Franklin, the experiments mentioned in his description of the course of the Gulf Stream, an account of which was annexed to his "maritime observations," addressed to the learned A. Le Roy of Paris,* and he determined to repeat these experiments in his future voyages. Accordingly, in one from Boston to Virginia, two from Virginia to England, three from England to Halifax, and four from Halifax to New York, he kept regular journals of the heat of the air and water at sunrise, noon, and sunset, and by consulting these, and the observations made at the dates written, together with the tracks of the ship's way, marked on the chart annexed, it will not only appear that Dr. Franklin's account of the warmth of the Gulf Stream is confirmed,† but also that banks, coasts, islands of ice, and rocks under water, may be discovered when not visible, and when the weather is too boisterous to sound, with no other trouble than dipping the thermometer into the sea-water. His experiments also establish the following facts.

1. That the water over banks is much colder than the water of the main ocean, and it is more cold in proportion as it is less deep.

2. The water over small banks is less cold than that of large ones.

3. The water over banks of the coast, that is, those immediately connected with the land above water, is warmer than that over those which admit deep water between them and the coast; but still it is colder than the adjacent sea.

4. The water within capes and rivers does not follow those rules; it being less agitated, and more exposed to the heat of the sun, and receiving the heat from the circumjacent land, must be colder or warmer than that in soundings without, according to the seasons and temperature of the atmosphere.

5. The passage, therefore, from deep to shoal water may be discovered by a regular use of the thermometer before a navigator can see the land; but as the temperature is relative, no particular degree can be ascertained as a rule, and the judgment can only be guided by the difference. Thus, in August, Mr. Williams found the water off Cape Cod to be 58° of Fahrenheit, and at sea 69°; in October, the water off Cape Cod was 48°, and at sea it was 59°. This difference was equally a guide in both cases, though the heat was different at different seasons.

The chart and first journal of Mr. Williams, from Boston to Virginia, shows that the water on the coast of Massachusetts was at 48°; at sea, between the coast and the stream, 59°; in the Gulf Stream, at its edge, 67°; between that and the Virginia coast, further south, 64°, and in soundings on that coast, 56°.

and every navigator is under lasting obligations to him, for the knowledge of the means of securing their safety at times when the compass, the log, or the quadrant, nay, the organs of vision, avail them nothing.

* *Trans. Amer. Philos. Soc.*, vol. II, p. 328.

† The increased heat of the Gulf Stream, although doubtless familiar to navigators, it is believed was first noticed in print by Dr. Blagden in his paper on the subject, in the *Transactions of the Royal Society of London* for 1781. On the 30th September, 1777, the water was at 76 deg. of Fahrenheit, and eleven deg. above that of the sea, before the vessel came into the current. Mr. Strickland found this difference to be even greater, as will appear presently.

The second journal from Virginia to England, shows that the water on the coast of Virginia, in December, was at 47° ; between the coast and the stream, 60° , and in the stream 70° ; near the banks of Newfoundland the thermometer fell from 66° to 54° ; passing these it arose again to 60° , and then continued a very gradual descent as he went north, till he struck soundings, when it was at 48° .

In Dr. Franklin's journal of November, 1776, the thermometer fell 10° ; near the banks and after passing them, it arose nearly to its former height. This agrees with Mr. Williams' journal nearly in the same place, made nine years afterward.

The third journal from England to Halifax shows the changes in the heat of the water, as he sailed over the banks and deep water alternately, with an accuracy that exceeded his expectation, the land appearing as the thermometer indicated an approach to it.

The journal from Halifax to New York, not only shows the variety of depths passed over, but indicates the inner edge of the Gulf Stream.

On the chart annexed to Mr. Williams' paper, the tracks of his several passages are marked, with the daily heat of the water, by which the variations on the approach to land may be seen at one view. The edge of the Gulf Stream is also traced, according to the experiments, as far as the banks of Newfoundland.

In addition to his journals, Mr. Williams has subjoined an account of some experiments on fish, (cod and halibut,) which show that their heat was 16° colder than the water at the surface, from which it may be supposed that the water at bottom is in proportion colder than that above: air 57° , water 52° , fish's belly 37° . Lat. $44^{\circ} 52'$; (July, 1790:) air 57° , water 53° , fish's belly 37° .*

The difference of heat which marks an approach to land, he found to be 6 degrees in three hours run, and long before the vessel was near enough to be in danger. In a former voyage, it was found that near the coast, in very hot weather, the water at the bottom, in 18 fathoms, was 12 degrees colder than at the surface. This difference of heat is more remarkable in winter than in summer, for Captain Billings of Philadelphia, in a voyage to Oporto, in June, 1791, found that the water on the coast was 61° , and in the Gulf Stream 77° . By Mr. Williams' journals it appears that, in November, 1789, the water on the coast was 47° , and in the Gulf Stream at 70° .† Returning towards the coast of North America, Captain Billings discovered his passage across the Gulf Stream by a sudden fall in the mercury of 5° from noon to night; and about 5° further west, by a further fall, in the space of 8 hours, he discovered the coast, where he got soundings before he saw the land.

On the subject of the utility of the thermometer at sea, Captain Thomas Truxton, the well-known United States naval commander, wrote to Mr. Williams the following letter:—

* These experiments were made by an officer of the British packet *Chesterfield*, Captain Schuyler, July 11, 1790. The preceding day, in another experiment, the temperature of the air was 57 deg., that of the belly of the fish 39 deg., water 52 deg., depth 46 fathoms. These results were communicated to Mr. Williams by Captain Schuyler.

† *Trans. Amer. Philos. Soc.*, vol. III, p. 194.

Extract of a letter from Captain Thomas Truxton to Jonathan Williams.

“PERTH AMBOY, 12th August, 1799.

“Your publication will be of use to navigation, by rendering sea voyages secure, far beyond what even you yourself will immediately calculate, for I have proved the utility of the thermometer very often since we sailed together,* not only in crossing and re-crossing the Gulf Stream that runs along our coasts, but in the Ethiopian, Indian, Arabian and Chinese seas, Gulf of Bengal, Gulf of Siam, the various straits in the eastern world, and in many other parts of the globe.

“It will be found a most valuable instrument in the hands of mariners, and particularly so to those who are unacquainted with astronomical observations, and calculations for determining the longitude at sea; these particularly stand in need of a simple method of ascertaining their approach to, or distance from the coast, especially in the winter season; for it is then that passages are often prolonged, and ships blown off the coast, by hard westerly winds, and vessels being in the Gulf Stream, without its being known; on which account they are often hove to, by the captains supposing themselves near to the coast, when they are very far off, and by this means favorable spirits of wind are lost. On the other hand, ships are often cast on the coast by sailing in the eddy of the stream, which causes them to outrun their common reckoning. Every year produces new proofs of these facts, and of the calamities incident thereto.”

Mr. Williams gives the following important directions to navigators:—

DIRECTIONS TO NAVIGATORS.

“Take with you at least three thermometers, for fear of accidents. Let them be kept in one place some days previous to your sailing, in order to try their uniformity. The plate should be of ivory or metal, for wood will swell at sea, and as the glass-tube will not yield, it is for this reason very liable to break; bell-metal is the best. Let the instrument be fixed in a square metal box, the bottom of which, as high as the mark 30°, should be water-tight, so that in examining the degree of heat, the ball may be kept in the water; the remainder of the length should be open in front, with only two or three cross-bars to ward off any accidental blow, like the thermometer used by brewers. Fix one instrument in some part of the ship in the shade, and in open air; but as much out of the wind, and in as dry a place as possible. The after part of one of the after-stanchions, under the quarter-rail, may answer, if no better place can be found.

“Let the second instrument be neatly slung with a sufficiency of line to allow it to tow in the dead water of the wake.

“Put the third away safely in your chest, to be ready to supply the place of either of the others.

“When you make your observations, begin by noting the state of the air from the instrument on deck. Throw the other out of the cabin window, and let it tow two or three minutes, then draw it up and examine it the instant you can bring it to your eye, with the ball *still in water*, and note the degree. This is a necessary precaution, for the mercury will soon fall when the thermometer is wet, especially if exposed to any wind. When you examine the water at night, take care not to heat the instrument by a candle, which should be always in a lantern; do not touch the tube, nor breathe upon it, while you examine it; lest you should communicate heat by the touch, or take it away by causing an evaporation, which is the effect of blowing upon a wet thermometer.

“Endeavor to make all your experiments in a uniform manner; do not

* Captain T. commanded the ship in which Dr. Franklin and Mr. Williams were passengers from Europe to the United States, in the year 1785.

try the water one day out of the cabin windows, another over the side, or in a bucket, but keep to one steady rule; it is not so material which way you do it, as it is to do it always the same way. If a bucket be used, let it tow long enough to take away its heat, for the cook may have had it full of hot water.

“Pay constant attention to the changes in the temperature of the air, and compare them daily with the changes in that of the water. This will account to you for the alterations on the surface of the sea, (especially in calm weather,) which naturally follow the alterations in the incumbent atmosphere. The difference between deep water and soundings will, under the same temperature of the atmosphere, still be the same. If, when in open sea, you should perceive a small change in the water, without being able to account for it by an alteration of latitude, or of the weather, you may suspect a current from the northward if colder, from the southward if warmer; and as circumstances may permit, you will do well to ascertain it.

“Compare your observations from time to time with those mentioned in the journals and noted on the chart, and if you find any difference when in the same situation, repeat your experiments, so as to be sure that the error is not on your side.

“Although it is not pretended to give accurate accounts, from the few experiments that have been made, it is presumed that the following will be found near the truth.

“FROM THE COAST OF EUROPE.—From the channel of England to the Tagus it will be generally found, that the water over soundings is about three degrees colder than at sea. And that the first symptom of soundings is at a great distance from the land, for the coast, (unlike that of America,) approaches from imperceptible depth to soundings so gradually, that it is not easy to say when you can get the ground. But were you to approach the rocks of Scilly, western coast of Ireland, Orkneys, &c., the alteration would probably be sudden and very decisive.

“ON THE COAST OF NORTH AMERICA.—At the edge of the Grand Bank, the water is 5 degrees colder than the deep ocean to the eastward. The highest part of the Grand Bank is 10° colder still, or 15° colder than the ocean eastward.

“As the banks deepen between them and the coast of Nova Scotia, the water grows about 6° warmer, till you get quite within them, when it rises to about the temperature of the deep ocean without; on soundings, the mercury will again fall to the temperature of the inner banks. So that, in coming from the eastward, a fall of 5° will indicate your entrance on the edge of the Grand Bank, and a further fall of 10° will indicate your being in soundings. Passing the summit of the banks, a rise of 6° will show the western edge of the Grand Bank, and a further rise to the temperature of the deep ocean without, will indicate the deep water within the banks. When the mercury falls again to the temperature of the inner banks, you strike soundings on the coast of Nova Scotia.

“An important observation occurs here. The Isle of Sable is a little bank of sand above water, which receives heat readily from a hot sun and communicates it rapidly to the shoals under water, upon the principle mentioned as to land-locked places. If, therefore, you come too near that island in hot weather, the thermometer will probably vary from these rules; in that case, you may get bottom. If, however, the previous ob-

servations are well made, you need not be in danger; for you can, by your meridian altitude, shape your course as far to the northward or southward as you choose.

"On the coast of New England, off Cape Cod, the water out of soundings is 8° or 10° warmer than in soundings, and in the stream it is about 8° warmer still. So that, in coming from the eastward, a fall of 8 degrees will indicate your leaving the stream, and a further fall of 8 degrees will indicate your being on soundings.

"On the coast from Cape Henlopen to Cape Henry, the water out of soundings is 5 degrees warmer than in soundings, and in the stream about 5 degrees warmer still. So that, in coming from the eastward, a fall of 6 degrees will indicate your leaving the stream, and a further fall of 5 degrees will give notice of soundings.

"By this sort of comparison, a navigator may readily ascertain when he leaves the stream and enters on soundings. It is not presumed to speak positively as to the degrees, except where it has been proved by experiment."

In the year 1810, Mr. Francis D. Masson writes to Mr. Williams from Clifton, England, and sends his journal to show "with what fidelity the thermometer indicated the Banks, and the approximation to islands of ice:"* on this Mr. W. remarks, "The important point of comparison is the *difference* in the *heat of the water* in *different places*, in or near the stream (gulf) in the ocean, out of the stream on the coast, and near islands of ice, not the *difference between the heat of the water* and the air, as some have imagined. This latter is merely a concurrent observation, serving to account for ordinary changes, and thereby to guide the judgment. From Mr. Masson's journal it appears that in April 28, 29, the temperature of the sea on the shoals of Sable varied from 40° to 43° ; at five P. M. of the last day the influence of the Gulf Stream raised it to $62-64$; at ten P. M. the temperature between the stream in deep water and the coast was 54° , which is about a mean between the two; then standing off shore at nine the next morning, 30th, the air and water were both at 60° . On the first of May, the mercury fell to 46° , (fourteen degrees,) no bottom—probably an ice island obscured by fog; at two P. M. the glass stood at 54° , but in one hour it fell to 46° , and *an island of ice* appeared at the distance of seven miles." Subsequently the ship proceeds in a regular degree of heat during seventeen hours, till six P. M., when the water again cooled, and fell to 56° at midnight, without bottom in eighty fathoms. Next morning appeared "an island of ice abreast one hundred yards, one hundred and fifty feet high, and a mile in diameter! We were sailing directly towards it. The obscurity was so great, that at that distance it appeared like a white cloud extending from the sea over our masts. Water at 39° ."

Thus far from Mr. Williams. When I read for the first time his paper in the Transactions of the American Philosophical Society, I was forcibly struck with its importance, and made use of it in the year 1804, when preparing my edition of Willieh's excellent Domestic Encyclopedia for the press. I also added the result of the observations made by the late Mr. Joseph Donath, of Philadelphia, during a voyage to Hamburg in the year 1791, which confirmed the utility of the thermometer in detecting the vicinity of

* Archives of Useful Knowledge, by the author, vol. 1. p. 254. Mr. Masson's observations were made on board the British packet Eliza, from New York to Falmouth.

ice islands previously to their being seen. He also furnished the following facts that occurred at a subsequent date. On the eighth of May, 1794, when on the banks of Newfoundland, the thermometer immersed in sea-water fell from 9° to 3° ,* in the course of six hours, viz, from four p. m. to ten o'clock; at twelve at night it fell to 2° .† The captain, alarmed at the circumstance, immediately, as by previous agreement, awoke Mr. Donath, who suspecting the diminution of temperature in the water to proceed from an approach to islands of ice, advised the captain to stand off. He did so, and when daylight appeared they saw several of them, distant about four or five miles. At ten o'clock, in thirty-five fathoms water, the thermometer rose to 6° .‡ The late Mr. William Poyntell of Philadelphia, also informed me that he had amused himself during a voyage to London, about the year 1801, in examining the temperature of the water, on various occasions, and he found the principles laid down by Mr. Williams to be correct.

Mr. William Strickland of England, who visited the United States in 1794, has added his testimony in confirmation of Mr. Williams' remarks on this subject. He says that "in the month of August, (26th,) there was a difference of 20° of the thermometer between the water on the Grand Bank of Newfoundland, and in the same latitude in the ocean not far to the east of it. The thermometer fell in four days from 72° to 52° ; its rise showing when the ship quitted the bank. The vicinity of Sable Island bank, on the fifth of September, caused a fall of seven degrees, and on the seventh of that month, a bank, not marked in any chart he had seen, in fifty-five fathoms, caused a further fall of 11° . Mr. Strickland's journal from America to England confirms the previous observations made in this track. The thermometer again fell no less than 20° on passing to the southeast of Newfoundland, and rose again 9° in the same latitudes, where, in his outward-bound voyage, he supposed himself crossing a branch of the Gulf Stream. The fall from hence of the thermometer, as the coast of Europe approached, is very remarkable and uniform.|| Mr. Strickland annexes to his paper the journal of his voyages from Hull, in England, to New York, in 1794, and that from Philadelphia to Falmouth in 1795, during which daily observations on the temperature of the atmosphere and the sea are recorded, with many useful remarks, and a chart of his two routes and of the Gulf Stream, with the temperature of the water.

In a paper on this subject in the third volume of Dr. Brewster's and Jameson's Edinburgh Philosophical Journal, page 247, by Andrew Livingston, the author, says that "it is now placed beyond dispute, that the thermometer indicates the proximity of the shores of the middle parts of the coasts of the United States of America, but I am not aware of any experiments having been made to the northward of $43^{\circ} 12$ min., in which latitude the thermometers used by Mr. Masson on board the packet ship Eliza were broken. Many circumstances lead me to incline to the opinion, that to the north of the Tropic of Cancer, in the northern Atlantic,

* 52 deg. to 38 deg. of Fahrenheit. Mr. D. used Reaumur's scale. † 36 deg. of Fah.

‡ 45 deg. of Fahrenheit. Domestic Encyclopedia, article Thermometer.

|| Mr. Strickland, (now Sir William Strickland, Bart.) addressed his communication to Mr. Williams, whose paper he had read.—Trans. Amer. Philos. Society, Philadelphia, vol. V, p. 90.

the thermometer is a useful indicator of an approach to land. My journal on board the ship *Asia*, from New Orleans to Gibraltar, in 1818, (August and September,) shows that at that season the nearness to land or soundings in the Gulf of Mexico, and in the strait between Cuba and the Tortugas and Martyr's reefs, had no effect upon the thermometer, but that as soon as we passed Cape Florida, when conscious of our proximity to the shore to the south of Cape Canaveral, *it will be perceived how faithful a monitor it proved.* The instant it fell two or three degrees I caused the ship to be tacked, nor did it in a single instance betray me, as it invariably fell before we could find soundings with one hundred fathoms. I call it a valuable instrument, and it truly proved so on that occasion to me, for with the wind dead on shore for twelve or fourteen days, in a ship of two hundred and seventy-six tons, we had only four men and a boy fit for duty, all the rest, officers included, being sick with fever. On the coast of America no vessel need run ashore without a previous warning of the proximity to land, if there is only a thermometer on board, and it is regularly attended to." This testimony of a British navigator is very valuable, and gratifying to the friends of the author of the important measure of thermometrical observations on sea-water, and complimentary to his memory. The last authority I shall quote, is a writer "C." in the *Salem Gazette* of June last, who evidently is an old shipmaster. His testimony is positive as to the importance of the thermometer, and he writes from ample experience.

I was induced to turn my attention to this subject at the present time, in consequence of the melancholy disaster which befell the packet ship *William Brown*, Capt. Harris, when on her passage from Liverpool to Philadelphia, by running against two islands of ice in immediate succession, on the 19th of April, 1841. Capt. Harris stated to the editor of the *North American*, that the first suspicion he had of the contiguity of ice, was the terrible collision,* a fact confirmed to me by Capt. H. himself, on the 9th of August. Seeing it stated frequently that the masses of ice in this year on the banks were greater than ever known, I was led to inquire why he had not anticipated their proximity from the sudden coldness of the air, which I presumed must have occurred. He replied, that he was not sensible of any change of temperature in the air, by reason of the wind blowing southeast from the ship towards the ice, in place of west, which would have driven the cold air from the ice directly towards her. It did not occur to him to try the temperature of the sea-water, although he is aware of the utility of thermometrical observations in leading to a discovery of banks, and in former voyages had recourse to them with advantage. The loss of the *William Brown*† may, therefore, fairly be ascribed to their

* *North American*, June 21, 1841.

† The ship *William Brown* left Liverpool, March 13, 1841, with sixty-five steerage passengers, bound to Philadelphia. On the 19th April, at about 9 o'clock of a dark and foggy night, wind southeast, in lat. 43 deg. 40 min. north, and long. 49 deg. 39 min. by account, the ship, when going at the rate of ten knots an hour, ran against an iceberg, and shortly after she struck another. On examining the pumps, two feet of water were found in the hold, and the ship was filling fast. Capt. Harris, with six of the crew and one female, got into the small-boat, and the mate, Fr. Rhodes, into the long-boat, with three of the crew and thirty-three passengers. At midnight the ship went down with thirty persons. In the morning Capt. H. resolved to try to reach Newfoundland, and advised the mate also to make the attempt, but the boat being so deep they could not

omission during a few days previously to her foundering, and on the day and night of that sad event, for the immense masses of ice in the vicinity must have caused a very sensible diminution of heat in the water, although from the cause mentioned the change in that of the air was not apparent; and had the cause of the fact been suspected, danger might have been avoided by an alteration of the course of the ship, or by lying to until daylight. Doubtless many other vessels have been lost from the same cause, of the fate of which nothing is known. Mr. Williams, in his remarks upon Mr. Masson's communication to him, refers to "the miserable fate of the ship *Jupiter*," the loss of which vessel from running against an ice island had probably taken place shortly before the date of his writing, viz, 1810.* I have recorded the loss of the British packet *Lady Hobart*, in July, 1803, from the same cause,† and I know of a second that occurred in the year 1822, in another British packet. I had a friend on board each of those vessels, in both of which the passengers and crews reached Halifax or some part of the coast in boats. A fifth misfortune from the same cause occurred to the ship *Lady of the Lake*, on the 11th of May, 1833, when on a voyage from Belfast to Quebec, with two hundred and thirty passengers, all of whom, fifteen excepted, went down with the ship. Another vessel, the *Jane*, with passengers, was lost in the ice, and fifteen were drowned. I presume no thermometrical observations had been made in any of these vessels.‡

Desirous of availing myself of every source of instruction and authority upon the all-important topic under consideration, I will give a summary of the remarks of a writer with the signature "C." in the *Salem (Massachusetts) Gazette*,|| and already quoted, who says he "has had much experience in crossing the Grand Banks at all seasons of the year."

1. He advises that "no vessel, as early as March 15th, should cross the

manage her, and they steered south until late in the afternoon, when they fell in with large quantities of ice. At night the wind blew strong from the south, with hard squalls, rain and hail, and a high sea, and as the boat took in water fast and leaked badly, it was impossible she could live without lightening her. On consultation, it was resolved by the mate and crew, to prevent the loss of the whole, that some should perish. At 10 o'clock, sixteen of the passengers who were most in the way, and prevented the crew from bailing out the water or working their oars, and were moreover almost dead from cold, were thrown overboard. It was not without the greatest difficulty that they could keep the boat afloat or clear her from the ice. Early the next morning they met with the ship *Crescent*, of Portsmouth, New Hampshire, Capt. Ball, who took all on board and brought them to Havre. Capt. H. was six days in the boat and at the helm, without sleep, when he was picked up by a French fishing vessel of Dieppe, Capt. Lewis Lebas. They were then two hundred miles from land. Two days before this a schooner made towards them, but a fog arose, and they lost sight of her.

* The ship *Jupiter*, bound from the United States to England, ran against an island of ice, and soon after leaked to such a degree as obliged the captain to take to the boats, in which all on board were accommodated. There were three passengers, viz, two English ladies, and Mr. Darsie of Baltimore. After several days they reached some port of Nova Scotia. I am indebted to Capt. John Meany, of Philadelphia, for this information.

† Domestic Encyclopedia, vol. V, p. 111.

‡ Niles's Register, 1833.

|| United States Gazette of Philadelphia, June 22, 1841.

bank north of 42° 30 min., and thinks that vessels are safer further north the last of April or first of May, say 44½° to 45°.*

2. "The best safeguard during the night, is a frequent attention to the thermometer. By placing it in water drawn from the sea, it will tell to a certainty the approach to ice." Of this he gives a case decidedly in point.

I view the use of the thermometer so important to ascertain by the temperature of sea-water the presence of a vessel in the Gulf Stream, and the proximity of banks, rocks, or ice islands, that I think regular daily observations with it on the temperature of the sea-water, with such remarks as may occur, and the record of them in the log-book, ought to be conditions in the policies of all vessels insured.

Insurers would also find it their interest to reprint part of the papers of Mr. Williams, Sir William Strickland, and Mr. Masson, with the charts of the two former, and the remarks of Mr. Williams on the journal of the last, and to present the pamphlet to the captain of every vessel insured by them. If printed, they ought to be bound in boards, if not leather, to prevent their certain and rapid destruction which would result from their being merely covered with paper. The preservation of the vessels mentioned in this paper, by their use, and the loss of others for want of them, would seem to leave no doubt as to the propriety of the measure.

II. TO GUARD VESSELS FROM THE EFFECTS OF LIGHTNING.

This tremendous agent is doubtless the cause of many losses at sea. One was on board a sloop bound to Georgia, with stores for the United States troops then in service in that state. It took place in the month of December, several years since, off the southern coast, but I cannot state the particulars. Another and very serious case happened more recently. The fine packet ship Poland, from New York to Havre, was struck on the 16th May, 1840, when five days out, and entirely destroyed by the fire that ensued. She had twenty-four cabin passengers, eleven in the steerage, and a crew of twenty-eight, officers included. After floating in a burning vessel for forty-eight hours, they were saved by the providential meeting with the New York packet ship Clifton, from Liverpool, Capt. Ingersoll. The value of the cargo, including \$70,000 in specie, was \$132,000. Mr. Harris of Plymouth, England, in a very valuable paper,† on the importance of lightning rods to ships, gives the particulars of four merchant ships, and six frigates or ships of war, which were struck by lightning, with more or less damage in five of them.

In none of these was there a conductor, while on one occasion, in Port Royal, Jamaica, in 1815, several ships surrounding the ship of war Norge, and having conductors up, remained untouched, while that ship and a merchant ship, neither of which had them, were struck. The Norge was "completely disabled." He adds, that in the course of the last war, great

* A retired shipmaster of high standing, who had often sailed between Philadelphia and Liverpool, recommends to all vessels leaving England early in the spring, to pass the banks in about lat. 41 deg. to 42 deg., because the chance will be that then the icebergs will not have reached that far south; and to those leaving in June, to cross the banks not further south than 45 deg., on the belief that by that time the ice will have drifted southward. The William Brown, as stated, met with the ice in lat 43 deg. 40 min. on the 19th of April, an unusually early date for their appearance.

† Edinburgh New Philosophical Journal, vol. III.

part of the British Mediterranean fleet, of thirteen sail of the line, under Lord Exmouth, were disabled by lightning, and were then furnished with conductors from Malta dockyard. The *Glory*, and the *Duke* of ninety guns, under Sir. R. Calder, were also much damaged, the *latter while in action under a battery!* No greater proof can be required of the utility of conductors in preserving vessels from lightning; nor of the danger consequent upon their being without them. Metallic rods and chains have hitherto been employed as conductors, but Mr. Harris justly remarks that "they are inapplicable to ships in consequence of their masts, (the only parts to which they can be attached,) being exposed to elongation and contraction, and to the necessity which frequently arises for removing the higher masts altogether, and placing them on deck." The chains moreover "are usually packed in a box, and are intended to be set up when occasions require, so that, as observed by Mr. Singer, in his work on electricity, they frequently remain in the ship's hold unemployed."* Mr. Morgan, in his lectures on this subject, also condemns them, and recommends strips of copper or lead in preference. Mr. Harris gives the following directions for fixing these strips.

"To protect a ship effectually from damage by lightning, it is essential that the conductor be as continuous and as direct as possible from the highest points to the sea; that it be permanently fixed in the masts, throughout their whole extent, so as to admit of the motion of one portion of the mast upon another, and in case of the removal of any part of the mast, together with the conductor attached to it, either from accident or design, the remaining portion should still be perfect, and equivalent to transmit an electrical discharge into the sea. To fulfil these conditions, pieces of sheet copper, from one eighth to one sixteenth of an inch thick, and about two feet long, and varying from six inches to one inch and a half in breadth, may be inserted into the masts in two laminæ, one over the other; the butts or joints of the one being covered by the central portions of the other. The laminæ should be riveted together at the butts, so as to form a long elastic continuous line; the whole conductor is inserted under the edges of a neat groove, ploughed longitudinally in the aft side of the different masts, and secured in its position by wrought copper nails, so as to present a fair surface. The metallic line thus constructed, will then pass downward from the copper spindle at the mast head along the aft sides of the royal-mast and top-gallant-mast, being connected in its course with the copper about the shieve-holes. A copper lining in the aft side of the cap, through which the top-mast slides, now takes up the connection, and continues it over the cap to the aft side of the top-mast, and so on as before, to the step of the mast. Here it meets a thick wide copper lining, turned round the step, under the heel of the mast, and resting on a similar layer of copper, fixed to the keelson. This last is connected with some of the keelson bolts, and with three perpendicular bolts of copper, of two inches in diameter, which are driven into the main keel upon three transverse or horizontal bolts, brought into immediate contact with the

* This neglect took place on board the packet ship *New York*, which was twice struck by lightning on the 19th April, 1827, on her passage from New York to Liverpool. A conducting chain at the time of the first explosion was stowed away in its box below, but was set up immediately afterward, and probably prevented the firing of the ship.

copper expanded over the bottom. The laminæ of copper are turned over the respective mast heads, and secured about an inch or more down on the opposite side; the cap which corresponds is prepared in a somewhat similar way, the copper being continued from the lining in the aft part of the round hole over the cap, into the fore part of the square one, where it is turned down and secured as before, so that when the cap is in its place, the contact is complete. In this way we have, under all circumstances, a continuous metallic line, from the highest points to the sea, which will transmit the electric matter directly through the keel, being the line of least resistance. Since the mizen-mast does not step on the keelson, it will be necessary to have a metallic communication at the step of the mast with the perpendicular stanchion immediately under it, and so on to the keelson as before, or otherwise carry the conductor out at the sides of the vessel.”

