

CHAPTER IV

MANUFACTURE

TUCKER introduces that part of his great work which immediately follows his treatment of the land problems, with a declaration of the aim of all the succeeding portions of the great work:

“The business and aim of the ensuing sections must be to remove those obstructions which impede the industrious and useful operations of self-love, and to set mankind and nature free. Free, I mean, in that sense in which consists our true liberty. For if self-love is restrained from doing good to society, it will do mischief, and if prevented from doing mischief, it will do good.¹ . . . Surely nothing can be plainer than that every man hath a right by nature to subsist himself by his own labor and industry in any way that is compatible with the good of the whole; for this is the only limitation that should take place.”²

This plea for freedom is central to all the thought that follows. The one hundred subsequent pages of the *Elements* have this freedom principle so prominently developed and so persistently applied that they clearly class their author as a strong advocate for economic freedom.

Having dealt with population in general and with land, Tucker elects to consider manufactures as the next subject

¹ *Elements*, p. 78.

² *Ibid.*, pp. 81-82.

to be treated in the unfolding of his systematic consideration of economic life. He defines :

“ Mechanic trades and manufactures [are] to be understood in the largest signification, including every branch of commercial industry, including shipping and navigation.”¹

As indicated in this definition, manufacture may occur by land industry or it may be accredited to shipping. Tucker treats first the inland division, leaving the carrying trade and its consequent international commerce problems for a succeeding chapter. His freedom principle as he applies it to inland manufacture reads

“ Any trade may be said to be free in which every person may engage if he pleases.”²

This raises with him the inquiry, what trades should be free and what are the means of securing their freedom?

Analyzing the manufacturing life about him he finds that the British have that “ liberty of conscience [which] conduces to industry ”³ and that “ as to civil liberty, never were a people more free than the English at this juncture.”⁴ Commercially however he thinks them free only in the sense that they are free from royal control. They are

“ slaves in other respects,” for, “ under foolish and fallacious pretences for supporting their privileges, . . . private parties oppress . . . as would not be tolerated in a king.”⁴

These traditional restraints upon commercial freedom he

¹ *Elements*, p. 79.

² *Ibid.*, p. 80.

³ *Ibid.*, p. 81.

⁴ *Ibid.*, p. 82.

combats. Two particular claims are put forward by exclusive companies, empowered to enforce these restraints, and he answers these claims at length.

(1) The first claim is that such companies are needed to maintain a standard of manufactured commodities.

He replies (a) That to attempt to set any arbitrary standard is injurious interference with trade and (b) That if exclusive companies are needed to test manufactures in any branch, then they should be given control of every branch; for examples there should be "butter and cheese worshipful companies" and

"on the same wise principle, a law ought to be enacted that for the due and proper exercise of the art and mystery of carrying goods and drawing a load in a carrier-like manner, all horses employed therein shall be duns, blacks or bays!"¹

(2) The second claim is that exclusive companies aid in developing new industries and induce foreign artisans to immigrate. Tucker's reply is that general bounties will develop new industries more quickly and less expensively to the community than chartered companies and that as to any danger of a mal-adjusted labor supply in industries new or old, perfect freedom to laborers to labor when and where they choose and at what wage they will agree upon, will secure a far more satisfactory adjustment than if exclusive companies attempt an arbitrary settlement. He rounds up his whole argument thus:

"The result of the whole is, . . . that no discouragement ought to be put upon industry and labor; that every trade productive of national commerce, wealth and prosperity ought to be free and unrestrained; that monopolies and exclusions in

¹ *Elements*, p. 84.

the case before us are both foolish and knavish schemes; . . . and, to sum up everything, it hence appears that excellency of work, cheapness of labor, right application of genius, good morals in private life, plenty and prosperity in regard to the public are the sure consequences of universal freedom and emulation.”¹

In connection with manufactures, the theme of this chapter, the topics so developed by Tucker, both here and elsewhere in his works, as to deserve especial consideration are I. Competition and Monopolies; II. Labor and Wages; III. Capital and Interest; and IV. Machinery.

I. COMPETITION AND MONOPOLIES

Tucker believed in free competition as the certain stimulator of industrial and commercial activity. He very frequently argues that it makes for society's best interests. His emphasis upon the importance of this principle may be most clearly evidenced by selections from among the many references to its powerful influence, to be found throughout his works:

“What is the public good? Is it not for the most part the result of emulation among the members of the same society? And what would become of industry, temperance, frugality, and the desire for excelling, if there were no emulation?”²

“The public good can only be promoted by a free and open trade, and by rival ships and competition.”³

A corollary of such propositions is that monopoly should be opposed, and Tucker opposed monopoly. Upon no other

¹ *Elements*, p. 92.

² *Reflect. Nat. For. Prot. Part II*, p. 33.

