BY THE SAME AUTHOR.

AN INTRODUCTION TO POLITICAL ECONOMY.

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ELEMENTS

OF

POLITICAL ECONOMY.

BY

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Quid pro quo.

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To

JOHN BASCOM,

PRESIDENT OF THE UNIVERSITY OF WISCONSIN,

IS INSCRIBED

This Improved Edition of my Book,

WITH

HIGH RESPECT AND WARM FRIENDSHIP.

PREFACE.

THE good reception given to my book in its previous editions by many practical teachers, as well as by the general public, has prompted me to subject it to another thorough revision, by verifying former statements of fact and introducing many new ones to bring the book abreast of the present time, and by enlarging the discussion of principles at some points and curtailing it at others in the interest of symmetry and completeness; and prompts me also to write, even at this late day, a preface to the book, since I have grounds for believing that some of its friends may be pleased to learn of the circumstances under which it was originally written.

I had taught Political Economy in this Institution for ten or twelve years without ever forming any purpose to try my hand at a treatise on the subject. I had used for my teachers and guides the English writers, particularly Smith, Ricardo, Senior, and Mill; and had familiarized myself also with the American writers, particularly Carey, Wayland, Bowen, and Bascom. Almost from the outset of my studies, however, and increasingly as the years went by, I felt a

dissatisfaction with what seemed to me to be the lack of scientific generality common to nearly all these writers. I could see no solid reason why economical discussions should be confined to tangible commodities, and not include as well personal services rendered for pay, and also credits of all kinds. I discussed this point repeatedly with Professor Bascom, at that time my colleague, and my mind had almost reached the conclusion in which it has now rested for many years, when my late friend Amasa Walker, who was even then a political economist of reputation, although he had not yet published his "Science of Wealth," recommended to me Bastiat's "Harmonies of Political Economy." I had scarcely read a dozen pages in that remarkable book, when, closing it, and giving myself to an hour's reflection, the field of Political Economy, in all its outlines and landmarks, lay before my mind just as it does to-day. I do not know how much I brought to this result, and how much towards it was derived from Bastiat. I only know that from that hour Political Economy has been to me a new science; and that I experienced then and thereafter a *sense of having found something*, and the cognate sense of having something of my own to say. This was in 1863.

Subsequently I learned much from Bastiat. It is a pleasure to acknowledge, in the amplest manner, one's indebtedness to such a quickening writer as he is; and whoever will compare carefully with his book

the following chapters on Value and Land, will see how much I have profited by his discussions; and he will also see that I have made an independent, not a servile, use of them. I dare to hope that the relations of utility to value are even more clearly and ultimately put than he has put them. Not to have availed myself of the truths which he has actually established would be as unjust to science, as not also to have endeavored, in the chapters on Exchange and Foreign Trade to execute the commission which he left to his readers in these words: "*I hope yet to find at least one among them who will be able to demonstrate rigorously this proposition: the good of each tends to the good of all, as the good of all tends to the good of each; and who will, moreover, be able to impress this truth upon men's minds by rendering the proof of it simple, lucid, and irrefragable.*" [1]

Under the impression that I could now say something about Political Economy that the public might be willing to hear, I wrote over my initials a series of articles for the "Springfield Republican," which attracted attention, and brought me letters alike from friends and from entire strangers, — notably from the late Sidney Homer of Boston, whose name I shall always hold in grateful remembrance for this and other reasons, — urging me to continue to write on this subject, and suggesting that a formal treatise might be acceptable to the public. Thus solicited

[1] Sterling's Translation of the Harmonies, page 92.

and encouraged, — Mr. Bowles kindly adding his voice to the rest, — I ventured with diffidence upon the composition of this book. It was not at all the primary purpose to prepare a text-book for the use of college students. I thought, indeed, that I might use the book with my own classes; but the general public was in my eye throughout. The supposed needs of merchants' clerks and farmers' sons, for example, influenced the matter and form much more than those of people intellectually further advanced. Indeed, there was, for this reason, in the first edition, a familiarity of phrase and illustration which justly elicited criticism, and which has since been gradually eliminated. While the original design, to be intelligible to all classes of readers, may doubtless have betrayed me at times into too familiar a style, it has continued, nevertheless, to control the form of every new and every altered paragraph.

That which is original in my book is perhaps rather to be sought for in the book as a whole than in the specific parts of it. The entire plan is different from that of any book published prior to 1865. I attempted a self-consistent and symmetrical development of the one idea of Value in each of the three forms in which it manifests itself. That the outline at least is complete, is confirmed by the fact that I have found no occasion since for any other chapters than the sixteen originally sketched. I dropped entirely the long-maintained distinctions between the

Production, Distribution, and Consumption of Wealth. So far as I know, I was the first to drop the technical use of the term Wealth, — a term that has always proved an invincible foe to every one trying to wrestle with it scientifically: even Bastiat, athlete as he was, was floored in this encounter. I believe that new light has been thrown on the value of land, on the delicate relations between money as a medium and money as a measure, on the whole line of objections to free trade, and on the nature of property as related to every form of taxation. The historical chapters of the book cost me very great labor. In sketching the history of American tariffs, I had not before me the tracks of even a solitary pioneer. The same remark applies in the same degree to the chapter on Money in the United States. Both of these historical subjects have since been widely and worthily developed by my friend Professor Sumner of Yale College; and in the present edition I have incorporated some additional points, the results of his further researches and of my own. In the opening chapter on the History of the Science, I was aided somewhat by the Introductory Discourse prefixed by Mr. McCulloch to his edition of Adam Smith, and also somewhat by the article "Political Economy," in the New American Cyclopedia; but all the quotations from the classical writers, as well as those from Locke, Hume, and Bastiat, were made at first hand.