ART. III.—BRITISH IMPORT DUTIES.

RESUMPTION OF THE EVIDENCE GIVEN BEFORE THE COMMITTEE OF THE HOUSE OF COMMONS ON IMPORT DUTIES.*

In a former number of this work we gave an abstract of the report of the committee of the house of commons on import duties, and the evidence of John M'Gregor, Esq. We now proceed to an analysis of other evidence corroborative of the views set forth by the said committee, which will prove equally interesting.

EVIDENCE OF JOHN BOWRING, ESQ., LL. D.

The next important witness examined was John Bowring, Esq., LL.D., who had been sent abroad on a mission to ascertain the general state of the commercial relations between Great Britain and other countries, and to suggest any modifications to the governments which might lead to an extension of those relations. It appeared to him that every duty is protective which excludes any foreign article coming in competition with the home articles, or which raises the price of the home article by putting the duty upon the foreign; and, obviously, it is to exclude the foreigner from the field of competition, by raising the price in the interest of the protected commodity. He objected to protective duties, in a fiscal point of view, on the ground that their immediate operation is to diminish trade, and the diminution of trade clearly diminishes the elements of taxation. In countries where the protective system has been carried on to its greatest extent, the revenues are least productive. In France, for example, the customhouse levies per head, under a protective system, is only about one ninth of that which is levied in England per head, under the British system, which is more liberal.

In reference to the operation of protective duties on the general interests of the country, Mr. Bowring remarked, that “a great objection to a protecting duty is, that it levies an enormous amount of indirect taxation; and that this taxation wholly escapes the public treasury. If any example be taken, it will be seen how it works. I have made an estimate of the probable

* For an abstract of the report of the committee of the house of commons, on import duties and the evidence of John M'Gregory; see *Merchants' Magazine* for August, 1841, vol. v. No. ii, p. 145.

amount of taxes levied on the people of this country by the inhibition of the import of live-stock and butchers' meat. I have grounded it on the statistics of the only country where I have got any thing approximative as to consumption. Prussia consumes 485,000,000 lbs. of butchers' meat, with a population of about 14,000,000. I estimate that the consumption of butchers' meat in this country cannot be less than 50 lbs. per head per annum; and it has been frequently estimated at double that amount. Now this, on 25,000,000 of consumers, makes a consumption of 1,250,000,000 lbs. per annum. If the prohibition of foreign cattle and foreign butchers' meat only raise the price here one penny a pound, it will be found that there is an indirect taxation of more than £5,000,000 levied upon the community. If the added value be 2*d.* a pound, which I am disposed to think is nearer the truth, it will be seen then that £10,000,000 are taken from the community in consequence of the prohibition of foreign meat; and if it should appear that the estimate is correct, which many statisticians have considered as the average of consumption in this country, viz, 100 lbs. per annum,—that is, about a third of a pound a day per individual; if the consumption be as great as that, then £20,000,000 are levied annually upon the consumers upon that article alone. I have taken another example in the case of sugar, on which there is a protecting duty, to favor the colonial interest. The returns that have been obtained in different quarters appear to show that the consumption of the United Kingdom is about 17 lbs. per annum per individual; upon that, if the additional price paid be 2*d.* a pound, which is a very low estimate, that is a taxation of about £3,500,000, growing out of the protection which colonial sugar has in preference to the sugar of other countries.

“The consumption of sugar in Great Britain is returned at $17\frac{1}{10}$ lbs. per head, as estimated on a population of 24,000,000. The consumption in France by the last returns is about $4\frac{3}{10}$ lbs. per head. In the states of the Germanic League, the consumption is $3\frac{9}{10}$ lbs. per head; and it is estimated that the average consumption of the whole of Europe is about $2\frac{1}{2}$ lbs. per head. Hence it is obvious that the protective duty operates more severely on England, it being about seven times as great, as upon the population of Europe generally, inasmuch as the consumption of sugar is seven-fold greater.”

Mr. Bowring gave another example with reference to a fluctuating duty, namely, that on corn. He supposed that the annual consumption of every sort of corn in Great Britain is 45,000,000 quarters, upon which, if the rise of price, in consequence of the exclusion of competing foreign corn, be 5*s.* per quarter, it is clear that the corn laws impose an indirect taxation of more than £11,000,000 upon that community; and the general objection with respect to all those protective duties is, that it is impossible to calculate their extent, that the amount taken from the consumer is not to be reached or estimated. He also inferred that they diminish the consumption of other articles by raising the price of articles which are of absolute necessity, and thus preventing the buying of many other articles which might be of convenient or of secondary luxury. “There is,” said he, “a diminished demand for the protected article, and also a diminished demand for that labor which would pay for the non-protected article.”

With regard to the influence of protective duties upon the revenue of the country, it clearly appears that where protection acts as a prohibition, and the foreign article is excluded, there can be no revenue at all; it is destruc-

tive of revenue, when the imports are diminished by its operation, which is in fact the argument which was most effectually urged upon the Minister of Finance in France, in the negotiations with which Mr. Bowring was charged with Lord Clarendon; that at that time they were receiving somewhere about £3,500,000 nett revenue upon a population of 35,000,000, whilst, in England, under a system less protective than theirs, they were, upon a population of 24,000,000, getting nearly £20,000,000 of nett revenue.

Mr. Bowring also gave other examples, where some branches of trade have risen to a state of great prosperity in different parts of the world, without any protection being given them. "You may take, for instance," said he, "two of the most extensive manufactures, the cotton trade in England, and compare it with the cotton trade in France; it is known that the cotton trade in England is the least protected of our trades—that it was in fact a persecuted trade in its origin; that taxation was levied upon cotton goods, in the interest of the woollen trade; that cotton manufacturers have been throughout the advocates of free trade, yet the development of that trade in England is perfectly unexampled. In France, the cotton trade is the most protected of trades; it was protected from its origin; it is only within a few years that the finest numbers of cotton twists have been admitted into France; there is an absolute prohibition on all articles of cotton manufacture except the very high numbers of cotton twists, which are used for making lace. The cotton trade has made very small progress in France, compared with the cotton trade of England; the state of cotton laborers is frequently one of very great suffering; the number of bankrupts among the cotton manufacturers of France has been great, and when the home market is glutted there is no means of relief by going to the foreign market, inasmuch as the price at which they produce, the fictitious price created by the protective system, is much higher than the prices of the nations with which they compete. The consequence is, that as a means of relief, the government have been in the habit of giving a large premium on exportation, which is another taxation levied upon the French people; they paying in the first case a much greater sum than they need pay for the cotton garments they wear; and secondly, the cost of the increased price upon the article which France exports, in order to enable her to get rid of her superfluous production."

The committee were made to understand that the increased price of all kinds of cotton goods, whilst France has the same facility as England, arises mainly from the protective duty; and that the only manufacture in France towards which a liberal system has been applied, is the manufacture of silk. Foreign cotton goods are excluded—foreign silk goods from any part of the world pay a duty of from 13 to 15 per cent; yet so sound and healthy is the manufacture of silk, upon the whole, that France is able to export four fifths of the whole of the silk goods she produces. So that while of cotton, protected in every conceivable way, the amount of her exports is trifling, and principally growing out of other circumstances, that of her superiority in taste, her exports of silks are, as before mentioned, four fifths of the whole which she manufactures.

From the knowledge Mr. Bowring possessed of the general state of trade in Europe, and in the United States, he thought that Great Britain must anticipate hostile legislation, on the ground that many countries have made representations of this character: "We are willing to adopt a sys-

tem of reciprocal modification ; and if you are not willing to meet us on that ground, we must adopt a system of further protection, and even of prohibition."

It appeared to Mr. Bowring, that the British tariff has been established "without any regard to a general principle ; that it is not protective in all its bearings, and that it is not made most productive to the revenue. That it is not protective, as the tariffs of France, Spain, Austria, and Russia are, of which the object is to exclude all foreign manufactures. That there are some duties that are productive, while there are others that are not, and that there is no general policy, no comprehensive end or object running through the English tariff as a system. He thought that the interests of protection and the interests of revenue are frequently incompatible ; and that one of the two ought to be made the object of customhouse legislation, which should be simplified, even beyond the simplification of the Prussian tariffs. If some ten or twelve articles, in which there is no competition with the home producers, were made the main objects of taxation, and upon those articles the highest duty imposed which could be recovered, and if then all other imports were left free, he thought that would be the wisest and most beneficial system of legislation that could be adopted.

Mr. Bowring spent a considerable time in Spain, and watched the operations of the high and prohibitive duties in that country, where, perhaps, the protective system has been pushed to its greatest extent, and where exports are in so low a state, and where commerce and manufactures probably suffer more than in any other kingdom in Europe. He stated that he had frequently travelled with smugglers, and had seen the way in which their goods are conveyed from one part of the country to the other, sometimes by fraud and sometimes by force ; that the laws are completely inefficient wherever the recompense to the contrabandist is large, or where the difference of price is considerable, between the price in Spain and the price in the producing country ; that exclusively of the demoralizing effect, the revenue of that country had been considerably diminished from what it would have been if the goods had been admitted at a moderate duty ; and that the only parts of the country where there had been any thing like a general prosperity, are the parts in which the prohibitory customhouse legislation had not been introduced. The Biscayan provinces having a fiscal legislation of their own, have always resisted the authority of the general government to impose prohibitory laws upon them ; and the contrast in the condition of the people in that country and every other part of Spain, is remarked by all who travel through that country. The condition of the ports of Spain, and the general misery of the people, is mainly attributable to their bad commercial system ; the grass grows in the streets at this moment in their principal commercial places.

In speaking of the unequal taxation in different continental countries, and the heavily taxed labor of England in competing with the more lightly taxed, or untaxed labor of foreign countries, Mr. Bowring remarked that "wages are only one element in the cost of production ; and it is quite clear that we have not the greatest advantages where we pay the lowest rate of wages, for in many cases the competition is strongest with foreign countries. Where we produce to the most advantage will frequently be found to be where we pay the highest wages ; and the reason is obvious—the low rate of wages in this country exists principally where labor is bought in its rudest shape, where there is very little skill, as in the

case of the hand-loom weavers ; and this labor, where there is little skill, is placed in competition with the whole world : it is a species of labor which is everywhere purchasable, and all production which is bought in the region where this labor is applied for general competition, must be in a perilous state. Those of our manufactures are most successful in which we obtain the greatest aptitude and the most intelligence from the laborer, and in these our great superiority is found over other countries. For example, the pacha of Egypt has chosen to be a great manufacturer ; the price he pays to his laborers in the cotton manufactories he has established, is thirty paras a day, which is less than two pence ; that is the price now fixed in the manufactories of Egypt. He has the advantage of having the raw material, probably at two-thirds of the price that is paid here, it being grown upon the spot ; besides that the manufacturers choose for the manufactures of the pacha the superior qualities, before the general supply is sent down to the markets for exportation. Notwithstanding this advantage of having the raw material so cheap, and having labor at a price so incredibly low, he cannot compete with the manufactures of England ; and wherever English goods come in contact with the Egyptian, they are found to be cheaper. So in the regions of Syria, where the rate of wages is from four to five shillings a week, the Syrian articles compete successfully, and frequently drive out the Egyptian, though it would appear, if the question of wages were the only question, that the Egyptian must have a great advantage over them. The question of the amount paid for rude labor is not so important a one as it is believed to be.

“The least instructed laborer can everywhere produce certain rude manufactures ; the consequence is, that those manufactures will be very badly paid for. All those laborers, in fact, who are employed in producing those common fabrics must necessarily be in a very bad condition, because they find competing labor in every part of the world : the way to benefit their condition is not by protecting them by legislation, but by extending the field of demand for labor, by increasing their manufacturing aptitude, and directing their attention to labor of a more productive and better compensated character.”

Mr. Bowring was in favor of adopting the plan of introducing, on all articles which yielded but a small amount of duties, what is called by the French *droit de balance*, that is, a duty on registration, to repay the expense of machinery for obtaining correct statistical returns. He thought it important to British manufacturers, who have to compete in foreign markets, that every article required by them in the process of the manufacture, should be landed from the ship into the warehouse with as little delay, and at as little expense as possible. “Such facilities,” said he, “always increase trade ; I may mention the fact, that there are two ports in Italy which are free ports, in one of which the transfer of goods is very much facilitated, and in the other very much impeded : the trade of Leghorn has greatly increased under the free system ; and that of Genoa, though nominally a free port, has continued stationary under the restricted system. The great facility connected with the warehousing of goods has been among the main causes of the prosperity of the Hanse Towns.”

At the conclusion of Mr. Bowring's examination, he expressed it as his opinion, if the corn laws were repealed, that the first effect would be, that the fluctuations of prices would be very much diminished ; that there would be a considerable rise on the continent, and some fall in England ; that

there would be on the continent a re-direction of capital to agricultural objects, which is now being devoted to manufacturing purposes; that there would be a considerable increase of trade, and a demand for labor, and a very great increase in the consumption of corn in England, probably equal to the whole amount with which foreign countries would be able to supply them.

ART. IV.—ILLINOIS, AND ITS RESOURCES.

ALTHOUGH the preponderance of wealth and power in the United States still lies east of the Alleghany mountains, yet it is abundantly evident that the true elements of our future greatness and glory are centred in that vast and fertile valley which stretches from the Alleghanies westward to the Rocky mountains. This magnificent valley includes about two thirds of the entire territory of the United States; contains more than a million and a quarter of square miles; and is capable of sustaining a population of one hundred and fifty millions of souls. There is, probably, no part of the globe of equal extent which has so small a proportion of waste land and so great an amount of soil fit for cultivation. It is not only the garden of America, but of the world, and M. de Toqueville, the French tourist and philosopher, declares it to be "the most magnificent dwelling-place prepared by God for man's abode."

This immense valley, at least six times as great as the whole of France, and ten times larger than the island of Great Britain, is watered by rivers which have been formed on the same scale of vastness and grandeur. These, taking their rise in the mountains on either side, meander through the rich plains below for hundreds, and, in some instances, for thousands of miles, until they lose themselves in that ceaseless flood which rolls along the bottom of the valley, called, in the pompous language of the natives, Mississippi, or the Father of Waters. The Mississippi rises in latitude forty-eight, amid the frosts and snows of the wintry north, and having coursed its devious way for three thousand miles, discharges itself into the Mexican Gulf, in the region of perpetual summer. In the course of its wanderings it receives the waters of no less than fifty-seven large navigable rivers, which, with their tributaries, distribute fertility and beauty throughout the valley, and cross it in such a variety of directions, that there is not a spot, unless it be in the great plains of the Upper Missouri, that is more than one hundred miles from some navigable stream. In this great congregation of confluent waters are many rivers of the very largest class. The Missouri sweeps away from the base of the Rocky mountains for more than three thousand miles; the Arkansas has a course of fifteen hundred; and six others wind their way among the rich bottoms and rolling prairies for about a thousand miles. Besides these great rivers and their lesser confluent, the country is everywhere crossed by rivulets starting from springs and fountains, which gradually swell into larger streams, and bend their way among the lesser valleys towards the ceaseless flood which is ever rolling its turbid waters to the ocean.

This great valley has been naturally enough divided by Darby into four sections. That portion which lies below the mouth of the Ohio, possessing

peculiarities of surface, soil, and climate, is called the lower valley ; and that which lies above this point, the upper valley. The country watered by the Ohio and its branches takes the name of the Ohio valley, and that which lies along the Missouri is called the valley of the Missouri. The Upper Mississippi valley differs somewhat from all the others. It is not so low, marshy, and warm as the lower valley : it is not spread out into such immense plains as the country which borders the Missouri : and its surface is not so diversified as that which lies along the waters of the Ohio.

The head branches of the Mississippi flow from an elevated tract of table-land, abounding in marshes and small lakes, and producing a spontaneous growth of wild rice. This lofty level, which is about one thousand five hundred feet above the Gulf of Mexico, not only gives rise to the waters which glide to the south through the great Mississippi valley, but also to those which run north into Hudson's Bay, and east into the St. Lawrence. From Lake Itaska, its extreme head, the Mississippi winds along through many deviations towards the south, and after passing through a succession of lakes and rapids for about seven hundred miles, is precipitated down the falls of St. Anthony. Ten miles below the falls it receives one of its largest branches, the St. Peters, from the west, and a little further down, another, the St. Croix, from the east. From these points, until it reaches the northern borders of Illinois, a distance of some two hundred and fifty miles, it curls among a multitude of islands, which in the summer are clothed so densely with forest trees, grass, and wild flowers, as often to prevent the eye from reaching the opposite shore. The land on the borders of the stream breaks into bluffs, which are divided by valleys and creeks, and clothed to the summit with the same splendid verdure as the islands, while the ravines below abound with crystals of quartz, carnelians, and other precious stones.

The valley of the Mississippi presents everywhere the most indubitable proofs of a diluvial formation. "Nowhere," says M. de Tocqueville, "have the great convulsions of the globe left more evident traces : the whole aspect of the country shows the powerful effects of water, both by its fertility and by its barrenness. The waters of the primeval ocean accumulated enormous beds of vegetable mould in the valley, which they levelled as they retired. Upon the right shore of the river are seen immense plains, as smooth as if the husbandmen had passed over them with his roller. As you approach the mountains, the soil becomes more and more unequal and sterile : the ground is, as it were, pierced in a thousand places by primitive rocks, which appear like the bones of a skeleton whose flesh is partly consumed. The surface of the earth is covered with a granitic sand, and huge, irregular masses of stone, among which a few plants force their growth, and give the appearance of a green field covered with the ruins of a vast edifice. These stones and this sand discover, on examination, a perfect analogy with those which compose the arid and broken summits of the Rocky mountains. The flood of waters which washed the soil to the bottom of the valley, afterward carried away portions of the rocks themselves ; and these, dashed and bruised against the neighboring cliffs, were left scattered like wrecks at their feet."

These evidences of a diluvial formation are scarcely less marked on the eastern side of the great river. From the summit level, which gives rise to the Mississippi, and forms the brim of the great lakes to the south point

of Illinois, including the Wisconsin, and the states of Ohio, Indiana, and Illinois, appears once to have been a great plain, with a gradual inclination to the two great rivers which form its borders. The ravines and valleys appear to have been gradually scooped out by the abrasion of the waters, while those points which presented greater resistance to their influence still remain, and constitute the bluffs which so often diversify the scenery on the margins of the rivers.

The state of Illinois, which forms the southwestern portion of this slope, extends from the mouth of the Ohio upwards along the east side of the Mississippi for 380 miles, with an average width of about 150 miles, and an area, including a small portion of Lake Michigan, of 59,000 square miles, being larger by about thirteen hundred square miles than the state of New York. On the south it extends to 37 degrees of north latitude, and on the north reaches to 42½ degrees. Its southern extremity is consequently nearly on a parallel with Richmond, Virginia, and its northern with Albany, in the state of New York. In consequence of this great extent from north to south the climate is various, but there is little essential variation in the inexhaustible richness of its soil, whether it sinks into "bottoms," rises into "bluffs," or spreads into "prairies" or "barrens."

It will be seen by a glance at the map, that its situation is exceedingly favorable to a commercial intercourse with the surrounding states. The Mississippi meanders along its western border for 700 miles: the Ohio washes it on the south: and on the east it lies against Lake Michigan and the Wabash. Besides this very extensive water communication along its borders, its interior is also traversed by several large navigable rivers. The Illinois, which is formed by the junction of the Des Plaines and Kankakee, two rivers which gather their head waters within a few miles of Lake Michigan, sweeps through the state in a southwesterly direction, and joins the Mississippi a few miles above the mouth of the great Missouri. It is navigable for steamboats at a moderate stage of water to Peru, a distance of more than 200 miles, without reckoning the windings of the channel in navigation; from which point the Illinois and Michigan canal, 100 miles long, connects it with Lake Michigan, thus opening to a great portion of the state a market through the lakes and Erie canal to New York. Rock river rises in Wisconsin, and after traversing the northwestern part of the state, empties into the Mississippi above the 41st degree of north latitude. It is navigable, with the exception of one or two obstructions in the shape of rapids, for near 200 miles. The Kaskaskia, another large river, waters the southern part of the state, and enters the Mississippi about midway between the Missouri and Ohio. The Muddy is still further south, and also discharges its waters into the Mississippi. The large streams on the eastern side of the state are the Iroquois, a tributary of the Kankakee; the Vermillion, emptying into the Wabash; and the Embarras and Little Wabash, both of which also find their way into the Wabash. Besides these are many smaller streams, crossing the country in every direction, some of which, particularly at the north, afford a valuable water-power for propelling machinery.

These extensive channels of intercommunication have been still further extended by artificial means. The public authorities commenced a system of internal improvements, some years ago, on an extended scale, which, although checked for the present by the embarrassments under which the state is laboring, will doubtless ultimately be completed, making every

part of the state accessible, and opening to the great markets of the Union the inexhaustible productions of the rich interior. Among these the most important is the Illinois and Michigan canal, connecting, as we have already stated, the waters of the Illinois river with those of the lake. It was commenced as a state work in 1836, and congress, to advance its construction, contributed every alternate section of land on each side of the canal, the value of which, when the work is completed, will, it is thought, more than defray the expense of construction. The work is still in progress, notwithstanding the embarrassments of the state, and will probably be completed in the course of the next two years. It passes through a region of inexhaustible fertility, and when finished will give a powerful stimulus to the producing interests of the state. It is a curious fact, strongly indicative of the character of the country, that this canal, the length of which is about one hundred miles, will be supplied with water for the greater part of this distance from Lake Michigan. A vast number of other works equally practicable and important have been projected, and some of them commenced, but are now in a state of suspension, and cannot be again resumed with any prospect of success until the resources of the state are called into requisition, and its population considerably increased.

The general surface of Illinois is level or only moderately undulating.* The northern and southern portions are broken and somewhat hilly, but no part of the state is traversed with mountains, or even ranges of hills. At a few miles distance from the bed of the rivers the land often rises into "bluffs" from fifty to one hundred and fifty feet in height, intersected by ravines, beyond which is an extended surface of table-lands, divided into "prairies," "barrens," and forests. The low lands lying between the bluffs and the margins of the rivers are called "bottoms," and have been formed by the alluvial deposits of the streams.

These "bottoms" constitute the richest land in the west. The soil is often twenty-five feet deep, and when thrown up from the digging of wells, produces luxuriantly the first year. The most extensive and fertile tract of this description of soil is what is called the *American Bottom*, commencing at the mouth of the Kaskaskia, on the Mississippi, and extending northward to the bluffs at Alton, a distance of ninety miles. Its average width is five miles, and it contains about 288,000 acres. The soil is an argillaceous or a silicious loam, according as clay or sand happens to predominate in its formation. This tract, which received its name when the Mississippi constituted the western boundary of the United States, is covered on the margin of the river with a strip of heavy timber, having a thick undergrowth, from half a mile to two miles in width, but from thence to the bluffs it is principally prairie. It is interspersed with sloughs, lakes, and ponds, the most of which become dry in autumn. The land is highest near the margin of the stream, and consequently when overflowed retains a large quantity of water, which is apt to stagnate and throw off miasma, rendering the air deleterious to health. The soil is, however, inexhaustibly productive. Seventy-five bushels of corn to the acre is an ordinary crop, and about the old French towns it has been cultivated and produced successive crops of corn annually for more than a hundred years. Besides the *American Bottom*, there are others that resemble it in its general char-

* This account of the surface and soil of Illinois is mostly condensed from Peck's *New Guide to Emigrants*.

acter. On the banks of the Mississippi there are many places where similar lands make their appearance, and also on the other rivers of the state. The bottoms of the Kaskaskia are generally covered with a heavy growth of timber, and are frequently inundated when the river is at its highest flood. Those of the Wabash are of various qualities, being less frequently submerged by the floods of the river as you ascend from its mouth. When not inundated they are equal in fertility to the far-famed American Bottom, and in some instances are preferable, as they possess a soil less adhesive.

These bottoms, especially the American, are the best regions in the United States for raising stock, particularly horses, cattle, and swine. The roots and worms of the soil, the acorns and other fruits from the trees, and the fish of the lakes, are sufficient to subsist and fatten the swine; and the horses and cattle find inexhaustible supplies of grass in the prairies and pea vines, buffalo grass, wild oats, and other herbage in the timber during the summer, and rushes in the winter. The soil is not so well adapted to the production of wheat and other small grain as of Indian corn. They grow too rank, and fall down before the grain is sufficiently ripened to harvest. They are also all, or nearly all, subject to the very serious objection of being unhealthy.

A large part of Illinois consists of the lesser prairies, which spread out between the creeks, rivers, and timber lands, being mostly undulating, dry, and extremely fertile. They are, however, sometimes level, and in other cases wet. In the southern part of the state they are small, varying in size from those of several miles in width to those which contain only a few acres. As you advance to the north they widen and extend on the more elevated ground between the water-courses, and are frequently from six to twelve miles in width. Their borders are by no means uniform. Long points of timber often project into the prairies, and points of prairie project into the timber between the streams. In many instances there are copses and groves of timber embracing from one hundred to two thousand acres in the midst of the prairies, like islands in the ocean. This is a common feature in the country between the Sangamon river and Lake Michigan, and in the northern parts of the state generally. The lead mine region, especially, abounds with these groves. These prairies are devoid of timber, and are covered with rank grass, over which the fire annually sweeps, blackening the surface, and leaving a deposit of ashes to enrich the soil. The tough sward which covers them, effectually prevents the timber from taking root; but when this is destroyed by the plough, the surface is soon covered with a thick growth of timber. There are large tracts of country in the older settlements, where thirty or forty years ago the farmers cut their winter's supply of hay, which are now covered with a forest of young and thrifty timber. The prairies have a rich, productive soil; are generally favorable to the preservation of health; and are well adapted to all the various purposes of cultivation.

Another kind of land which abounds in this state is called, in the dialect of the west, "*Barrens*." In the early settlement of Kentucky, the inhabitants, observing that certain portions of the country had a dwarfish and stunted growth of timber scattered over the surface or collected in clumps, with hazel and shrubbery intermixed, inferred that the soil must necessarily be poor, and hence called these tracts *barrens*. It was, however, soon ascertained that, so far from their being barren, they were really among the

most productive lands in the state. The name has, however, been retained, and received a very extensive application throughout the west. In general, the barrens of Illinois have a surface more uneven or rolling than the prairies, and which more frequently degenerates into ravines and "sink-holes." They are almost invariably healthy; have a greater abundance of pure springs, and possess a soil better adapted to all the purposes of cultivation and the different changes of seasons than either the bottoms or prairies. They are covered with wild grass, and with oak and hickory trees and shrubs, which are scattered over their surface, and are gnarled and dwarfish, in consequence of the repeated fires which sweep over them; but when these are stopped, healthy sprouts shoot up from the mass of roots which have accumulated in the earth, and grow with amazing rapidity, so that the want of timber on these tracts can easily be supplied.

What is called *Forest or Timber Land* also abounds in Illinois, but is very unequally distributed over the state. Where the prairie predominates timber is, of course, a desideratum, but as it shoots up with great strength and rapidity as soon as the soil is broken by the plough, this circumstance does not prove a bar to the settlement of the country. The kinds of timber most abundant are oaks of various kinds, black and white walnut, ash, elm, sugar maple, honey locust, hackberry, linden, hickory, cotton wood, pecan, mulberry, buckeye, sycamore, wild cherry, box, elder, sassafras, and persimmon. In the southern and eastern parts of the state are yellow poplar and beech; near the Ohio are cypress; and on the Calamich, near Lake Michigan, is a small tract covered with white pine. The undergrowth consists of red-bud, pawpaw, sumach, plum, crab-apple, grape vines, dog-wood, spice-bush, green brier, hazel, &c. For ordinary purposes, there is now timber enough in the state without resorting to artificial cultivation.