³ *Letter on Naturalization*, p. 5 of Mss. A similar statement was quoted on the previous page from *Elements*, p. 92.

one topic did he write so extensively. The long *Appendix* to the 3d edition of the *Essay on Trade*, the entire tract on the trade to Turkey, more than one-half of the *Elements* and long passages in other works are devoted to a condemnation of monopoly. Tucker recognizes a tendency to monopoly in every human nature:

“All men, whether natives or foreigners, would be monopolists if they could.”¹

Commercial monopoly is thus defined by him:

“That in a commercial sense, every exclusion from the common benefit of trade due to all men by natural right,² is a monopoly. And the degrees of the monopoly are either more or less in proportion to the restraints and abridgements of such natural right.”³

The spirit of the monopolist he thus characterizes:

“The desire of present gain operates so strongly with every monopolist that he is quite regardless of futurity; hoping that he will have made his fortune before the evil can reach himself; and as to the public, that was never his concern.”⁴

He states clearly that the interests of the public and of monopolistic companies clash and he points to free competition as the remedy for monopoly abuses:

“The aims of an exclusive company can never coincide with

¹ *Letter on Naturalization*, Mss. p. 6.

² Natural right is sometimes appealed to by Tucker—the prerogative of an 18th century political writer.

³ *Elements*, p. 161.

⁴ “*Appendix to Turkey Trade*,” p. 24.

the welfare of the public, inasmuch as monopolists, established by law, are thereby secured from rivals. So that their particular interests consist in selling as dear as they can; whereas the interest of private adventurers is to sell as cheap as possible, in order to get custom by rivalling one another. Thus the public is benefited by emulation, as it promotes the circulation of labor¹ and universal plenty; but is hurt by monopolists, who are a check to industry, to the circulation of labor¹ at home and the exportation of it abroad, and whose only view, whatever may be pretended, is to sacrifice the general interest of the kingdom to that of a few individuals."²

Tucker's chief attacks upon particular monopolies were directed against the great chartered trading companies of Great Britain. His arguments against these privileged companies are considered at some length in the following chapter, upon "Foreign Trade," and will therefore be passed here with the mere mention.

His opposition to monopolies in the concrete did not end with these powerful assaults upon exclusive trading companies. He opposed monopoly in any form in which it appeared to him inimical to the public welfare. For illustrations, *he objects*

(1) "To confining the commission money (from trade in a foreign country) to an English factor. . . . If the trade was free, every man would naturally choose that agent who would serve him best, let his country be what it will,"³

(2) To the long apprenticeships then required, advising the repeal of "the 5th of Elizabeth, which obliges persons to serve apprenticeships of seven years to several trades which require

¹ Tucker frequently uses the term "labor" when he evidently means by it "products of labor."

² *Reflect. on Turkey Trade*, p. 5.

³ *Letter on Naturalization*, Mss. p. 7.

not seven weeks to learn—a most iniquitous and vexatious law, which gives to dunces and blockheads a power to tyrannize over the most ingenious, useful and industrious members of society.”¹

(3) To the Navigation Act. Of this he says: “By the famous Navigation Act, and other acts still in force, all foreign commanders of foreign-built ships, together with their foreign crews, are in effect excluded from enjoying the benefits and privileges of settling in England were they ever so desirous. Now if this be not a monopoly against the whole trade and manufactures of this country, it is hard to say what it is.”²

(4) To large estates. The argument upon this subject has already been presented in the preceding chapter.

The only monopoly which Tucker views with tolerance is that afforded by the patent right. Of this he says:

“The inventor may have a patent to reward his genius, to reimburse his expenses, and to encourage his industry, for fourteen years, if he pleases.”³

II. LABOR AND WAGES

The second special topic suggested by Tucker’s treatment of manufactures is labor and wages.

Tucker presents no distinct theory of wages. He has much, however, to say about labor and its reward. His thought may be given under the following headings: (a) competition in the labor market; (b) piece vs. time wages; (c) division of labor; (d) factory vs. domestic system; (e) danger of high wages and holidays; (f) the unproductive

¹ *Thoughts on Public Affairs, Gent’s Mag.*, vol. 1, pp. 132-133.

² *Further Thoughts*, section VI. A strong and extended attack on the Navigation Act occurs in *Reflect. on Present Matters in Dispute*, etc., pp. 18-25.

