Tench Coxe Speaks for Factories, 1787

Providence has bestowed upon the United States of America means of happiness, as great and numerous, as are enjoyed by any country in the world. A soil fruitful and diversified—a healthful climate—mighty rivers and adjacent seas abounding with fish are the great advantages for which we are indebted to a beneficent creator. Agriculture, manufactures and commerce, naturally arising from these sources, afford to our industrious citizens certain subsistence and innumerable opportunities of acquiring wealth. To arrange our affairs in salutary and well digested system, by which the fruits of industry, in every line, may be most easily attained, and the possession of property and the blessings of liberty may be completely secured—these are the important objects, that should engross our present attention. The interests of commerce and the establishment of a just and effective government are already committed to the care of THE AUGUST BODY now sitting in our capital.—The importance of agriculture has long since recommended it to the patronage of numerous associations, and the attention of all the legislatures—but manufactures, at least in Pennsylvania, have had but a few unconnected friends, till sound policy and public spirit gave a late, but auspicious birth, to this Society.

The situation of America before the revolution was very unfavorable to the objects of this institution. . . . But as long as we remained in our colonial situation, our progress was very slow, and indeed the necessity of attention to manufactures was not so urgent, as it has become since our assuming an independent station. The employment of those, whom the decline of navigation has deprived of their usual occupations—the consumption of the increasing produce of our lands and fisheries, and the certainty of supplies in the time of war are weighty reasons for establishing new manufactories now, which existed but in a small degree, or not at all, before the revolution.

While we readily admit, that in taking measures to promote the objects of this Society, nothing should be attempted, which may injure our agricultural interests, they being undoubtedly the most important, we must observe in justice to ourselves, that very many of our citizens, who are expert at manufactures and the useful arts, are entirely unacquainted with rural affairs, unequal to the expenses of a new settlement; and many we may believe, will come among us invited to our shores from foreign countries, by the blessings of liberty, civil and religious. We may venture to assert too, that more profit to the individual and riches to the nation will be derived from some manufactures, which promote agriculture, than from any species of cultures whatever.

Let us endeavor first to disencumber manufactures of the objections, that appear against them, the principal of which are, the high rate of labor, which involves the price of provisions—the want of a sufficient number of hands on any terms,—the scarcity and dearness of raw materials—want of skill in the business itself and its unfavorable effects on the health of the people.

Factories which can be carried on by watermills, windmills, fire, horses and machines ingeniously contrived, are not burdened with any heavy expense of boarding, lodging, clothing and paying workmen, and they multiply the force of hands to a great extent without taking our people from agriculture. By wind and water machines we can make pig and bar iron, nail rods, tire, sheet-iron, sheet-cooper and sheet-brass, anchors, meal of all kinds, gunpowder, writing, printing and hanging paper, snuff, linseed oil, boards, plank and scantling; and they assist us in finishing胸怀, sickles and Woolens cloths. Strange as it may appear they also card, spin and weave by water in the European factories. Bleaching and tanning must not be omitted, while we are speaking of the usefulness of water.

By fire we conduct our breweries, distilleries, salt, and potash works, sugar houses, potteries, casting and steel furnaces, works for animal and vegetable oils and refining drugs. Steam mills have not yet been adopted in America, but we shall probably see them after a short time in New-England and other places, where there are few mill seats and in this and other great towns of the United States. The city of Philadelphia, by adopting the use of them, might make a saving of above five percent. on all the grain brought hither by water, which is afterwards manufactured into meal, and they might be usefully applied to many other valuable purposes.

Machines ingeniously constructed, will give us immense assistance.—The cotton and silk manufacturers in Europe are possessed of some, that are invaluable to them. One instance I have had precisely ascertained, which employs a few hundreds of women and children, and performs the work of 1200 carders, spinners and winders. They have been so curiously improved of late years, as to weave the most complicated manufactures. In short, combinations of machines with fire and water have already performed much more than was formerly expected from them by the most visionary enthusiast on the subject. Perhaps I may be too sanguine, but they appear to me fraught with immense advantages to us, and full of danger to the manufacturing nations of Europe; for should they continue to use and improve them, as they have heretofore done, their people must be driven to us for want of employment, and if, on the other hand, they should return to manual labor, we shall undergo them by these invaluable engines. We may certainly borrow some of their inventions and others of the same nature we may strive out ourselves; for on the subject of mechanism America may justly pride herself. Every combination of machinery may be expected from a country, a native son of which, reaching this immeasurable object at its highest point, has epitomized the motions of the spheres, that roll throughout the universe.

