SUPPLEMENTARY OBSERVATIONS,

SEPTEMBER 1814.

The right application of the national industry, is the surest and greatest of the means to promote the wealth of nations. In the United States, there is no reason to entertain a doubt, on the general proposition, that labor and skill applied to the land will produce the greatest portion of riches. But it is also certain, that foreign commerce, which discovers markets for the spontaneous productions of the land, and for the fruits of cultivation, and procures abundant, and cheap supplies for the farmers and other consumers, also greatly promotes our wealth. Less favorable opinions and imperfect information have attended the internal department of the national trade, *the manufacturing business of the United States.* It has been the manifest object, of the president and congress to obtain a foundation, in truth, for sound opinions upon the subject of our *manufactures*, in the form of authentic information from every state, territory, district, county, city, borough and township, by means of the examinations of the marshals, and territorial secretaries and their repective assistants. The numerous reports of those officers, unavoidably imperfect as they are, afford much important information as well local as general, in relation to many things not before known. It is found, that our cotton wool has every where forced itself into manufacturing uses, and there is no reason to doubt, that the value of our cotton manufactures though much extended since 1810, very greatly exceeded, in that year, the highest value of the raw cotton heretofore exported in any one annual period. This prosperity of the cotton manufacture was without the aid of the double duties, and with but little assistance from labor-saving machinery. But when the vast importance of *mechanism*, in lieu of laboring hands, is considered, in connexion with our power to produce cotton, the diffusion and extent, which the cotton manufacture must obtain, particularly in a state of war and blockade, cannot be estimated.

Labor-saving processes and devices apply not to cotton alone. Wool, flax, hemp, wood, the various metals, tobacco, the manufacture of drinks and gunpowder, printing, dying, staining and callendering, fulling, moving boats and vessels freighted with raw materials, and manufactures, the manufacture of shoes, dipt candles, nails, hairpowder, paints and dyestuffs, various oils and paper are effected by machinery, which very beneficially abridges labor, and it is of incalculable importance, that the acquisitions from abroad and the numerous and invaluable inventions and improvements at home, *in regard to the uses of steam*, have given us opportunities in manufactures by machinery, which were not even in contemplation in Europe twenty years ago. To convince ourselves of the importance of labor-saving machinery to the United States, with a limited population, and a power to produce cotton in effect *unlimited*, let the people of America dwell, with the most sober and the most close attention, upon the fact that *the diminution of manual labor in Great Britain, by means of machinery, in the cotton manufacture, in the year* 1810, was as two hundred to *one*!! At that rate the people of the city and precincts of Baltimore, or half the people of either of the entire cities of Philadelphia or New-York, whose population, respectively, exceeds 100,000 persons, (with improved cotton machinery) could execute as much of the cotton yarn and twist manufactory, as our whole nation of eight millions, could perform in the former manner of manual industry, as conducted throughout Europe forty years ago. To neglect, in our country, the due use of such an advantage, would evince a destitution of common sense. To expect, that the United States will not proceed with ardor in this carreer, while our crops are so much confined to the home markets by foreign commercial regulations, under the name and color of blockades, is totally to disregard the most unavoidable and manifest consequences of the most potent causes. Whether Great Britain, or Russia, or Germany, or France, or Holland, or Spain, or Italy occasion, or *suffer* such a foreign commercial regimen to exist in respect to us, as forces us to make our requisite supplies out of our own crops, it is probable, that the industry, abilities and capital of our seaports will be incessantly turned, by such commercial obstructions, towards *manufacturing by machinery*,

so as not to be drawn from it, by a long procrastinated peace, or even by an early peace, if foreign navigation laws shall be found to circumscribe our external commerce. The inhabitants of the maritime towns will not become farmers, but will take large interests in great manufactories.