³ *Tract V*, p. 58. A similar thought is expressed in *Elements*, p. 168.

classes; (g) opposition to fixed wages; (h) opposition to apprenticeship and settlement acts; (i) opposition to slave labor.

a. COMPETITION IN THE LABOR MARKET

A passage in the *Elements* argues that congestions in the labor market will be righted in time better by letting the normal forces of that market play than by attempting corrective interference by state power. It is the application of his freedom thesis to labor. He says:

“Granting that a trade may be accidentally overstocked with numbers; when that is the case the best and safest way is to let the evil alone, and then it will infallibly cure itself. For, in process of time, some of these persons will go off to other trades, and as the trade is out of repute, there will not so many young recruits be bred up to it. Thus the occupation that was once overstocked will soon be reduced to a medium, and may in its turn want hands again, the consequence of which may probably be that it will be again overstocked. For such is the rotation of human affairs, dearness begets cheapness and cheapness, dearness. But if you should take any other course than the one here mentioned, which is in fact the course of nature and of Providence, . . . your attempts will not only be frustrated, but, by endeavoring to remove one seeming evil and temporary inconvenience, you will certainly introduce a thousand real ones, which will grow more dangerous and inveterate by length of time.”¹

b. PIECE WORK VS. TIME WAGES

Tucker develops the advantages of a piece work system. The passage in which he does this closes with an argument against the economy of slave labor which anticipates the

¹ *Elements*, pp. 87-88. A similar passage is in *Reflect. Nat. For. Prot. Part II*, pp. 13 and 14.

order of topic arrangement somewhat; but the passage is given entire that its force may not be lessened:

“Most manufacturers now find it to their interest to pay their people by the piece, or the great, wherever they can, rather than by the day; which circumstance alone is a striking proof that no sufficient check hath yet been invented against loitering away of time when the master was to pay for it; not to mention that the person who works by the day hath scarce any motive to exert an industry, dexterity or skill superior to others, whereas the working by the piece, or the great, calls them all forth, because he himself and none others are to reap the benefit of them. And note well this single remark, were there no others, is sufficient to prove that slaves—who literally work by the day and can have no motive whatever to exert any other industry or dexterity than what is just sufficient to escape the whip of the driver; nay, whose self-interest will naturally teach them to conceal any superior talents from the knowledge of their masters, lest their masters should expect a greater task from them than others, and punish them for not doing it—I say, this single remark is full proof that slaves never did, nor ever will, perform their work either so cheap or so well as those freemen who work by the piece, or the great, and are spurred on every moment by the example of others, by self-interest, and by the glory of excelling.”¹

C. DIVISION OF LABOR

In the preliminary pages opening his *Elements*, Tucker introduces the division of labor as characteristic of man as distinguished from the lower animals:

“Nor do birds, beasts, or fishes discover any disposition to divide the labor of the community into different branches or assign distinct parts to the respective individuals. This, I

¹ *Instruct. for Trav.*, pp. 19 and 20.

think, is the case in general with respect to the brute creation. But if there are any traces of superior abilities, they are so few and inconsiderable as not to deserve a particular inquiry. Nay, whenever any tribe of animals distribute the labor of the community into different parts, as is reported to be the case among the beavers, ants and bees, it hath always been observed that they make some advances superior to the condition of mere animal life.”¹

The social instincts are “for the most part the prerogative of man”² and men therefore “naturally seek society to gratify these social instincts.”² Where they are once together in society a vast number of advantages appear owing to mutual assistance.

“The common labor of the society is branched out into separate and distinct parts. Then it is that each individual chooses a particular course of life, according as his circumstances of genius shall determine his pursuits. I mention genius the more emphatically because some men are formed by nature to peculiar employments, being born with talents (which are a kind of instinctive knowledge) for one pursuit preferably to another. . . . Therefore, among the human species some are employed in the several articles of clothing, others in raising provisions, and third set in preparing materials and building habitations. Thus are the first wants of mankind, viz., food, raiment and dwelling, much better supplied by dividing the general labor into different branches, than if each individual depended on himself alone. . . . And these different parts of the common labor are nothing else, in other words, but distinct trades and manufactures, and may be considered as the first draft or rudiments of commerce.”³

¹ *Elements*, p. 4.

² *Ibid.*, p. 5.

³ *Ibid.*, pp. 5 and 6.

Tucker's reasons for introducing the discussion of division of labor in his preliminary discourse are obvious. In analyzing human nature he found social instincts; in the societies formed to satisfy these instincts he saw that men by mutual aid make great gains over animals; one of the earliest and greatest of these gains comes from a division of labor. The division to which he refers here is the division into various occupations but even in this he saw one of the advantages true throughout all the more minute divisions viz., that men can labor where their talents will return the most to society. In later discussion he stated a number of the further advantages which labor division brings. Among these as he noted them are (1) the expertness and speed acquired by one who continuously performs a single operation or manufactures a single commodity; (2) the saving of time and of expense; (3) the possibility of utilizing child and woman labor to greater advantage. These thoughts and two others bearing upon division of labor viz., (1) the especial opportunity to secure more minute division of labor in the machine industries and (2) the effect of a narrow market in preventing the gainful division of labor are suggested in one of his instructions to his young traveler. After having advised that the traveler observe what use is made of machinery in a given country, he suggested as his next query:

“Is that labor which is still being performed by the human kind so judiciously divided that men, women and children have their respective shares in proportion to their strength, sex and abilities? And is every branch so contrived that there is no waste of time or unnecessary expense of strength and labor?”¹

¹ *Instruct. for Trav.*, p. 22.