The more uneven portions of the country are divided into *knobs*, *bluffs*, *ravines*, and *sink-holes*. *Knobs* are ridges of flint limestone intermingled and covered with earth, and elevated one or two hundred feet above the common surface. They are of little value for cultivation, and have a thin growth of dwarfish trees like the barrens. The steep hills and natural mounds that border the alluvions have obtained the name of *bluffs*. Some are in long parallel ridges, others like cones and pyramids. They are sometimes formed of precipices of limestone rock from fifty to one hundred feet high. The *ravines* are the depressions formed between the bluffs, and often leading from the prairies down to the streams. *Sink-holes* are circular depressions of various sizes, from ten to fifty feet deep, and from ten to one hundred yards in circumference. They frequently contain an outlet for the water received by the rains, and indicate a substratum of secondary limestone.

There are but few tracts of ground in the state where loose stones are scattered over the surface or imbedded in the soil, and these are chiefly in the northern part. There are, however, quarries of stone in the bluffs, along the ravines, and on the banks of the streams. The soil throughout the state is mostly porous, easy to cultivate, and exceedingly productive. There are no mountains; no ranges of hills; but few ledges; and only a small amount of irreclaimable wastes of any kind in the state. Its capabilities of production are therefore immense, and probably greater than those of any other state, comparing area with area.

Among the products of the soil, grapes, plums, crab-apples, wild cherries,

persimmons, pawpaws, black mulberries, gooseberries, strawberries, and blackberries, are indigenous, and grow wild in great profusion. Of the cultivated fruits, apples, pears, quinces, peaches, and grapes, thrive well, and can be raised in abundance. The cultivated vegetable productions of the field are Indian corn, wheat, oats, barley, buckwheat, Irish potatoes, sweet potatoes, turnips, rye, tobacco, cotton, hemp, flax, the castor bean, &c. *Maize*, or *Indian corn*, is the staple. No farmer can live without it, and many raise little else. It is cultivated with great ease; produces ordinarily fifty bushels to the acre; often seventy-five; and not unfrequently reaches even to a hundred. The number of bushels raised in 1839 amounted to twenty-two and a half millions. Wheat is a good and sure crop, especially in the middle part of the state, and in a few years Illinois will probably send immense quantities to market. The number of bushels raised in 1839 was 3,263,552. Hemp grows spontaneously, but is not extensively cultivated. Cotton is raised in the southern part of the state, and in 1840, 200,000 pounds were produced. 30,000 pounds of rice were gathered in the same year, and 2,591 pounds of hops.

The *stock* of the farmer consists principally of horses, neat cattle, swine, and sheep. Horses are more used here than in the eastern states. They do much the greater proportion of the ploughing, and off from the stage routes the travelling is chiefly performed on horseback. The number in the state in 1840 was, according to the returns of the United States marshal, 200,741. Illinois possesses fine grazing lands, and raises for market considerable quantities of beef, which is sold in the western states. In Alton alone, 5000 beeves were killed during the past winter, prior to the first of February. The number of *neat cattle* in the state was, in 1840, 612,244. *Pork* is one of the staples, and thousands are produced almost without trouble or expense, as they are raised on the fruits and nuts which grow wild in the woods. Near 70,000 were slaughtered in Alton last fall, and in the whole state the number, as returned by the marshal, is 1,445,925. *Sheep* have not been hitherto raised in very great numbers, but the flocks of the Illinois farmers are rapidly increasing, and the number in the state now amounts to 486,751. *Poultry* are raised in great abundance. Ducks, geese, and other aquatic birds, visit the lakes and streams during winter and spring, and prairie hens (grouse) and quails are very numerous, and are taken in great abundance.

But the resources of Illinois do not stop with her large and navigable rivers; the inexhaustible fertility of her soil; or the abundance of her animal and vegetable productions. She is also rich in *minerals*. Coal, secondary limestone, and sandstone, are found in almost every part of the state. Iron has been found in the south, and is also said to exist in considerable quantities in the north. Marble and granite are found in several counties, and the quantity quarried in 1839, amounted in value to \$71,778. Copper has been found in small quantities on Muddy river, and in the bluffs of Monroe county; and in greater abundance on the Peekatonokee, near the northern boundary of the state. Crystalized gypsum has been discovered in small quantities in St. Clair county, and quartz crystals in Gallatin county. Gold is found in Jo Daviess and Fulton counties, from which gold was produced in 1839 to the amount of \$5,250. Silver is also supposed to exist in the vicinity of Silver creek, and in early times a shaft was sunk here by the French, and it is said that large quantities of this metal were obtained.

But of all the mineral productions of the state *lead* is the most abundant. In the northern part of Illinois and the territory adjacent, are the richest lead mines hitherto discovered on the globe. They lie principally north of Rock river and south of the Wisconsin, but some have also been found on the west side of the Mississippi. For many years the Indians and French traders were accustomed to dig lead in these regions, but they never penetrated much below the surface. In 1823, the late Col. James Johnson, brother to the Hon. Richard M. Johnson, obtained a lease of the United States government, and made arrangements to prosecute the business of smelting, which he commenced with considerable energy the following year. This enterprise attracted the attention of other capitalists, and in the course of three or four years, this sequestered spot literally swarmed with miners, smelters, merchants, speculators, and gamblers of every description, until, in 1829, the lead business was entirely overdone, and the market for a while destroyed. Since that time, however, the business has revived, and continues to be profitable. The supply exists over a tract of country about two hundred miles in extent, and appears to be inexhaustible.

In 1839, the United States marshal found twenty-three smelting-houses, principally in the county of Jo Daviess. The capital invested in the business was \$128,600, and the quantity of lead produced 3,546,000 pounds. The government received six per cent of the lead produced for rent. The following table, from Peck's Gazetteer of Illinois, exhibits the amount of lead made in this region from 1821 to September 30, 1835.

Pounds of lead made from 1821, to Sept. 1823,	335,130
do. for the year ending Sept. 30, 1824,	175,220
do. do. do. 1825,	664,530
do. do. do. 1826,	958,842
do. do. do. 1827,	5,182,180
do. do. do. 1828,	11,105,810
do. do. do. 1829,	13,344,150
do. do. do. 1830,	8,323,998
do. do. do. 1831,	6,381,900
do. do. do. 1832,	4,281,876
do. do. do. 1833,	7,941,792
do. do. do. 1834,	7,971,579
do. do. do. 1835,	3,754,290
Total,	70,420,357

The *coal* of Illinois is of the bituminous character, and lies principally in the ravines and points of the bluffs. Exhaustless beds are found in the bluffs of St. Clair county, bordering on the American Bottom, and large quantities are carried across to St. Louis for fuel. There is, however, scarce a county in the state in which it does not abound. The quantity dug in 1839 was over 376,000 bushels.

Common salt (muriate of soda) is also found in various parts of the state, held in solution in the waters of the springs, and the manufacture is carried on in several counties to a considerable extent. The springs and land are owned by the state, and the works leased. During the last year more than 20,000 bushels were produced, principally in Gallatin and Vermillion counties, and the supply can be increased to any desirable extent.

The *manufacturing* interests of Illinois are still in their infancy, but the time is not distant when its manufactories will cope with those of the older states. Steam mills for flouring and for sawing timber, have been erected in the southern and middle portions of the state, and are rapidly increasing in number: while mills driven by water-power are in operation at the north. It is worthy of remark, too, that in those portions of the state not supplied with a constant water-power, coal and wood for fuel abound. The best water-power is found in the northern part, and it has already been improved to a considerable extent. Mills for various purposes have sprung up along the streams, particularly along Rock river and its branches, and the Illinois and Fox rivers. The Illinois and Michigan canal also furnishes an admirable water-power, superior probably to any other in the west. The rapids in the Fox river, four miles above Ottaway, have a descent of sixteen feet, and an abundant supply of water at all seasons of the year, while, from the rapids down, the river has such a descent as will enable its waters to be used for propelling machinery. The improvements on the Great and Little Wabash, and the Kaskaskia, will also make the waters of those streams available for hydraulic purposes, and whenever mills shall be required there is nothing to prevent their rapid multiplication. In 1839, the number of flour, grist, and saw mills, was 1,502, and the value of manufactured products, \$2,306,619.

Education. The same provision has been made by congress for the support of schools in Illinois as in the other new states. The public lands are surveyed into townships six miles square, containing 36 sections, of 640 acres each, and the section numbered *sixteen*, in every township, is given to that township for educational purposes. Besides this provision, which applies only to the local townships, three per cent of all the public lands within the state, sold, or to be sold, after its admission into the Union in 1819, are to constitute a fund for the support of education, under the direction of the state authorities, provided that one sixth is to be exclusively devoted to the support of a college or university. Two entire townships, or 46,080 acres, have also been bestowed for the support of education, which, with a moiety of the surplus money divided between the states, constitutes a fund which is estimated at about three millions of dollars, a large portion of which, however, will long be unavailable. The interest which resulted from the education fund in 1839, and which was divided according to the law, was \$44,326. But the state lacks a well organized system of common schools, without which education can never generally prevail.

Besides several respectable academies, there are in this young state six institutions which take the name of *colleges*, viz: Illinois College, at Jacksonville, under the direction of the "new school" Presbyterians; McDonough College, at Macomb, belonging to the "old school;" Shurtleff College, at Alton, which takes its name from Dr. Shurtleff of Boston, who made it a munificent donation; McKendree College, at Lebanon, St. Clair county, belonging to the Methodists; and Canton College, in Fulton county, and Belvidere College, in Winnebago county, two new institutions which have only recently been chartered. But notwithstanding this great show of literary institutions, it will probably be found that education languishes in Illinois, as indeed it does in most new states. The foundation which is laid, however, in the prospective education fund, is of great importance, and we may confidently expect that the intellectual resources of this vast and beautiful region will ere long be as abundant as its physical.

The following particulars are derived from a tabular statement prepared by J. A. Townsend, of Alton, Illinois :

	Quantity.	Value.
Population,*	476,273	
Horses and mules,	200,741	\$9,033,345
Neat cattle,	612,244	9,183,640
Sheep,	486,751	973,502
Swine,	1,445,925	1,337,775
Poultry,		340,600
Wheat,	3,263,552	2,039,720
Barley, buckwheat, and rye,	49,366	76,470
Oats,	5,681,931	1,136,386
Corn,	22,523,630	4,504,727
Wool, (pounds)	634,349	285,457
Beeswax, (pounds)	26,676	6,669
Potatoes,	2,086,516	521,629
Hay, (tons)	138,125	1,005,000
Flax and hemp,	15,604	1,560,000
Tobacco,	475,250	28,515
Sugar,	399,713	49,964
Wood, (cords)	124,138	248,276
Dairy, (value of produce)		445,621
Orchards, (value of produce)		118,132
Domestic goods,		1,108,096
Garden and nurseries		97,996
Stores,	1,374	
Stores, (capital invested in)		5,085,457
Skins, ginseng, &c.		258,838
Bricks and lime,		262,406
Carriages and wagons,		135,712
Flour, grist, saw, and oil mills,	1,502	
Flour, &c. (manufactured)		2,306,619
Brick and frame houses, (built in 1839)	4,020	
Houses,		2,044,108
Tanneries,	154	
Sole and upper leather, (sides)	68,808	223,118
Saddleries, (products)		255,252
Distilleries, breweries, &c.	153	
Distilleries, breweries, (products, No. of gals.)	1,554,109	388,195
Manufactures, (not enumerated products)		361,522
Manufactures, (not enumerated capital)		338,195
Manufactories, total amount of capital,		3,969,912
Total value of products, exclusive of capital and cost of buildings,		51,811,606
No. of persons employed in mining,		1,227
“ “ agriculture,		97,781
“ “ commerce,		2,523

* For a statement of the population of each county in the state of Illinois, taken at the census of 1840, and the number of square miles in the several counties, see Merchants' Magazine for October, 1841, page 391.

No. of persons employed in navigating the ocean,			75
“ “ navigating rivers and lakes,			85
“ “ learned professions,			1,931
No. of deaf and dumb,			311
“ blind,			80
“ insane and idiots,			200
“ colleges,	7	No. of students,	311
“ academies,	41	“ “	1,907
“ common schools,	1,200	“ “	33,724
“ students at public charge,			1,318
“ white persons over 20, who cannot read and write,			28,780
“ pensioners,			155

ART. V.—DUTCH COMMERCE.

DUTCH TERRITORY AND POPULATION—SYSTEM OF COMMERCE—IMPROVEMENTS OF AGRICULTURE—MANUFACTURES—IMPORTS AND EXPORTS—NAVIGATION—DUTCH AT THE HEAD OF EUROPEAN PROGRESS—GENERAL SOCIETY OF COMMERCE OF THE LOW COUNTRIES—ITS CHARACTER AND COMMERCIAL OPERATIONS—RE-ESTABLISHMENT OF MANUFACTURES IN HOLLAND, ETC.

THE following official report on Dutch commerce, was recently addressed to the Minister of Foreign Affairs, by M. Bois le Comte, French Minister at Hague. Exhibiting, as it does, a clear and comprehensive view of the present condition of Dutch commerce, from an authentic source, it will be found not only interesting to our commercial readers, but valuable for reference :

“ When I exposed to the predecessor of your excellency what remained to Holland of its ancient maritime and commercial power, I tried to establish, by official calculation, the political influence and the produce of her colonies. I am to complete this work with the assistance of the results obtained during the year 1839, and the documents presented to the States General in 1840.

“ The same uncertainty continues as to the real state of the population of those colonies. The Dutch Government itself has but approximate and vague valuations in this respect. M. Beau gives the number of the population of Java as eight millions, but he reduces that of the other islands in a great degree, by the observation that culture and social organization alone can produce a great development of population. As to Sumatra, I should prefer to his estimations, which are evidently too low for that island, those of MM. Vanden Bosch, de Capelle, and Nahuys, who give the number of its population as five or six millions; but nothing contradicts his opinion that the population of Borneo does not exceed three millions, that of the Celebes two millions, and the Moluccas 500,000. This would give twenty millions of inhabitants to a territory three times as large as France, the half of which is governed by the Dutch themselves, or by princes named and directed by them.

“ In the Dutch Indies there are 10,000 Europeans, including the army, and 30,000 negro slaves. By emigration, partly permanent and partly

periodical, there are about from 200,000 to 300,000 Chinese in the Dutch Indies, of whom 100,000 are in Java alone, men who are both useful and dangerous—brokers, retailers, artisans, and cultivators; they perform every service which requires most intelligence and activity. At Java they manage plantations of cane and tea; at Sumatra that of pepper; at Riow that of palm trees;* at Gamba and at Banca, the working of the tin mines; and at Borneo that of the gold mines.

"The English *census*, in 1815, gave the number of the population as 4,500,000. The population has doubled in fifteen years from the increase of health in the population, and from the disappearance of the small-pox, which made as much ravage in Java as the plague in Turkey, or the yellow fever in America.

"No change has taken place in 1839 as to the general system of commerce. The ports before named in each of the islands receive foreign vessels, the Moluccas alone are forbidden theirs; the Government, which has reserved to itself the purchase of spices, keeps up the monopoly of opium and salt. Strangers are allowed to establish themselves in the ports open to commerce. It is forbidden to penetrate into the interior. Three *entreports* in the island of Java (Batavia, Samarang, and Sourabaya,) and two free ports, one at the northern extremity of the Neerlandish Archipelago, and the other at the southern, Riow and Coupang, complete the system.

"The improvements of agriculture commenced by Count Vanden Bosch have not only been realized, but exceeded by the harvest of this year. I here annex the statements of the exportation of Java in 1838. I compare it with that of 1790, under the old company, and with that of 1828, under the government which preceded that of M. Vanden Bosch.

"The separation of Belgium, where the industry of the United Low Countries had been concentrated, caused the metropolis to despair of taking part in the provisioning of her colonies of 1830. King William has succeeded in conquering the difficulty, and in reviving the manufacturing industry of Holland, and in enabling the Dutch to furnish the Javanese with their cotton stuffs, which are their principal articles of importation from Europe. Thus this branch of commerce has doubled in the space of ten years, and yet the European manufacture has not destroyed native industry at Java, as it has been the case in the Indies. The population of Java, itself supplied in a great measure from Europe, sends to the other islands two millions' worth of linen of an inferior quality. Cloth and silk, which are only made use of for the clothing of priests and princes on days of ceremony, are very little bought in these possessions. The total amount of the importation of Java in 1839 was eighty millions of francs: forty-five millions coming from Holland, thirteen and a half millions from England, 876,000f. from France, 1,300,000 from Hamburg and Sweden, a million from the United States, and the rest from Asia.† The exportations have

* "The *Hague Gazette* denies that the Chinese cultivate pepper at Sumatra, or the palm at Riow. It is the gum called *terra japonica* which M. Bois le Comte must have mistaken for the produce of the palm.

† "According to the official statement of the commerce of Java, in 1839, the total of importation was 68,000,000 of francs, of which about—

32,000,000f.	from Holland.
8,000,000f.	" England.
700,000f.	" France.
900,000f.	" Hamburg, Sweden, Denmark, and Bremen.
600,000f.	" America.
26,000,000f.	" The Cape of Good Hope, Bengal, and the rest of Africa.

risen to 136,800,000f. ; 100,820,000f. for Holland, 4,300,000f. for France, 1,000,000f. for Sweden and Germany, 2,050,000f. for the United States, and the rest for the Asiatic countries.* They consist of few natural products, but of great value.

	Kilogrammes.	Value in francs.
Coffee	46,934,000	50,565,000
Sugar	54,500,000	23,738,000
Rice	68,000,000	9,941,000
Indigo	596,000	7,578,000
Tin	2,975,000	5,057,000
Nutmegs and cloves	553,000	4,707,000†

"I beg your excellency will permit me to illustrate these figures by a few points of comparison :—

		From the Metropolis.
The possessions of the English company import	175,000,000f.,	of which 67,000,000f.
The possessions of the English government import on an average	462,000,000	" 215,000,000
The French colonies imported in 1838	75,000,000	" 65,000,000
The Spanish colonies in 1838	176,000,000	" 34,000,000
The Portuguese colonies in 1836	24,000,000	" 1,300,000
The Island of Java in 1839	80,000,000	" 45,000,000
The Dutch colonies of America in 1839	80,000,000	" 7,000,000

"The commercial relations of Sumatra, and of the other islands in the Sound, carried on in a great measure by the natives, cannot be estimated here ; a part entering Java, from thence to pass into Europe, contributes to increase the commerce of this island.

		For the Metropolis.
The possessions of the English company export	295,000,000f.	of which 80,000,000f.
The possessions of the English government export	562,000,000	" 387,000,000

* "According to the same document, the exportations in 1839 amounted to about 120,000,000f.

81,000,000f. for Holland.

4,000,000f. " England.

1,600,000f. " France.

1,200,000f. " Denmark, Sweden, Hamburg, and Bremen.

200,000f. " Spain, the Isle of France, Bengal, China, Japan, &c.

23,000,000f. " The Indian Archipelago.

† "According to the official statements, the exportations of 1839 consisted of the following articles :—

		Value.
Coffee.....	46,781,729 kilogrammes	48,000,000f.
Sugar.....	53,839,114	" 23,000,000f.
Rice.....	68,144,634	" 9,500,000f.
Indigo.....	588,764	" 7,500,000f.
Tin.....	2,941,723	" 4,800,000f.
Spices.....	563,303	" 4,700,000f.
Divers articles.....		23,000,000f.

The French colonies have exported		For the Metropolis.
in 1838	83,000,000	of which 80,000,000
The Spanish colonies in 1838	156,000,000	“ 34,000,000
The Portuguese colonies in 1836	31,000,000	“ 9,000,000
The Island of Java in 1839	136,000,000	“ 110,000,000
The Dutch possessions of America	15,000,000	“ 15,000,000

“ The tonnage of the vessels which transport these exchanges is taken at their entering port as well as their leaving it :—

For the possessions of the English company at	1,050,000 tons, of which	For the Exchanges with the Metropolis.
The possessions of the English government	6,373,000	“ “ 2,162,000
The French colonies, in 1838	770,000	“ “ 421,000
The Spanish colonies, in 1838	1,044,000	“ “ 274,000
Java, in 1839	546,000	“ “ 105,000
All the Dutch Indies, in 1840, Java included	272,000	“ “ 272,000
The Dutch possessions of America in 1839*		40,000

“ Thus the navigation and commerce of Holland derive from the island of Java alone almost equal advantages with those obtained with the navigation and commerce of England from the vast Indian continent and its hundred million of inhabitants. The exchanges made between England and the Indies amount to 147,000,000 francs. Those of Holland with Java amount to 146,000,000 francs. The navigation between the Indies and England occupies 214,000 tons ; that between Java and Holland occupied, in 1839, 195,000 tons, and in 1840 more than 220,000. These results have been brought about by the combination of two ideas. One of them is political—the substitution of labor for impost, and the position of protectors assumed by the Dutch over the relations of the natives with each other ; the other is commercial, being the formation of the general society of commerce.

“ The Dutch boast of having been at several epochs at the head of European progress, and of having given birth to the great improvements afterward adopted by other nations. It is they who gave the example of those companies, commercial and sovereign at once, imitated by other countries in the Indies. The first constitution of the Dutch East India Company was purely commercial. During the seventeenth century it continued the same, and accumulated wealth. In 1693, it had 102,000,000f. of profit. But this money was soon spent when the company had to provide for the expenses of the wars necessary to consolidate and extend its territorial empire. At the end of the eighteenth century it had a debt of 252,000,000 of francs, with 5,540,000 francs interest.

“ The Dutch government then thought that the system of this company was superannuated, that its exclusive character and political power did not answer the state either of opinion or of things. It refused, in the year

* “ The importations of the American colonies of Holland in 1839 did not amount to more than from 4,000,000 to 5,000,000 of francs, the greater part coming from the metropolis.”

1795, to renew the privileges of the society, took the debt upon itself, and opened its possessions to the commerce of both the Dutch and the foreigner, yet reserving to the former divers advantages by its regulation of the customhouse. These advantages were found insufficient, and the preponderance which the English drew, from the superiority of their capital and of their navigation, had given them the supply of the Dutch colonies.

"A law of the 29th of March, 1819, authorized the establishment of the General Society of Commerce of the Low Countries. According to its statutes, the association is to exist till the 31st of December, 1849. The proprietors of four shares, at least, (each share is worth 1,000 florins,) represent the whole society, and form its legal body. This body is divided into six electoral colleges, or is united into one general assembly, which, during the latter years, consisted of about three hundred voting members. The electoral college of Amsterdam, and that of Rotterdam, choose, among the possessors of at least seven shares, four commissioners; those of Dordrecht, of Leyden, of Midelburg, and the Hague, name each one; the king names a third, who presides over the assembly of commissioners. This commissioner is permanent; the others are renewed every year by one fourth. The commissioner, together with the three directors, form the council of the society. The first of the three directors is president of the direction of the council of the general assembly, and of the society. He is named by the king, without any candidatedship; the other directors are also named for the first time by the king; but when one of their places becomes vacant, the council present to the king, in order to fill it up, a list of candidates chosen among the possessors of more than twenty-five shares. The direction forms the executive power of the society; makes contracts, buys, sells, receives, keeps, distributes the revenues, names and dismisses those employed. The council holds each year a session, which opens on the first Monday of May; it receives the accounts, and makes a statement of the affairs; it makes regulations, and gives instructions; these regulations and instructions are to be submitted to the approbation of the king. The general assembly has no periodical meeting; when the resolutions to be taken deviate from the articles first agreed upon, the council calls an assembly, after having obtained the king's consent. The directors are forbidden to accept any public office, or to take part in any commercial enterprise. Their shares, as well as those of the commissioners, deposited as surety, can be confiscated, in case of any infraction of the laws of the society. The directors receive a salary, and these salaries are very large for an economical nation. The president gets 25,000*fl.*, the directors 17,000*fl.*, and each of them has besides one half per cent from the general dividend, six francs per league for the expenses of travelling, and twenty-one francs a day for being present during the session. King William has kept the General Society of Commerce as a merely commercial company, without any right of government or exclusive privilege. The India company had ministers at Java, an army, and a fleet: the society has but a factory there, composed of a president and two members. It cannot possess land, for it is obliged to overlook the culture of all the land. As it can only make use of the ships made by the Dutch, and belonging to them, it cannot possess any itself. In order that its large freights may be fairly distributed among the Dutch, the company has no vessels of its own, but employs the shipping of the Dutch ports in such proportions that Amsterdam has $\frac{2}{4}$, Rotterdam $\frac{1}{4}$, Dordrecht $\frac{2}{4}$, and Midelburg, also, $\frac{2}{4}$.

Those employed by government deliver the produce at Java to the factory ; the society is to transport it into Holland according to a fixed price ; this price was, in 1839, twenty-eight centimes per kilogramme of coffee, and twenty-three centimes per kilogramme of sugar. The Dutch government would increase its revenue one third by selling the produce of Java in Java, but then the aim would not be attained. Dutch navigation must be kept up by the transport of the produce, and the produce must be brought to Holland, in order that Holland may remain the great market. The result of this arrangement has answered the largeness of those views which dictated them. When the society was established, the Dutch flag only transported half the produce of their Indies, and now it transports all.

" In the year 1838 alone, the society freighted upwards of 140 vessels, of 100,000 tons burden, and shared amongst the proprietors a salary of 16,532,000f. In 1839, the tonnage of the vessels freighted was of 116,000 tons, and in 1840, of 138,000 tons. Such encouragement rendered the premium given by government for the building of vessels superfluous. It has been enabled to spare this expense ; and, in spite of the suppression of the premium, the work upon the docks is more active than ever in all the Dutch ports. During the year 1839, 123 vessels, of 39,918 tons, have been built. Holland and Belgium united only possessed, in 1826, 1,176 vessels, of 148,000 tons burden ; on the 1st of January, 1840, Holland alone possessed 1,528 vessels, of 270,000 tons burden, all built at Java, and belonging to the colony. The society has engaged, since 1839, to take and keep a naval apprentice for every 200 tons, yearly ; so that each year from 600 to 700 young men are formed for navigation.

" Whilst the society thus increased the national marine, it also gave to Holland that manufacturing industry so long flourishing, and so lately ruined, by the weight of taxes, and the dearness consequent upon them.

" The re-establishing manufactures in Holland seemed an impossible undertaking ; what manufacture could have risen above the expense of its first establishment, and support the expense of the apprenticeship of a population unaccustomed to the work ? King William saw this obstacle ; but he thought that once it was surmounted, the Dutch manufactures could occupy and give a livelihood to the mass of poor to whom the want of cultivable land leaves deprived of work, and at the charge of the treasury. The king then inserted in the charter of the society, the express stipulation that it should make use of Dutch produce for exportation, unless this could not be procured at a reasonable price ; and interpreting this expression himself, he caused the society to make engagements with the manufactures which were to be established upon the faith of its orders ; and supporting these operations by the customhouse tariff, by the power of the company, and by all the protection of the political authorities, and at the same time erecting manufactories on every point of the kingdom, he took away the supply of Java from England. In 1824, the Dutch manufacturers sent out to Java 430,000f. worth of cotton stuffs, and the English manufacturers 5,400,000f. worth. In 1839, the Dutch sent out to Java 15,484,000f. worth of cotton stuffs, and England 6,850,000f. worth.* By

* The importation of national cotton stuffs at Java in 1839, was of about 15,000,000 francs, and that of English cotton of 5,000,000. But the cotton thread, which is made use of in the manufactures of Holland, comes almost all from England. The annual value of English cotton thread thus employed being 5,000,000 francs, this sum is to be

bringing upon the market of Java an association provided with so great a superiority of means, and supported by all the power of government, the king was establishing a regular monopoly. He nevertheless took care to avoid this evil. Any operation of an exclusive character was forbidden to the society by its statutes. Foreigners continue to bring their merchandise to Java, and to buy the produce of the soil; only they find another competitor, and this competitor governs the market by the power of its capital. The Dutch, whether individual commercial houses or the society, are also favored by the dispositions of the tariff, which exempt from duty the produce exported by Dutch ships, and which reduces, for Dutch merchandise, the general duty of importation from 25 per cent to $12\frac{1}{2}$ per cent. Under this new condition about fifteen Dutch houses, and six or eight English, French, and American houses, still remain at Java. These houses kept, or sent to foreign countries in the year 1839, 5,000,000 florins' worth of coffee, 3,000,000 florins' worth of sugar, and 8,000,000 florins' worth of rice. They received from foreign countries, and distributed in the island, 20,000,000 of florins' worth of merchandise, one fourth of the importation of Java. The society, in its purchases, its sales, and in the mode of its transports, making its interest subordinate to the general interests of the country, has realized such considerable profits, that it has been under the necessity of reducing them, and has just consented to diminish the advantage of its contracts with the state. In 1838 and 1839, its dividend was $8\frac{1}{2}$ per cent, besides $4\frac{1}{4}$ in reserve, and $4\frac{1}{2}$ per cent interest, in all $17\frac{1}{4}$ per cent. The dividend of the bank of London has never exceeded 10 per cent.