Two or three editions of the present treatise had been issued before I had seen any of the books of Henry Dunning Macleod, and to the numerous points of our independent coincidence have been added, in my later editions, many points of information in matters of fact, and some distinctions in matters of science, for which I wish here to express in general my obligations to him. Mr. Macleod, in the first volume of his "Principles of Economical Philosophy" has done me the great honor to associate my name with Condillac, Whately, Bastiat, and Chevalier, — the heads of the third great school in Political Economy. His own name is more worthy than mine, and more likely than mine, to stand permanently in that distinguished list.

The most recent writers, whom I have consulted, and to whom I feel under obligations, — and every writer who is both competent and earnest puts his readers under obligations of some sort, — are Sir Anthony Musgrave, now Governor of Jamaica, Bonamy Price in his "Practical Political Economy," Professor Jevons in his late books, and Professor Walker of New Haven in his "Wages Question" and "Money." The points of the latter in respect to the so-called "Wages-Fund" have led me to surrender, — not indeed the term, which I still hold to be useful, but my former definition and application of it. In this edition I have also followed

the excellent example set by Professor Walker in his "Money" of dropping entirely the term "Currency" as a useless and perplexing word; and I now publicly invite my friend to return the compliment, and to follow my example set many years ago in dropping entirely the equally useless and still more perplexing word "Wealth." If he will do this, between us both, Political Economy will have been advanced two quite important stages.

I can not conclude this preface without expressing my sense of indebtedness to the successive classes of intelligent young men, to whom I have presented, and with whom I have discussed, now for almost a quarter of a century, the facts and principles of this fascinating science. It seems to me as if every possible objection to the leading points in this book has been raised, at one time or another, in my own lecture-room. Sometimes I have been convicted of error in minor points, and many times been fortified in the truth, through an attempt to remove objections started thus by students. Nearly every one of the objections to free exchange answered in the chapter on Foreign Trade was broached in this way; and I deem it of the greatest advantage to any political economist, — an advantage to which Adam Smith himself was much indebted, — to have the opportunity to test views and theories over and over again in the presence of fresh and bright minds. It has not infre-

quently happened in my experience that new light has been thrown out upon a subject by a young man just grasping the thought for the first time.

A. L. P.

WILLIAMS COLLEGE,
August 16, 1878.

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ELEMENTS OF POLITICAL ECONOMY.

CHAPTER I.

HISTORY OF THE SCIENCE.

Political Economy is the *Science of Exchanges*, or, what means just the same, the *Science of Value*. All these terms will be strictly defined a little further on, and good reasons will be given why this definition of the science is better than any other. It will be seen at once, that the word *Wealth*, so often found in this connection, finds no place in the definition as above given. This word has been the bane of Political Economy. It is used by the people, and even by writers, in many senses, and so has become unfitted for scientific uses. It is difficult, if not impossible, to define it clearly, and so it is a worse than useless word in a definition of anything else. Moreover, our science does not need this word, any more than a man needs three boots to a pair. There is another word, whose meaning can be made as clear as the day, all ready to take the place of this indefinite and ambiguous term. That word is *Value*. It is now our task to study the science of Value, which is also at the same time the science of Exchanges.

In this task, which may perhaps prove to be a pleasure also, three things, in the general, are to be done: first, to circumscribe the *field* within which

the peculiar facts of this science take place; second, to lay bare the immovable *grounds* on which its propositions may rest; and third, to unfold in a due order and completeness the *propositions* themselves with their proofs. In order to do these three things well, there will be required, in the particular, first, an analysis of those principles of *human nature* out of which exchanges spring; second, an examination of the *providential arrangements*, physical and social, by which it appears that exchanges were designed by God for the welfare of men; third, a consideration of *actual exchanges*, in their kinds, extent, and gainfulness; and fourth, an inquiry into the *laws and usages devised by men* to facilitate or to impede exchanges.

Before these purely scientific inquiries are entered upon, however, and for the sake of preparing the way for them, it will be well to take a preliminary glance at the history of the science, and to try to trace the steps by which successive thinkers have brought Political Economy to its present stage of development.