That he might make his meaning clear he cited an illustration from Birmingham:

“When a man stamps a metal button by means of an engine, a child stands by him to place the button in readiness to receive the stamp and to remove it when received, and then to place another. By these means the operator can stamp at least double the number which he could otherwise have done had he been obliged to have stopped each time to have shifted the buttons; and as his gettings may be from 14d. to 18d. and the child’s from a penny to 2d. per day for doing the same quantity of work, which must have required double the sum had the man alone been employed, this single circumstance saves above 80, or nearly 100 per cent., at the same time that it trains up children to a habit of industry almost as soon as they can speak. And hence it is that the *bijoux d’Angleterre*, or Birmingham toys, are rendered so exceedingly cheap as to astonish all Europe.”¹

The influence of a wide market in making possible a very great differentiation of employment he states thus in his discussion of the relative trading strength of poor and rich nations:

“In the richer country, where demands are great and constant, every manufacture that requires various processes and is composed of different parts, is accordingly divided and subdivided into separate and distinct branches, whereby each person becomes more expert, and also more expeditious, in the particular part assigned him. Whereas, in a poor country the same person is obliged, by necessity and for the sake of getting a bare subsistence, to undertake such different branches as prevent him from excelling or being expeditious in any.”²

¹ *Instruct. for Trav.*, p. 23.

² *Four Tracts*, pp. 33-34.

It is, moreover, observable that in country places where there is scarcity of inhabitants, one trade will not be sufficient for a man's subsistence, but several distinct occupations must be joined together in order to obtain a bare and wretched support. By which means it comes to pass that there cannot be the *quantity* of work performed as where every one exercises and improves himself in one particular calling, and as to *quality* or workmanship itself, that must necessarily be clumsy, rude and imperfect." ¹

d. DOMESTIC VS. FACTORY SYSTEM

Tucker favors the domestic system rather than the factory system. He describes the two systems as then in operation and contrasts their effects upon the laborers and upon the product. Raising the question of the relative number of independent manufacturers and of journeymen and the effects upon morals, quality of the product, etc., he tells his traveler the conditions in England:

"This matter is better illustrated by comparing the same manufacture, and the consequences attending it, under the different circumstances here referred to. In many parts of Yorkshire the woollen manufacture is carried on by small farmers and freeholders. These people buy some wool and grow some. Their wives, daughters, and servants spin it in the long winter nights, and at such times when not employed in their farms and dairies. The master of the family either sells this produce in the yarn market or hath it wove up himself. It is then milled, cleansed, and brought to market, generally to the town of Leeds; but when sold there, he can be paid for no greater number of yards than the cloth will measure after having been well soaked in water, by which means all frauds in stretching, tentering, &c., are effectually prevented. The persons who buy this cloth generally act upon commission at

¹ *Elements*, p. 12.

a very low rate, and afterwards cause the cloth to be dyed (if it was not dyed in the wool), and to be properly dressed and finished. Thus the whole passes through various hands independently of each other. And though in fact the spinner, weaver, millman, dyer, dresser, &c., &c., are all of them the journeymen of the agent or commissioner, who stands in the stead of him who is the clothier in other places, yet by acting thus upon a distinct footing they conceive themselves as far independent of him, and of each other, as any buyer or seller whatever. And being thus independent, they are all rivals, all animated with the same desire of bringing their goods to market upon the cheapest terms and of excelling one another. Their journeymen, likewise, if they have any, being so little removed from the degree and condition of their masters, and so likely to set up themselves, by the industry and frugality of a few years, have no conception that they are embarked in an interest opposite to that of their masters, or that they are called upon to enter into clubs and combinations against them. Thus it is that the working people are generally moral, sober and industrious, and that a riot or a mob is a thing hardly known among them. Whereas in Gloucestershire, Wiltshire, and Somersetshire the manufacture is carried on by a quite different process, and the effects are accordingly, viz.: One person, with a great stock and a large credit, buys the wool, pays for the spinning, weaving, milling, dyeing, shearing, dressing, &c., &c. That is, he is the master of the whole manufacture, from first to last, and perhaps employs a thousand persons under him. This is the clothier, whom all the rest are to look upon as their paymaster. But will they not also sometimes look upon him as their tyrant? And, as great numbers of them work together in the same shop, will they not have it the more in their power to vitiate and corrupt each other, to cabal and associate against their masters, and to break into mobs and riots upon every little occasion? The event hath fully showed, and is now showing, that these conjectures are too frequently supported by facts. Besides, as the master is placed so high above the condition of