"The society, increasing its capital as it extended its operations, has raised the former to 97,250,000 florins. The possession of this capital ranks it among the number of the great commercial associations which exist in the world; the capital of the Bank of Amsterdam is 20,000,000 of florins; that of the Bank of France 90,000,000 millions; and that of the Bank of England 260,000,000. King William Frederic possesses himself 20,000,000 of the capital of the society.* After having regulated the statutes, he had guaranteed to his associates an interest of $4\frac{1}{2}$ per cent. During two consecutive years, 1827 and 1828, he realized his guarantee, and paid from four to five millions of francs interest. The abdication of King William Frederic has been for the society a crisis from which it is not yet extricated. It is not yet known what power this prince preserves as an individual in an association of which he remains the guarantee and the principal shareholder. The situation of the new king with regard to this association is not yet determined. Every one seems particularly stricken with the abuses which have resulted from the dependence of the society upon the crown, and look to the cessation of this dependence for more surety to the public finances, and more liberty to commerce; but perhaps it will not be long before the absence of this superior power will be felt, which caused to converge towards the same action the services of

deducted from the number of the importation of Dutch cotton stuffs, and to be added to that of the English importation. The share of English industry in the importation of cotton stuffs to Java, in 1839, was thus about 10,000,000 francs, and that of the Netherlands 10,000,000 francs also.

"* This seems incorrect. By the 14th article of the royal decree of March 29, 1824, King William Frederic became security for himself and his family for a sum of 4,000,000 of florins in the capital of the company."

the state and the operations of commerce, which combined the establishment of a manufacture in Over Issel with the cultivation of a field at Java, and the levying of a tax with the success of a commercial speculation. What is truly great in this creation, made and conducted by King William, is, that by it the true policy came to dominate in both the fiscal spirit of the treasury, and the mercantile spirit of a company. It would be melancholy and pernicious to see a divorce between the government and the company, the one looking to economy, the other to profit. Both aims would be missed by the separation."

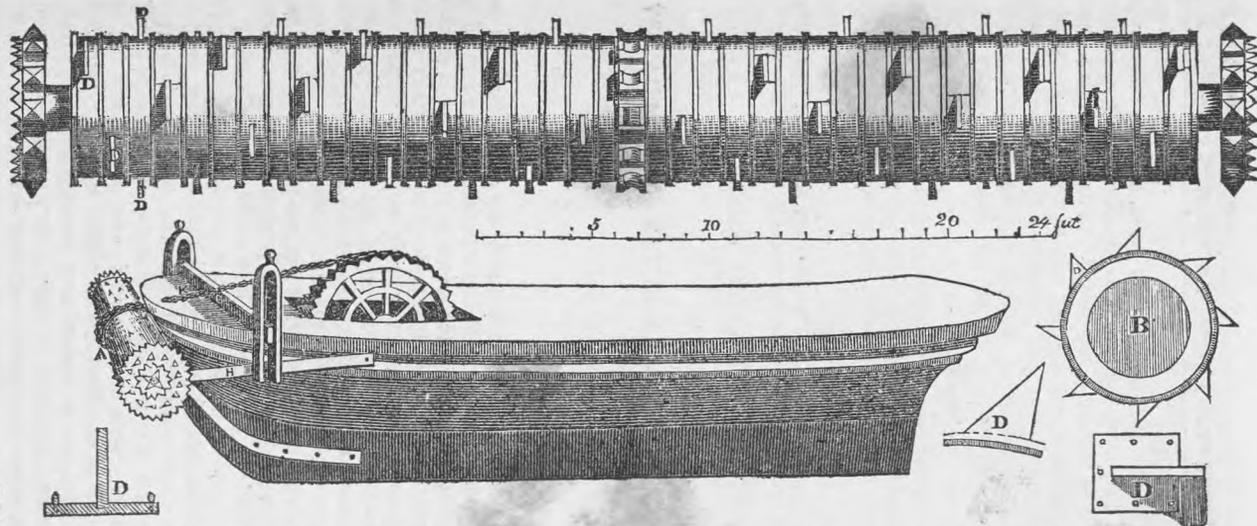
ART. VI.—TOWNSEND'S ICE-BREAKER.

To the Editor of the Merchants' Magazine :

PERMIT me, dear Sir, through your widely circulating journal, to lay before the public the plan of an invention which, if successfully applied, will prove one of the most valuable discoveries of modern times. It is comprised in a machine, constituted of a cylinder armed with teeth, and revolved by means of a steam-engine, which is designed to advance upon our rivers and bays, and to break a channel through the ice during the winter, thus affording a free track for steam navigation in that season. The inventor is Mr. Jacob Townsend, a respectable and practical mechanic of the city of New York, who has devoted much time and expense to the instrument, and already taken out a patent. The advantages resulting from the success of his invention would be scarcely second to those of the application of steam to the propulsion of vessels by Mr. Fulton, for it would nearly double the benefits that are now derived from this agent, by extending its operation to the whole year, it being now obstructed by the ice through a considerable part.

It seems extraordinary that in our own age, when the agent of steam enables us to create and apply almost an indefinite amount of power to so many various objects, the simple operation of breaking so soft a material as that of ice has never been successfully effected, and the benefits that would flow from its accomplishment should scarcely cause us to regret any ordinary sacrifices that we might make for the attainment of the desired end. The plan of the ice-breaker of Mr. Townsend has been carefully examined by scientific and practical men, who have expressed their decided conviction that it promises to be effective in attaining the anticipated object. The instrument thus invented by Mr. Townsend, is earnestly commended to the attention of the patriotic and liberal-minded men of our large cities, as well as those of the country. While I am well aware that our patent office in Washington exhibits, in its numerous unsuccessful models which are there deposited, the offspring of many a furrowed brow and sleepless night, melancholy evidences of disappointed, nay, blasted hopes ; does that fact present any good reason why an invention of so much importance, that promises reasonable success, should not be aided by the public support, in order that the experiment may be fairly tested ? For my own part, I conceive that the establishment of a joint-stock company for that direct purpose, would be the most favorable mode of advancing the success of this invention—an invention whose value will scarcely be deemed visionary when backed by the names of the well-known gentlemen who have

attested the feasibility of the object, and whose operations are shown by the description of the instrument, and the mathematical demonstrations which are here subjoined.



The following description of the Ice-breaker is given in the Report of the Committee on Arts and Sciences of the Mechanics' Institute :

The committee are of opinion, that the invention offered for their consideration by Jacob Townsend, presents a combination of effective forces sufficient to easily break the ice formed in our bay, and the rivers emptying into it, during a winter of ordinary severity ; and that by a proper application of power to the machine, its progress through ice may be increased to such an extent as to make it a valuable invention. The full scope of its usefulness, however, will be better ascertained by experiment, as is the case with all inventions, and more especially those in which an application of mechanical laws is intended to counteract an irregular operation of natural laws.

DESCRIPTION. A is a cylinder, with its periphery and ends armed with strong iron, hooked, and wedge-shaped

teeth, D. This cylinder may be made of wood, in the usual manner, and have the teeth fastened on its periphery by means of strong iron hoops bending over flanges cast upon the base of the teeth; or it may be formed entirely of iron, cast in rings or zones, and united in a manner similar to iron water-pipes. This cylinder is suspended horizontally in front of the boat, by an arrangement that permits of its being raised or lowered at pleasure. H, arms enclosing the gudgeons of the cylinder, and attached to the sides of the boat by strong iron bolts. G, a beam supporting the yokes or stirrups in which the arms rest. K, a chain band to communicate motion to the cylinder, passing over spurs on the cylinder and a cogged ring on the spur wheel. The arrangement of the teeth on the cylinder, as represented in the engraving, is spiral.

I think you will agree with me, Sir, that the advantages flowing from this successful experiment can scarcely be overrated. A free navigation between New York and Albany, and through the other channels of water-communication to the port towns along our seaboard, and in the interior, would throw a new aspect over the commercial condition of the country, and add greatly to the productive power of the people and the wealth of the nation. As New York is entitled to the credit of the discovery of steam navigation, so also, let New York be instrumental in the first successful establishment of steam navigation throughout the year. With the hope that my few remarks may direct the attention of all who are interested in commerce to the invention of Mr. Townsend, I subscribe myself,

Sir, yours very respectfully,

FULTON.

ART. VII.—LAWS RELATIVE TO DEBTOR AND CREDITOR.

NUMBER XII.

DEBTOR AND CREDITOR IN ILLINOIS.*

Suits in Illinois for the recovery of debts, are commenced either by *summons, capias, or attachment.*

BY SUMMONS.

By this mode, the debtor is simply summoned to appear on the first day of the next term of the court, to answer the complaint of his creditor, and his person or property are thereby, prior to judgment, in no wise affected.

BY CAPIAS.

A *capias*, requiring bail for the debtor's appearance at court, may be issued when the plaintiff or other credible person who can ascertain the sum due, or damages sustained, will make oath that the same will be in danger of being lost, or that the benefit of whatever judgment may be obtained will be in danger, unless the defendant be held to bail. If the requisite bail is not given on arrest, the defendant must either procure a discharge, as is provided by the insolvent act, or stand committed until the sitting of court.

* Prepared for the Merchants' Magazine, from the Statutes, by Charles Gilman, Esq., of the Quincy, Illinois, bar.

BY ATTACHMENT.

A writ of attachment may be issued against resident debtors, when any creditor or his agent shall make complaint on oath, or affirmation, to the clerk of the Circuit Court, that his debtor is about to depart from the state, or has departed therefrom, with the intention in either case of having his effects and personal estate removed without the limits of the state, or stands in defiance of any officer authorized to arrest him on civil process, so that the ordinary process of law cannot be served; and, also, that such debtor is indebted to such creditor in a sum exceeding twenty dollars of lawful money of the United States, specifying the amount and nature of such indebtedness. Before the attachment is issued, in addition to this oath, a bond, with approved security, executed by the party, his agent or attorney, payable to the defendant in double the sum claimed to be due from defendant to plaintiff, conditioned for satisfying all cost which may be awarded to the defendant, in case plaintiff is cast in the suit, and also all damages which shall be recovered for wrongfully suing out such attachment, must be also filed with said clerk. This attachment reaches all and singular the lands and tenements, goods and chattels, rights and credits, moneys and effects of what nature soever, in whosoever hands or possession the same may be found, and whose names are inserted in the writ as garnishees.

The jurisdiction of justices of the peace, in cases of attachment, extends to the sum of fifty dollars.

If the debtor is a non-resident, and cannot personally be served with process, and has any estate, real or personal, within the state, such estate may be reached by attachment as is herein before provided.

If two or more persons not residing in the state, are jointly indebted, an attachment may be issued against their separate and joint estate, on the oath, or affirmation, of non-residence, particular residence, and indebtedness of such debtors.

A creditor who is absent from, or a non-resident of the state, may have an attachment against the estate of his debtor, upon his agent or attorney making the requisite oath, and filing a bond as in other cases.

In all cases by attachment or otherwise, if the plaintiff is a non-resident, a bond or obligation for costs, signed by some responsible person residing within the state, must be filed prior to the commencement of the suit.

Whenever more than one attachment shall be issued against the same defendant, and returned to the same term of the court to which they are returnable, or where a judgment in a civil suit shall be also rendered at the same term against the defendant, who is the same person and defendant in the attachment or attachments, each attaching and judgment creditor will receive in proportion to his respective demand.

When suits have been commenced by summons, an attachment in aid thereof may be issued at any term pending such suit, upon the filing of the proper affidavit and bond.

In cases of attachment of real estate, the officer serving the process is required to file a certificate of the fact with the recorder of the court where such land is situated, and from and after such filing, the levy takes effect as to creditors and *bona fide* purchasers without notice.

Judgments, in all cases, create a lien on real estate, from the last day of the term of the court in which the same may be rendered, for the pe-

riod of SEVEN YEARS, if execution thereon be issued within one year from the time of rendition.

The following articles of personal property are exempted from attachment and execution, viz: for every person being the head of a family, and residing with the same, one milch cow and calf, the wearing apparel of himself and family, necessary bed and bedding, one spinning wheel, and a pair of cards, provisions not more than sufficient for the support of the family three months, and the necessary utensils for cooking, and necessary household furniture, not exceeding in value fifteen dollars, and sixty dollars worth of property suited to his occupation and condition; and for every single person, his wearing apparel, and necessary military arms and accoutrements.

The plaintiff may elect on what property he will have execution levied, except the land on which defendant resides, and his personal property, which shall be last taken in execution. All property so taken on execution issuing on a judgment rendered, and founded on any contract entered into prior to the first day of May, A. D. 1841, must be valued and appraised by three householders on oath, before it can be sold, which valuation and appraisal must have reference to its cash value; and when offered for sale, if no person shall bid two thirds of said valuation, it shall not be struck off.

IMPRISONMENT FOR DEBT.

Whenever any debtor shall refuse to surrender his estate, lands, tenements, goods or chattels, for the satisfaction of any execution issued against his property, the plaintiff, his agent or attorney, on making affidavit of such fact before any justice of the peace, and filing the same with the clerk of the court from which the execution issued, or with the justice who issued it, is entitled to an execution against the body of the debtor.

The debtor when arrested on *mesne process* or execution, may go before the probate justice of the peace, and if he desire, be allowed a jury of seven householders of the neighborhood, who shall be sworn to try the fact of refusal to surrender the property of such debtor for the benefit of his creditors; if the jury find a verdict of "guilty of such refusal," then the debtor is required to surrender his property, or make a schedule, as hereinafter mentioned; but if their verdict is "not guilty," he shall then be discharged from arrest.

If the debtor does not claim such a jury, he must make a full, fair, and complete schedule of all his property of any and every description, or kind, name, or nature, whatsoever; together with a true and perfect account of all the debts which he may owe at the time, which schedule must be subscribed by the debtor, who shall also take and subscribe the following oath or affirmation, to wit: "I do solemnly swear (or affirm, as the case may be) that the schedule now delivered, and by me subscribed, contains, to the best of my knowledge and belief, a full, true, and perfect account and discovery of all the estate, lands, tenements, hereditaments, goods, chattels, and effects, unto me in any wise belonging, and such debts as are unto me owing, or unto any person or persons for me, or in trust for me, and of all securities and contracts, whereby any money may become due or payable, or any advantage or benefit accrue to me, or to my use, or to any person or persons for me, or in trust for me; that I have not lands, money, or any other estate, real or personal, in possession,

reversion, or remainder, which is not set forth in this schedule: nor have I, at any day or time, directly or indirectly, sold, lessened in value, or otherwise disposed of, all or any part of my lands, money, goods, stock, debts, securities, contracts, or estate, whereby to secure the same, or to receive, or expect to receive, any profit or advantage therefrom, to defraud any creditor, or creditors, to whom I am indebted in any wise whatsoever; and also, that this schedule contains a true and perfect account of all the debts which I owe to any and every person whatsoever."

Any creditor of such debtor has the right to appear before the judge of probate, and contest the truth of the schedule; if, after a full investigation and fair examination of the debtor and witnesses, if any, it shall appear to the judge that the proceedings on the part of the debtor are fair, just, and honest, he shall appoint an assignee of the debtor, and the debtor shall immediately, by endorsement on said schedule, assign all, or so much of his property as the judge may deem sufficient to pay all the debts, interest, costs, and charges in the schedule mentioned, to said assignee.

When the debtor shall produce to the judge the receipt of the assignee, that he has received all the estate, &c., so assigned to him, the judge is then required to give the debtor a discharge in writing from imprisonment, which discharge shall exempt the debtor from arrest on account of any debt mentioned in said schedule, until the same shall be vacated by the due course of law.

An appeal to the Circuit Court is allowed to either party who may think himself aggrieved by the discharge of, or a refusal to discharge the debtor, on entering into the bond required by law.

The assignee of any insolvent debtor is required to make a settlement of the insolvent's estate before the judge of probate, within eighteen months after the date of the assignment, giving thirty days notice of making such settlement; and the judge shall make such order of distribution, as is made in cases of deceased persons, and the assignee shall pay the creditors their dividends within thirty days after such settlement, if all the debts have been collected.

Any debtor who shall be convicted of taking a false oath under any of the provisions of the Insolvent Act, shall be deemed guilty of perjury.

PROMISSORY NOTES, &c.

Promissory notes, bonds, due-bills, and other instruments in writing for the payment of money or articles of personal property, are made assignable by endorsement thereon, in the same manner as bills of exchange are.

Every assignor of any such instruments is liable, as such, if the assignee shall have used due diligence by the institution and prosecution of a suit thereon against the maker. If the institution of such suit would have been unavailing, or the maker had absconded, or left the state, when such instrument became due, the assignee is entitled to recover against the assignor, as if due diligence by suit had been used.

RATE OF INTEREST.

Six per cent is the legal rate of interest in Illinois, subject, however, to the provision that a higher rate of interest may be received, when an express contract has been made.

MERCANTILE LAW DEPARTMENT.

RECENT DECISIONS IN THE UNITED STATES COURTS.

United States Circuit Court.—Before Judge Thompson.—April term, 1841. One hundred and twenty-three packages of Glass. Barclay and Livingston, claimants, vs. The United States.

Thompson, J. This case comes up on a writ of error, from the district court for the southern district of New York: an information was there filed under the fourth section of the act of congress of the 28th of May, 1830, (8 vol. J. W., S. 340.) claiming a forfeiture of the goods in question upon an allegation, that the invoice was made up with intent, by a false valuation, to defraud the revenue of the United States; alleging that the goods were charged in the invoice, at a less price than they *actually cost* the importer. The information also contains an allegation, that the goods having been procured otherwise than by purchase, the same were charged in the invoice at a price less than their *actual value* at the time and place when and where procured.

The claims interposed by the claimants, allege that the goods were bona fide the property of Booth & Co. of Sunderland, in England, manufacturers, and were sent out and consigned to the claimants for sale. That an entry was duly made, and invoice produced and left with the collector, and denying that such invoice and entry were made with intent to defraud the revenue.

From these allegations in the pleadings, it appears that the entry was made by the claimants as consignees of Booth & Co., who were the manufacturers and owners of the goods; so that the inquiry upon the trial could not involve the *actual cost* of the goods, they not having been purchased; but must have turned upon the *actual value* of the articles. The case comes upon a bill of exceptions taken at the trial.

The district attorney gave in evidence, the entry made by the claimants as consignees of Booth & Co. upon the oath of Schuyler Livingston, and the production of the invoice and bill of lading. The district attorney also read in evidence, an affidavit annexed to the invoice, made by one John French, one of the firm of Booth & Co., as evidence that they were the manufacturers of the glass in question, which affidavit stated that they were the true and lawful owners of the goods, and that he and his partners were the manufacturers, and that the nett prices charged in the invoice were the current value of the same at Sunderland.

The district attorney then introduced Abraham B. Mead, one of the appraisers, and other witnesses, who appraised the goods at the time and place of importation at a higher value than that stated in the invoice.

On the part of the claimants, testimony taken under a commission was introduced, to show that the fair market value of the goods at the time and place of importation was according to the prices stated in the invoice. Among other witnesses, James Riche swore, that he knew the shipment in question and the invoice thereof, (a copy of which was annexed to his deposition,) and which exhibits the fair market value of the articles at Sunderland, at the date of the invoice. That his knowledge was gained by occasionally selling goods in Booth & Co.'s warehouse, and by having access to their books at all times. James Wilson was then called as a witness on the part of the claimants, who swore that for two years and a half last past he had been conversant with the importation and sales of glass ware from the Tyne river and its vicinity. And the claimants then offered to prove by this witness the selling price of glass of this kind in New York, and what would be market price at Sunderland, in order to yield a profit here. This inquiry was objected to, and excluded by the court, and the admissibility of such inquiry is one of the questions that has been made in the case, and the only one relating to the admissibility of evidence. The affidavit annexed to the invoice was introduced on the part of the United States, and the force and effect of it, and the light in which it was considered

by the court, in the charge to the jury, will depend on other considerations than the admissibility of the evidence.

I do not see on what grounds this inquiry, offered to be made of Wilson, was improper or irrelevant. Had the goods in question been *purchased* in England, the *actual cost* might have been proved, and would perhaps have been the evidence required. But the issue was as to the real or market value of the article at the date of the invoice. And this was a point not susceptible of absolute certainty in proof, but was to be made only by circumstances, and depending in some measure upon the opinion of witnesses. The selling price in New York was certainly not entirely irrelevant. It contributed in some measure to aid an opinion upon the actual or market value of the article at the place of exportation. It is not to be presumed that an importation would be made at a valuation upon which a loss must be sustained, according to the selling price, in the market here. It was evidence of the same character as that given on the part of the United States, by the appraisers. That testimony could be no more than mere matter of opinion, derived from their acquaintance with the article, and their knowledge of the market price here and in England. And it was precisely the inquiry that had been made of Thomas D. Moore, a witness on the part of the United States. And although made on a cross-examination, it was made without objection, nor do I perceive any objection that could have been made. The opinion of the appraisers as to the foreign cost or market value of the goods, is undoubtedly, under the revenue laws, *prima facie* evidence of the fact, and unappealed from may be conclusive evidence as to the amount of duties, but certainly cannot be conclusive upon the question of forfeiture. It must undoubtedly be rebutted by clear and satisfactory evidence. The weight to which it is entitled, when compared with the evidence on the other side, is to be weighed by the jury, who are to decide whether the inventory was made up with intent to defraud the revenue. I think, therefore, that the inquiry offered to be made of Wilson was improperly excluded.

The other question in the case relates to the affidavit annexed to the invoice. This was introduced on the part of the United States, and the inquiry respecting it grows out of the charge of the court. The judge instructed the jury, "That the affidavit accompanying the invoice was not to be looked to by them at all as evidence in the case. That it was not taken as evidence, was given without the presence of the adverse party, or any notice to him, was a voluntary affidavit of the party in his own behalf, and was merely a customhouse document, required to accomplish the entry. That it was not a judicial oath on which the party could be indicted, and was no higher evidence than the invoice itself, or a letter of the party, and that the claimants were not entitled to any presumption in their favor as to its verity, or to the benefit of any doubt, so far as this allegation of the claimant is concerned."

I cannot view the affidavit annexed to the invoice in this light. It was evidence introduced on the part of the United States, and was of course before the jury for some purpose. And if it was properly before the jury, it was their province to decide upon the weight of it. And they could not be instructed by the court not to look to it at all. It was not, to be sure, taken as evidence in a cause pending in court, and which would require notice to the other party, but it was a voucher required by law to accompany the invoice, and could not be considered merely as the voluntary oath of the party, but as evidence of the verity of the invoice, not conclusive, but still adding some sanction to the invoice. It can hardly be supposed that the government would require an affidavit to be annexed to an invoice, and at the same time considered it of no force or effect whatever. It was the voucher required by law, and upon which the goods would be admitted to an entry, unless objected to by the collector, upon the ground of a false and fraudulent valuation. It can form no objection that the party could not be indicted for perjury. This arises from want of jurisdiction of the case in our courts. Had the affidavit been taken here, and is false, the party might have been indicted for perjury. If the affidavit was no higher evidence than the invoice itself, it is not easy to understand why the

act of congress should have required it to be superadded to the invoice; it must certainly have been intended to give it some additional sanction. Admitting the seventy-first section of the act of 1799, (3 vol. L. U. S. 200,) to be in force and applicable to the case, it does not call for the view taken of the affidavit in the court below. That act only declares that if upon the seizure, the property shall be claimed by any person, the onus probandi shall lie upon such claimant, but that such onus probandi shall lie on the claimant only where a probable cause is shown for such prosecution.

The evidence of the appraisers was undoubtedly sufficient to make out the probable cause, and to throw upon the claimants the onus of proving the valuation of the article as stated in the invoice, and that must be shown by testimony satisfactory to the jury, but it determines nothing with respect to the kind of evidence necessary to establish the fact. Had the goods in question been purchased, it would have been in the power of the claimants to show the actual cost. And if that had not been done, it would have afforded a strong inference against them; such evidence being in their possession or within their power; but not presumed to be in the possession or within the power of the United States. But that principle does not apply to the present case. The inquiry here was as to the real or fair market value of the article, and this did not depend upon any private knowledge in the possession of the claimants; but upon matters of public information equally open to the United States as to the claimants.

The cases referred to upon the argument, where a construction had been given to the onus probandi, required on the part of the claimants under the seventy-first section, do not apply to the case now before the court. The inquiry in those cases was as to the *actual cost* of the goods. This was a fact susceptible of positive proof within the power of the claimant; and its non-production, or not accounting for its absence, was a kind of negative evidence which ought to have great weight in the case. I cannot, upon the whole, concur with the district court in the view taken of the affidavit annexed to the invoice. It was an authentication of the invoice required by law, and was in evidence before the jury, and the weight to be attached to it was for them to decide. The judgment of the district court must therefore be reversed.

MARITIME ASSAULTS.

On the trial of an action brought by a seaman against the mate of a vessel, for an assault and battery, on the admiralty side of the district court of the United States, Judge Hopkinson gave his opinion of suits of this description—he said:—

In action by a mariner for his wages, in which he seeks for nothing but a remuneration for his labor, and the owner or master of the vessel endeavors to deprive him of it by an allegation of a forfeiture, or to make deductions by charges of misconduct, I hold the respondent to strict proof, and require of him to show clearly, a good and sufficient cause for the defence. I will not defeat such claim and take from the man his hard earnings, for services which have been rendered and received, for unimportant acts of disobedience or rude and impertinent language, unless it be of a very gross character or dangerous to the discipline of the ship, and subordination of her crew; faults which such men as seamen commit without any serious design of insubordination or insult, but which masters and mates, not unfrequently as rough as their men, are fond of calling *mutiny*, to resist a demand for wages. We do not look for the manners of a drawing-room on board of a ship, nor should we punish as an assault and battery those violations of the pride or person of a sailor, which in another class of men must be repressed or they would lead to mortal consequences. While, therefore, in a suit brought by a sailor for his wages, I would make every reasonable presumption to protect him from loss; on the other hand, if he brings his officer here for an assault upon him, to which he is frequently instigated by bad advisers on shore, I reverse the proceeding, and require of him to make out a clear case, by credible and consistent proof. I throw the burden

on him, with no disposition to favor frivolous complaints, or encourage such litigation. It is not enough to show on the part of the officer, coarse and threatening language, it is the idiom of the sea, "signifying nothing;" nor even a rash, and perhaps, unnecessary blow, for if such occurrences are to be the ground of these suits, a vessel will seldom come into port, without furnishing more or less of them. Officers will be under such an apprehension of them, that they will be unable to maintain that discipline, which is essential to the safety of all. But when I can see there has been a deliberate design to oppress a seaman, an assault upon him, to gratify some personal ill will, or indulge a vindictive temper; or where there has been a wanton and tyrannical abuse of power; or if a serious injury has been inflicted by the violence of passion, however sudden, in such cases, redress for the wrong will always be found in this court, so far as I am capable of affording it. Obedience and submission are the duty of a sailor on his voyage, and the law rewards him for them, by an ample protection against wrong, when he reaches his port, and comes within the power of the law. The weapon used by an officer for punishing a seaman, is always a subject of consideration and weight with the court.

Actions for assaults and battery were first brought in this court, since I came upon the bench. They were formerly prosecuted in the common law courts of the state, where the delay in obtaining a trial, the difficulty of having witnesses at the trial, and the heavy expense, were sufficient discouragements to prevent frivolous and vexatious suits. But the speedy trial to be had here, with little or no advance of money, where something may be gained and nothing lost, for the plaintiff cannot pay the legal costs if he is unsuccessful, has been a great encouragement to trifling complaints, and experimental suits, which are determined in few days. He may therefore venture on any chance, however desperate; he may get something; he can lose nothing. I desire to discountenance such experiments, but will freely open the door to every serious abuse of power given to the officers of a vessel to preserve her necessary discipline, and not for the indulgence of a cruel and vindictive temper, or the outbreaks of unrestrained and violent passions.