While labor is as old as the race, and exchanges are as old as society, and while doubtless in all ages individual inquirers have tasked their minds with some portions of the subject, yet Political Economy as a Science is both recent and still imperfect. There can be no doubt, that men exchanged among themselves services and commodities, and found their profit in thus exchanging, long before the dawn of authentic history. The first commercial transaction on record dates back two thousand years before Christ. It was the purchase by Abra

ham of the cave and field of Machpelah. "And Abraham weighed to Ephron the silver which he had named in the audience of the sons of Heth, four hundred shekels of silver, current money with the merchant." All this implies at that early day fixed conditions of trade. There were merchants as a class. Silver by weight was already a medium of exchange passing from hand to hand. It was current money with the merchant. In the absence of written documents a bargain was made in the presence of living witnesses. It was "in the audience of the sons of Heth, before all that went in at the gate of his city, that the field and the cave were made sure unto Abraham for a possession." An earlier passage in the life of Abraham shows that gold as well as silver was already reckoned an article of merchandise. It is said that Abraham departed from Egypt "very rich in cattle, in silver and gold."

In the copious verses of Homer, which give a complete picture of the heroic age, there is no direct mention of Money; and this is almost sure proof that no such thing as money was in use at that time; but there are many lines in his poems that indicate a brisk interchange of *products* as characteristic of those times and countries. For instance, these near the end of the seventh book of the "Iliad": —

> "But the long-haired Greeks
> Bought for themselves their wines; some gave their brass,
> And others shining steel; some bought with hides,
> And some with steers, and some with slaves, and thus
> Prepared an ample banquet." [1]

Still, there are hints in Homer, that, though there

[1] Bryant's translation.

were then no money passing from hand to hand, there was then and there a sort of common measure of things exchangeable. Several articles are mentioned in his poems as being worth so many *oxen*. For example, near the middle of the sixth book of the "Iliad," in these lines: —

> "Then did the son of Saturn take away
> The judging mind of Glaucus, when he gave
> His arms of gold away for arms of brass
> Worn by Tydides Diomed, — the worth
> Of fivescore oxen for the worth of nine."[1]

Many places in the Scriptures throw light upon the kinds and mode of ancient exchanges. The twenty-seventh chapter of the prophet Ezekiel gives a vivid picture of the immense commerce centering in the city of Tyre. Nineveh, according to the prophet Nahum, "multiplied her merchants above the stars of heaven." In the twenty-eighth chapter of Job there is a poetic but accurate description of the processes of ancient mining: —

> "Truly there is a vein for silver,
> And a place for gold, which men refine.
> Iron is obtained from earth,
> And stone is melted into copper.
> Man putteth an end to darkness;
> He searcheth to the lowest depths
> For the stone of darkness and the shadow of death.
> From the place where they dwell they open a shaft;
> Forgotten by the feet,
> They hang down, they swing away from men.
> The earth, out of which cometh bread,
> Is torn up underneath, as it were by fire.
> Her stones are the place of sapphires,
> And she hath clods of gold for man.

[1] Bryant, 307–311.

The path thereto no bird knoweth,
And the vulture's eye hath not seen it;
The fierce wild beast hath not trodden it;
The lion hath not passed over it.
Man layeth his hand upon the rock;
He upturneth mountains from their roots;
He cleaveth out streams in the rocks,
And his eye seeth every precious thing;
He bindeth up the streams, that they trickle not,
And bringeth hidden things to light." [1]

Herodotus makes the probable statement (I. 94) that the Lydians of lesser Asia "were the first nation to introduce the use of gold and silver coin, and the first who sold goods by retail;" he also ascribes (VI. 127) to Pheidon, king of Argos, who flourished about 750 B. C., the permanent introduction into Greece of "weights and measures," which without doubt, like the Greek coinage, came originally from the eastward; and the same writer describes (IV. 181–185) with minute accuracy the caravan routes by which Carthaginian enterprise penetrated the interior of Africa for the sake of a trade in dates and salt and gold-dust and slaves. The Carthaginians were daring navigators also in the interests of traffic; coasting, according to the "Periplus" of Hanno, outside the pillars of Hercules, and down the west coast of Africa, at least as far south as the mouths of the Senegal and Gambia; and coasting northward also to the British Isles, attracted by their abundant supply of tin. Herodotus (III. 115) knows the Scilly Isles under the name of the Cassiterides or Tin-islands.

The earliest writer known to us who treated eco-

[1] Dr. Noyes' translation.

nomic subjects at any length is Xenophon. Before the middle of the fourth century before Christ this accomplished Athenian published a treatise "On Ways and Means." This early essay, not indeed on Political Economy, but on some of the subjects with which that science has to do, contains, together with much that is fallacious, some sound and liberal principles. Its object is to propose methods for enhancing the prosperity of the Athenian State. Praising the soil, the climate, the mines, the coins, the commercial position of Athens, Xenophon suggests that the State offer various encouragements to the settlement of aliens, in order to swell the active population and increase the revenue from the aliens' tax; that merchants and shipmasters of all nations receive special honors in the city, in order to attract more of them thither and thus augment the income from duties on imports and exports; that prizes be offered the presidents of the courts to expedite the trial of commercial causes; that inns, warehouses, and marts for the sale of goods be erected at the public expense for the sake of the rents; that government as such undertake commercial enterprises; that especially the silver mines be worked on the most extensive scale, as well on government account as by private and joint-stock adventurers, so that the State might enjoy direct profits in addition to the prices and the twenty-fourth part of the produce of the mines purchased by individuals; and that finally a council of peace be instituted, by whose mediation war might be avoided, and the State, in the enjoyment of durable tranquillity, enter gradually upon these measures of national improvement, which, moreover, ought to

be begun and continued by consulting the ancient oracles, and by supplications to the gods. Xenophon also has left us a dialogue entitled "The Householder," in which he says that economy is a science by itself, making the legal distinction between οἰκία and οἶκος, the *house*, and the *whole estate.*