the journeyman, both their conditions approach very much nearer to that of a planter and slave in our American colonies than might be expected in such a country as England; and the vices and tempers belonging to each condition are of the same kind, only in an inferior degree. The master, for example, however well disposed in himself, is naturally tempted by his situation to be proud and overbearing, to consider his people as the scum of the earth, whom he has a right to squeeze whenever he can, because they ought to be kept low and not to rise up in competition with their superiors. The journeymen, on the contrary, are equally tempted by their situation to envy the high station and superior fortunes of their masters, and to envy them the more in proportion as they find themselves deprived of the hopes of advancing themselves to the same degree by any stretch of industry or superior skill. Hence, their self-love takes a wrong turn, destructive to themselves and others. They think it no crime to get as much wages and to do as little for it as they possibly can, to lie and cheat, and do any other bad thing, provided it is only against their master, whom they look upon as their common enemy, with whom no faith is to be kept. The motives to industry, frugality, and sobriety are all subverted by this one consideration, viz., that they shall always be chained to the same oar and never be but journeymen. Therefore their only happiness is to get drunk and to make life pass away with as little thought as possible. This being the case, is it to be wondered at that the trade in Yorkshire should flourish, and the trade in Somersetshire, Wiltshire, and Gloucestershire be found declining every day?"¹

Tucker's distrust of the common people reinforced his opposition to all monopolies in leading him emphatically to condemn any combinations of the laborers in these factories that were developing. This is suggested in the passage above quoted and is directly expressed in the *Essay on Trade* where the prevention of "combinations of journeymen

¹ *Instruct. for Trav.*, pp. 24-25.

against their masters” is characterized as “greatly for the public good.”¹

e. HIGH WAGES AND HOLIDAYS

Instead of upholding the economy of high wages, as a present day writer might do, Tucker, wherever he touches on the rate of wages, argues for a low rate. His eye is on enlarged markets in other lands and he laments that the English workmen do not labor more cheaply. For example, speaking directly to British laborers in explanation of the recurrent stagnations of trade, he tells them that the cause

“is really this, that you do not labor as cheap, and are not content to live and fare as hard as the manufacturers in other countries, and consequently their merchants can afford to sell their goods at the market cheaper than ours. . . . For alas! and this is the ruin of all our trade, too many there are who will not accept of work one part of the week, but on such terms only as may enable them to live in vice and idleness the rest. . . . In this you are worse, much worse, than the common people of any other nation.”²

Again, he says that if “the price of labor is continually beat down it is greatly for the public good.”³ At another place he charges that the English common workmen become more vicious, more indigent and idle in proportion to the advance of wages.”⁴

In close connection with this arraignment of the English workingmen as too grasping in wage and too inclined to idleness comes his testimony against them because they “lose probably more time in cockfighting, bullbaiting, mob-

¹ *Essay on Trade*, p. 46.

² *Six Sermons*, p. 89.

³ *Essay on Trade*, p. 46.

⁴ *Essay on Trade*, p. 41.

tings and electioneering”¹ than the French do “in their too many holidays and great processions.”¹

f. THE UNPRODUCTIVE CLASSES

Tucker considered professional men to be nonproducers. He ranks the professional classes among the “trades which injure the community by flourishing” and says of them.

“As these scholars and literary gentlemen, lawyers, doctors, divines, live by the labor of others, the increase of their numbers would be so far from adding to the public stock of wealth that it would greatly diminish it in every view. . . . A few, indeed, are necessary in every state, but many are a nuisance, both to themselves and to the public.”²

He lists³ as one of the disadvantages in trade of France as compared with Great Britain

“the number of religious, of both sexes, . . . at lowest computation 300,000, . . . who might be useful in trades; . . . but not only this, they are a heavy burden.”

The large number of French nobles, scorning productive labor, is also listed with the disadvantages of France.

g. FIXED WAGES

Consistently with his freedom of trade thesis and with his application of this in opposing government attempts to regulate goods according to some standard, Tucker unreservedly condemns laws for fixing wages. He argues:

¹ *Ibid.*, p. 35. *An Earnest and Affectionate Address to the Common People, etc.* (1787), is a plea against cockfighting, etc.

² *Elements*, p. 92.

³ *Essay on Trade*, pp. 28-30.