The public mind in the United States, has received a very considerable excitement from the numerous acquisitions of the European and African sheep; the Merino, the Tunisian, and the British Lincoln and Leicestershire breeds, with long wool and very heavy fleeces. In most countries of Europe, land is universally dear and, generally, it is monopolised. In Europe therefore and particularly in Great Britian, there is a comparative and irremediable want of *that description or form of capital* for the woollen branch, which is found in an abundance of cheap lands. But let it be well considered, that in the United States of America, the known variety and abundance, and even redundance of soil occasions a quantity of *indispensable and actual capital*, for the woollen branch in the *landed* form, the benefit of which is evident and incalculable. This capital has been steadily and powerfully working in our country: and hence it is, that while the people on the *seabord* were universally believing in insuperable impediments, from wild animals, to sheep farming, in interior situations, it is found that *our frontier county of Washington* has so increased its flocks, as to have more sheep than any other county in Pennsylvania, which reported more than 618,000 of those valuable animals in 1810. The columns of the tables, which relate to woollen cloths, hats, stockings, and fulling mills, with an estimate of the miscellaneous and unnamed cloths, evince a very considerable progress in the woollen manufacture to have been made in 1810, since which the improvements and acquisitions in stock, materials, machinery, and skill have been much greater than in any other branch in the United States. An uncommon facility is given, in America, to the owners of woollen manufactories, by the cheapness and abundance of cotton wool to mix, in every convenient form, with that of the sheep. Until we shall acquire a quantity of the various wools, amply sufficient for domestic consumption and foreign trade, substitutes for woollens made of cotton, will be found peculiarly convenient, saleable and profitable.* Every farmer and every village and hamlet, partakes in the profits of the woollen branch. It rests upon the broadest foundation. Having risen to its actual height in 1810, in the mere course of free industry and without material aid from machinery or instruction, it cannot decline with its subsequent real and great advantages, in regard to the raw material, the skill and the machinery

The iron branch of manufactures, from its highly useful nature and other circumstances, appears to demand the most serious consideration of public and private men. It is proved by the columns of furnaces and even by those of forges (though often supplied by long water and land carriage with pig iron,) that the eastern states are deficient in the ore or the fuel, or the local union of ore and fuel necessary to produce quantities of pig iron, sufficient for the air furnaces, the steel manufactories, rolling and slitting mills, gunsmiths, blacksmiths, trip-hammers, naileries, cutlers, shipsmiths and other iron workers of that part of our country. The duties upon foreign iron, in pigs and bars and upon fuel, are very injurious to the eastern manufacturers, ship owners, merchants, house builders and farmers, as also to all those in the Atlantic districts. It has occured incessantly, in the examinations, which have preceeded the preparation of the various parts of this work, that it is well worthy of candid and serious consideration, whether iron in pigs and bars, and fossil coal might not be justly and wisely made free of duty, like pig copper, block tin, hides and skins, cabinet woods and other goods, of the nature of raw materials. Iron manufactures and the use of iron would so increase on all the seacoasts, that the owners of iron works, who are not very numerous in places within five days carting from the ports, would not be materially incommoded, and the establishment of many new manufactures of iron would give perfect steadiness and stability to their business. The removal of the duties on iron and coal would produce no inconvenience whatever to the interior iron masters, because the expence of carting far exceeds the duties.

The cultivation of the olive tree and *the manufacture of olive oil, and of the soap of that oil* appear to be worthy of the immediate and serious attention of the people of the United States. The

*Blankets, counterpanes, coverlets, Canton flannels, cotton velvets, corduroys, and other warm, stout and heavy goods. The foreign rival articles require too much of the raw material, loaded as it is with duties and charges.

country lying between the state of Virginia, and the gulf of Mexico will probably prove to be generally capable of producing the olive tree. It grows and produces oil of the first qualities in Provence and Tuscany, and is very productive in other parts of Europe, corresponding in temperature with our country lying south of Virginia and Kentucky.* The quantity of olive oil, produced in a good year in France alone, is estimated by Peuchet at seventy-five millions of livres, which are nearly equal to fifteen millions of dollars. The price is fifteen sous per French pound, or nearly fourteen and a half cents for an American pound weight. The total weight of the olive, rapeseed, flaxseed and other oils made in France was, 100,000,000 of French pounds or 108, 000,000 of our weight in the year 1788, before its revolutionary extensions. If this article be compared with our whole exports of our produce and manufactures, it falls very little short of half of their value in a good year. Every description of these oils can be made in America. The olive oil is *a manufacture*, for use in substance, in soap and otherwise, which must ultimately contribute greatly to the wealth of our southern country. France imports much olive oil from the islands of the Archipelago, and has a great export trade in that oil, and in its excellent soap, manufactured at Marseilles. This oil is used in effecting the operations and in the lamps of many of the artists and manufacturers.