Plato in the eleventh and twelfth chapters of the second book of his "Republic," admirably sketches one important principle of the science, namely, the necessity men are in, from their multifarious wants, of uniting in society, in which each individual may devote himself to that branch of industry for which he is best fitted, and then by exchange supply his remaining wants. "More will be done, and better, and with greater ease, when every one does but one thing, according to his genius, at the proper time, and when at leisure from all other pursuits." But this speculative view is adduced to account for the origin of a political state, and is so far from being carried out to its practical applications either economically or politically that Plato goes on to advocate community of goods in the leading class of his ideal state, and the exclusion of husbandmen and artisans from all share in the government.

Aristotle is sometimes called the father of Political Economy. He is certainly the father, if not of the science, of this name of the science, which name, however, he uses in a very different sense from that in which it is now used. At the opening of the second book of his "Economics" he distinguishes economy into four kinds, the regal, the satrapical, the *political*, and the domestic. By the first he means the central, and by the second the provincial, admin-

istration of a great empire like that of Persia; by the third, the administration prevailing in free states; and by the fourth, what we also mean by domestic economy. It is in the last sense, as indeed the name (οἶκος, *estate*, and νόμος, *law*) implies, that the ancients generally conceive of economy; and hence, although Aristotle is the first to use the term political economy, it is not so much in his "Economics" as in his "Ethics" and "Politics" that we find his real contribution to our science. According to Aristotle's division of the practical sciences, Ethics treat of the nature and welfare of man apart from the social relations; Economics view him under the social relations of the family; and Politics under the social relations of the state. In all three of these treatises accordingly of this transcendent thinker are to be found acute definitions, shrewd remarks, and pretty copious information, relating to the proper science of Political Economy. This, for example, is a perfect definition of property: — "*But by property we mean everything, of which the value is measured by money.*" (Ethics, IV. i.) The proper boundary line between economy and morals is drawn as follows: — "*Whenever there is no agreement made about the service performed, those who confer a favor freely for the sake of the persons on whom they confer it, cannot complain; for the value of it is not measured by money, and no equivalent price can be paid.*" (Ethics, IX. i.) The same chapter accurately describes the ultimate phenomenon of value as between the two persons exchanging: — "*For each fixes his mind on that which he happens to want, and for the sake of that will give what he does give.*" Aristotle understood,

as well as any one understands at present, the function of money as a measure: — "*Money, therefore, as a measure, by making things commensurable, equalizes them; for there could be no commerce without exchange, no exchange without equality, and no equality without the possibility of being commensurate.*" (Ethics, V. v.) In direct opposition to Plato's proposed community of goods, he insists strongly upon the rights and benefits of private property (Pol. II. v); apprehends the true origin of money, and that it is, in common with all other forms of property a mere means, no more than they, an end in itself (Pol. I. ix.); and estimates agriculture highly, as the ground of all other arts, and as most favorable to health, morals and good government. (Econ. I. ii.) Still Aristotle was not wholly emancipated from the prejudices of his time. Remarkable as was his sagacity in matters economical, he yet held views incompatible with a sound and complete science of economy. For example, these: — "*And indeed the best regulated states will not permit a mechanic to be a citizen; for it is impossible for one who lives the life of a mechanic or hired servant to practice a life of virtue.*" (Pol. III. v.) "*For usury is most reasonably detested, as the increase of our fortune arises from the money itself, and not by employing it for the purpose for which it was intended.*" (Pol. I. x.) "*It is clear then that some men are free by nature, and others are slaves, and that in the case of the latter the lot of slavery is both advantageous and just.*" (Pol. I. v.)

There is another Greek contribution to our science, important to be mentioned although the author of it is unknown, in a dialogue entitled the "Eryxias,"

in which Socrates in conversation with Eryxias is made to discourse copiously on the nature and forms of wealth. This remarkable piece of discussion is probably not much later than the time of Aristotle himself, perhaps about three hundred years before Christ. The author of it perceives clearly and makes Socrates fully expound that things are possessed of value simply because they can be exchanged for other things that are more wanted, that all values are more or less local, and that "those persons who teach music or grammar, or some other science, who in return for this obtain what is necessary for them as a remuneration for this instruction," also deal in valuable things.

When, as quoted above, Aristotle said, "*But by property we mean everything, of which the value is measured by money*," he laid down a pregnant proposition, and one that still lies at the foundation of our science. His term for property — χρήματα — is clearly used in a general sense so as to include all the three classes of valuable things, namely, material commodities, personal services, and credit-claims, since the value of each of these "is measured by money." Besides, this great proposition implies that value only appears through exchanges, since the only way in which the value of these things can be truly "measured by money," is by being exchanged against money. That Aristotle uses the term χρήματα in this broad sense is confirmed by the author of the "Eryxias," who expressly says, that the personal services of teachers rendered for pay are χρήματα; and is made quite certain by the later law usage of the Greeks, in which credit-claims also are expressly in-

cluded in the term χρήματα. The Greeks, accordingly, and especially Aristotle, made a good beginning in our science; but, unfortunately, there they stopped short.