“The statutes regulating wages and the price of labor are another absurdity, and a very great hurt to trade. Absurd and preposterous it must surely appear for a third person to attempt to fix the price between buyer and seller, without their own consents. For, if either the journeyman will not sell his labor at the fixed or statutable price, or the master will not give it, of what use are a thousand regulating laws? Nay, how, indeed, can any stated regulations be so contrived as to make due and reasonable allowance for plenty or scarcity of work, cheapness or dearness of provisions, difference of living in town or country, firing, house-rent, &c., &c.; also for the goodness or badness of the workmanship, the different degrees of skill or despatch of the workman, the unequal goodness of material to work upon, state of the manufacture, and the demand, or stagnation, at home or abroad? I say, how is it possible to make allowance for all these various and contingent circumstances? And yet were even this possible, a great difficulty still recurs, viz.: Who shall, or how can you, force the journeyman to work, or the master to give him work, unless they themselves shall mutually agree about it? And if they agree, why should you, or I, or anyone else interfere? And what need of any regulations at all? In short, such laws as these can do no good, because they can never be carried into a regular, useful practice. But, on the contrary, they may cause a great deal of mischief, riots, and disturbances, and will infallibly, sooner or later, drive the trade from that country where men are absurd enough to attempt to put them in execution.”¹

Incidentally this passage contains a suggestive analysis of the conditions determining contract wages.

h. APPRENTICESHIP AND SETTLEMENT

In further application of his freedom of trade principle Tucker is everywhere and always the consistent opponent

¹ *Instruct. for Trav.*, pp. 34 and 35.

of the statute of apprentices and of pauper settlements. He deals with these topics at length in both the *Elements* and the *Instructions for Travellers*. Under the head of exclusive privileges he classifies

“that absurd statute of the fifth of Queen Elizabeth, which restrains persons from exercising those very trades they may have the happiest genius for, and in which they may have made great improvements and excelled all that went before them. Yet strong and unanswerable as these reasons are, they are totally overruled by this single law, and the unfortunate ingenious person must be debarred from exercising that trade which nature herself designed him for, and perhaps in which only he could be of use to his country, because, forsooth, he had not served a regular apprenticeship!”¹

Tucker criticises the pauper and parish settlement acts many times in his works. He opposes these laws because the parishes in particular are injured and because the trading and manufacturing nation, as a whole suffers through an ill distributed labor force. He says:

“The present set of pauper and parish settlement laws are absurd and unjust, nor have they one good consequence. . . . The parishes are injured, . . . put at war against the rest of the kingdom. . . . Law suits cost more than charity would. . . . The public at large suffers. In a commercial state, all able and willing should be provided with work; . . . cannot do this unless . . . can provide work for all at home at all seasons (an extravagant supposition), or let them seek it wherever they choose. . . . The poor suffer greatly by these unjust laws. . . . Sent to the parish to be a pauper when he could have a flourishing business elsewhere.”²

¹ *Instruct. for Trav.*, p. 34. For a general scoring of all trade restraints due to exclusions and including the statute of the 5th of Elizabeth see *Elements*, pp. 79-92.

² *Elements*, pp. 20 and 21.

Again:

“The statutes relating to pauper settlements are another great confinement and disadvantage to trade, without being of real benefit to any set of men whatever, the lawyers excepted.”¹ “The restraints that villains should not stir from manors probably suggested the later law that the poor be confined to their parish (originally coextensive with the manor). This indicates a failure to distinguish the difference of times and the variation of circumstances. For, in a commercial country, the people must follow their work, be it near or far, and as trade and manufactures are always shifting places, . . . it seems unavoidable that people should be permitted to remove as their work removes,” &c.²

i. SLAVE LABOR

Tucker opposes slavery both upon ethical and economic grounds. He couples these two classes of objections when he says

“We make slaves of these poor wretches (the African blacks) contrary to every principle, not only of humanity and justice, but also of national profit and advantage, as I have often proved in several of my writings, both commercial and theological. We, I say, the boasted patrons of liberty and the professed advocates of the natural rights of mankind, engage deeper in this murderous traffic than any nation whatever.”³

Under the discussion of piece work above and in the earlier chapter on *Fundamental Notions*, passages were cited giving one of Tucker’s arguments against the economy of slave labor. The gist of all these arguments is

¹ *Instruct. for Trav.*, p. 34.

² *2nd Lett. on Naturalization*, p. 6, Note. Similar statements are made in *Manifold Causes Increase of Poor*, p. 8, and *Thoughts on Public Affairs, Gent’s Mag.*, vol. 1, pp. 132-133.

³ *Series of Answers*, p. 21.