It is remembered by many, that the American provinces, which are now the United States, formerly depended entirely on importation for the liquors, which were drank in their families, or for the malt and molasses out of which they were made. Abundant supplies exist in our country in this season of war, blockade, and interruption of commerce. The columns of the following tables, which relate to distilled spirits, beer, ale, porter, and wines, amounting to the sum of 16,528,207 dollars, in 1810, the materials for which are nearly all derived from our soil, evince the magnitude of this manufactured resource, and the benefits of the liquor manufacture to the markets for produce and to the cheap supply of the various drinks in times of peace. Cider, domestic brewing of all kinds, metheglin, mead, and currant wine, if all descriptions were completely returned, would probably give us for the year 1814, without the use of imported molasses, a liquor manufacture of twenty millions of dollars. The distillery has greatly increased and improved, and the brewery and minor and domestic manufactures of liquors, have been exceedingly multiplied. It may be of some use in the future consideration of this subject, to know, that respectable writers in France, have considered the total production of wines and brandies of the grape in that country to have been in a single year before 1789, about 350 millions of livres in value, equal nearly to sixty-five millions of dollars, for twenty-six millions of white persons. The exportation did not amount to one tenth. The importance of the manufacture of potable commodities, to the general economy of the country and to the landed interest, is worthy of constant and serious consideration.

As a very cheap and infallible method of promoting the manufacturing purchases of the produce of our lands, it is most respectfully recommended to the consideration of all persons of public spirit, and legislative and executive station, that early, effectual and systematic measures be taken to diffuse models, descriptions, specifications and drawings, exhibiting the various modes of *saving labor* in manufactures;† and particularly in such things as will lighten and facilitate labor *to females, to children*, and to infirm persons, *in household manufactures*. Not only benevolence but profit strongly invites us to such measures. Certain of our artizans, in all our townships and counties, such as the clockmakers, turners, and various smiths, would have frequent opportunities of considerable profit, by adding to their ordinary business, the manufactures of the new and improved labor-saving machinery. The perpetual and other spinning and carding machinery, *the fly shuttle*, and *the most improved forms of the loom*, are considered to be among the most important objects of this nature.

It is well known, that the business of many of our most valuable mechanics, such as masons and plasterers, is interrupted by the winter season, in most of the states. It appears to be an

*The olive district of Europe commences in the vicinities of Lyons, Chamberry, and Grenoble in the department of *the Isere*, and extends to the southern points of Spain, Italy, and the Morea. That valuable tree is abundant in the adjacent parts of Asia, and grows well in northern Africa.

†Also in the business of the planters and farmers.

object of national importance, *in the saving of labor*, that those persons should acquire the knowledge of some second useful branch of industry, such as weaving, to employ their time when the frost suspends their ordinary occupations. In many parts of Europe the freedom of a second trade is not permitted, but here the advantage can be fully enjoyed by every workman.

In the cases of young females, particularly those who are bound as apprentices or otherwise, by the public guardians, and who continue for a time in private families, for maintenance and education, it would be an easy measure, and highly important to the children and to the country, if the persons, who take them into their houses were, to be obligated to have them well taught the art of weaving. It is a business, a good knowledge of which may be obtained in a few weeks, and it would be a great advantage to those families through the whole of their lives. It is principally by female weavers, that the states of North Carolina and Virginia have been unobservedly enabled to exceed all the others in the number of working looms, and that the southern states have so imperceptibly advanced in the various cloth manufactures. The stocking looms of England and Germany, and the new broad and other hose web looms of England are peculiarly and manifestly worthy of female attention, being much more profitable than the common very unproductive knitting needles. The present imperfection and deficiencies in the American stocking manufacture are the forerunners of great and sure profits to all those, who shall hasten to employ, with care and judgment, the most improved looms for hosiery and for stocking cloth or broad hose webs. The counties of Nottingham and Leicester in Great Britain, were agitated throughout their limits, a few years ago by the effect of some of these new invented looms, upon the industry of the stocking weavers on the old plan: so greatly do they save labor. To us, who have yet to make a large portion of the hose we wear, and to attain a standing in the stocking weaving business, all these improved looms are objects of peculiar interest.

Since an ardent passion for ships, commerce, navy, fisheries, and those monopolies of trade, which are produced by navigation laws, appear to have taken full possession of the minds of European statesmen, and since the possession of no more than eight millions of acres of land, shorn of its wood, and destitute of pit coal,* by Massachusetts proper, Connecticut Rhode and Island, manifestly denies to the good people of those three interesting sections of our country, a considerable standing in productive agriculture, and even creates some difficulties in the prosecution of certain branches of manufacturing industry, it would be gratifying to men of a brotherly disposition towards those eastern states, in other parts of the Union, if a convenient system for the promotion of the arts and manufactures could be devised and adopted. It is worthy of the serious and liberal consideration of all the rest of the Union.