There appear to be three principal reasons why the Greeks, who were so intellectually capable of it, and who, as we have just seen, really touched the foundations of it, did not develop any full system of Political Economy. In the first place, their affairs of private life were wholly subordinate to those of public life; and, consequently, the varied forms of private and associated industry could not win that attention, which, at present, they are able to compel. To the Greeks the State was everything, and the individual only that which the State allowed him to be. In the second place, the institution of slavery threw its shadow over most of the branches of industry. It was inevitable that employments committed mainly to slaves should seem mean to the free. Only agriculture and commerce, carried on on a large scale, and scarcely these, escaped this damaging influence. Even Aristotle, who says, "*The best nation is a nation of farmers*" (Pol. VI. iv.), says also, "*Neither should they who are destined for office be husbandmen.*" (Pol. VII. ix.) It lessened no man's consideration, however, in the public opinion of the Greeks, to have any kind of industry carried on on his account, provided he did not work at it with his own hands. In the third place, the constant recurrence of wars interfered sadly with the free expansion of industry.

Nevertheless, the Greek States showed practical good sense in their economical regulations. They

fell into no such egregious follies as have marked the legislation of modern states. There was no interdicting the exportation of raw materials; no favoring of manufactures at the cost of the agricultural class; no prohibitions on the export of specie; no efforts to preserve a factitious balance of trade; and no duties on imports except for purposes of revenue. The usual customs' duty in the port of Athens was two per cent. of the value of the goods. The duty laid by Athens in the ports of her subject-allies was generally five per cent.; and when in a few exceptional cases the rate was raised to ten per cent., it was regarded as extortion. In all essential respects, therefore, there existed freedom of industry and freedom of trade.[1]

We should expect beforehand that the more practical Romans, lovers of law and order, and exhibiting to the world many of the high qualities of citizen life, would make some valuable contribution to the science of exchanges. In this we are disappointed. Though in the earlier and better days of Rome, agriculture was highly esteemed, the blighting institution of slavery brought labor, the mechanical arts, and commerce more and more into disrepute. The lands were tilled by slaves. Slaves became the artisans of the country. As always happens under such circumstances, the freemen, the citizens, came to feel themselves above such degrading occupations. It is pitiful to hear Cicero declaim against the noble rights of labor. In the "De Officiis" there is a whole paragraph of condemnation for those branches of man

[1] See Boeckh's *Public Economy of Athens*, and Heeren's *Ancient Greece* chap. x. See also Macleod's *Economical Philosophy*, vol. i. pp. 47, 135.

ufacturing and commercial industry which ought to be regarded not only as honorable but as the life and strength of the State. One sweep of his pen pushes out of the pale of respectability the whole class of mechanics. "All artisans are engaged in a degrading profession," says he. Again, "there can be nothing ingenuous in a workshop." Trade and commerce fare no better at his hands. When carried on on a small scale they are to be regarded as disgraceful; when on a large scale they must not be greatly condemned! When social prejudices and views of labor like these are promulgated by the foremost man of his time, the best educated and the most liberal, there is no longer room for surprise at the lack of Roman contributions to Political Economy.

Moreover, the Roman moralists held that the accumulation of riches undermined those virtues in which they placed the perfection of character. Cato, the censor, in his stand against luxury, which is one consequence of such accumulation, was a representative of a large class of moralists. Their general position ought not to surprise us for two reasons: first, because the stream of Roman riches, instead of being diffused everywhere by a natural and general distribution, rushed at once into a few huge reservoirs; and second, the source of most of these accumulations was as wrong as their absorption by the few great families. They did not come from the peaceful and gradual development of the national resources; they came from conquests, from tributes, often from official extortion from the provincials. A comprehensive theory of value will hardly be helped forward in connection with such moral notions, such

views of labor, and such methods of gain as prevailed at Rome.

We find in the Roman Law, nevertheless, some admirable definitions, some acute distinctions, and even some theoretical discussions, relating to our science. For example, one would have to try hard before he could improve the brevity or the beauty of Ulpian's definition of Property: "Ea enim res est, quæ emi et vendi potest." *For that is Property which may be bought and sold.* Ulpian was a Roman jurist, assassinated by an imperial order in 228 A. D.; and when the Code of Justinian was formed about three hundred years later, many extracts from his writings found their way into the Digest. Ulpian also says, — "Nomina eorum qui sub conditione vel in diem debent et emere et vendere solemus." *We are accustomed to buy and sell debts payable on a certain day and at a certain event.* As examples of sharp distinction in matters economical, let us take these from the Digest: "Omnium rerum, quas quis habere, vel possidere, vel persequi potest, venditio recte fit." *A sale is lawful of anything which a man has or has the use of* OR HAS THE RIGHT TO SUE FOR. "Pecuniæ nomine non solum numerata pecunia, sed omnes res, tam soli quam mobiles et tam corpora quam jura continentur." *Under the name of Property, not only ready money, but things both movable and immovable, both corporeal things and* RIGHTS, *are included.*

As examples of what may be called economic discussion, let us note two passages in the Institutes of Justinian. "*Some valuable things are corporeal and others incorporeal. Things corporeal are those, which*

by their nature can be touched, such as land, a slave, clothes, gold, silver, and other things innumerable. Things incorporeal are those which cannot be touched, such as those which consist in mere rights, as an inheritance, a usufruct, uses, and all obligations however contracted. Nor is it any objection that corporeal things are contained in an inheritance; for fruits also which are gathered from land are corporeal; and that which is due on an obligation is usually corporeal, as land, a slave, money; but the right of inheritance, and the right of using and enjoying, and the right of the obligation are incorporeal."