*David Rittenhouse, Esq. of Pennsylvania.

The lovers of mankind, supported by experienced physicians, and the opinions of enlightened politicians, have objected to manufactures as unfavorable to the health of the people. Giving to this humane and important consideration its full weight, it furnishes an equal argument against several other occupations, by which we obtain our comforts and promote our agriculture. The [planting] business for instance—reclaiming marshes—clearing swamps—the culture of rice and indigo and some other employments, are even more fatal to those, who are engaged in them. But this objection is urged principally against carding, spinning and weaving, which were formerly manual and sedentary occupations. Our plan, as we have already shewn, is not to pursue those modes, for we are sensible, that our people must not be diverted from their farms. Horses, and the potent elements of fire and water, aided by the faculties of the human mind (except in a few healthful instances) are to be our daily labourers. After giving immediate relief to the industrious poor, these unhurtful means will be pursued and will procure us private wealth and national prosperity.

Emigration from Europe will also relieve and assist us. The blessings of civil and religious liberty in America, and the oppressions of most foreign governments, the want of employment at home and the expectations of profit here, curiosity, domestic unhappiness, civil wars and various other circumstances will bring many manufacturers to this asylum for mankind. Ours will be their industry and what is of still more consequence ours will be their skill. Interest and necessity, with such instructors, will teach us quickly. In the late century the manufactures of France were next to none; they are now worth millions to her yearly. Those of England have been more improved within the last twelve years, than in the preceding fifty. At the peace of 1762, the useful arts and manufactures were scarcely known in America. How great has been their progress since, unaided, undirected and discouraged. Counternanced by your patronage and promoted by your assistance, what may they not be ere such another space of time shall elapse.

We must carefully examine the conduct of other countries in order to possess ourselves of their methods of encouraging manufactories and pursue such of them, as apply to our own situation, so far as it may be in our power. Premiums for useful inventions and improvements, whether Foreign or American, for the best experiments in any unknown matter, and for the largest quantity of any valuable raw material must have an excellent effect. The state might with great convenience enable an enlightened Society, established for the purpose, to offer liberal rewards in land for a number of objects of this nature. Our funds of that kind are considerable and almost dormant. An unsettled tract of a thousand acres, as it may be paid for at this time, yields very little money to the state. By offering these premiums for useful inventions to any citizen of the Union, or to any foreigner, who would become a citizen, we might often acquire in the man a compensation for the land, independent of the merit which gave it to him.

It might answer an useful purpose, if a committee of this society should have it in charge to visit every ship arriving with passengers from any foreign country, in order to enquire what persons they may have on board capable of constructing useful machines, qualified to carry on manufactures, or coming among us with a view to that kind of employment. It would be a great relief and encouragement to those friendless people in a land of strangers, and would fix many among us whom little difficulties might incline to return.

**Extreme poverty and idleness in the citizens of a free government will ever produce vicious habits and disobedience to the laws, and must render the people fit instruments for the dangerous purposes of ambitious men. In this light the employment of our poor in manufactures, who cannot find other honest means of a subsistence, is of the utmost consequence. A man oppressed by extreme want is prepared for all evil, and the idler is ever prone to wickedness, while the habits of industry, filling the mind with honest thoughts, and requiring the time for better purposes, do not leave leisure for meditating or executing mischief.**

An extravagant and wasteful use of foreign manufactures, has been too just a charge against the people of America, since the close of the war. They have been so cheap, so plenty and so easily obtained on credit, that the consumption of them has been absolutely wanton. To such an excess has it been carried, that the importation of the finer kinds of coat, vest and sleeve buttons, buckles, brooches, breastpins, and other trinkets into this port only, is supposed to have amounted in a single year to ten thousand pounds sterling, which cost the wearers above 60,000 dollars. This lamentable evil has suggested to many enlightened minds a wish for sumptuary regulations, and even, for an unchanging national dress suitable to the climate, and the other circumstances of the country. A more general use of such manufactures as we can make ourselves, would wean us from the folly we have just now spoken of and would produce, in a safe way, some of the best effects of sumptuary laws. Our dresses, furniture and carriages would be fashionable, because they were American and proper in our situation, not because they were foreign, shewy or expensive. Our farmers, to their great honor and advantage, have been long in the excellent economical practice of domestic manufactures for their own use, at least in many parts of the union. It is chiefly in the towns that this madness for foreign finery rages and destroys. There unfortunately the disorder is epidemical. It behoves us to consider our untimely passion for European luxuries as a malignant and alarming symptom, threatening convulsions and dissolution to the political body. Let us hasten then to apply the most effectual remedies, ere the disease becomes inveterate, lest unhappily we should find it incurable.