“Little industry can be expected from any poor wretches who know beforehand that a greater exertion of industry on their parts would only be an increase of labor painful to themselves and solely beneficial to their masters.”¹

III. CAPITAL AND INTEREST

The third important topic under the general head, *Manufactures*, is Capital and Interest.

a. CAPITAL

Tucker has but little to say about capital. He theorizes neither about its origin nor about its share in distribution. The one thought concerning it which he expands at all is the importance to the merchant, to the manufacturer, and to the nation, of having capital in large amounts. By means of their large capitals he notes that British manufacturers and traders can “give longer credits . . . and receive none;”² “always command the market in buying raw materials at the best hand;”³ can make . . . costly experiments or embark in . . . expensive and longwinded undertakings;”⁴ and can vend “all goods on the cheapest terms.”⁵

It is because of their large capitals bringing to them these advantages that British merchants are the leading traders of the globe. He states that the combined capitals of British citizens give Great Britain, as a nation, a capital greater than that of any other nation, so great indeed, that “the trade of

¹ *Series of Answers*, p. 39. Tucker’s most extended argument against the economy of slave labor occurs in *Reflect. Present Matters in Dispute, etc.*, pp. 11-17.

² *Series of Answers*, p. 30.

³ *Four Tracts*, p. 34.

⁴ *Ibid.*, p. 32.

the world is carried on in a great measure with British capital.”¹

In particular he argues that Great Britain has a great advantage over France in that “its capitals in trade are much larger no uncommon thing for an English manufacturer to have 20,000£ in trade” whereas in France “as soon as they get 10,000 £ is it not a common practice with them to buy some charge in order to ennoble their families and so wipe off the disgrace of having been once useful to their country?”²

b. INTEREST

Tucker deals with but one phase of the subject of interest, at any length. With this one exception, all of his remarks concerning it are incidental. All that he says may be presented under the heads (1) the rate of loan interest (2) discrimination between loan interest and profits and (3) the ethics of loan interest.

(1) Concerning the rate of loan interest he states that an increase of the money supply causes a lowered rate of interest;³ that “the low interest of money will insure, the vending of all goods on the cheapest terms,”⁴ i. e. that prices vary as the rate of loan interest; and lastly, that rents vary inversely as the rate of loan interest. This last point he argues in his longest passage treating of interest, in which he says:

“Enquire the relative price both of land and of money;

¹ *Series of Answers*, p. 31.

² *Reflect. on Turkey Trade, Append.*, pp. 28-29.

³ *2nd Lett. on Naturalization*, p. 39.

⁴ *Four Tracts*, p. 34. In *Essay on Trade*, p. 39, he states that higher interest makes higher prices.

criteria like the alternate buckets of a well, where the ascent of one necessarily supposes the descent of the other. . . . Where interest of money is high the price of lands must be low, because the height of interest is a proof that there are many to borrow yet few to lend. And if so, then it follows that wherever there are but few lenders of money there cannot be many purchasers of land. On the contrary, were the interest to be exceeding low, the price of lands must rise in proportion, because the lowness of interest is an infallible proof that there are many persons in that state capable of making purchases, and yet but few who want to sell or mortgage their estates. But the effects of high or low interest are yet to be extended a great deal further, inasmuch as the employment or non-employment of a people, and consequently their riches or poverty, will be found to depend, in a considerable degree, on one or the other of these things.”¹

(2) He distinguishes between loan interest and profits. In contrasting England and France he says that interest is lower in England and that “therefore a master manufacturer is content with less profits . . . for no man would run risks and take fatigue of trade if he could get as much, or nearly as much, by living upon the interest of his money.”² It may be noted here that this remark contains the substance of all that Tucker has to say about profits.

(3) Tucker condemns laws against interest taking. Speaking of historic days where English princes were using the Jews “as sponges to suck up the treasure of the nation”³ he says:

“It must be observed that both church and state had in those

¹ *Instruct for Trav.*, p. 59.

² *Reflect. on Turkey Trade, Appendix*, p. 28. A similar remark occurs in *Instruct. for Trav.*, p. 59.

times enacted several foolish, absurd laws, that no Christian should lend money upon interest.”¹

Remembering that Tucker was a churchman, it is interesting to note that he continues by commenting that both church and state erred in “grossly mistaking the meaning of the Scripture” on that head. In a note he refers to the Mosaic precept against interest saying:

“Moses, in settling the property of the land of Canaan, seems to have kept the happy medium between an absolute agrarian law and an unlimited monopoly of land. And, therefore, he allowed the rich and the industrious to purchase from the poor or the idle for the space of 49 years, and no longer. The consequence of which was that personal industry received a sufficient encouragement, at the same time that an effectual guard was placed against the laziness and luxury of an overgrown fortune. But this excellent scheme would still have been eluded had the Israelites been permitted to lend money to each other upon interest, because it would have proved the same thing in fact, whether the paternal estate was bought forever or mortgaged forever. He, therefore, ordained that they should not take usury or interest of one another. This is the true reason for that remarkable prohibition, but the clergy and laity of the times we are now speaking of little understood it.”²

IV. MACHINERY

The last topic worthy particular treatment under the general head of *Manufactures* is machinery.