"*Likewise value ought to dwell in money; for it used to be earnestly discussed, whether value can be in other things,—for example, whether a man or a piece of land or a garment can be the value of another thing. Sabinus and Cassius think, value can dwell in another thing* [*than money*] *too; whence is that which was commonly said, buying and selling is carried on in the exchange of goods, and that view of purchase and sale is very old; and they used for proof the poet Homer, who somewhere says, that the army of the Grecians procured wine in exchange for certain things. Writers of a different school took the opposite view and thought, exchange of commodities was one thing but buying and selling another thing: furthermore, they thought, the matter could not be explained in the case of exchanging commodities,* WHICH THING *seems to have been sold as property and* WHICH *given as the price; for reason does not allow that both things appear to have been sold and given as the price. But the opinion of Procullus has deservedly prevailed, who says, exchange is a particular kind of transaction different from selling; since*

this is both supported by other verses of Homer, and is proven by stronger reasons; and this, both former illustrious persons have given a place to, and it is shown more at length in our Digest." [1]

In all that related, moreover, to the proper acquisition and exchange of property, and to the management of the ordinary sources of national income, the Romans exhibited a strong sense of justice, together with moderation and practical wisdom. They taught the world something in the matter of taxation. They opened up new sources of revenue, from which governments still think it useful to draw. They levied duties in their ports as a simple expedient of taxation. They knew nothing of what has since become famous under the name of Protection. The rate of the duties in Cicero's time was five per cent. of the value of the goods; in the time of the emperors, two and one half per cent.; and the highest duty known to the Roman custom-house was twelve and one half per cent. Augustus introduced an excise-tax of one per cent. on the value of all things which were sold. The same emperor laid a tax of five per cent. on legacies and inheritances. There was a tax on bachelors. In the provinces at least, a door-tax was sometimes exacted. The public lands, the mines, the salt-works, and especially the tributes, were the remaining sources of income.[2]

It will be noticed from the points already made,

[1] Mr. Macleod was the first modern economist to bring out the interesting aspects of the Roman Law towards our Science. This last extract from the Institutes was called to my attention by Mr. Melville Eggleston, and was translated for me by Mr. F. W. Fiske, — both recent graduates of this college.

[2] See articles "Vectigalia" and "Portorium" in *Dict. of Antiquities.*

that both the Greeks and Romans clearly perceived that *exchangeability* is the one quality of all things having value, in which the value itself resides, whatever may be the other nature of those things; and also, that the Greeks and Romans, taken together, recognized three great classes of valuable things: namely, first, both alike, of course, corporeal things, or *commodities;* secondly, the author of the "Eryxias" at least, incorporeal *services*, like those of the teacher; and thirdly, the Roman Law certainly, incorporeal rights, or *claims*, such as debts, copyrights, patents, shares, and so on. Antiquity, accordingly, though its contributions to our science in the way of construction are meagre enough, perceived after all some of its fundamental distinctions with great clearness.

The confusion consequent upon the breaking up of the old Roman empire; the settlement of the barbarian nations in the seats of the ancient civilization; the gradual growth of feudalism, than which no system could be more hostile to a free and varied industry; the almost exclusive occupation of men's minds during the Middle Ages, with religious questions, and with the intricacies of the disputatious schoolmen; the prevalence of the monkish idea that contact with the world was contaminating; the fact that the universities were under the control of the clergy, who only allowed in them a meagre curriculum of scholastic studies together with the civil law; and the fact that war and rapine, rather than the supply of their mutual wants, gave occasion to the intercourse of nations with each other; all these contributed to divert attention for centuries from the subject-matter of the science of exchanges.

In our survey thus far, if we have found little positive light thrown as yet upon the science of value, we have at least discovered some of the reasons why such light could not be thrown. Absence of comprehensive investigation, however, does not necessarily imply the lack of a theory. In truth, there was a half-developed theory of value, which exerted a prodigious influence, certainly from Cicero's time, even down into the seventeenth century. It is remarkable that this earliest general doctrine of value, which I shall venture to call the *Bullion Theory*, came into currency in direct contravention of the great authority of Aristotle. That philosopher taught clearly that money is but an instrument towards a further end, and derives all its importance from being an *instrument;* but the later less acute observers, perceiving that gold and silver were the money of all civilized nations, fell into a curious mistake in regard to the nature of money, and came to give to these metals a factitious importance by regarding them as the *only valuable things.* They overlooked the fact that these metals are a commodity, that they owe their value to efforts and desires just as other commodities do, and that they are bought and sold like all other commodities. With useful products of any kind one can always buy gold and silver. To trade is nothing but to barter one commodity for another, — to exchange corn for silver and silver for corn. Fraud aside, the one is as valuable as the other estimated at that time and place; and it would seem as if the simple fact that men are willing to part, and are all the time parting, with gold and silver to buy other things would have been fatal to the preju-

dice that the precious metals are the only valuable things.