In the above case the libel was dismissed, but without costs. A short time after the above decision was made, another case occurred, in which damages were given; and the two opinions will show the ground assumed by the judge in the decision of actions by mariners against their officers for assaults.

Whitney vs. Eager.—Libel for assault and battery.—In deciding questions of this sort between the master of a vessel and his men, it has been my endeavor to preserve the ship from the danger to which she would be exposed by the refractory disobedience and turbulence of the crew, and, at the same time, to protect the crew from cruelty and unnecessary violence on the part of the master. Indeed, one of the most effectual means of securing their submission, even under ill treatment, is, that they shall be assured that they will receive redress at the end of the voyage, for any abuse of the power of the master over them. I have, in a late case, explained the principles on which my decrees are founded in such cases. I would avoid, on the one hand, encouraging frivolous and vexatious complaints, and on the other, be ready to give adequate redress for real and substantial injuries.

To maintain the necessary discipline of the ship, great power is given to the master, and obedience and non-resistance are exacted from the seamen; but the master is not, therefore, constituted an unrestrained tyrant, nor are the sailors made his defenceless victims. They are always, and everywhere, under the protection of the law, whether in the rivers of their country, or the most distant seas. They must be patient and submissive under suffering, and wait for the season of redress; when this arrives, the same power of the law which has sustained the master in his authority, will make him account for the abuse of it.

In this case there has been a clear and gross abuse of that authority, a wanton cruelty, which neither the law or common humanity can justify.

[After a careful comment upon, and examination of, the principal facts of the particular case, the learned judge continued:]

As to the *receipt* extorted from the libellant as the condition of payment of his wages, by which he was required not only to acquit the owners of any claim for wages, but to release the officers of the ship from all claims and damages, it has more than once been decided in this court, that no attention will be paid to such releases. An acquittance for the wages is the proper object and office of the receipt to be given on the payment of wages; to couple it with a release to the officers for all personal wrongs and injuries, especially when the wages are denied without it, will always be regarded as an attempt to impose upon the seaman, and as betraying a consciousness of wrong, and a design to get rid of it in this way.

I have been surprised that the owners of vessels do not give some attention, in selecting their masters, to the temper and manners of the individual.—In passenger ships, these are matters of real importance. What can be more disagreeable and distressing to passengers, than to witness, daily or hourly, the indulgence, by the master of their vessel, of a violent and cruel temper, and to hear from him coarse abuse, accompanied by vulgar swearing, in his treatment of his men.

The damages claimed in this libel are \$5000. This is probably as much as the captain would get in ten years of his life, and more than the libellant could earn in his whole life. This will not do. We must not become oppressors in our endeavors to punish and prevent oppression. We must consider the situation of both parties; and while we may imagine a case between parties in which this amount of damages would not be excessive for the same assault, it cannot be a case between the master and mariner of a ship. We must not bring distress and ruin on the one, to redress a wrong to the other, for the assault complained of, although severe and unjust, has produced no serious or permanent consequences to the libellant. It is enough that the respondent shall receive a lesson to restrain his temper, and to know that whatever his power may be at sea, a greater power is at home to call him to an account for the use he has made of it. This, with a reasonable compensation to the libellant for his injuries, will fully meet the justice of the case.

Damages decreed \$100, with costs.

THE BOOK TRADE.

1.—*The Poetry of Flowers, and Flowers of Poetry; to which are added a Simple Treatise on Botany, with familiar examples: and a copious Floral Dictionary.*

Edited by FRANCES S. OSGOOD. 12mo. pp. 276. New York: C. Riker. 1841.

This little book, edited by Mrs. Osgood, who appears to be attaining that distinction among our poets that her talented husband has already acquired in the kindred art of painting, is a striking example of the application of the fine arts to literature. We here have not only the most beautiful efforts of the intellect in delineating the poetry of flowers, which have been termed, we believe, by a German author, "the smiles of God," but the flowers themselves blooming in their natural colors upon the page. Mrs. Osgood has selected from the most distinguished authors those sentiments most appropriate to the illustration of her design, and has interspersed her own delicate poetry through those parts of the volume where they appeared most to be required. A familiar treatise upon botany, sufficiently extended to exhibit its general principles, is also embodied in the volume; together with a floral dictionary, which teaches the language of this poetry of nature. In its design and execution the present volume is one of the most exquisite that has issued from the American press, and furnishes an appropriate present for a friend, and a fitting ornament to the centre table.

2.—*Biblical Researches in Palestine, Mount Sinai, and Arabia Petraea*. A Journal of Travels in the year 1838, by E. ROBINSON and E. SMITH, undertaken in reference to Biblical geography. Drawn up from the original diaries, with historical illustrations; by EDWARD ROBINSON, D. D., Professor of Biblical Literature in the Union Theological Seminary, New York; author of a Greek and English Lexicon of the New Testament, &c. With new maps and plans, in five sheets. 3 vols. 8vo. pp. 571, 677, 721—in all, nearly 2000 pages. Boston: Crocker & Brewster. New York: Jonathan Leavitt.

This is no common work. We are anxious to do our part in calling the attention of our countrymen to one of the most stupendous monuments which patient research and profound scholarship have ever yet erected. Its principal laborer, Professor Robinson, was prepared for this great achievement by the whole course of his previous studies. He had besides, in Missionary Smith, the best of all guides; a man thoroughly familiar with the Arabic language, and the Syriac people; acquainted, too, with the difficulties and resources of oriental travellers; and as remarkable for his taste for geographical, as Professor Robinson for critical research. More than all, he has consecrated three years to the task, in the midst of the exhaustless treasures of learning in Germany, and aided, as a worthy companion, by her distinguished oriental scholars. No wonder a great treasure is here added to the world's literature—an invaluable geographical and historical encyclopædia for the inquirer upon Palestine, to the scanty collections in our own tongue—a splendid refutation of the charge that America does nothing for literature, to the growing achievements of her scholars in every department of science. With the humility of profound learning, Professor Robinson entitles his books "A first attempt to lay open the treasures of Biblical geography and history still remaining in the Holy Land—treasures which have lain for ages unexplored, and had become so covered with the dust and rubbish of ages, that their very existence was forgotten." But it is far more than this. Innumerable mistakes, handed down from father to son, and never suspected till now, this work has finally corrected: as it slowly becomes known, they will melt like shadows before the rising sun. We find this even in the geography, which might have been considered most accurate and certain; and still more in the history. Many points, wholly in doubt, this work has settled beyond any further question. And while we would not complain of the loaded learning and exact scholar style, we can see but one improvement of which the work is susceptible; and that is, a systematic arrangement of its contents into a physical and historical geography of the Holy Land. And this its author has now in view: may Providence bless his labors. The maps, published since the work itself, of Sinai, Arabia Petraea, Jerusalem, Southern and Northern Palestine, are the best ever given, and worthy of the masterly enterprise to which they belong.

3.—*Sermons on Important Subjects, by the Rev. Samuel Davies, A. M., President of the College of New Jersey. With an Essay on the Life and Times of the Author*. By ALBERT BARNES. 12mo. pp. 497, 556, 499. New York: Dayton & Saxton. 1841.

We learn from the publishers' advertisement, that so steady has been the demand for these sermons, that they feel the strongest confidence in presenting the Christian public with the present stereotype edition. Several editions of the work have been published in England, and this forms the fifth American. These sermons are held in high esteem by Christians of the popular faith, as presenting "vivid, fervent, and just exhibitions of the great truths" of religion, as understood by "such men as Edwards, the Tennents, and Strong, and Payson, and Dwight, and Griffin, and Bedell." The volumes contain all the published works of President Davies, besides an original introductory essay, embracing a very copious sketch of the life and times of the author, written with the force and elegance that distinguishes every thing from the pen of Dr. Barnes, one of the most learned and gifted divines of the Presbyterian Church, in this country.

- 4.—*A Dictionary, Practical, Theoretical, and Historical, of Commerce and Commercial Navigation.* By J. R. McCULLOCH, Esq. Edited by HENRY VETHAKE, LL. D., one of the Professors in the University of Pennsylvania; Member of the American Philosophical Society; Author of a Treatise on Political Economy, etc. 2 vols. 8vo. pp. 765, 803. Philadelphia: Thomas Wardle. New York: James P. Giffing. 1841.

The practical utility of this work is too well known by the commercial public to need our commendation. It is, or should be, found in the hands of every merchant and importer in the country. Our present purpose, therefore, is simply to call attention to the American edition of Professor Vethake. This edition has been reprinted from the last English edition, and embraces the whole of McCulloch's supplement. In the additions to this work, the American editor has, for the most part, confined himself to matters relating to the United States, or of especial interest to its citizens. Considerable information of this nature will be found appended to the articles, Aliens, Banking, Credit, Liens, Cotton, Importation and Exportation, Imports and Exports, Iron, Roads, Silk, and Tariff, as well as others. Several articles have been inserted on subjects not treated by McCulloch; such as Admiralty courts, Liverpool, London, &c. The language of Dr. Johnson, in his preface to Rolt's Commercial Dictionary, will apply with peculiar force to the edition of McCulloch before us. Though immediately and primarily written for the merchants, this dictionary will be of use to every man of business in the community. There is no man who is not in some degree a merchant, who has not something to buy and something to sell, and who does not therefore want such instructions as may teach him the true value of possessions or commodities. The descriptions of the productions of the earth and water which these volumes contain, may be equally pleasing and useful to the speculatist with any other natural history. The descriptions of ports and cities may instruct the geographer, as well as if they were found in books appropriated only to his own science; and the doctrines of funds, insurance, currency, monopolies, exchanges, and duties, is so necessary to the politician, that without it he can be of no use either in the council or the senate, nor can speak or think justly either on war or trade. It is in fact a work which no condition of life can render useless, which may contribute to the advantage of all that make or revise laws, of all that buy or sell, of all that wish to keep or improve their possessions, of all that desire to be rich, and all that desire to be wise. The volumes are neatly printed on good paper, and substantially bound.

- 5.—*Law and Lawyers, or Sketches and Illustrations of Legal History and Biography.* In two volumes. pp. 339, 333. Philadelphia: Carey & Hart. 1841.

These volumes form a valuable compendium of facts and illustrations, showing something of the general character of the English bar. Many personal anecdotes are brought together, which are of no less interest to the public than to the members of the profession. The most distinguished characters, who formerly adorned the English bar and bench, as well as many who are now living, flit before us in their most prominent traits. We commend the work as one which should find a place in the library of every legal aspirant who desires to raise the standard of his profession, and to become acquainted with the most interesting circumstances connected with its brightest ornaments.

- 6.—*An Argument on the Unconstitutionality of Slavery; embracing an abstract of the Proceedings of the National and State Conventions on this subject.* By G. P. F. MELLEEN. 12mo. pp. 440. Boston: Saxton & Pierce. 1841.

Mr. Mellen maintains, with all the earnestness of a thorough-going abolitionist, that, "according to our constitution, it is impossible either for congress or the states to establish slavery; that no man now is rightfully or legally held in bondage in this country; that the whole system is unconstitutional; and that it is in violation of its spirit and letter, and ought not to be upheld."

7.—*Pantology, or a Systematic Survey of Human Knowledge*; proposing a classification of all its branches, and illustrating their history, relations, uses, and objects, with a synopsis of their leading facts and principles, and a select catalogue of books on all subjects suitable for a cabinet library: the whole designed as a guide to study for advanced students, in colleges, academies, and schools, and as a popular directory in literature, science, and the arts. By ROSWELL PARK, A. M., Professor of Natural Philosophy and Chemistry, and member of the American Philosophical Society. 8vo. pp. 587. Philadelphia: Hogan & Thompson. 1841.

We regard this work as one of the most valuable publications which have recently issued from the American press, and alike creditable to the author and the publishers. The plan on which it is based is both novel and ingenious; uniting a complete and thorough classification of all the branches of human knowledge, with a comprehensive summary of their leading facts and principles. It is, therefore, a miniature encyclopædia, with the peculiar advantage of treating the subjects in a natural order, instead of dissecting them alphabetically; but any subject may readily be found, without remembering the system, by means of a copious alphabetical index at the end of the work. Another peculiar and important feature of this publication is, that it contains a choice list of the best books on every branch of human knowledge, arranged according to the subjects, and embracing nearly fifteen hundred works, which together would form a highly select library, and from which a further selection may easily be made. As a book of reference, for merchants and men of business, as well as professional men and students, we know of no other single volume so generally useful as Professor Park's *Pantology*. It treats of every subject of human knowledge: grammar and languages, mental and moral philosophy, and education, law and government, religion and theology, geography and statistics, history and biography, poetry and romance, mathematics and natural philosophy, natural history and medicine, machinery, architecture, engineering, and navigation, agriculture, manufactures, and commerce, printing and the fine arts; showing their extent and relative importance, their connections and dependencies, while it gives a considerable amount of positive and authentic information on each one of them all. The wonder is that so many valuable ideas could be clearly expressed within the compass of a single octavo volume. The engravings are appropriate, well executed, and on subjects of popular interest, while most of them are such as would rarely be met with elsewhere. We think that every young man seeking for information, must have felt the want of such a work as this; and that Professor Park has performed a valuable service for the cause of education and morals, as well as for the diffusion of useful knowledge, in this attractive publication. We wish that this work may become as extensively known as it is meritorious and useful; and we venture to predict its entire success, as a standard and popular work for all classes of intelligent readers.

8.—*A Wreath of Wild Flowers from New England*. By FRANCES S. OSGOOD. 12mo. pp. 364. Boston: Saxton & Pierce. 1841.

A wreath of wild flowers from New England, laid before the British public, is certainly a new thing under the sun. Yet we doubt not that this beautiful wreath, entwined by a daughter of New England, has been much admired in that country, if we are to judge from the commendations of this work by the British press. It is indeed a collection of choice gems. The contents comprise a dramatic poem, and various fugitive pieces, upon as many topics. They all denote the fair authoress as a lady of decided genius, possessing a tender sensibility, a cultivated taste, and a delicate appreciation of the gentle affections, and of the beautiful in nature and art. We believe that the volume has already received the stamp of public admiration in our own country, and we hope that the writer may be induced to cull more flowers, and to entwine more wreaths, to bedeck the literature of the day.

9.—*Life and Times of Red Jacket, or Sa-go-ye-what-ha*; being the sequel to the History of the Six Nations. By WILLIAM L. STONE. 8vo. pp. 484. New York and London: Wiley & Putnam. 1841.

The history of the state of New York is yet to be written. It remains for some of her gifted sons to rear "that loftier monument on which, not the rays of the setting sun, but the rays of a nation's glory, as long as letters shall endure, will continue to play and linger on its summit." Within the past few years very ample and interesting materials have been provided, and are almost daily brought to light. The history of the Indian tribes—of their confederation—our colonial annals—our revolutionary struggle—the toils and privations of our border settlements—are all given in detail, and furnish those materials from which the master-builder can select when he rears his noble temple. Among the largest contributors is the author of the *Life of Red Jacket*. Amid the labor and vexations of editing a daily paper, he has found time to make extensive researches into our early history, and has given the fruits of those researches to the world. "The *Life of Brant*" has been followed by "The *Life of Red Jacket*," and now we understand the author is engaged upon the closing work of the series—the *Life and Times of Sir William Johnson*. The latter, though written last, will be the first of the series in the order of time. "The *Life and Times of Red Jacket*" is beautifully got up, is very interesting, and contains accounts of all the treaties with the Six Nations since the revolution—of the efforts made to civilize and christianize them—with stirring incidents of the last war—together with the speeches of Red Jacket himself, the great orator of the confederated tribes. We hope the work may receive that attention to which its merits entitle it.

10.—*The Critical and Miscellaneous Writings of Sir Edward Lytton Bulwer*. In 2 vols. 12mo. Philadelphia: Lea & Blanchard. 1841.

We thank the publishers for this collection of gems from the periodical literature of England. Though not so able as Macauley, not so classical, not so admirable in taste, they are little less brilliant; and must be welcomed by the admirers of Bulwer throughout the land. We are surprised that the "Ambitious Student," already so familiar to the American public in another shape, should be included in these volumes; but many pieces are wholly new, all are racy and stirring, and some of them, as, for instance, that on the death of Scott, are truly magnificent.

11.—*The Two Defaulters; or a Picture of the Times*. By MRS. GRIFFITH, author of "Discoveries in Light and Vision," &c. 18mo. pp. 172. New York: D. Appleton & Co. 1841.

This is the first original American story embraced in "Appleton's Tales for the People and their Children." The series, our readers are aware, include contributions from Miss Martineau, Mrs. Copley, Howitt, Capt. Marryatt, and other popular writers. We therefore feel a pride, and take pleasure in expressing the opinion, that in interest of narrative and style, this faithful "picture of the times," by our countrywoman, will bear a favorable comparison with most of the series which have preceded it.

12.—*Gems of Irish Eloquence, Wit, and Anecdote*. By JAMES HOBAN, of the Washington bar. 12mo. pp. 316. Baltimore: James Murphy. 1841.

The compiler of this volume has gathered into a wreath the scattered flowers of Irish wit, eloquence, bravery, and truth, and bound them in their beauty around the ancient brow of Erin. From Phillips, Emmet, Plunket, Burke, Burrows, and others, rich specimens of reasoning and soul-stirring declamation are collected. A portion of the work is devoted to incidents and matters deserving of reminiscence, in the history of Ireland and her men of eminence. Many details are also presented in exemplification of the virtue and genius of her humble and unaspiring sons.

- 13.—*Manners and Customs of the Japanese, in the Nineteenth Century; from the accounts of recent Dutch residents in Japan, and from the German of DR. PH. FR. VON SIEBOLD.* 18mo. pp. 298. New York: Harper & Brothers.

It is correctly remarked, that there is no people with any claims to civilization, of whom so little is known as of the Japanese. Their policy in regard to foreigners is more jealous and exclusive than that of the Chinese, the Dutch being the only Europeans allowed to trade with them, and their intercourse being extremely limited, and subject to severe restrictions. Within the last two or three years, several publications have appeared in Holland, by members of the Dutch factory, descriptive of the institutions, character, &c., of that singular people. These, however, have not been translated, and this is the first attempt to present to the American reader a compendium of the curious and interesting facts which they contain. The volume before us, from the English edition, has, we are informed, been carefully revised and corrected. It forms the 132d number of the Family Library now publishing by the Harpers, and will, we think, from the novelty of its matter, and on other accounts, be found a valuable addition to that useful collection of works.

- 14.—*The World in a Pocket-book, or Universal Popular Statistics; embracing the Commerce, Agriculture, Revenue, Government, Manufactures, Population, Army, Navy, Religions, Press, Geography, History, Remarkable Features and Events, Navigation, Inventions, Discoveries, and Genius of every Nation on the Globe. An ample Political, Commercial, Agricultural, Manufacturing, Historical, Geographical, Statistical, and General Synopsis of the United States; with the Census of 1840, and tables of the State and Presidential Elections, Interest, Usury Laws, &c. &c.* By W. H. CRUMP. 12mo. pp. 192. Philadelphia: J. Dobson. 1841.

It would seem, after giving the copious title quoted above, to be a work of supererogation on our part to present a detail of the contents of this really comprehensive and valuable collection of statistical facts. Mr. Crump, the compiler, is one of the most industrious and scientific statisticians in the United States, as this little manual amply demonstrates. He has here brought together a mass of information in a small compass that must render his book a perfect *vade mecum* on all subjects of interest to statesmen, political economists, farmers, manufacturers, merchants, and mechanics, and in short, all classes of society.

- 15.—*The Motive Power of Organic Life, and Magnetic Phenomena of Terrestrial and Planetary Motions, with the application of the ever-acting and all-pervading agency of Magnetism, to the nature, symptoms, and treatment of Chronic Diseases.* By HENRY HALL SHERWOOD, M. D. 8v. pp. 196. New York: H. A. Chapin & Co. 1841.

The title of this work indicates its character; and the author has presented the subject to the reader in a plain, concise, and simple manner, divested entirely of the abstruse metaphysics in which it has been heretofore involved. Magnetism is here shown to be instrumental both in the powers of organic life, and in all planetary movements. The approximation of the earth's axis to the plane of the ecliptic, accounts, it appears, for the changes which our world has undergone, and the imbedding of ancient animals by its changes. The work is illustrated with numerous well-executed engravings, which, with the remarkable character of the subjects treated, must insure for it an extensive reading.

- 16.—*Anecdotes, Religious, Moral, and Entertaining. Alphabetically arranged, and interspersed with a variety of useful observations.* Selected by the late Rev. CHARLES BUCK. From the ninth London Edition. 12mo. pp. 507. New York: Dayton & Saxton.

This is a new edition of an interesting book, which has been out of print in this country for some years. The high estimate, hitherto placed upon its merits by the religious community, has induced the present publishers to issue a neat edition, at a price that will materially facilitate its general circulation.

- 17.—*The Book of the Seasons ; or the Calendar of Nature.* By WILLIAM HOWITT. From the Tenth London Edition. Philadelphia : Carey & Hart.

This volume, beautiful in style, sentiment, and in its mechanical appearance, is designed to promote that general acquaintance with nature, which is so highly to be desired, and for which we hope to see a growing taste evinced, in this country as in England. The plan pursued by Mr. Howitt, has been to furnish an original article on the general appearance of nature in each month, drawn entirely from his own regular observations, through many seasons, and to superadd a great variety of facts from the best sources. To these he has added a complete table of the migration of birds ; a copious list of garden plants, which come into flower in the month ; a botanical calendar, including a select number of the most beautiful or interesting British plants, and an entomological catalogue of about three hundred of the most common or remarkable insects ; a notice of rural occupations ; and, finally, one of angling.

- 18.—*Plain Sermons, by contributors to the "Tracts for the Times."* In two volumes. 12mo. pp. 336, 350. New York : J. & H. G. Langley. 1841.

These volumes contain seventy-two discourses, designed to explain and enforce the doctrines and duties of Christians, as held by a large portion of the Church of England. They come out here under the sanction of Bishop Onderdonk, of the Protestant Episcopal church in New York, who recommends them to the members of his diocese, "for private and family reading," and "authorizes the public reading of them, together with such others, as he may from time to time appoint, by lay readers within said diocese." One of the objects of the publication of these sermons in connection with the controversial "Tracts for the Times," as stated in the preface, is to bring before all persons, whether friendly or opposed to these views, that beautiful truth of the Messiah, that "if any one will do his will, he shall know of the doctrine, whether it be of God." An admonition which, amid so much unhappy contention and dispute, we might, many of us, be too apt to forget.

- 19.—*Ruins of Ancient Cities ; with general and particular accounts of their rise, fall, and present condition.* By CHARLES BUCK. 2 vols. 18mo. pp. 360, 360. New York : Harper & Brothers. 1841.

These two volumes form the 134th and 135th numbers of the valuable Family Library, in course of publication by the enterprising firm named in the title page. The sad memorials presented to our contemplation in the ruins of ancient cities, strikingly exemplifies the mutability of human concerns, and give a high moral value to these volumes. The author appears to have consulted, in the preparation of the work, the best authorities, and has succeeded in enriching his pages with the greatest possible variety of information ; and on the whole produced a very useful, amusing, and no doubt accurate work.

- 20.—*Anti-Popery ; or Popery Unreasonable, Unscriptural, and Novel.* By JOHN ROGERS, Member of the Society of Friends, and Counsellor at Law. With a Preface, Notes, and Index, by Rev. C. SPARRY. 12mo. pp. 315. New York : D. Fanshaw. 1841.

"This work," says Mr. Rogers, "relates to Popery, the whole of Popery, and nothing but Popery ; and therefore will," he hopes, "be acceptable, or unobjectionable to the whole protestant world, and even to the whole Christian world that oppose the plan of papal Rome." It is written in a sententious, clear, and forcible, though quaint style ; and possesses great logical precision.

- 21.—*Happiness, its Nature and Sources described, and mistakes concerning it corrected.* By J. A. JAMES. New York : D. Appleton & Co. 1841.

This little treatise comes to the reader with the high pretension, and a higher it cannot have, of pointing out what true happiness is, where it is to be found, and how it is to be obtained.

- 22.—*A Token of Affection—Poetry of the Heart—A Token of Remembrance—A Token of Friendship—Pure Gold from the Rivers of Wisdom.* New York: D. Appleton & Co. 1841.

It has heretofore been considered high praise for the American publisher to equal in typographical elegance, the best works of the English press; but however startling and improbable it may appear, we have no hesitation in saying, that these four volumes of the "Miniature Classical Library," of D. Appleton & Co., are an improvement on the English edition of the same series of books. The volumes were compiled by the author of "Affection's Keepsake," and comprise the best works of our best English authors; and it may be stated, as an evidence of the estimation in which they are held abroad, that some of them have passed through eight or ten editions.

- 23.—*The Rose: or Affection's Gift for 1842.* Edited by EMILY MARSHALL. Illustrated with ten highly finished engravings: New York: D. Appleton & Co. 18mo. pp. 216.

It appears to have been the object of the editor, in preparing this little annual for publication, to render it directly subservient, not only to the entertainment, but to the real instruction and permanent benefit of the young. With this object in view, the pieces admitted generally possess the requisite qualities of utility as well as beauty. It is altogether a very excellent annual, and must prove a most acceptable offering for the young at the approaching Christmas and New Year.

- 24.—*Confessions of an English Opium-Eater. Being an Extract from the Life of a Scholar.* From the last London Edition. 12mo. pp. 190. Boston: Wm. D. Ticknor. New York: J. & H. G. Langley. 1841.

The re-appearance of this highly wrought, spirit-stirring narrative, attributed without denial to De Quincy, will be received with a cordial welcome, by those who perchance became acquainted with it twenty years since in the pages of the London Magazine, or whose knowledge of it is only traditional. Its authenticity is, we believe, considered unquestionable. We esteem it not merely as an interesting record, but, in some degree, useful and instructive.

- 25.—*The Cause and Cure of Infidelity,—including a notice of the author's unbelief and the means of his rescue.* By the Rev. DAVID NELSON. New York: John S. Taylor & Co. 12mo. pp. 352. 1841.

This treatise is well calculated to excite the curiosity, awaken the attention, and stimulate the inquiry of the vigorous minds of the west, where the author's life has been chiefly spent. Abstruse argument is here brought down to the apprehension of men in general. Facts drawn from history, science, and observation, are placed in a strong light, and there is an earnestness, a personality running through the whole, which, to use the language of the President of Centre College, Kentucky, gives to the written argument much of the interest and power of an oral address.

- 26.—*Astronomy for Schools, upon the basis of M. Arago, of the Royal Observatory, Paris.* By W. H. HOSKINS, A. M. 12mo. pp. 323. New York: H. A. Chapin & Co. 1841.

In this book, the leading truths of the science of which it treats, are illustrated without mathematical demonstrations. A correspondent, in whose judgment we place confidence, says, "it is a work of singular merit, as a school book, for seminaries, or for general reading. The want of such a treatise in our common schools, is now most effectually supplied, and there can be no doubt that its peculiar advantages will introduce it into all our schools."

- 27.—*Rocky Island, and other Parables.* By SAMUEL WILBERFORCE, M. A., Archdeacon of Savoy. New York: John S. Taylor. 18mo. pp. 196.

This volume contains six parables, the design of which is to convey religious instruction to the minds of children. The writer is a son of Wilberforce, the celebrated statesman and philanthropist.

27.—*History of Christianity, from the Birth of Christ to the Abolition of Paganism in the Roman Empire.* By H. H. MILLMAN. With a Preface and Notes, by JAMES MURDOCK, D. D. pp. 528. Harper & Brothers.

This is a very valuable work, and full of interest, not only to the biblical scholar and divine, but to every class of readers. Ecclesiastical history has for the most part been treated of so little, in connection with political events, and so little in reference to its relation to the progress of society, that a most important view of it has been kept in a great measure out of sight. It was reserved for the learned author of this volume to strike out a new path in this department of historical research; to give us the history of Christianity upon a wider and more liberal scale; pointing out its vast temporal results; and tracing its influence and effects on the civilization and improvement of the world. This he has done, so far as he has gone, in a masterly manner; and when he shall have completed his design, by bringing his work down to a late period, as he promises to do, it will present an argument for Christianity, hitherto comparatively little dwelt on, which it will be impossible to resist or overturn.

28.—*The Settlers at Home.* By HARRIET MARTINEAU. New York: Appleton & Co. 18mo. pp. 210. 1841.