The limited size of those three states, the lightness of the original growths of much of their wood land, the rarity of calcareous substances for building, the consequent use of wooden buildings, and the quantities of wood requisite for the repair of those buildings and for fuel, suggest the propriety of the utmost possible use of all their water falls, instead of an inordinate use of steam enginery and other modes of operation requiring fire The utmost use should be made of all the eastern water powers, by a skillful formation of their mills and machinery.

The want of land, in that district, renders it advisable to consider the easiest and cheapest modes of human and ordinary animal subsistence. *The cultivation of the potatoe* and of other things of similar fecundity demand the closest con ideration of every friend to those eastern states. Animal strength and spirits are no where more conspicuous than in the country, which supports its population, beyond all others, by that vegetable.

The improvement of roads and canals leading towards Massachusetts, Connecticut and Rhode Island from the surrounding districts, of greater extent and production, are manifestly of the utmost importance, as they facilitate and cheapen the introduction of raw materials, grain and other productions of the soil of less populous or more fertile districts.

A due attention to the river, bay and sea fisheries is dictated to those eastern states by their unalterable interests, not only with a view to foreign trade, but as *a source of food*, whale bone, oils, skins, and spermaceti for the nourishment and employment of their manufacturers. It merits

*Very little coal, of which none is good, has been yet found in those states.

dispassionate consideration, particularly by the manufacturing citizens, whether the articles produced by the foreign fisheries, *of the nature of food*, ought or ought not to be dutied or prohibited, and whether all those, which are capable of use *as materials employing manufacturers*, or in the frugal lighting or general economy of the manufactories, ought or ought not to be exempted from duty. These are new, and, it is admitted, very nice questions, which arise principally between the manufacturing interest, in the eastern seaports of the United States, and those on the *seabord*, who pursue the business of the fisheries. The fish oils are indeed of universal utility among our leather dressers. The comparative value of the leather manufactures of Massachusetts, Connecticut and Rhode Island, on the one part, and of the fisheries on the other, is in favor of their leather business, especially in Connecticut and Rhode Island, which did not partake largely in the exports of the fisheries, for some years before the present war.

The economy of fuel is so important to the internal business of the old eastern settlements, that it merits further consideration. There are manufactures of metal, which require little or no use of fire, such as wire drawing, cut-nail-making, stamping, grinding and cutting mills and machines, turning and boring mills. Metalic objects like these are best adapted to those old settlements, which have become deficient in wood, and have not pit coal. There are other manufactories, which require little or no fire: such as carding, spinning and fulling mills; oil, paper; snuff, starch and powder mills. Works like these, also will prove highly convenient to districts, which are illy supplied with fuel. Household manufactures are perfectly suitable to such districts, because the fire necessary for culinary and other domestic purposes, is all that is required.

As the present war and the existing blockade have greatly interfered with the transportation of southern raw materials to the old and populous settlements of Massachusetts, Connecticut and Rhode Island, it appears, that wool is a much better object of stable manufacture in those states, than cotton, and it seems expedient for them, rather to attend to sheep, than even to possess horned cattle, mules and hogs. To an observing and reflecting people, who can best give practical direction to the most suitable branches of their own industry, it appears sufficient to offer, by way of example, such principles and such suggestions, in regard to the mode of encouraging manufactures, as have been above mentioned. It is however on frequent and serious reflexion believed, that Massachusetts proper, Connecticut and Rhode Island will derive many advantages, from an investigation and application of the principles suggested.