There were however two things that seemed to sustain the Bullion theory. One was, that money is always the measure of value. "How much is it worth?" The answer comes, so many dollars. Dollars are the denomination in which value is reckoned, just as degrees of the thermometer are the denomination by which heat is measured. The difference between value itself and the measure of value — between a bushel of wheat and that round measure by which we determine that there *is* a bushel — seems obvious enough; but money has this peculiarity, it is not only a measure of value, but, so far as this expression is ever true of any one commodity, it has value in itself. There is no heat in a thermometer, and no wheat in a bushel-measure, but a dollar is not only a dollar measure, but a dollar value, and we can see how the fact that dollars both had value and were the measure of all other values, gave some plausibility to the notion that the dollars were all. The other thing that made the Bullion theory plausible was the use of gold and silver as the universal medium of exchange. They came to be such medium simply in consequence of their convenience and their nearly uniform value; and because they were such a medium, everybody wanted them, and whoever had them could get with them whatever else he wanted. Because the great thing was to get money, men seemed to think that money was the only thing to be got!

I cannot find that the Bullion theory had anything better to support it than these two deceptive pillars; and yet for a very long period, and by many well-

informed men as well as by all the unthinking, it was considered to stand upon an immovable foundation. The commercial policy that sprang from this theory was obvious and well-nigh universal. If gold and silver are the only values, then by all means keep the gold and silver in the country! Get all you can in, and let as little as possible out! Accordingly very early the nations passed laws to prohibit the exportation of gold and silver. We learn from Cicero, incidentally, that this was done repeatedly at Rome. In one of his orations he says, "The Senate solemnly decreed both many times previously, and again when I was consul, that gold and silver ought not to be exported." According to Adam Smith, there are ancient acts of the old Scotch Parliament, which prohibit under heavy penalties the carrying gold and silver *forth of the kingdom*. The same thing was done by France and England, and probably by every other nation in Europe. Spain tried this experiment of prohibition under noticeable conditions. She had domestic mines, but also became proprietor in the sixteenth century of the rich metallic treasures of Mexico and Peru. The precious metals were literally poured into her bosom. Their export she prohibited under the severest penalties. The prohibition was largely futile, since these are things that can easily be smuggled out. So far as the prohibition was effective the metals in consequence sank rapidly in value. They are only good to buy with; and as the Spaniards were not allowed to buy with them abroad, they soon found that they could buy relatively little with them at home; which, of course, increased the smuggling out. Spain per-

sisted in this policy until her commercial decay proved to her and to all the world, not only the folly of such attempts to obstruct the natural current of commercial circulation, but also the important truth that national values consist not in the mere abundance of gold and silver. Had the Bullion theory been correct, to encourage the importation of the precious metals, and discourage their exportation, would have been the high road to national prosperity. But the Bullion theory was not correct; and the clearness of our views in Political Economy will largely depend upon our thorough emancipation from the prejudice that gold and silver are any more valuable or any more desirable than the products for which they exchange. They constitute a part, but only a small fractional part, of the values of any country.

The discovery by the Portuguese of an ocean path to the Indies in 1497, and the general waking up of the European mind during the next century, gave a vast impulse to commerce. On the last day of that century, Dec. 31, 1600, Queen Elizabeth chartered an exclusive company entitled "The Governor and Company of Merchants of London trading into the East Indies." They were empowered to export all sorts of goods free of duty for four years; and also to export foreign coin or bullion to the amount of £30,000 a year, £6,000 of the same being previously coined at the mint; but they were at the same time put under obligation to import, within six months after the completion of every voyage except the first, the same quantity of silver, gold, and foreign coin that they had exported. The enemies of the Company soon complained that this last condition was

not complied with, and that it was, besides, highly injurious to the public interest, and *contrary to all principle*, to allow gold and silver to be sent out of the kingdom.

The advocates of the Company, on the other hand, though they did not venture to assail the doctrine that values consist in gold and silver alone, took narrower ground, and asserted that the export of money is advantageous, whenever the articles bought by it and imported, are chiefly reëxported to other countries and sold for as much money as was originally carried out; and also whenever the export of coin, and the consequent import of commodities occasions, though indirectly, a greater value of exports from home of native products. Thomas Mun, a writer of that period, quoted by Adam Smith, compares the trade of the merchant exporting gold and silver, to the seed-time and harvest of agriculture. "If we only behold," says he, "the actions of the husbandman in the seed-time, when he casteth away much good corn into the ground, we shall account him rather a madman than a husbandman. But when we consider his labors in the harvest, which is the end of his endeavors, we shall find the worth and plentiful increase of his actions." In these excuses now set up for the exportation of bullion we may mark the beginnings of a second general commercial theory, which is usually termed the *Mercantile System*. This child of the bullion theory became in turn the cause of the death of its parent. The advocates of the East India Company gradually earned to take broader ground, and at last boldly contended that bullion was nothing but a commod

ity, and that its exportation should be made as free as that of other commodities. These views gained strength; many eminent merchants not connected with the Company adopted them; and in 1663, the House of Commons repealed the statutes prohibiting the exportation of foreign coin and bullion, and gave the Company and private traders liberty to export them in unlimited quantities.[1]