Miss Martineau has never done better than in this little work. Appleton has done well in making it one of a series of Tales for the People and their Children. In every point of view "its beauty makes us glad." It is printed with clear, large type, on serviceable as well as handsome paper, and done up in the neatest style. But this is the smallest of its many recommendations. The plot of the tale is exceedingly simple, and yet deeply, almost painfully, interesting. We like for children—yes, we feel it right to demand for them—a narrative no way complicated or improbable. The subject of this is only a fact of history—the inundation of a Dutch settlement in England during the commonwealth times—drawn out in an individual case, with the fidelity and richness of description which characterizes the author of *Deerbrook*. But, still more, the moral of the book—one of the very noblest which could employ the moralist's pen—steals upon the heart so unostentatiously and sweetly. There is none of the usual parade about saying a very good thing—no flourish of drums to make the heralded peerage more conspicuously insignificant—no drawing down of the countenance, as if about to preach something very unnatural and not a little overstrained. Her moral of the victory which a forbearing and gentle spirit always obtains over the roughest nature, flows along so naturally in the narrative, one cannot doubt the fact, or weary over the inference, or skip the Christian philosophy. In most children's books, the child is driven, by the invincible pedantry and inimitable dullness of the reflective part, to omit it altogether. Here the precept and the practice are the same. As Providence teaches us chiefly by examples of living virtue, the "Settlers at Home" would convince us of the safety, dignity, and duty of Christian love, by the happy result of the controversy between Roger and Oliver. We commend the story most heartily to "The People and their Children."

29.—*Lectures on the Sphere and Duties of Woman, and other Subjects.* By GEORGE W. BURNAP. Baltimore: John Murphy. 1841. 12mo. pp. 272.

30.—*Lectures to Young Men on the Cultivation of the Mind, the Formation of Character, and the Conduct of Life.* By GEORGE W. BURNAP. Baltimore: John Murphy. 1841. 12mo. pp. 224.

These volumes are exceedingly able, timely, and striking. That to young men contains three lectures additional to those first published; one of which drew favorable notices from every quarter on its appearance in our pages. The volume addressed to the ladies, though it omits physical education and legal rights, is worthy to go forth a fellow-laborer with that to the young men, and both are, as far as we know, the best books on their subjects.

MERCANTILE MISCELLANIES.

THE POETRY OF BOOKKEEPING.

The Honduras Observer thus describes the art of bookkeeping :—

Attentive be, and I'll impart
 What constitutes the accountant's art.
 This rule is clear ; what I receive
 I debtor make to what I give.
 I debit Stock with all my debts,
 And credit it for my effects.
 The goods I buy I debtor make
 To him from whom those goods I take ;
 Unless in ready cash I pay,
 Then credit what I paid away.
 For what I lose or make, 'tis plain,
 I debit Loss and credit Gain.
 The debtor's place is my left hand,
 Creditor on my right must stand.
 If to these axioms you'll attend,
 Bookkeeping you'll soon comprehend,
 And double-entry you will find
 Elucidated to your mind.

METHOD OF COLLECTING A DEBT.

We were much amused the other day, (says the editor of the St. Louis Bulletin,) on our way home, at the shrewdness of one of our city merchants, who was on a collecting tour through the western part of Missouri. The boat we were on landed at a small town, and the merchant repaired to the house of one of his debtors. On inquiring of the good lady for her husband, she expressed her regret that he had just left town, and would not, "*positively*, be back for a week." The merchant regretted that very much, as he "had some money" for her husband.

LADY.—You *have*?—well—really—let me see—John, are you *sure* that your father has gone?—go, see—perhaps I'm mistaken—run quick, and tell your father, if you can find him, that a gentleman is here who wishes to pay him some *money*.

The boy ran—full speed for his daddy.

LADY.—I hope I *am* mistaken—husband was telling me this morning he expected some money from St. Louis. Money is so scarce these days, and people are so negligent in paying their debts. Jane, bring the gentleman some water, quick now—stop, come here—(*in a whisper, but audible to the merchant,*)—tell Sarah to bring some of those largest and best apples, do you hear?—now, run, quick! When did you leave St. Louis, sir?

MERCHANT.—Last Monday was two——

LADY.—(*Running to the window*)—There's husband, as true as I'm born—I really was afraid he'd left.

MERCHANT.—(*Husband enters, puffing and blowing*)—My dear G——, I was so fearful you had left.

HUSBAND.—(*In an under tone*)—I wish to Heaven I had! (*To the merchant*)—Ah, Mr. —, how are you?

MERCHANT.—Very well—pleasant day—all well—hark! the bell is ringing—not much time to talk—I have a little business—(*presents two or three bills*)—would be very glad if you could settle them to-day.

HUSBAND.—Ah, ah—yes, sir—well, I don't know—Colonel Winston promised to be here to-day, who owes me some borrowed money—hard times—when will you leave, probably? (*Bell rings again.*)

MERCHANT.—I must be off, sir—"lift" one of these notes, and I'll wait for the rest—the bell is ringing, and I must be off.

HUSBAND.—Well, sir. (*Aside, to his wife*)—Why did you tell I was at home, confound it!

The merchant receives \$500, and bids the gentleman "good morning," much pleased with the success of the game he had played. Our friend regrets to say that the "good wife" countermanded her order for apples before he settled with the husband.

SLAVE MARKET AT CONSTANTINOPLE.

Mrs. Dawson Damer says, in her "Tour in Greece, Turkey, and Egypt:—"We took the slave market on our road home, where, however, we saw none of the disagreeable objects which such a name usually conjures up in the imagination from the descriptions one hears of slavery in other parts of the world. The countenances of the poor women here expressed nothing of that extreme dejection at being torn from their country and their friends, which one would naturally look for in slaves; on the contrary, they seemed quite reconciled to their fate, and were chiefly excited by hope or depressed by disappointment, as they seemed likely or not to obtain a purchaser; for, in fact, their only prospect of advancement in life is dependent upon becoming inmates of a wealthy harem, where its master's caprice may lead to the lowest slave becoming its mistress. The Sultana Valida herself is said to have been purchased from a Georgia merchant at the Tifflis market. They betrayed, however, no eagerness to attract our attention, as it is well known that no Giaours are permitted to make purchases. We only saw one female slave of great beauty, who, though very young, was already a mother, and had her infant in her arms. She was described to us as an Abyssinian, but had much more of the light copper coloring of the far east. Her hair was smooth and black, her features small and exquisitely proportioned, and the shape of her head faultless; so that if the phrenological criticism on the Venus de Medicis be correct, that a woman so formed would be deficient in understanding, this beautiful little Abyssinian must have been a perfect idiot.

GLUT IN THE MARKET.

A wealthy London merchant, who resided near Windsor, and lately retired from business, called upon Sir Astley Cooper to consult with him upon the state of his health. The patient was not only fond of the good things of this world, but indulged in high living to a great excess. This was soon discovered by Sir Astley, who thus addressed him:—"You are a merchant, sir, and therefore must possess an extensive knowledge of trade; but did you ever know of an instance in which the imports exceeded the exports that there was not a glut in the market? That's the case with you, sir; take more physic, and eat less. The gentleman took the hint, and has since declared that Sir Astley's knowledge of the "first principles of commerce," and the mode of giving his advice, rendering it "clear to the meanest capacity," has not only enabled him to enjoy good health ever since, but has probably prolonged his life for many years.

COMMERCIAL HONESTY.

A New York merchant says that in the year 1824, Mr. Christopher Robinson, of Lynn, Mass., made some purchases of him, but before the amount became due, he failed and compounded with his creditors at forty-five cents on the dollar, and was released from all further claim. He stated, however, at the time, that if he was ever able to pay the balance he would do so. Recently the merchant received a letter enclosing a check for \$164 06, being the balance of the debt, with interest. It affords us pleasure to publish a circumstance which we believe is of rare occurrence. May it stimulate others to do likewise!

COMMERCIAL REGULATIONS.

TARIFF OF CHARGES, ETC., AT ST. LOUIS.

ESTABLISHED AND RECOMMENDED FOR GENERAL ADOPTION BY THE ST. LOUIS CHAMBER OF COMMERCE.

The following rates to be charged, if no agreement exists to the contrary:—

Commissions—	<i>Per cent.</i>
On sales of merchandise or produce,.....	5
On sales of lead,.....	2½
Guaranty of sales on time,	2½
For purchasing and shipping merchandise with funds in hand, (on the aggregate cost and charges,).....	2½
For accepting drafts, or endorsing notes or bills of exchange, without funds, produce, or bills of lading on hand,.....	2½
For cash advances in all cases, even with produce or bills of lading, (with interest from date,).....	2½
For shipping to another market, produce or merchandise upon which advances have been made,.....	2½
For negotiating drafts or notes, as drawer or indorser,.....	2½
On sale or purchase of stocks,.....	1
On sale or purchase of boats, without guaranty,.....	2½
For procuring freight, on amount of freight,.....	5
For chartering boats,	2½
For collecting freights or accounts,.....	2½
For collecting delayed or litigated accounts,.....	5
For collecting dividends on stocks,	½
For adjusting insurance losses,.....	2½
For receiving and remitting moneys from which no other remuneration is derived,.....	1
For effecting insurance, when the premium amounts to forty dollars or less, \$2 00	
For effecting insurance, when the premium exceeds forty dollars, on amount of the premium,	5
On outfits and disbursements,.....	2½

The above commissions to be exclusive of storage, brokerage, and every other charge actually incurred.

The risk of loss by fire, unless insurance be ordered, and of robbery, theft, and other unavoidable occurrences, if the usual care be taken to secure the property, is in all cases to be borne by the owner of the goods.

Interest to be charged at the rate of ten per cent per annum, on all debts, after maturity, until paid.

Rates for receiving and forwarding goods, exclusive of charges actually incurred:—

Sugar,.....per hogshead	\$0 50
Tobacco,.....per hogshead	0 50
Pork, beef, and whiskey, in bbls.....per bbl.	0 10
Flour, beans, wheat, beeswax, etc., in bbls.....per bbl.	0 06½
Corn, wheat, salt, etc.....per sack	0 04
Lead,.....per pig	0 02
Merchandise, assorted,.....per 100 lbs.	0 10
Lard,.....per keg	0 04
Gunpowder,.....per keg	0 25
Carriages,.....each	5 00
Gigs,.....each	3 00

And other articles in proportion.

Rates of storage—

	<i>Per month.</i>
On each hogshead of tobacco,.....	\$0 50
“ hogshead of sugar,.....	0 50
“ hogshead of molasses,.....	0 75
“ hogshead of bacon,.....	0 37½

	Per month.
On each pipe or hogshead of liquor,.....	\$0 50
“ hogshead of oil,.....	0 50
“ tierce of oil,.....	0 37½
“ tierce of rice or flaxseed,.....	0 25
“ barrel of salt,.....	0 08
“ barrel of oil, molasses, or foreign liquors,.....	0 12½
“ whiskey, cider, sugar, fish, lard, pork, or beef,.....	0 10
“ flour, apples, bread, and beans,.....	0 06½
“ 100 lbs. bacon, in boxes,.....	0 08
“ keg of lard,.....	0 03
“ soap or candles,.....	0 03
“ box of wine,.....	0 06½
“ box of raisins or drum of figs,.....	0 03
“ box of window glass,.....	0 05
“ half box of do.	0 03
“ 100 lbs. hempen yarn,.....	0 05
“ 100 lbs. hemp, in bales,.....	0 06½
“ 100 lbs. bale rope,.....	0 05
“ piece of bagging, 50 yards or less, (longer in proportion),.....	0 05
“ 100 lbs. cordage, tarred or white,.....	0 05
“ 100 lbs. salted hides,.....	0 06½
“ 100 lbs. dried hides,.....	0 10
“ crate and cask of queensware, small size,.....	0 25
“ “ “ large size,.....	0 37½
“ bag of coffee, pepper, and pimento,.....	0 10
“ 100 lbs. iron, steel, lead, and shot,.....	0 05
“ 100 lbs. manufactured tobacco,.....	0 06½
“ 100 lbs. drygoods, or other merchandise, in assorted lots,.....	0 10
“ bag of salt, large size,.....	0 10
“ “ small size,.....	0 06½
“ keg of white lead,.....	0 02
“ keg of nails,.....	0 05
“ ton of dyewood,.....	1 00
“ hamper of bottles,.....	0 18¾
“ ream of writing and wrapping paper,.....	0 01
“ cask of cheese,.....	0 08
“ 100 lbs. tea,.....	0 10

Other articles in proportion.

For the second and succeeding months, one half of the above rates to be charged. The rule, under the head of “commissions,” respecting fire, robbery, theft, etc., to apply, also, in the case of storage.

TAX ON NEW ORLEANS MERCHANTS.

The following are the provisions of an ordinance of the general council of the municipalities in the city of New Orleans, laying a tax on wholesale and retail dealers, and others, in that city:—

ARTICLE I.—An annual tax of twenty-five dollars, payable in advance, in the month of January of each year, shall be paid by each money or exchange broker, apothecary, and all wholesale merchants, dealers, and traders; and an annual tax of fifteen dollars shall, in like manner, be paid by all retail merchants, dealers, and traders.

ART. II.—The said tax shall be paid by each partner of any firm, engaged in the business or professions designated in the preceding article, except where such partner resides permanently out of the state.

ART. III.—Where the parties who are subject to this tax sell both by wholesale and retail, they shall pay the wholesale tax; and all persons shall be considered as wholesale dealers who sell or deliver goods by the package, whether the same be an original package or a package made up by said dealers themselves.

ART. IV.—All persons, occupying in whole or in part, any store, counting-room or

office; or engaged in any business directly connected with buying or selling of produce or merchandise; whether they act as principals or agents in said buying or selling, and whether they reside permanently or temporarily in the city; whether they sell on the levee, or from any flatboat, barge, steamboat, ship, or vessel, shall be liable to, and shall pay the tax imposed by this ordinance; and all the provisions and conditions thereof shall be applicable to the collection of said tax for the present year, except in such cases where parties may have already paid for the current year a similar tax under any previous ordinance. Provided, that the provisions of the present article shall not apply to sales on the levee, in any flat or steam boat, ship, or vessel, until after the 1st of November next.

ART. V.—That the tax levied by this ordinance shall be recoverable before any court of competent jurisdiction; and the said tax is declared to be in lieu of the tax imposed by the ordinance of 3d February, 1835, or of any similar tax, imposed by any other ordinance; and all ordinances, or parts of ordinances, heretofore in force, contrary to the provisions of the present ordinance, be, and is hereby repealed.

INSPECTION OF SOLE-LEATHER IN NEW YORK.

The following act of the "People of the State of New York, represented in Senate and Assembly," was passed and approved by the governor on the 26th day of May, 1841, to take effect immediately:—

1. The governor shall nominate, and with the consent of the senate appoint, one of the seven inspectors appointed by law, an inspector-general of sole-leather for the city and county of New York, who shall have been an experienced manufacturer of or dealer in leather, residing in said city, and who shall hold his office two years from the date of his appointment, and until a successor is appointed.

2. It shall be the duty of the inspector-general to divide among the inspectors as near as he can, an equal part of the leather to be inspected, and collect all moneys due for fees, and divide the same monthly in equal proportion among the said inspectors, reserving to himself one seventh part in addition to two per cent on the nett amount of said fees for extra services.

3. The said inspector-general shall keep an office near the central point of his business in said city, for the reception of orders from the owner, agent, or person having leather in charge; and it shall be the duty of the inspectors of leather, on the requirement of the inspector-general, to go without delay to the place within the city of New York, where such leather is deposited, and inspect the same, and make returns daily of every finished job to the inspector-general, the amount of leather inspected, and the quality thereof; and the said inspector-general shall enter the same in a book to be kept for that purpose, and make his returns to the secretary of state, according to law.

4. If any dispute shall arise between the purchaser and seller of any leather, or between either of them and the inspector, in relation to the inspection of any leather in said city, such dispute shall be submitted to and determined by the inspector-general; but, if the buyer or seller shall be dissatisfied with the decision of the inspector-general, they or either of them may appeal to three indifferent persons, one to be chosen by each of the parties, and the third by the two thus chosen, whose decision shall be conclusive in the matter.

5. The inspector-general shall exhibit his books to any person who may feel himself aggrieved on account of unfaithful inspection; and shall also, before he enters upon the duties of his office, execute a bond of two thousand dollars, with surety for the faithful performance of his duty, in the same manner as is now done by the inspector of green hides and skins in the city of New York.

MODIFICATION OF DANISH SOUND DUES.

The Danish government has concluded a treaty with Great Britain and Sweden relative to the passage of the sound. In virtue of this treaty, the duration of which is limited to ten years from the 15th of June, and may be prolonged for ten years more, if agreeable to the contracting parties, the court of Copenhagen has established a new tariff of duties to be paid by merchant vessels navigating under English or Swedish colors. In accordance with the negotiations which have lately taken place, the sound dues on several articles not mentioned in the Christianopol tariff have been reduced from the 15th of June, 1841.

Annexed are the alterations:—

	<i>From June 15.</i>	<i>Former duty.</i>
Allspice,.....per 100 lbs.	4½ stivers*	9 stivers
Oranges, lemons, etc.....per chest	1	2
Arsenic,.....per 300 lbs.	8	12
Orpiment,.....per 100 lbs.	6	9
Cocoa,.....per 100 lbs.	6	24
Coffee,.....per 100 lbs.	6	24
Camel's hair,.....per 50 lbs.	12	30
Canella Alba,.....per 100 lbs.	6	36
Cardamoms,.....per 100 lbs.	18	36
Cassia Fistula,.....per 100 lbs.	12	36
Cassia Lignea,.....per 100 lbs.	9	36
Cement,.....per 12 bbls.	12	36
Cubeb's,.....per 100 lbs.	8	12
Juniper berries,.....per 800 lbs.	6	36
Cotton yarn or twist,.....per 100 lbs.	16	36
Do. sewings,.....per 50 lbs.	15	30
Do. printing,.....per 50 lbs.	15	18
Do. Turkey red,.....per 50 lbs.	15	30
Do. for embroidery,.....per 50 lbs.	15	30
Camel's yarn,.....per 50 lbs.	18	30
Manna or manna groats,.....per 100 lbs.	2	9
Turmeric,.....per 100 lbs.	4	12
Shot,.....per 100 lbs.	2	4
Dyewoods, viz:—Japan and Sapan wood, Provence wood, Sandal wood, Camwood or Barwood, Calia-tour wood, Campeachy wood, Honduras wood, Log-wood, Gallicie wood, Ficot wood,.....per 1000 lbs.	8	30 or 36
Nicaragua wood, Stockfish wood, Santa Martha wood, Rio de la Hache wood,.....per 1000 lbs.	12	36
Dyewoods not mentioned or stated in the Christianopol tariff, or here, 1 per cent ad valorem.		
Manufactured goods of all kinds, with the exception of white ordinary calicoes, and those mentioned here, 1 per cent ad valorem.		
Cotton hose,.....per 50 pairs	6	30
Half hose and children's do.....per 100 pairs	6	30
Ochre,.....per 200 lbs.	1	9
Paddy,.....per 400 lbs.	6	1½ st. per bushel.
Sarsaparilla,.....per 100 lbs.	18	36
Soda,.....per 300 lbs.	3	6
Spices not mentioned here, 1 per cent ad valorem.		
Sugar, raw,.....per 100 lbs.	5	9
Zinc,.....per 100 lbs.	2	3

* 48 stivers specie are equal to two Danish rix bank dollars, or one Danish specie dollar.

STEAMBOAT AND RAILROAD STATISTICS.

UTICA AND SCHENECTADY RAILROAD.

We have frequently passed over this road, and as frequently been struck with its regularity, and the excellent management of Col. W. C. Young, the intelligent and efficient superintendent. The facts stated in the following notice from the Schenectady Reflector speak volumes in favor of the manner in which the affairs of this great thoroughfare are conducted:—

“This road commenced operations with the month of August, 1836, from which time up to the 1st of August, 1841, makes a period of five years. Within that time the company’s locomotive engines have made about 1,870 trips across the road annually, or in other words, have run on an average, about 150,000 miles a year, and within the period of five years 750,000 miles. Within the same period they have carried 434,893 passengers over the whole length of their road, and 376,695 between intermediate points; making, in the aggregate, 811,589 passengers who have been transported on that road within five years. Within this five years, during which 811,589 passengers have been conveyed on that road, no accident, (with but one exception, in 1836, when two passengers were slightly hurt,) has ever occurred, by which any passenger was injured; and no serious injury, (with but one exception,) has ever occurred to any of the men employed on the engines or train. Within the same period of five years, during which the locomotive engines have made, on an average, 1,870 trips annually, they have never failed to make any one trip, have never but once been six hours behind their time, and, (with four or five exceptions,) have never been three hours behind their time, although snows have covered the track three feet deep, and floods have carried off and fire burnt up bridges. There is no line of public conveyance on the face of the globe, not even excepting the Hudson river steamboats, that can show a greater degree of regularity, punctuality, and safety in the transportation of so great a number of passengers than the Utica and Schenectady railroad, and certainly no railroad that can at all compete with it. This most complete and gratifying success is owing to the care, attention, and skill of Wm. C. Young, superintendent and engineer; and of David Matthews, superintendent of the motive power on that road.”

GERMAN RAILWAYS.

The Augsburg Gazette gives the following account of the number of passengers conveyed on the German railroads, and the gross receipts during the month of June:—Vienna to Brunn, 22,128 passengers; receipts for passengers and goods, 71,304 florins. Munich to Augsburg, 25,037 passengers; receipts, 25,565 florins. Mannheim to Heidelberg, 29,409 passengers. Nuremberg to Furth, 44,647 passengers; receipts, 5,213 florins. Leipzig to Dresden, 50,249 passengers; receipts, 38,881 rix dollars. Dusseldorf to Elberfeld, 31,724 passengers. Magdeburg to Leipzig, 57,239 passengers. Berlin to Potsdam, 67,299 passengers. Mentz to Frankfort, 82,326 passengers; receipts, 43,246 florins. Cologne to Aix-la-Chapelle, number of passengers and amount of receipts not known. Berlin to Anhalt, 24,642 passengers. Vienna to Raab—this road was open as far as Baden in May, and on the 20th June to Neustadt; on the 27th June there were 17,000 passengers conveyed, and on the 29th 20,000. Lintz to Budweis, (in the month of May,) 1,603 passengers. Lintz to Gununden, (May,) 11,061 passengers, and 46,434 quintals of goods. Presburg to Tyrnaur, the first of the railways in Hungary, number of passengers from the 28th of September, 1840, to the 30th of April, 1841, 25,132 passengers; receipts, 5,647 florins. The florin is equal to two francs and a half.

CUNARD'S BRITISH STEAMERS.

The annexed statement of the time of the arrival of each boat, and of the duration of their passages, is from the Boston Transcript. The time is calculated from the hour of their departure from Liverpool to the hour of their arrival in Boston, without deducting the time of their detention at Halifax:—

Britannia	arrived	July 18,	1840,	.....	in 14 days	8 hours.
Acadia	"	Aug. 17,	"	.....	in 12 "	12 "
Britannia	"	Sept. 17,	"	.....	in 13 "	12 "
Caledonia	"	Oct. 2,	"	.....	in 13 "	00 "
Acadia	"	Oct. 17,	"	.....	in 12 "	12 "
Britannia	"	Nov. 3,	"	.....	in 13 "	12 "
Caledonia	"	Nov. 19,	"	.....	in 14 "	22 "
Acadia	"	Dec. 21,	"	.....	in 16 "	22 "
Columbia	"	Jan. 21,	1841,	.....	in 16 "	15 "
Britannia	"	Feb. 22,	"	.....	in 17 "	12 "
Caledonia	"	Mar. 20,	"	.....	in 15 "	20 "
Acadia	"	April 7,	"	.....	in 18 "	12 "
Columbia	"	April 21,	"	.....	in 15 "	00 "
Britannia	"	May 6,	"	.....	in 15 "	10 "
Caledonia	"	May 19,	"	.....	in 14 "	12 "
Acadia	"	June 2,	"	.....	in 13 "	12 "
Columbia	"	June 17,	"	.....	in 12 "	02 "
Britannia	"	July 3,	"	.....	in 13 "	12 "
Caledonia	"	July 17,	"	.....	in 13 "	01 "

It will be seen by the above table that the boats have performed nineteen voyages from Liverpool to Boston. The average time occupied in these passages is fourteen days and ten hours, which, considering the tempestuous weather during the winter months, and which necessarily lengthened the voyages at that season of the year, may be said to be unparalleled in the annals of steam navigation.

COST OF TRANSPORTATION ON THE BALTIMORE AND OHIO RAILROAD.

Total cost, (including freight and toll,) for transporting flour on the Baltimore and Ohio Railroad.

		Per barrel.			Per barrel.
From Harper's Ferry to Baltimore,		34 cts.	From McPherson's to Baltimore,		28 cts.
" Weverton to "		32 "	" Reel's Mill to "		28 "
" Knoxville to "		32 "	" Mount Airy to "		26 "
" Berlin to "		32 "	" Woodbine to "		23 "
" Catoctin Switch to "		32 "	" Hood's Mill to "		21 "
" Point of Rocks to "		32 "	" Sykesville to "		20 "
" Frederick to "		30 "	" Marriottsville to "		17 "
" Ijamsville to "		30 "	" Woodstock to "		15 "
" Monrovia to "		30 "	" Elysville to "		13 "
" Doup's Switch to "		28 "	" Ellicott's Mills to "		9 "
" Davis's Warehouse to "		28 "	" Ilchester to "		8 "
" Buckey & Kemp's to "		28 "			

WESTERN STEAMBOATS.

The following steamboat statistics are compiled from data found in the Louisville Directory, recently published. They exhibit an aggregate amount of steamboat tonnage, that presents the commercial importance of the west in a strong light. The number of steamboats now afloat on the western and southwestern waters is about four hundred. Of these boats there were built at Pittsburg, 112; Cincinnati, 70; Louisville, New Albany, and Jeffersonville, 55; Wheeling, 20; the residue at Brownsville, Marietta, Portsmouth, and other places, all on the western waters, except four or five built in eastern ports.

COMMERCIAL STATISTICS.

EXPORTS OF COTTON FROM THE PORT OF MOBILE,

For the last four years, the present ending 31st August, the others 30th September.

WHITHER EXPORTED.	1840-41.	1839-40.	1838-39.	1837-38.
Liverpool,	147,050	250,844	123,217	153,832
London,				
Glasgow and Greenock,	5,478	7,141	2,416	3,282
Cowes and a market,				
Belfast,				
Total to Great Britain,	152,528	257,985	125,623	157,114
Havre,	51,470	78,783	22,304	54,324
Bordeaux,		222		426
Marseilles,	1,994	1,523		4,634
Nantes,	1,123			1,052
Caen,	543			687
Total to France,	55,130	80,528	22,304	61,123
Amsterdam,		807	770	800
Rotterdam,	921	1,200		317
Antwerp,	1,873	5,935	985	2,461
Hamburg,	1,553	2,652		
Stockholm,	106	1,230		
St. Petersburg,				390
Havana,	3,891	2,366		1,315
Genoa, Trieste, &c	830	2,005	280	595
Total to other Foreign Ports,	9,174	16,195	2,008	5,908
New York,	48,611	34,067	59,176	47,168
Boston,	28,444	19,823	13,721	7,870
Providence,	9,853	7,192	6,564	2,601
Philadelphia,	2,605	2,758	735	
Baltimore,	2,656	759	685	
New Orleans,	5,096	15,672	16,768	22,920
Other Ports,	3,621	5,123	2,051	5,317
Total Coastwise,	100,886	85,394	99,700	85,876
TOTAL,	317,718	440,102	249,645	310,021

COMMERCE OF NEW ORLEANS.

ANNUAL STATEMENT OF LEVY'S "NEW ORLEANS PRICE CURRENT AND COMMERCIAL INTELLIGENCER."

"We now present our readers," says the editor of the New Orleans Price Current, "with the annual statement of the commerce of New Orleans, made up to September 1, 1841, instead of October 1, as heretofore. The compilation of tables of receipts and exports for the last ten years, to compare with the present, has been attended with much labor, but such having been the expressed wish of the great body of merchants, as represented by the chamber of commerce, we have not hesitated to meet it, and the greatest care having been taken in compiling and checking them, we think ourselves justified in recommending them to the public as correct. An account of the actual stocks, both of cotton and tobacco, has recently been taken, which conforms with the annexed statements."