Some pains have been taken in the various parts of this work, to render manifest the great value of the extensive and steady market for American productions and land, which the manufacturers afford, by their purchases of bread, meat, forage, working cattle, raw materials, wood, coal, building materials, sites for dwellings, warehouses, stables, workshops, mill seats and streams of water. But another idea of incalculable importance is yet to be added. The savings, the gains, and the facilities to the business of the country, which are produced by the creation and maintenance of manufactories, and the presence of household and other manufacturers, *in every vicinity—in every interior situation,—at the door of every planter and farmer,—and even within his mansion and out houses*, are not only of very great aggregate value, but are most eminently conducive, and indeed many be deemed indispensibly necessary to the prosperity of the landed interest. Do our forests cumber a rich soil, an hundred or two hundred miles from the sea, and prevent its cultivation? To transport the wood to the seaports would be attended with a ruinous expence. What then can be done with it? We erect iron works, which require coal; of the maple trees we make sugar and cabinet wares; of the walnut and wild cherry, we make furniture and gun stocks; of the locust, treenails; of the general woods, we make potash and pearl ash, of the oak we make casks, and of various trees, we make boards, joists, scantling, shingles, charcoal and ordinary fuel. Are grain, fruit and potatoes redundant at a distance from the ports, too great for them to bear the expence of transportation? We make them into distilled spirits, beer, ale, porter, cider, starch and wafers. To save the expence of sending flax, hemp, wool, hides and skins to the maritime towns, we card, spin, weave and manufacture them into thread, hosiery, various cloths, ropes, twine, shoes and boots, saddlery, hats and other goods for use in our houses and neighbourhoods. So of our abundant iron ore and other fossils. The surplus, trebled or quadrupled in value, and reduced both in size and weight, can be sent to the markets of the towns near to the ocean, and sometimes

to the seaports, at a rate of charges reduced seventy-five per cent. *Thus the manufacturing uses for the productions of the earth, occasion a regular and extensive sale and consumption of them, in places, where there would otherwise be no market.* Agriculture and the landed interest are materially and steadily benefitted, and the country prospers by many convenient internal exchanges and operations. In those situations, the rate of the port duties is of very little consequence, as a premium to manufactures. In such places they do not require protecting duties. They are made, under the influence of a more powerful cause, *the impulse of a moral necessity*, or of an all important saving of the whole cost of like foreign articles, which, but for the neighbouring manufacturers, might be paid for by the sacrifice of a quantity of produce, too great to be afforded for them, by the most skillful and industrious cultivation of the richest soil. It is manifest to the close observer, that this state of things, very extensively existing and faithfully represented, has occasioned manufactures to spring up every where, as an operation of plain common sense, to effect the consumption, employment or sale of the products of the earth, and to attain a supply of the comforts and conveniencies of life. It is the natural and irrestible working of things. It is to be earnestly hoped, that so safe and convenient a mode of effecting the application of agricultural productions to profitable and useful purposes, will be universally well *examined* and *considered*, and *if found practicable and beneficial*, that it will be steadily and extensively pursued. The farmers may confidently expect, that the master workmen, with capital and skillful assistants, will soon increase, so as to maintain and extend the demand for their raw materials, provisions, forage and fuel, and to multiply and improve those manufactures in the new settlements, which are annually substituted for imported supplies.

The absolute freedom of industry in the United States, entitles our manufacturing citizens to pursue their own plans of interest and prosperity, with such advantages as are afforded by chance, or permitted by laws, consistent with the general welfare. So of the merchants, ship owners, mariners and fishermen. So of the owners and cultivators of the soil. The agricultural, manufacturing and mercantile citizens respectively promote the national prosperity. The superior importance of the planters and farmers, in aggregate wealth, numbers and productiveness cannot be doubted. Those numbers give, to the landed citizens, the high power to hold the scales of distributive justice and to promote the public good They are the guardians of the interests, of commerce and manufactures, the two chief, or rather the sole auxiliaries of agriculture, in the great business of the public welfare. The operation enjoined in 1810, upon the secretaries of the territories, and the marshals of the states and the districts, by the legislative body, the result of which appears in the annexed tables, is respectfully conceived to have been a very wise measure, well calculated to procure much of that information, which might enable congress impartially to promote the public good, and the citizens to pursue their respective interests. The two series of tables, of which congress have authorised the publication, are a rare, and it is believed an unprecedented document, highly instructive, with all the imperfections it contains, The preceding communication to the late secretary of the treasury was a voluntary accompaniment, produced by the public feelings, which repeated inspections of the marshals' reports, irresistibly excited. That communication was intended, in case of its publication, to produce among other things, a due excitement on the subject of the savings, as well as the gains of maunfactures in the poorest families; in the sparsest settlements; in the little work shops, and in the greatest manufactories All were embraced by sound principles. The work may appear however, to the enlarged politician, too minute, especially upon the subject of goods or branches, apparently of much general interest, not hitherto sufficiently considered. As, to make two ears of corn grow, where but one grew before, so to produce, in very many families, a new thrift or additional fair profit, equal to their former modest gains, seemed to be an object not unworthy of the paternal views of the legislative and executive government.