I cannot conclude this address, gentlemen, without taking notice of the very favorable and prodigious effects upon the landed interest, which may result from manufactures. The breweries of Philadelphia in their present infant state require forty thousand bushels of barley annually, and when the stock on hand of English beer shall be consumed, will call for a much larger quantity. Could the use of malt liquors be more generally introduced, it would be, for many reasons, a most fortunate circumstance. Without insisting on the pernicious effects of distilled liquors, it is sufficient for our present purpose to observe, that a thousand hogsheads of rum and brandy, mixed with water for common use, will make us much strong drink as will require 120,000 bushels of grain to make an equivalent quantity of beer, besides the horses, fuel, hops, and other articles of the country, which a brewery employs. The fruits of the earth and the productions of nature in America are also required by various other manufacturers, whom you will remember without enumeration. . . . So great are the benefits to the landed interest, which are derived from them, that we may venture to assert without apprehension of mistake, that the value of American productions annually applied to their various uses, as just now stated, without including the manufacturers of flour, lumber and bar-iron, is double the aggregate amount of all our exports in the most plentiful year with which Providence has even blessed this fruitful country.
valuable is this market for our increasing product—How clearly does it evince the importance of our present plan. But we may venture to proceed a step further—Without manufactures the progress of agriculture must be arrested on the frontiers of Pennsylvania. Though we have a country practicable for roads, our western counties are yet unable to support them, and too remote perhaps to use land carriage of the most easy kind... The inhabitants of the fertile tracts adjacent to the waters of the Ohio, Potowmack and Susquehannah, besides the cultivation of grain must extend their views immediately to pasturage and grazing and even to manufactures. Foreign trade will never take off the fruits of their labor in their native state. They must manufacture first for their own consumption, and when the advantages of their mighty waters shall be no longer suspended, they must become the great factory of American raw materials for the United States. Their resources in wood and water are very great, their treasures in coal are almost peculiar... 

How numerous and important then, do the benefits appear, which may be expected from this salutary design? It will consume our native productions now increasing to super-abundance—it will improve our agriculture and teach us to explore the fossil and vegetable kingdoms, into which few researches have heretofore been made—it will accelerate the improvement of our internal navigation and bring into action the dormant powers of nature and the elements—it will lead us once more into the paths of virtue by restoring frugality and industry, those potent antidotes to the vices of mankind and will give us real independence by rescuing us from the tyranny of foreign fashions, and the destructive torrent of luxury. 

Should these blessed consequences ensue, those severe restrictions of the European nations, which have already impelled us to visit the distant regions of the eastern hemisphere, defeating the schemes of short-sighted politicians will prove, through the wisdom and goodness of Providence, the means of our POLITICAL SALVATION.

Alexander Hamilton’s “Report on Manufactures,” 1791

The expediency of encouraging manufactures in the United States, which was not long since deemed very questionable, appears at this time to be pretty generally admitted. The embarrassments, which have obstructed the progress of our external trade, have led to serious reflections on the necessity of enlarging the sphere of our domestic commerce; the restrictive regulations, which in foreign markets abridge the vent of the increasing surplus of our Agricultural produce, serve to begot an earnest desire, that a more extensive demand for that surplus may be created at home; And the complete success, which has rewarded manufacturing enterprise, in some valuable branches, conspiring with the promising symptoms, which attend some less mature essays, in others, justify a hope, that the obstacles to the growth of this species of industry are less formidable than they were apprehended to be, and that it is not difficult to find, in its further extension, a full indemnification for any external disadvantages, which are or may be experienced, as well as an accession of resources, favorable to national independence and safety...