1. Exports of cotton from the port of New Orleans for ten years, commencing 1st Sep-
tember, and ending 31st August.

Whither Exported.	Bales of Cotton.										
	1840-41.	'40-41.	'63-6381	'63-8381	'63-8381	'76-9381	'93-9381	'53-7381	'73-8381	'33-6381	'23-1381
Liverpool,.....	396010	459943	297793	466886	329436	227530	245221	271821	218974	194580	
London,.....	304	113	6	123	41	281	45	244	536	.....
Glasgow and Greenock,.....	20415	26603	7390	16147	17077	7991	12601	13950	8096	6272	
Cowes, Falmouth, &c.....	9188	13560	2459	48	2966	1287	156	1160	676	3771	
Cork, Belfast, &c.....	4393	4549	2139	.....	1180	.....	1220	702	.....	.....
Havre,.....	157277	206311	110978	110384	113155	106126	126505	89311	72342	65239	
Bordeaux,.....	2807	6581	1348	4407	6100	4137	2295	2650	1597	1770	
Marseilles,.....	21933	21989	6371	7129	9110	16205	8055	6808	5203	9486	
Nantz,.....	1834	5609	2070	6383	4412	6672	5017	3841	2612	2820	
Cette and Rouen,.....	80	.....	.....	.....	753	.....	.....	.....	.....	370
Amsterdam,.....	.....	3688	49	932	202	2130	238	754	50	392
Rotterdam and Ghent,.....	.....	709	.....	.....	.....	.....	.....	359	.....	70
Bremen,.....	1706	1084	47	636	123	3039	805	2088	926	1026	
Antwerp, &c.....	2264	7377	.....	1598	2782	5348	1122	153	.....	370
Hamburg,.....	2983	6846	310	3149	2538	4330	1863	5059	1391	1655	
Gottenburg,.....	2793	2994	947	343	553	1025	552	195	1186	695	
Spain and Gibraltar,.....	561	1508	1225	5523	3490	1323	1316	1384	1615	4562	
West Indies,.....	19002	30594	3380	2559	1807	521	.....	.....	75	.....
Genoa, Trieste, &c.....	16801	25652	4820	5910	7875	10239	5588	.....	.....	1825
Other foreign ports,.....	90	1044	113	902	233	2117	.....	922	.....	.....
New York,.....	55930	46354	62175	39384	23622	29019	52678	14708	31749	24405	
Boston,.....	81626	54042	49497	39853	39244	35982	42928	26312	28625	25201	
Providence, R. I.....	3132	1811	3701	1607	1177	3211	5431	2849	13651	4611	
Philadelphia,.....	5721	6195	6371	8224	6483	6767	7918	3368	8411	3548	
Baltimore,.....	4832	3045	9450	6341	2785	1128	989	1701	4784	1573	
Portsmouth,.....	9025	5099	5369	4819	8044	11989	8707	8209	4760	3343	
Other coastwise ports,.....	581	4563	6189	4662	3781	2098	5741	2478	3465	520	
Western states,.....	.....	1457	982	364	.....	.....	.....	.....	.....	.....
TOTAL,.....	821288	949320	579179	738313	588969	490495	536991	461026	410524	358104	

RECAPITULATION OF COTTON.
Bales of Cotton.

Whither Exported.	1840-41.	1839-40.	1838-39.	1837-38.	1836-37.	1835-36.	1834-35.	1833-34.	1832-33.	1831-32.
G. Britain.....	430310	504768	309787	483904	350700	237089	259343	287877	228082	204633
France,.....	183931	240430	120767	128303	133330	133140	141872	102610	81734	79685
N. of Europe,	9836	23742	1466	7560	6431	17989	4580	9530	3553	4208
S. of Europe,	36364	57754	9425	13992	13172	12083	6904	1384	1690	6387
Coastwise,.....	160847	122566	137734	103254	85136	90194	124392	59625	95445	63201
TOTAL,.....	821288	949320	579179	738313	588969	490495	536991	461026	410524	358104

2. Exports of tobacco from the port of New Orleans for ten years, commencing 1st September, and ending 31st August.

Whither Exported.	Hogsheads of Tobacco.									
	1840-41.	1839-40.	36-38381	38-481	7.23-9381	93-5381	93-831	1833-34.	1832-33.	32-181
Liverpool,.....	5252	3827	4115	2695	1913	3033	2006	1913	1189	1594
London,.....	8732	4320	3725	3579	1989	6267	2593	1348	1422	346
Glasgow and Greenock,.....			37							
Cowes, Falmouth, &c.....	6681	992	871	3695	6556	5126	975	4851	2264	7005
Cork, Belfast, &c.....										
Havre,.....	4224	3655	1455	2858	2447	384	333	168	20	560
Bordeaux,.....	814	1107		504	320	654	10		60	20
Marseilles,.....	1774	1844	315	1516	699	38	1107	138		
Nantz,.....					312	61	10		5	
Cette and Rouen,.....										
Amsterdam,.....			224		1254	674	32		187	889
Rotterdam and Ghent,.....						299				426
Bremen,.....	4012	2464	1366	1500	3736	871	2966	2083	1884	3265
Antwerp, &c.....	1219	1090			713	1011		909	492	398
Hamburg,.....	1064	1465		206	674	852	704	942	448	1312
Gottenburg,.....	1559	745	939	576	342	1545	1173	528	876	757
Spain and Gibraltar,.....	4142	3843	3400	1542	1628	414	902	745	323	920
West Indies,.....	1020	1013	618	725	1317	786	859	536	103	364
Genoa, Trieste, &c.....	2	44	598	563		394		174	19	101
Other foreign ports,.....	667	343	315	186	612	274	188	87	2	3
New York,.....	7466	8132	8174	9758	4838	9544	10639	4674	6967	9002
Boston,.....	3109	2888	2888	2616	3520	2795	4847	2557	3081	3154
Providence, R. I.....							1			1
Philadelphia,.....	2126	1963	1291	1649	1494	2043	3002	1166	1619	2757
Baltimore,.....	517	219	296	770	541	878	410	19	217	623
Portsmouth,.....										
Other coastwise ports,.....	287	482	225	617	916	3691	684	2372	2459	1559
Western states,.....										
TOTAL,.....	54667	40436	30852	35555	35821	41634	33801	25210	23637	35056

RECAPITULATION OF TOBACCO.

Whither Exported.	Hogsheads of Tobacco.									
1840-41.	20665	9139	8748	9969	10458	14426	5334	8112	4875	8945
1839-40.	6812	6616	1770	4878	3778	1137	1461	316	85	580
1838-39.	8040	6005	2654	2438	6760	5526	4943	4432	3987	7047
1837-38.	5645	5002	4806	2860	3516	1594	1881	1542	447	1388
1836-37.	13505	13684	12874	15410	11309	18951	19583	10788	14343	17096
1835-36.										
1834-35.										
1833-34.										
1832-33.										
1831-32.										
TOTAL,.....	54667	40436	30852	35555	35821	41634	33801	25210	23637	35056

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3. Table, exhibiting the arrivals, exports, and stocks of cotton and tobacco at New Orleans, for ten years, from September 1st to date each year.

Years.	COTTON—BALES.			TOBACCO—HOGSHEADS.		
	Arrivals.	Exports.	Stocks.	Arrivals.	Exports.	Stocks.
1840-41.....	822,870	821,288	14,490	53,170	54,667	2,758
1839-40.....	954,445	949,320	17,867	43,827	40,436	4,409
1838-39.....	578,514	579,179	10,398	28,153	31,852	1,294
1837-38.....	742,720	738,313	9,570	37,588	35,555	3,834
1836-37.....	605,813	588,969	20,678	28,501	35,821	3,857
1835-36.....	495,442	490,495	4,586	50,555	41,634	10,456
1834-35.....	536,172	536,991	3,649	35,059	33,801	1,821
1833-34.....	467,984	461,026	4,082	25,871	25,210	717
1832-33.....	403,833	410,524	816	20,627	23,637	1,203
1831-32.....	345,646	358,104	9,778	31,174	35,056	4,646

4. Table, exhibiting the exports of sugar from the port of New Orleans for five years, (up the Mississippi excepted,) from 1st September to 31st August.

Whither Exported.	1840-41.		1839-40.		1838-39.		1837-38.		1836-37.	
	Hhds	Bbls	Hhds	Bbls	Hhds	Bbls	Hhds.	Bbls.	H ds	Bbls.
New York,.....	18759	822	18556	598	9911	229	12593	75	9999	53
Philadelphia,.....	6726	431	8622	134	4516	126	5417	.....	5295	19
Charleston, S. C.....	1716	1	1513	88	1535	97	1745	.....	1717	171
Savannah,.....	357	39	722	.....	670	30	404	81	450	.....
Providence and Bristol, R. I.,.....	3	20	12	3	3	29	.....	.....	.....	.....
Boston,.....	422	114	951	327	1612	131	415	.....	755	36
Baltimore,.....	7588	48	8403	942	5804	79	4867	.....	4439	120
Norfolk,.....	664	48	819	553	659	5	188	.....	539	.....
Richmond and Petersburg,....	1520	64	1923	179	1215	19	1039	110	681	.....
Alexandria, D. C.....	374	2	372	.....	137	.....	59	15	.....	.....
Mobile,.....	1530	445	2214	315	1816	140	1271	234	1005	157
Apalachicola and Pensacola,	566	782	947	1567	457	661	397	1271	218	1024
Other ports,.....	304	1293	234	1880	480	1273	227	1910	70	588
TOTAL,.....	40526	4092	45296	6595	28815	2793	28651	3696	25168	2168

5. Table, exhibiting the exports of molasses from the port of New Orleans for five years, (up the Mississippi excepted,) from 1st September to 31st August.

Whither Exported.	1840-41.		1839-40.		1838-39.		1837-38.		1836-37.	
	Hhds	Bbls.	Hhds.	Bbls.	Hhds.	Bbls.	Hhds.	Bbls.	Hhds.	Bbls.
New York,.....	5496	17081	3511	15105	7584	3884	4897	8536	5106	8322
Philadelphia,.....	1002	4674	962	3078	173	753	782	725	337	467
Charleston, S. C.....	550	5216	.....	2309	863	2844	591	3596	246	3325
Savannah,.....	.....	1008	117	1309	182	1174	.....	1322	.....	2887
Providence and Bristol,	208	103	99	251	273	696	383	162	52	155
Boston,.....	496	2756	811	4451	456	328	227	1826	.....	727
Baltimore,.....	1582	7275	1267	5850	1734	3552	1216	3666	281	3318
Norfolk,.....	350	539	50	971	.....	391	.....	770	.....	579
Richmond & Petersb'g,	91	716	89	1694	231	765	236	1678	8	1592
Alexandria, D. C.....	85	153	.....	98	.....	399	257	108	.....	368
Mobile,.....	.....	4778	38	3867	.....	2609	.....	2018	.....	3087
Apalach. & Pensacola,	.....	1121	51	1710	232	1542	15	900	3	1299
Other ports,.....	1424	2661	1942	1704	1387	1495	1610	2441	223	1542
TOTAL,.....	11284	48104	8937	42397	13115	20432	10214	27748	6256	27668

6. Table, exhibiting the imports from the interior into the port of New Orleans for ten years, from 1st September to 31st August, in each year.

Articles.	1840-41.	1839-40.	1838-39.	1837-38.	1836-37.	1835-36.	1834-35.	1833-34.	1832-33.	1831-32.	
Apples,.....bbls.	27,244	24,387	6,724	27,561	18,850	23,315	2,359	10,469	11,954	11,530	
Apple Brandy,.....bbls.	4					44	7	50		51	
Bacon, assorted,.....hhds. and casks	11,120	7,197	13,533	11,541	7,774	7,099	8,911	5,051	4,251	4,881	
Bacon, assorted,.....boxes	111	153	215	174	357	375	774	524	215	370	
Bacon Hams,.....hhds.	6,006	4,349	6,089	5,420	6,164	7,356	8,175	7,318	1,821	2,734	
Bacon, in bulk,.....lbs.	2,593,057	1,117,987	1,501,900	985,250	1,492,877	893,188	1,525,059	567,324	670,693	990,905	
Bagging, Kentucky,.....pieces	70,976	66,898	49,697	48,364	30,477	55,160	47,503	21,921	31,965	22,494	
Bale Rope,.....coils	65,613	47,970	62,602	61,005	21,256	33,033	30,923	21,951	23,660	24,127	
Beans,.....bbls.	14,281	2,026	405	4,015	5,519	1,946	312	1,159	13,874	2,850	
Butter,.....hhds.	23	19	5	51	1	49	38		1	13	
Butter,.....kegs and firkins	14,074	10,429	7,557	11,967	7,369	6,178	5,930	7,804	8,847	4,812	
Butter,.....bbls.	693	790	429	279	199	382	64	80	160	165	
Beeswax,.....bbls.	306	182	155	117	255	244	200	474	380	511	
Beeswax,.....boxes	1	72	21	1	4	51	20	5	185	374	
Beef,.....lbs.	16,069	10,573	4,250	7,963	1,800	20,890	51,435	28,250	50		
Beef,.....hhds.	33,262	10,843	10,777	6,153	9,859	9,618	10,118	5,401	5,331	4,609	
Beef, dried,.....lbs.	32	195	70	36	17	56	18	180	204	3	
Beef, dried,.....lbs.	70,100	39,120	38,090	44,050	130,646	115,223	30,052	59,160	103,410	152,910	
Buffalo Robes,.....packs	2,587	5,447	4,035	2,929	4,816	3,800	2,493	1,626	1,957	1,942	
COTTON. {	Louisiana and Mississippi,.....bales	677,343	747,894	469,231	560,406	443,307	355,149	349,805	311,383	287,728	194,469
	Lake,.....bales	5,163	14,960	12,156	13,836	11,643	11,166	10,848	9,202	11,974	7,354
	North Alabama and Tennessee,.....bales	118,122	155,466	69,347	124,539	132,080	96,700	149,181	134,482	93,303	114,934
	Arkansas,.....bales	11,149	13,767	7,003	11,969	7,101	5,738	3,134	1,616	2,862	1,187
	Mobile,.....bales	5,881	15,649	16,768	23,301	7,655	16,472	17,456	5,063	1,533	17,663
	Florida,.....bales	731	2,727	1,080	5,437	1,053	6,882	2,764	5,321	6,278	9,499
Texas,.....bales	4,481	3,982	2,929	3,232	2,974	3,335	2,984	917	155	540	
Corn Meal,.....bbls.	2,214	1,447	3,082	3,109	2,992	8,703	1,518	1,665	2,983	2,028	
Corn, in ears,.....bbls.	168,050	152,965	161,918	270,924	194,013	255,975	262,410	97,774	91,473	71,322	
Corn, shelled,.....sacks	268,557	278,358	338,795	177,751	369,090	287,182	162,346	62,137	65,620	7,490	
Cheese,.....casks	1,852	428	319	510	201	291	173	117	153	321	
Candles,.....boxes	425	390	34	800	23	216	46	519	1,811	127	
Cider,.....bbls.	544	524	184	1,627	735	1,790	22	1,199	898	929	
Coal, Western,.....bbls.	221,233	99,915	94,362	99,220	61,118	85,328	45,756	24,120	50,000	50,000	

Commercial Statistics.

Table 6 continued—exhibiting the imports from the interior into the port of New Orleans for ten years, from 1st September to 31st August in each year.

Articles.	1840-41.	1839-40.	1838-39.	1837-38.	1836-37.	1835-36.	1834-35.	1833-34.	1832-33.	1831-32.
Dried Peaches,.....bbls.	483	18	32	37	239	443	21	319	29	47
Dried Apples,.....bbls.	1,041	740	.....	35	792	1,176	60	1,128	1,145	250
Feathers,.....bags	470	489	457	141	152	224	384	361	200	143
Flaxseed,.....bbls.	742	723	316	541	1,220	3,381	6,268	3,720	910	900
Flour,.....bbls.	496,194	482,523	434,984	320,208	253,500	287,232	286,534	345,831	233,742	221,283
Furs,.....hhds.	86	106	111	42	5	70	191	67	306	123
Furs,.....boxes	32	16	12	6	3	6	5	6	79	9
Furs,.....bundles	1,733	1,121	301	616	575	1,846	2,596	479	876	671
Gin,.....bbls.	.....	.....	.....	50	179	70	183	330	509	468
Ginseng,.....bags and cases	5,000	.....	38	2	70	37	31	.....	221	244
Ginseng,.....lbs.	.....	7,560	3,865	3,000	11,500	8,350	8,500	13,600	.....	.....
Hemp,.....bundles	450	500	4,044	450	.....	7	.....	32	375	479
Hempen Yarn,.....reels	26	.....	.....	94	40	.....	21	27	85	333
Packing Yarn,.....reels	483	842	1,040	471	138	.....	905	36	.....	16
Hides,.....	25,522	29,962	19,582	12,235	22,287	21,926	35,716	40,679	22,362	12,889
Horns,.....	2,480	18,666	27,450	7,050	16,376	45,078	35,767	38,934	28,845	30,067
Hay,.....bundles	21,425	7,603	9,915	13,525	20,594	15,982	1,311	823	1,634	1,166
Iron, pig,.....tons	512	1,001	411	1,834	415	1,048	3,526	3,253	1,144	30
Iron, wrought,.....tons	45	40	17	.....	.....	47	131	68	148	.....
Lard,.....hhds.	74	146	313	30	.....	.....	9	.....	.....	.....
Lard,.....bbls.	9,672	5,007	8,620	3,737	3,664	1,671	3,322	2,359	686	1,235
Lard,.....kegs	311,710	177,303	218,387	224,388	203,825	188,739	239,552	195,565	128,019	151,725
Lard,.....lbs.	3,000	.....	2,300	10,000	.....	2,100	3,274	.....	.....	.....
Leather,.....bundles	1,092	799	681	424	832	738	1,021	569	856	325
Leather,.....sides	.....	.....	.....	.....	200	391	25	.....	.....	.....
Lime, Western,.....bbls.	2,406	1,020	900	500	590	500	1,332	3,820	1,642	.....
Lead, pig,.....pigs	434,467	307,397	309,528	294,448	260,223	313,705	225,386	203,999	163,393	117,826
Lead, bar,.....kegs and boxes	601	863	807	1,520	431	760	627	2,367	1,026	453
Lead,.....lbs.	.....	.....	.....	.....	.....	.....	.....	244,000	245,500	.....
Oats,.....bbls.	54,250	42,885	38,708	25,514	32,180	18,132	14,264	18,206	9,029	1,784
Onions,.....bbls.	6,457	2,871	441	1,605	4,642	3,532	361	8,772	610	501
Oil, Linseed,.....bbls.	414	195	180	400	249	159	613	514	488	171
Oil, Bear,.....bbls.	24	1	1	9	2	40	68	93	154	48

Articles.	1840-41.	1839-40.	1838-39.	1837-38.	1836-37.	1835-36.	1834-35.	1833-34.	1832-33.	1831-32.
Oil, Castor,.....bbls.	1,115	669	357	564	905	1,220	495	363	274	402
Peach Brandy,.....bbls.	147	9	51	177	196	147	401	257	412	20
Pecans,.....bbls.	100	44	.....	.....	121	310	23	11	80	6
Pickles,.....bbls.	142	144	196	31	420	37	44	.....	73	57
Pickles,.....kegs	15	283	415	183	435	1,130	1,223	283	849	238
Potatoes,.....bbls.	28,468	21,469	6,254	16,565	26,599	14,122	4,984	8,537	46,343	6,346
Pork,.....bbls.	216,974	120,908	166,071	139,463	115,580	79,505	92,172	91,998	59,241	68,270
Pork,.....hhds.	763	1,067	1,160	1,523	531	87	124	298	175	30
Pork, in bulk,.....lbs.	9,744,220	5,099,987	7,192,156	3,474,076	8,939,135	5,416,976	7,160,934	2,603,860	4,196,192	4,114,096
Porter and Ale,.....bbls.	2,133	106	324	95	1,181	756	49	1,723	1,803	1,456
Rum,.....puncheons	102	289	478	464	639	159	520	498	66	.....
Rum,.....bbls.	2,133	1,714	454	40	4,324	1,418	1,396	2,083	1,816	347
Skins, Deer,.....packs	1,650	2,200	3,183	2,925	4,014	4,338	2,612	5,091	5,223	3,809
Skins, Bear,.....packs	26	21	74	13	9	65	90	174	311	197
Shot,.....kegs	6,501	1,442	1,345	1,962	1,891	1,313	2,444	1,920	1,160	1,196
Shot,.....bags	102	.....	106	111	.....	.....	4	20	72	.....
Soap,.....boxes	150	66	300	587	83	328	1,187	1,588	1,876	76
Shingles,.....	155,000	537,000	80,000	140,000	88,000	580,000	368,600	55,000	702,000	251,000
Staves,.....	736,600	1,000,000	1,700,000	600,000	1,000,000	1,020,000	1,000,000	2,000,000	850,000	700,000
Cigars,.....bbls.	512	.....	2	35	40	113	29	50	27	2
Moss, Spanish,.....bales	2,073	2,085	1,888	1,733	3,863	5,861	1,284	584	1,059	735
Tallow,.....bbls.	937	200	748	135	73	335	440	712	1,954	1,594
Tobacco, Leaf,.....hhds.	53,170	43,827	28,153	37,588	28,501	50,555	35,059	25,871	20,627	31,174
Tobacco, Chewing,.....kegs and boxes	3,935	912	1,856	4,069	1,427	1,109	1,385	2,390	2,825	11,434
Tobacco,.....carrots	180	.....	.....	366	.....	4	942	222	1,723	1,447
Tobacco,.....bales	1,226	280	1,386	144	1,533	1,499	3,204	1,277	2,784	2,271
Twine,.....bundles	905	932	896	654	227	354	439	249	267	125
Twine,.....boxes	104	61	16	.....	36	38	76	65	42	11
Venison Hams,.....	1,034	7,348	1,910	1,470	550	4,272	5,006	9,122	6,229	970
Vinegar,.....bbls.	318	18	1,674	464	94	58	136	159	958	64
Whiskey,.....bbls.	73,873	55,857	29,353	51,580	44,790	31,929	35,220	32,182	34,970	37,369
Window Glass,.....boxes	760	2,363	2,732	2,859	2,059	2,864	7,904	3,938	3,222	1,138
Wheat,.....bbls. and sacks	2,621	63,015	17,280	2,027	6,422	1,090	10,038	.....	.....	.....

Table 6 concluded—exhibiting the imports from the interior into the port of New Orleans for ten years, from 1st September to 31st August, in each year.

7. Table, exhibiting the monthly arrivals of ships, barks, brigs, schooners, and steam-boats at the port of New Orleans, for four years, from 1st September to 31st August.

Months.	1840-41.						1839-40.					
	Ships.	Barks.	Brigs.	Schrs.	TOTAL.	Steam-boats.	Ships.	Barks.	Brigs.	Schrs.	TOTAL.	Steam-boats.
September,.....	31	7	18	20	76	83	16	2	17	18	52	62
October,.....	55	13	15	37	120	186	49	6	21	40	116	135
November,.....	68	18	23	27	136	229	54	18	26	38	136	153
December,.....	105	30	55	76	266	281	59	22	57	65	203	241
January,.....	80	32	43	65	220	241	99	26	53	91	269	196
February,.....	37	15	21	50	123	207	38	14	36	64	152	219
March,.....	76	25	52	97	250	233	27	13	26	110	176	241
April,.....	53	15	32	43	143	219	94	33	54	74	255	207
May,.....	40	10	22	31	103	208	30	11	60	69	170	170
June,.....	24	10	14	31	79	141	40	13	37	50	140	135
July,.....	12	10	16	20	58	92	39	9	30	29	97	103
August,.....	14	6	14	35	69	67	18	10	18	34	80	75
TOTAL,.....	595	191	325	532	1643	2187	553	177	435	682	1846	1973

Table 7 continued.

Months.	1838-39.						1837-38.					
	Ships.	Barks.	Brigs.	Schrs.	TOTAL.	Steam-boats.	Ships.	Barks.	Brigs.	Schrs.	TOTAL.	Steam-boats.
September,.....	22	3	13	18	56	57	18	7	9	24	58	64
October,.....	42	9	23	31	105	50	20	7	19	15	61	74
November,.....	81	15	45	56	197	117	77	12	35	33	157	103
December,.....	69	17	47	63	196	163	64	11	45	48	168	204
January,.....	67	18	59	103	247	161	44	9	54	64	171	198
February,.....	53	25	44	84	206	179	33	9	41	59	142	165
March,.....	57	18	56	98	229	195	48	4	58	75	185	186
April,.....	49	19	37	79	184	186	44	16	37	72	169	150
May,.....	52	5	39	62	158	187	53	10	50	55	168	144
June,.....	8	6	15	41	70	144	46	11	65	73	195	156
July,.....	16	9	19	47	91	76	12	6	27	29	74	79
August,.....	15	2	10	34	61	53	12	9	20	23	64	35
TOTAL,.....	461	146	407	716	1740	1568	471	111	460	570	1612	1558

In the year 1836-37 the arrivals were as follows:—ships, 408; barks, 102; brigs, 440; schooners, 540; total sailing vessels, 1,489: steamboats, 1,561.

IMPORTATION OF COCHINEAL INTO GREAT BRITAIN.

Statement of imports of cochineal into Great Britain at six different periods, from 1815 to 1840.

Year.	HOME USE.	EXPORTS.	PRICE.	STOCK.
	Pounds.	Pounds.	Per Pound.	Ceroons and Bags.
1815.....	55,378	78,236	33s. to 38s.	3,337
1820.....	73,696	56,302	24s. to 27s.	3,441
1825.....	118,123	92,782	17s. to 20s.	2,184
1830.....	172,123	102,367	8s. 6d. to 10s.	2,047
1835.....	170,843	346,759	6s. 9d. to 9s.	2,296
1840.....	510,631	819,329	4s. to 6s.	3,415

SKETCH OF THE COMMERCE AND NAVIGATION OF THE UNITED STATES, 1840.

AS COMPILED FROM THE ANNUAL REPORT FOR HAZARD'S UNITED STATES REGISTER.

IMPORTS.

The imports in 1840, (year ending 30th September,) amounted to \$107,141,519, exceeded by the exports \$24,944,427. This amount varies from the tables accompanying the report of the secretary.

In 1838, the imports were.....	\$113,717,404
1839, "	162,092,132
1840, "	107,141,519

Which shows the imports in 1840 to have been less than in 1838 by \$6,575,885, and than in 1839, \$54,950,613.

Of the imports, \$92,802,352 were in American, and \$14,339,167 in foreign vessels.

Of the whole amount of imports, \$57,196,204, or 53 per cent, was free of duty.

The amount of imports from—

England,.....	was \$33,114,133	Mexico,.....	was \$4,175,001
France,.....	17,572,876	Hanse Towns,.....	2,521,493
Cuba,.....	9,835,477	British American colonies,	2,007,767
China,.....	6,640,829	Russia,.....	2,572,427
Brazil,.....	4,927,296	British East Indies,.....	1,952,461

From Sweden and Norway, Holland, British West Indies, Hayti, Spain, and Spanish West Indies, except Cuba, Italy, Venezuela, and Chili, the imports exceed one million each.

Some of the principal articles of import were—

Teas, (from China,) 19,981,476 lbs.....	\$5,417,589
Coffee, 94,996,095 lbs.....	8,546,222
Silks, not India,.....	8,288,958
Cloths and cassimeres,.....	4,696,529
Cottons dyed, printed, or colored,.....	3,893,694
Brown sugar, 107,955,038 lbs.....	4,742,492
Bar iron,.....	3,397,480
Salt,.....	1,015,526
Molasses,.....	2,910,791

EXPORTS.

The amount of exports in 1840 amounted to	\$132,085,946
" " 1839 "	121,028,416
" " 1838 "	108,486,616

Being an excess in 1840 over 1838 of \$23,599,330, and over 1839 of \$11,057,530.

Domestic exports in 1840 amounted to \$113,895,634, and foreign exports to \$18,190,312.

In 1840 the domestic exports exceeded those of 1839 \$10,361,743. The exports exceeded the imports \$24,944,427.

Some of the principal domestic exports in 1840 were—

Cotton,.....	\$63,870,307
Flour,.....	10,143,615
Tobacco,.....	9,883,957
Cotton goods,.....	3,549,607
Refined sugar,.....	1,214,658

Of the exports there went to—

England,.....	\$57,048,660	Holland,.....	\$3,856,310
France,.....	21,841,554	British West Indies,.....	2,965,584
Cuba,.....	6,310,515	Mexico,.....	2,515,341
British American colonies,....	6,093,250	Brazil,.....	2,506,574
Hanse Towns,.....	4,198,459	Scotland,.....	2,050,940

Russia, Danish West Indies, Hayti, Italy, Trieste, Texas, Chili, and China, each took of the exports over one million.