It was also intended by means of the facts adduced, or as presented in the communication to the treasury, to bring into view a part of the general and technical grounds, on which manufactures appear to stand in this country and in modern times, when manual labor has been wonderfully substituted by various devices, which in a very great degree have superceded and abridged, the use of *hands*. Having hazarded a very zealous and sanguine promulgation of that topic, in favor of

manufactures twenty-seven years ago in a public discourse, which was passed to the world in numerous copies and editions, the limited degree of notice, which labor-saving machinery, devices and processes had subsequently received in the United States, was a matter of surprize and regret. This fact suggested the necessity of much additional public excitement. It seems to have become requisite to our prosperity, that reiterated notices of the labor-saving subject should be published, till it shall be thoroughly examined and considered and duly appreciated by our men of business; and it is respectfully added, by the general and state governments. It is highly important to this country, deficient in population as it is, and obstructed as it has too often been, in the common field of external commerce, that we should duly advert to the value and importance of this wonder working mode of employing our productions and monied capital. England, in the year 1786, made goods to the amount of sixty millions of pounds sterling. She did not then export more of those manufactures, than the value of twelve millions. Her consumption was four fifths of the whole. But, if she can effect by labor-saving machinery, even at fifty for one instead of two hundred for one, the fabrication of an equal quantity of goods, she can, in the same proportion, with six, or 700,000 of her people, make a quantity of manufactures equal to the surplus of the manufacturing industry of continental Europe. In carding and spinning, England does more by water than all the rest of the world.* The Scottish distillery is effected twenty-three times in an hour. 30,000 planchets, or tops of buttons and other metalic things are cut at Birmingham in sixty minutes. Fifty thousand handkerchiefs, or ten thousand yards of cotton cloth are printed in a day, by the English copperplated and engraved rollers, attended by a man and four children. The quantity of pig iron extracted from the ore in a year, by the modern English method, is perfectly wonderful, and is a very great saving of the hardest labor. The steam power produces a substitute for manual industry in Great Britain, the magnitude of which is incalculable. The United States have not entirely neglected this aid of their labor-saving means of manufacturing, of foreign and American invention, but they have not yet duly estimated the immense advantages, nor availed themselves in any considerable degree, of these means of manufacture, so obviously and peculiarly proper for them. It is however confidently believed, that their practicability and their importance, particularly to a country situated as the United States are, is perceived by many in private business and in public life.

Some further illustration of the great interest of the United States in the general business of manufactures, of their unforced progress, of their actual magnitude, of their sure, easy means of execution and of their immoveable establishment, was the principal object of this supplementary note. It was written in the summer of the current year, 1814, while the original statement was issuing from the press, and under the same circumstances as parts I. and II. The sole aim of this publication of the present entire work, is to elucidate, unite and promote the various interests of the American family, whether agricultural, mercantile, manufacturing or auxiliary, in the north and the south, in the east, in the west, and in the centre. No partial objects, local or professional, have influenced the publication. To sacrifice the rights and interests of the merchants, to the exclusive benefit of the manufacturers, would appear to be an unreasonable and vain attempt; to endeavour to effect a like sacrifice of the rights and interests of the manufacturers, to the exclusive benefit of the merchants, would seem equally irrational and vain: to neglect to foster by all wise measures, both external and internal trade, or foreign commerce and home manufactures, would appear intirely to disregard the well tried and certain means of agricultural, and landed prosperity, and of national wealth and power. A very large majority of every description of our citizens is deeply impressed with our rights and interests, with respect to foreign trade and navigation.

*The French had in 1805, fifty large, and two hundred small spinning mills, carrying 300 to 400,000 spindles. They are much increased, and are very well constructed. Foreign cotton yarns and manufactures, have been prohibited several years. They spun by machines 4,320,000 pounds of cotton wool, in 1805, and nearly 56,000,000 by hand, all which was imported by land or water, and cost there six times our prices. *The profits and wages* of the French cotton manufactory were computed in 1813, at forty-three and a half millions of dollars. The French have also the labor-saving machinery for wool. They represent their sheep (in proper France) in 1 13, to have been 24,307,728, yielding 85,076,848 pounds of wool. In France with its acquisitions, 9,000,000 were of the fine and improved kind of wool; being about a thirteenth. The last French *exposition* contains the following observations: ' But the products of our "soil have not acquired their real utility in value, until our industry has prepared them for consumption and use, and it is only when "our industry has been applied *to our raw materials*, that they increase our riches." It is certain, that this is equally true in the United States, but we mean expressly and most emphatically to include operations by water, steam, fire, machinery, &c. in our system of manufacturing industry. There are spinning mills in Spain and Russia.