Tucker’s theory of the effects of machinery, formulated in 1757, at the very beginning of the industrial revolution

¹ *2nd Lett. on Naturalization*, pp. 36 and 37. For other condemnations of usury laws see *Ibid.*, pp. 26 and 39.

² *2nd Lett. on Naturalization*, p. 37, *Note*.

in England is one that may be approved even to-day, when the economist has a century and a half of world-experience with machinery, upon which to reflect. In his *Instructions for Travellers* he advises his traveler to find out what machines are being used in each country that he visits and what effect these machines have upon the price of goods, and upon the number of persons employed. To illustrate his meaning he thus states¹ his own ideas concerning the use of machinery in England:

“ Few countries are equal, perhaps none excel, the English in the numbers and contrivance of their machines to abridge labor. Indeed, the Dutch are superior to them in the use and application of windmills for saving timber, expressing oil, making paper and the like. But in regard to mines and metals of all sorts, the English are uncommonly dexterous in their contrivance of the mechanic powers; some being calculated for landing the ores out of the pits, such as cranes and horse-engines; others for draining off superfluous water, such as water-wheels and steam engines; others, again, for easing the expense of carriage, such as machines to run on inclined planes or roads down hill, with wooden frames, in order to carry many tons of materials at a time. And to these must be added the various sorts of levers used in different processes; also the brass battery works, the slitting mill, plate and flattening mills, and those for making wire of different fineness. Yet all these, curious as they may seem, are little more than preparations or introductions for further operations. Therefore, when we still consider that at Birmingham, Wolverhampton, Sheffield, and other manufacturing places, almost every master-manufacturer hath a new invention of his own, and is daily im-

¹The passage has been reprinted here in full not only because it gives Tucker's thought upon machinery, but because (1) the first part of it is an outline account by an eye-witness of manufacturing England in 1757, and (2) it well illustrates Tucker's substance and style both as recorder of observations and as theorist.

proving on those of others, we may aver, with some confidence, that those parts of England in which these things are to be seen exhibit a specimen of practical mechanics scarce to be paralleled in any part of the world. As to machines in the woollen and stuff way, nothing very considerable hath been of late attempted, owing, in a great measure, to the mistaken notions of the infatuated populace, who, not being able to see farther than the first link of the chain, consider all such inventions as taking the bread out of their mouths, and therefore never fail to break out into riots and insurrections whenever such things are proposed. In regard to the silk manufacture, the throwing mills, especially the grand one at Derby, are eminent proofs of the abridgment of that species of labor. And some attempts have been lately made towards the cotton and linen manufactures by means of certain engines.

“ In regard to the other part of the query, viz.—What is the consequence of this abridgment of labor, both regarding the price of goods and the number of persons employed?—the answer is very short and full, viz.: That the price of goods is thereby prodigiously lowered from what it otherwise must have been, and that a much greater number of hands are employed. The first of these is a position universally assented to; but the other, though nothing more than a corollary of the former, is looked upon by the majority of mankind, and even by some persons of great name and character, as a monstrous paradox. We must, therefore, endeavor to clear away these prejudices step by step. And the first step is that cheapness, *ceteris paribus*, is an inducement to buy, and that many buyers cause a great demand, and that a great demand brings on a great consumption, which great consumption must necessarily employ a vast variety of hands, whether the original material is considered, or the number and repair of machines, or the materials out of which those machines are made, or the persons necessarily employed in tending upon and conducting them, not to mention those branches of the manufacture, package, portorage, stationery articles and bookkeeping, &c., &c., which must inevitably be performed by human labor. But to come to

some determinate and striking instance, let us take the plow, the harrow, the cart, the instruments for threshing and winnowing, and the mills for grinding and bolting, as so many machines for abridging labor in the process of making bread. I ask, do these machines prevent or create employment for the people? And would there have been as many persons occupied in raising of corn and making of bread if no such engines had been discovered? The obvious reply to this query is that probably the wheaten loaf had been confined to one or two families in a state, who, on account of their superior rank and vast revenues, could have afforded to give an extravagant price for this delicious morsel. But it is impossible that under such circumstances it ever could have become the common food of the kingdom. And the same remark would hold good were it to be applied to the art of printing, and to the numbers of people from first to last therein employed. For printing is nothing more than a machine to abridge labor and reduce the price of writing. But examples are endless, and surely enough has been said to convince any reasonable man—though even the great author of *L'Esprit de Loix* should once be of a different mind—that the system of machines, which so greatly reduces the price of labor as to enable the generality of a people to become purchasers of the goods, will in the end, though not immediately, employ more hands in the manufacture than could possibly have found employment had no such machines been invented. And every manufacturing place, when duly considered, is an evidence in this point.”¹

¹ *Instruct. for Trav.*, pp. 20 to 22.