SPECIE.		
Imports—gold bullion,.....	\$273,127	
silver bullion,.....	469,434	742,561
Specie—gold,.....	\$2,812,030	
“ silver,.....	5,328,222	8,140,252
		<hr/>
Total imports,.....	\$8,882,813	
Exports—American gold and silver coin,.....	2,235,073	
Foreign gold,.....	1,468,300	
“ silver,.....	4,665,952	6,134,252
		<hr/>
		8,369,325
		<hr/>
Total excess of imports,.....	\$513,488	

Showing that there has been an excess of imports of \$2,748,561 of foreign gold and silver, and an export of \$2,235,073 of American in its place.

Of the whole amount of domestic exports, the southern states exported, viz:—

Maryland,.....	\$5,495,020	
Virginia,.....	4,769,937	
North Carolina,.....	387,484	
South Carolina,.....	9,981,016	
Georgia,.....	6,862,959	
Alabama,.....	12,854,694	
Louisiana,.....	32,998,059	
Florida,.....	1,850,709	
		<hr/>
		\$75,199,878

The middle states exported as follows:—

New York,.....	\$22,676,609	
New Jersey,.....	14,863	
Pennsylvania,.....	5,736,456	
Delaware,.....	37,001	
		<hr/>
		28,464,929

New England states:—

Maine,.....	\$1,000,910	
New Hampshire,.....	20,761	
Vermont,.....	305,150	
Massachusetts,.....	6,268,158	
Rhode Island,.....	203,006	
Connecticut,.....	518,210	
		<hr/>
		8,325,195

Western states:—

Ohio,.....	\$991,954	
Michigan,.....	162,229	
		<hr/>
		1,154,183

District of Columbia,..... 751,429

Total exports,.....\$113,895,634

From this statement it would appear that the southern states export nearly three fourths of the domestic products of the United States; of which Louisiana exports nearly one half. But as the Mississippi is the natural outlet of the southwestern and western states which do not appear in the tables to have any exports, they ought to be considered in connection with that state. Again, they are entitled to a credit for a considerable portion of the exports from the middle and eastern states, such as the cotton, tobacco, rice, &c.

The following is a similar classification of the several states with respect to the imports of 1840:—

Maryland,.....	\$4,910,746	
Virginia,.....	545,085	
North Carolina,.....	252,532	
South Carolina,.....	2,058,870	
Georgia,.....	491,428	
Alabama,.....	574,651	
Louisiana,.....	10,673,190	
Florida,.....	190,728	
	<hr/>	\$19,697,230
Middle states:—		
New York,.....	\$60,440,750	
New Jersey,.....	19,209	
Pennsylvania,.....	8,464,882	
Delaware,.....	802	
	<hr/>	68,925,643
New England, or eastern states:—		
Maine,.....	\$628,762	
New Hampshire,.....	114,647	
Vermont,.....	404,617	
Massachusetts,.....	16,513,858	
Rhode Island,.....	274,534	
Connecticut,.....	277,072	
	<hr/>	18,213,490
Southwestern and western states:—		
Ohio,.....	\$4,915	
Kentucky,.....	2,241	
Tennessee,.....	28,938	
Michigan,.....	136,610	
Missouri,.....	10,600	
	<hr/>	185,304
District of Columbia,.....		119,852
		<hr/>
Total imports,.....	\$107,141,519	

Showing that about 4.5ths of the whole amount of imports arrive in the middle and eastern states.

NAVIGATION AND TONNAGE.

There arrived, in 1840, 7,211 American, 4,571 foreign vessels; total, 11,782 vessels, of 2,289,309 tons. Crews, 110,991 men, 3,739 boys. Cleared during the same, 7,583 American, 4,583 foreign; total, 12,166; tons, 2,353,495. Crews, 116,331 men, 3,415 boys. Of the foreign vessels which entered 4,024 were British, 113 French, 134 Hanseatic, 101 Spanish. Of the vessels entered there arrived at—

New York,.....	1,955	New Orleans,.....	924
Boston,.....	1,507	Philadelphia,.....	444
Passamaquoddy,.....	1,161	Baltimore,.....	410

The registered tonnage of the United States is	899,764.76
Enrolled and licensed,.....	1,176,695.46
Fishing vessels,.....	104,304.84

Tons,.....	2,180,764.16.95
The tonnage employed in the whale fishery,	136,926.64.94
“ “ coasting trade,.....	1,144,664.34
“ “ cod fishery,.....	67,926.48
“ “ mackerel fishery,..	28,269.19
“ “ steam navigation,	198,184.30

There were built in the United States, in 1840, 97 ships, 109 brigs, 378 schooners, 224 sloops, 63 steamboats; total, 871. Tonnage, 118,309 23.95.

Of these, 181 were built in Maine; 113 in Massachusetts; 109 in New Jersey; 103 in Pennsylvania; 111 in Maryland; 72 in New York.

There were sold to foreigners, 11 ships; 29 brigs; 46 schooners; 1 sloop.

Lost at sea, 33 ships; 41 brigs; 87 schooners; 20 sloops; 16 steamboats.

COTTON EXPORTS OF GREAT BRITAIN, ETC., FOR 1840.

Statement showing the declared value of cotton manufactures and cotton yarn, exported from the united kingdom, and the amounts taken by the different countries to which they were exported; derived from official documents, and originally published in the Leeds Mercury.

COUNTRIES.	VALUE.	COUNTRIES.	VALUE.
<i>Northern Europe.</i>		St. Helena,.....	1,494
Russia,.....	£1,151,798	Mauritius,.....	159,808
Sweden,.....	66,350	<i>Asia.</i>	
Norway,.....	28,000	Arabia,.....	
Denmark,.....	6,328	E. Ind. Co.'s territ's & Ceylon,	3,878,186
Prussia,.....	1,961	Sumatra, Java, &c. in Ind. seas,	272,633
Germany,.....	3,551,439	Philippine islands,.....	141,629
Holland,.....	2,244,373	China,.....	327,137
Belgium,.....	206,530	British settlements in Australia,	179,707
<i>Southern Europe.</i>		New Zealand,.....	3,181
France,.....	209,136	South Sea islands,.....	1,998
Portugal Proper,.....	728,309	<i>America.</i>	
Portugal Azores,.....	25,228	British North Amer. colonies,	611,303
Portugal Madeira,.....	16,677	British West Indies,.....	1,234,687
Spain and the Baleric islands,	11,181	Hayti,.....	161,929
Spain and the Canaries,.....	28,339	Cuba, and other for. W. I. col's,	401,382
Gibraltar,.....	635,821	United States of America,.....	1,123,439
Italy and the Italian islands,...	1,671,122	States of Cen. and S. America,	
Malta,.....	80,261	Mexico,.....	249,065
Ionian islands,.....	49,174	Guatemala,.....	
Morea and Greek islands,.....	638	Colombia,.....	248,046
Turkey,.....	895,888	Brazil,.....	1,525,037
Syria and Palestine,.....	216,269	States of the Rio de la Plata,...	335,305
<i>Africa.</i>		Chili,.....	921,627
Egypt,.....	64,267	Peru,.....	494,827
Tripoli, Tunis, Algiers, &c.....	47,047	<i>Neighboring British islands.</i>	
Western coast of Africa,.....	262,499	Guernsey, Jersey, Alderney, {	65,381
Cape of Good Hope,.....	134,655	Man, &c.....	
African ports on the Red Sea,.....		TOTAL EXPORTS,.....£24,668,618	
Cape Verd islands,.....	2,487		

White or plain cottons,.....yards,	433,114,373.....value,	£7,803,772
Printed or dyed cottons,.....	" 357,517,624.....	" 8,498,448
Hosiery and small wares,.....	" ".....	" 1,265,090
Twist and yarn,.....pounds,	118,470,323.....	" 7,101,308

Total value of cotton exports,.....£24,668,618

BELGIAN COMMERCE AND NAVIGATION.

It appears by an account of the return of the commercial movement of the Belgian ports, for 1840, that the number of vessels which entered Antwerp in that year was 1,173, measuring 180,632 tons; and the number which left the port 1,151, measuring 163,306 tons. The imports by sea into Antwerp amounted to 120,902,770f., being nearly 23,000,000f. more than in 1839. The general movement of arrivals and departures at Ostend was 753 vessels, measuring 76,076 tons; Ghent, 285 vessels, giving a total of 27,486 tons; Louvain, 132 vessels, 9,576 tons; Nieuport, 204 vessels, 5,994 tons. The general result of the five ports was 3,598 vessels, measuring 463,069 tons, being 61 vessels and 49,429 tons less than in 1839. The imports by sea into Ostend amounted to 9,383,557f.; Nieuport, 3,964,141f.; Louvain, 472,300f.; Ghent, 20,294,777f. The total amount of the imports for the five ports was 155,472,605f. The imports of cotton amounted to 13,019,900f., being 7,794,740f. more than in 1839. Of this amount 10,955,540f. was from the U. S.; 1,957,000f. from England; and 263,360 from France.

BANK STATISTICS.

BANK OF FRANCE.

DEBTOR AND CREDITOR ACCOUNT OF THE POSITION OF THE BANK ON THE 30TH JUNE, 1841.

<i>Debtor.</i>	<i>Francs.</i>	<i>Ctmes.</i>
Bank notes payable to bearer,.....	225,011,500	00
Bank notes payable to order,.....	1,205,939	95
Account current with the Treasury,.....	120,343,174	79
Various accounts current,.....	48,857,392	44
Receipts payable at sight,.....	2,803,500	00
Capital of the bank,.....	67,900,000	00
Reserve,.....	10,000,000	00
House and furniture,.....	4,000,000	00
Dividends payable,.....	4,328,001	43
Different branch banks,.....	2,685,724	28
Drafts of branch banks payable,.....	243,900	63
Total,.....	487,379,133	52
<i>Creditor.</i>	<i>Francs.</i>	<i>Ctmes.</i>
Cash on hand,.....	225,691,022	82
Commercial bills discounted,.....	148,513,296	72
Advanced on the security of bullion,.....	8,297,000	00
Advanced on government securities,.....	8,822,491	65
Accounts current debtors,.....	19,594,398	27
Capital advanced to branch banks,.....	12,000,000	00
Reserve,.....	10,000,000	00
Lodged in government securities,.....	50,177,748	90
House and furniture,.....	4,000,000	00
Sundry credits,.....	283,175	16
Total,.....	487,379,133	52

AVERAGE AMOUNT OF BUSINESS TRANSACTED DURING THE QUARTER ENDING 30TH JUNE, 1841.

<i>Debtor.</i>	<i>Francs.</i>
Average amount of bank notes payable to order outstanding,.....	226,727,500
Treasury account,.....	106,693,000
Sundry accounts,.....	45,558,500
Receipts payable at sight,.....	3,825,500
<i>Creditor.</i>	<i>Francs.</i>
Average amount of cash on hand,.....	226,856,500
Average amount of commercial bills discounted,.....	117,115,500
Advances on bullion, &c.....	19,615,000
Branch banks, accounts current,.....	16,958,000

BUSINESS TRANSACTED DURING THE QUARTER ENDING THE 30TH OF JUNE, 1841.

	<i>Francs.</i>
Amount of bills of exchange discounted,.....	213,907,500
Cash advanced on deposits of bullion and government stock,.....	32,152,600
Received from sundry accounts current,.....	1,018,826,000
Paid for sundry accounts current,.....	1,031,961,000
Received from the Treasury,.....	105,226,000
Paid from the Treasury,.....	84,635,000
Received in sundry cash payments,.....	594,287,000
Paid in sundry cash payments,.....	591,519,500

SAVINGS BANKS IN FRANCE.

The *Moniteur* publishes a report to the king, from the minister of commerce, on the savings banks throughout France, including Paris. We learn from the document that the number of savings banks, with their branches, which, in 1834, was only 70, had, in 1839, increased to 404; and the amount of deposits in hand, which was, in 1834, only 37,015,492 francs, although the institution of savings banks in France had already at that time an existence of sixteen years, had increased, in 1839, to 171,057,904 francs.

The progressive increase from 1834 was as follows:—1835, 62,185,676 francs; 1836, 96,576,622 francs; 1837, 107,637,150 francs; 1838, 146,089,884 francs; and in 1839, 171,057,904 francs. The number of depositors, in 1834, was 81,714, giving an average of 452f. 98c. for each; in 1839 it was 310,843, giving an average of 550f. 30c., thus showing a beneficial result, not only as to increase of numbers, but also as to the pecuniary means of contributors, or greater habits of economy.

BOSTON BANKS.

Table of the Boston banks, presidents, cashiers, capital, and the semi-annual dividend paid on the 4th of October, 1841.

Banks.	Presidents.	Cashiers.	Capital.	Dividend. Per cent.	Amount.
Atlas,.....	Samuel C. Gray,...	Joseph White,.....	\$500,000	2½	\$12,500
Atlantic,.....	Pliny Cutler,.....	Benjamin Dodd,....	500,000	3	15,000
Boston,.....	Robert G. Shaw,...	James C. Wild,.....	600,000	3½	21,000
City,.....	C. W. Cartwright,...	Eliphalet Williams,...	1,000,000	none	
Columbian,.....	John G. Torrey,...	William Coffin,.....	500,000	3	15,000
Eagle,.....	Titus Welles,.....	Waldo Flint,.....	500,000	3½	17,000
Freeman's,.....	Andrew Drake,.....	Jeremy Drake,.....	150,000	3½	5,250
Globe,.....	James Read,.....	Charles Sprague,...	1,000,000	3	30,000
Granite,.....	Joseph V. Bacon,...	Archibald Foster,...	500,000	3	15,000
Hamilton,.....	Daniel Denny,.....	Joseph Hall, jr,....	500,000	3	15,000
Massachusetts,.....	Wm. Parsons,.....	James Dodd,.....	800,000	3	24,000
Market,*.....	J. Stickney,.....	Jonathan Brown,....	600,000	3½	19,600
Mechanics',.....	David Nickerson,...	Alvan Simonds,....	150,000	3	4,500
Merchants',.....	Franklin Haven,....	C. H. Eldredge,....	2,000,000	3½	70,000
New England,.....	Philip Maret,.....	E. P. Clark,.....	1,000,000	3	30,000
North,.....	John W. Trull,....	Gurdon Steele,.....	750,000	3	30,000
Shoe & Leath. D's	Enoch Baldwin,....	E. Plummer,.....	500,000	3½	17,500
Shawmut,.....	Benj. T. Reed,.....	Thomas Drown,....	500,000	3	15,000
State,.....	E. A. Bourne,.....	Jonathan Call,	1,000,000	1	18,000
Suffolk,.....	Henry B. Stone,...	Isaac C. Brewer,...	1,800,000	4	40,000
South,.....	B. C. Clark,.....	J. J. Loring,.....	500,000	2	10,000
Tremont,.....	E. T. Armstrong,...	James Dalton,	500,000	3	15,000
Traders',.....	David Dudley,.....	Jeremiah Gore,....	500,000	none	
Union,.....	Samuel Fales,.....	Chester Adams,....	800,000	3	24,000
Washington,.....	Aaron Baldwin,....	D. A. Sigourney,...	500,000	2½	13,750
			\$17,610,000		\$466,350

* Out of the earnings since the reduction of the capital.

COMPARISON OF THE PRICES OF BANK NOTES IN 1841 AND 1824.

Massachusetts,.....	1841, par	1824, par
Maine,.....	½ per cent discount	1 per cent discount
New Hampshire,.....	¼ " " "	1 " "
Vermont,.....	¼ " " "	1 " "
Canada,.....	2 " " "	2 " "
Pennsylvania, (Phila.)	3½ " " "	par
Maryland,.....	3 " " "	½ per cent discount
Virginia,.....	4 " " "	1 " "
North Carolina,.....	4½ " " "	1½ " "
Georgia,.....	10 " " "	35 " "
Ohio,.....	9 " " "	6 " "
Kentucky,.....	9 " " "	60 " "
Tennessee,.....	10 " " "	35 " "
Louisiana,.....	5 " " "	3½ " "
Alabama,.....	11 " " "	6 " "

STATISTICS OF POPULATION.

CENSUS OF THE UNITED STATES, 1840.

Official epitome of the whole population of the states and territories of the United States, exhibiting the general aggregate amount of each description of persons, by classes.

FREE WHITE PERSONS.

<i>Males</i> —Under five years of age,.....	1,270,790	
Of five and under ten,.....	1,024,072	
Of ten and under fifteen,.....	879,499	
Of fifteen and under twenty,.....	756,622	
Of twenty and under thirty,.....	1,322,440	
Of thirty and under forty,.....	866,431	
Of forty and under fifty,.....	314,505	
Of fifty and under sixty,.....	174,226	
Of sixty and under seventy,.....	80,051	
Of seventy and under eighty,.....	21,679	
Of eighty and under ninety,.....	2,597	
Of ninety and under one hundred,.....	476	
Of one hundred and upwards,.....		7,249,266
<i>Females</i> —Under five years of age,.....	1,203,349	
Of five and under ten,.....	986,941	
Of ten and under fifteen,.....	836,588	
Of fifteen and under twenty,.....	792,168	
Of twenty and under thirty,.....	1,253,395	
Of thirty and under forty,.....	779,097	
Of forty and under fifty,.....	502,143	
Of fifty and under sixty,.....	304,810	
Of sixty and under seventy,.....	173,299	
Of seventy and under eighty,.....	80,562	
Of eighty and under ninety,.....	23,914	
Of ninety and under one hundred,.....	3,231	
Of one hundred and upwards,.....	315	
		6,939,842
Total number of free white persons,.....		14,189,108

FREE COLORED PERSONS.

<i>Males</i> —Under ten years of age,.....	56,323	
Of ten and under twenty-four,.....	52,799	
Of twenty-four and under thirty-six,.....	35,308	
Of thirty-six and under fifty-five,.....	28,258	
Of fifty-five and under one hundred,.....	13,493	
Of one hundred and upwards,.....	286	
		183,467
<i>Females</i> —Under ten years of age,.....	55,069	
Of ten and under twenty-four,.....	56,562	
Of twenty-four and under thirty-six,.....	41,673	
Of thirty-six and under fifty-five,.....	30,385	
Of fifty-five and under one hundred,.....	15,728	
Of one hundred and upwards,.....	361	
		199,778
Total number of free colored persons,.....		386,245

SLAVES.

<i>Males</i> —Under ten years of age,.....	422,599	
Of ten and under twenty-four,.....	391,131	
Of twenty-four and under thirty-six,.....	235,373	
Of thirty-six and under fifty-five,.....	145,264	
Of fifty-five and under one hundred,.....	51,288	
Of one hundred and upwards,.....	753	
		1,246,408

<i>Females</i> —Under ten years of age,.....	421,470
Of ten and under twenty-four,.....	390,075
Of twenty-four and under thirty-six,.....	239,787
Of thirty-six and under fifty-five,.....	139,201
Of fifty-five and under one hundred,.....	49,692
Of one hundred and upwards,.....	580
	1,240,805
Total number of slaves,.....	2,487,213
*Total aggregate,.....	17,062,566
White persons included in the foregoing, who are deaf and dumb, under four- teen years of age,.....	1,919
White persons included in the foregoing, who are deaf and dumb, of fourteen and under twenty-five,.....	2,056
White persons included in the foregoing, who are deaf and dumb, over twenty- five,.....	2,707
White persons included in the foregoing, who are blind,.....	5,024
White persons included in the foregoing, who are insane and idiots, at public charge,.....	4,329
White persons included in the foregoing, who are insane and idiots, at private charge,.....	10,179
Total number of persons employed in mining,.....	15,203
Total number of persons employed in agriculture,.....	3,717,756
Total number of persons employed in commerce,.....	117,575
Total number of persons employed in manufactures and trades,.....	791,545
Total number of persons employed in navigation of the ocean,.....	56,025
Total number of persons employed in navigation of canals, lakes, and rivers,.....	33,067
Total number of persons employed in learned professions,.....	65,236
Slaves and colored persons included in the foregoing, who are deaf and dumb,.....	977
Slaves and colored persons included in the foregoing, who are blind,.....	1,892
Slaves and colored persons included in the foregoing, who are insane and idiots, at private charge,.....	2,093
Slaves and colored persons included in the foregoing, who are insane and idiots, at public charge,.....	833
Total number of pensioners for revolutionary or military services,.....	20,797
Total number of universities or colleges,.....	173
Total number of students in universities or colleges,.....	16,233
Total number of academies and grammar schools,.....	2,342
Total number of students in academies and grammar schools,.....	164,159
Total number of primary and common schools,.....	47,209
Total number of scholars in common schools,.....	1,848,244
Total number of scholars at public charge,.....	468,264
Total number of white persons over twenty years of age, who cannot read and write,.....	549,693

* Total number of persons on board of vessels of war in the United States naval service, June 1, 1840, 6,100; thus making the total aggregate of the population of the United States 17,068,666.

VALUE PER HEAD OF THE PRODUCTS OF THE UNITED STATES.

We published, in the September number of this magazine, a table from the department of state, showing the value of the agricultural productions in the several states of the Union, excepting Kentucky, Michigan, and North Carolina. With the aid of this table, the editor of the *St. Louis Gazette* has made "an estimate of the money value of the several products, and placed the result side by side with the population of the states respectively, to show the yield per head, in round numbers."

It will be seen by the following table that only four states produce more than \$100 to each head of the population, viz: Vermont, Mississippi, Arkansas, and Louisiana. Of these, Vermont takes the lead, and must certainly be considered the most enterprising, industrious, and thrifty agricultural state in the Union. Massachusetts is lowest in the

scale; but that state is engaged extensively in commerce and manufactures. The states most devoted to planting and farming, or whose products are chiefly agricultural, are mostly the southern and western. All the New England and middle states, as also Ohio, are very considerable manufacturers, and the most of them have a large commercial and navigation interest—causes which operate to draw away hands from agriculture. The average production *per capita* is \$87 50. Fourteen members of the Union size above this average, the remaining ten below it.

States.	Value.	Popula- tion.	Per Head.	States.	Value.	Popula- tion.	Per Head.
Maine,.....	\$34,720,000	501,793	769	Georgia,.....	\$58,830,000	691,352	85
New Hampsh.	25,703,000	284,574	90	Ohio,.....	84,507,000	1,519,467	55
Vermont,.....	43,227,000	291,948	148	Tennessee,....	73,130,000	829,510	88
Massachus'ts,	28,809,400	737,699	38	Louisiana,.....	37,706,000	352,000	106
Rhode Island,	3,745,800	108,830	34	Alabama,.....	42,376,000	590,756	71
Connecticut,...	22,945,000	309,948	74	Mississippi,....	41,773,000	375,601	111
New York,...	233,800,000	2,428,921	98	Missouri,.....	22,309,400	383,702	58
New Jersey,...	35,911,000	373,308	95	Indiana,.....	47,859,000	685,866	69
Pennsylvania,	136,249,000	1,721,033	79	Illinois,.....	35,264,500	476,183	74
Delaware,.....	6,027,000	78,085	78	Arkansas,.....	10,536,000	97,574	108
Maryland,.....	43,846,200	469,232	93	Iowa,.....	2,277,000	43,035	53
Virginia,.....	102,177,000	1,239,797	82	D. of Columb.	352,000	43,712	7
So. Carolina,...	49,117,800	594,398	82				

FACTS IN REGARD TO THE CENSUS OF THE UNITED STATES.

The editor of the Cincinnati Chronicle has been examining the six returns of the census, taken at intervals of ten years each since the adoption of the constitution. The investigations show some curious facts:—

1. The population of the United States increases exactly 34 per cent each ten years, and which doubles every twenty-four years. The law is so uniform and permanent, that when applied to the population of 1790, and brought down to the present time, it produces nearly the very result as shown by the census of 1840. And thus we may tell with great accuracy what will be the census of 1850. It will be nearly twenty-three millions.

2. But although this is the aggregate result, it is by no means true of each particular part of the country, for New England increases at the rate of 15 per cent each ten years, while the northwestern states increase 100 per cent in that period.

3. The slave population increased at 30 per cent, but since at less than 25 per cent. The free population have, however, increased at the rate of 36 per cent. At this rate, therefore, the difference between the free and slave population is constantly increasing.

4. Another fact is that the colored population increase just in proportion to the distance south; and that slavery is certainly and rapidly decreasing in the states bordering on the free states.

This state of things continued, would, in half a century, extinguish slavery in these states, and concentrate the whole black population of the United States on the Gulf of Mexico, and the adjacent states on the southern Atlantic.

PRUSSIAN-RHENISH POPULATION.

The Dusseldorf Gazette gives the following statistical account of the population of the Prussian-Rhenish provinces:—

“In 1826 it amounted to only 1,849,711 souls, but in 1840 had increased to 2,550,553, without reckoning the district of St. Wendel, which contains 36,499. Thus there has been an increase of 664,343 souls, or 35 per cent, in the space of twenty-four years. It is composed of 1,929,660 Roman Catholics; 593,353 Protestants; 1,318 Mneumonites, and 26,222 Jews. The department of Dusseldorf alone counts 802,998 inhabitants. The males amount to 1,278,637.”

MERCANTILE LIBRARY ASSOCIATION OF NEW YORK.

We have great pleasure in laying before our readers the syllabus, in part, of the 15th annual course of Lectures to be delivered at Clinton Hall, during the present season. From the topics so far selected, and the distinguished character of the lecturers, we anticipate a rich and interesting series. We would here take occasion to add, that the 21st anniversary of this noble institution will be celebrated on Tuesday the ninth of the present month, by an oration from the Hon. WILLIAM INGLIS of New York, and a poem by Mr. WILLIAM CUTTER, a member of the association. It is understood also, that a supper is to be provided on the occasion; and we would respectfully suggest, that the board of managers, in view of the progress of the great temperance movement of the day, follow the example of the American Institute at their recent celebration, by omitting the use of the "flowing bowl," "a custom more honored in the breach than the observance."

FIFTEENTH ANNUAL COURSE OF LECTURES TO BE DELIVERED AT CLINTON HALL, ON TUESDAY EVENING OF EACH WEEK, COMMENCING NOVEMBER 16TH.

Introductory—By DAVID PAUL BROWN, Esq., of Philadelphia.

One Lecture—Hon. RUFUS CHOATE, of Massachusetts.

One Lecture—Hon. A. BRUYN HASBROUCK, (President Rutgers College, New Jersey.)

One Lecture—ELIHU BURRITT, A.M., of Massachusetts, (the learned blacksmith)—"Is a Roman patriotism congenial with the republican principles or the spirit of our institutions?"

One Lecture—Hon. GEORGE M. DALLAS, of Pennsylvania, (late United States minister to Russia,) on "Russia."

One Lecture—Rev. J. M. WAINWRIGHT, D.D.

Two Lectures—Major G. TOCHMAN, (a Polish exile,) Professor, ——— College, Kentucky, on the "History and Revolution of Poland."

One Lecture—JOSEPH R. CHANDLER, Esq., of Philadelphia, on "Maternal Affection."

One Lecture—Rev. HENRY W. BELLOWES, on "Manners and Morals of a Republic."

Two Lectures—Professor SILLIMAN—1st, "A Sketch of the Structure of the Earth, including the leading facts of Geology."

2d, "Theory of the powers and operations by which the arrangement has been effected; with the results of utility and beauty."

One Lecture—WILLIAM L. STONE, Esq., on the "Buccaniers of America."

One Lecture—Rev. J. N. MAFFIT, Professor St. Charles College, Missouri.

One Lecture—JOHN NEAL, Esq., of Portland, on "Self Reliance."

One Lecture—GRANVILLE SHARP PATTISON, M.D., (Professor University Medical School,) on "The Constitution and Organization of the Animal Body."

One Lecture—Rev. JOHN O. CHOULES, on "Saint Bartholomew's Day, and Admiral Coligny."

LYFORD'S PRICE CURRENT.

In the Merchants' Magazine for June, 1841, we published a valuable table of flour inspections in Baltimore for the last forty-two years, which we omitted to credit to the "*Baltimore Commercial Journal, and Lyford's Price Current,*" the paper in which it originally appeared. We embrace this opportunity of correcting the omission, and at the same time of expressing our admiration of the industry and ability displayed by Mr. Lyford in the conduct of that excellent commercial journal. No work of the kind is more generally quoted abroad for its accurate and just review of the markets, as well as its carefully compiled and useful tables. We shall be happy to receive subscribers for it, and forward their names to the worthy publisher.

☞ An interesting and important paper on "*Morocco, and its Facilities for American Commercial Enterprise,*" and another on "*The British Corn Laws,*" are unavoidably deferred, but will appear in the December number of this magazine.