In regard to the importance of agriculture, the most correct convictions of mind are universal; Yet it is certain, that neither in commerce, nor in navigation, nor in the fisheries, nor even in agriculture itself, do we find a truth so vast and stupendous, as that which is exhibited to our eyes *in the case of labor-saving machinery* Taking the advantage, in favor of the cotton carding and spinning, at the ascertained rate of two hundred to one above manual labor, we are astonished to find, that the whole industry of our eight millions of persons, operating with water and steam machinery, in that part of the cotton manufactory, would be able to execute as much work as sixteen hundred millions of persons, (if so many existed on our* earth) could perform in the usual mode of manual industry. We do not expect to accomplish miracles: nor to engross manufactures. But the United States of America, *sincerely regarding and thoroughly respecting the rights and interests of the rest of mankind,* are able and authorised to participate with all the sister nations of the world, in this wonderful object of human industry, to which they have actually contributed so many valuable inventions.†

*The whole population of the terraqueous globe, is estimated at little more than nine hnudred millions of men, women and children.

†Of all the discoveries and inventions yet accomplished, the machinery, which saves labor, incidental to manufactures, in the greatest degree, is that of Mr. Eli Whitney, gunsmith of New-Haven in Connecticut, for ginning cotton wool.

AN ESTIMATE FOR ONE YEAR,

ENDING ON THE 30th DAY OF SEPTEMBER, 1790,

Of the value of the specified manufactures actually imported from foreign countries into the United States, together with the goods rated *ad valorem* from those countries and ports, which supply us with manufactures, intended to exhibit the probable amount of foreign manufactures imported during that year.

Denominations and descriptions of goods.	*Prices at that time.*	*Value of each denomination.*	
Beer, ale and porter, 83,734 gallons,	20 Cents.	16,746	80
Loaf sugar, 140,528 pounds,	10	14,052	80
Candles of tallow, 6,206 do	10	620	60
Do of wax, 1,749 do	50	874	50
Cheese, 92,282 do	8	7,382	56
Soap, 13,537 do	10	1,353	70
Tobacco manufactured, 928 do	20	185	60
Snuff, 377 do	20	75	40
Nails and spikes, 1,808,439 do	7	126,590	73
Steel, wrought, Cwt.5,428:3:5	6	36,478	
Cables, Cwt.626:1:23,	8 Dollars.	5,059	64
Tarred cordage, Cwt.5,151:3:27,	8	41,294	34
Untarred cordage and yarn, Cwt.894:1:1,	9	8,046	15
Twine and pack thread, Cwt.676:0:22,	20 Cents.	15,093	60
Salt, 1,194,188 bushels, at various prices,		109,132	4
Malt, 5,232 do	60	3,139	20
Shoes, slippers, and goloshoes of leather, 57,927,	100	57,927	
Shoes or slippers, silk or stuff, 25,729,	80	20,583	20
Boots, 844,	5 Dollars.	4,220	
Wool and cotton cards, 757 dozens,	4	3,028	
Cider, beer, ale and porter, 18,166 bottles,	133	24,160	78
Packs of playing cards, 18,552 packs,	6 Cents.	1,113	12
Value of goods dutied *ad valorem*, not specified, but generally manufactures.		14,798,481	21
		$15,295,638.	97

DISTRIBUTION OF MANUFACTURES IN OLD AND NEW SETTLEMENTS.

As an example of the distribution of manufactures, in our *fully* and *sparsely* settled districts, the following note of the whole value of manufactures in 1810, in the best returned state is given.

MANUFACTURES OF PENNSYLVANIA IN 1810.

Philadelphia City,* within the corporation bounds, made to the value of	$ 9,347,767
Ditto County,* including the suburbs of Philadelphia,	6,756 102
Montgomery, on Schuylkill,	1,679,457
Bucks, on Delaware, above Philadelphia county,	1,002,901
Northampton, on Delaware and Lehigh, above Bucks,	1,569,355
Wayne, on Delaware, above Northampton, and on New-York line,	157 354
Delaware, on that river, below Philadelphia,	1,015,970
Chester, joins Maryland, and on Brandywine creek,	1,794,053
Lancaster, east of Susquehannah, and adjoining Maryland,	2,855,455
Dauphin, on Susquehannah, east side,	1,265,252
Berks, on Schuylkill, above Montgomery,	2,200,160
Luzerne, on Susquehannah, East Branch,	604,911
Northumberland, on do. West Branch,	1,159,273
Lycoming, on West Branch of do.	351,064
Tioga and Potter,† join to New-York state,	31,649
Erie, on Lake Erie,	119,686
M'Kean,† joins state of New-York,	4,382
Warren, do. on Allegheny river,	32,514
Jefferson,† heads of Toby's and Sandy Creeks,	1,231
Armstrong,† on Allegheny river,	199,759
Clearfield,† on head of West Branch of Susquehannah,	71,725
Indiana, on Conemagh Creek,	126,814
Centre, on West Branch of Susquehannah in the centre of Pennsylvania,	353,508
Mifflin, on Juniata,	449,409
Cumberland, west side of Susquehannah,	1,311,282
York, do and Maryland line,	1,383,755
Adams, do. on Maryland line,	636,818
Franklin, on do.	1,029,698
Bedford, on do.	381,117
Huntingdon, on Juniata,	674,711
Cambria,† } West of Allegheny mountain,	29,369
Somerset, } West of Allegheny mountain,	354,318
Fayette, } settled in 1780 { on Monongahela and Youghiogeny and Virginia line,	1,140,293
Greene, } settled in 1780 { South west angle of Pennsyvania,	123,612
Westmoreland,	678,580
Washington, settled in 1789, on the western line of Pennsylvania,	1,678,529
Beaver, settled in 1795, } On and beyond the Allegheny river joining or adjacent to the western line, and to the state of Ohio,	164,113
Butler, do. in do. } On and beyond the Allegheny river joining or adjacent to the western line, and to the state of Ohio,	285,615
Allegheny, on Ohio, } On and beyond the Allegheny river joining or adjacent to the western line, and to the state of Ohio,	921,917
Mercer, } Settled in 1795. } On and beyond the Allegheny river joining or adjacent to the western line, and to the state of Ohio,	166,952
Venango, } Settled in 1795. } On and beyond the Allegheny river joining or adjacent to the western line, and to the state of Ohio,	174,147
Crawford, } Settled in 1795. } On and beyond the Allegheny river joining or adjacent to the western line, and to the state of Ohio,	159,439
In 220 articles of Pennsylvania manufacture.	$ 44,194,740

*There is no flour included in the Philadelphia return, and very little flour in the Philadelphia county return.
†These are either very new and sparsely settled, or at present, mere nominal counties.

NOTE OF MANUFACTURES OF THE UNITED STATES, MOST FREQUENTLY EXPORTED IN 1810.

Ashes pearl,
Do. pot,
Ale, pale and brown,
Bar and slit and rolled iron,
Bark, ground,
Books,
Boots,
Brushes,
Beer,
Boats,
Boards, plank and scantling,
Biscuit,
Crockery or earthen-ware,
Carriages, for pleasure and work,
Cotton yarn,
Cider,
Cheese,
Candles, tallow,
Do. spermaceti,
Do. wax,
Cordage,
Cables,
Casks, tubs, buckets, pails, canns, &c.
Chocolate,
Cabinet-wares of all kinds,
Cowskin whips,
Canes, mounted,
Drums,
Fish oil,
Fire engines,
Flour and meal,
Gloves,
Gunpowder,
Hats,
Hair powder,
Hides,
Hand barrows,
Hoops iron and wooden,
Hand cards,
Iron work, for mills.
Linseed oil,
Loaf sugar,
Marble, sawed and polished for slabs, &c.
Muskets,
Machinery,
Measures, of wood and metal,
Nails and spikes,
Playing cards,
Pistols,
Ploughs,
Porter,
Pearl barley,
Plated wares, various,
Paper, fine and common,
Do. wrapping and sheathing,
Past boards,
Parchment,
Preserves and pickles,
Rifles,
Saddlery, of all kinds,
Shingles,
Swords,
Spermaceti oil,
Segars,
Soap,
Skins,
Sugar candy,
Set work and jewellery,
Silver plate and goldwares,
Shoes and slippers,
Spirits, from grain,
Do. from apples,
Do. from peaches,
Do from molasses,
Steam engines,
Starch,
Steel,
Ships and vessels,
Tin and copper wares,
Types,
Tortoise shell combs,
Upholstery,
Windsor chairs,
Whale oil,
Whips,
White and red lead,
Wheelbarrows.