The Mercantile System, though, as compared with the previously existing bullion theory, it was a considerable step in the progress towards sounder opinions, was itself fallacious in principle and pernicious in action. It gave its care, not indeed to prevent the direct export of the precious metals, but to make the general exports of a country greater than its imports, so that a balance should come back in gold and silver. The sole aim of the system was to preserve what was called the *Balance of Trade.* A famous phrase this, the balance of trade! The legislation, the politics, the diplomacy, and the wars, of nearly two centuries were full of it.

By the balance of trade was meant the excess of the value of the commodities exported over the value of the commodities imported, which excess it was supposed, would always come back in the form of gold and silver. Hence unlimited pains were taken to make the exports greater than the imports, and the excess was regarded as the measure of a country's commercial prosperity. Various devices were employed to make the exports great and the imports little. To increase the amount of exports, bounties were offered to domestic producers, to en-

[1] M'Culloch's *Commercial Dictionary*, Art. East India Company.

courage them to sell as much as possible to foreign countries. With the same end in view, the raw materials of domestic manufactures were forbidden to be exported, so that the finished products, thereby rendered greater in amount, might help swell the exports. Colonies were planted with similar intent, that the mother country might find an open market there, and swell her exports. To diminish the aggregate of imports, prohibitions were laid on the bringing in from abroad articles which could be made or grown at home; and heavy restrictions imposed on imports from those countries with which the balance was supposed to be unfavorable, while the same articles, perhaps of an inferior quality, were admitted on easier terms from countries with which the balance was supposed to be better. Thus everything was sought to be regulated in view of an imaginary balance of trade. The Mercantile System was the prolific mother of those commercial restrictions, those attempted regulations of manufactures, those doctrines of monopoly, of corn-laws, and colonies, which have fettered industry almost up to the present time.

The particular fallacies that lurk in the Mercantile System, and the tortuous and cramping policy that grew out of it, will be more fitly discussed at a later stage of our inquiries; this is a proper place to indicate in general that the whole system is based on a misapprehension. It overlooks entirely the mutual benefit to the parties of every act of exchange, without which benefit the exchange clearly would not take place at all, and makes the whole advantage of commerce consist in a certain balance of gold and

silver, which comes back to that one of the parties which has managed to part with more of its own commodities. It seems strange that it did not occur to those people, that, if it were worth while to trade at all, the benefits of the trade were rather to be measured by the amount and value of what was received, than by the amount and value of what was parted with! Moreover, the system takes for granted, that traders carry forth goods to foreign countries to receive back goods *and* bullion worth as much, — less goods, indeed, and the balance in bullion. Why on that principle should the goods be carried forth at all? The labors, the risks, and the exchanges all made; the goods and the balance received; and the country just as well, but no better off than before! The whole wisdom of the Mercantile System was to sell as much as possible and buy as little as possible, — a wisdom which is evident folly, inasmuch as it is not possible to sell without buying, or to buy without selling. The sound reason, that justifies the East India Company in exporting the metals or other commodities, and at the same time condemns the Mercantile System, is, that the goods purchased by the exports are of greater worth, when imported, than what was exported to pay for them.

The leading commercial nations of Europe, nevertheless, fell into the meshes of the Mercantile System. Portugal, Spain, France, Holland, and England, all gave their attention to the balance of trade, all laid restrictions on the natural freedom of industry, and all applied the system rigidly to their colonial dependencies. These restrictions on

trade, especially on the importation of manufactured goods, and on the exportation of corn and raw materials, to say nothing of the bounties which the people were taxed to pay, were to the last degree vexatious and onerous; while the penalties for their infringement were in many cases cruel and even barbarous. Various writers in the different countries, and particularly in England, where the laws in question were, perhaps, the most oppressive, began to attack the mercantile theory and the policy that had grown out of it. And it is to this series of writers in long succession, some overthrowing one false position, and some another, one establishing a truth here and another there, that we owe the gradual development and present state of the science of Political Economy. The science has gradually emerged from the waves of thought dashing and roaring around the Mercantile System. It is still necessary, at least on the continent of Europe and in the United States, to combat some of the remains of the old mercantile legislation. England is believed to be the only country which has erased from her statute-book the last vestiges of the system. This she has done in direct consequence of the skill and power with which the political economists have guided the public opinion of that country; and it is on account of their success, as well as on account of the superior numbers and weight of English thinkers in this field of inquiry, that it is proper now to consider first the English contributors to the modern science of Political Economy. We shall then attend to what the French have done towards building up the science; and, with a few remarks on the Italian and German

writers, shall close this sketch with a brief recital of American views and writers.

It is not necessary in a book like the present to go into much detail respecting individual authors, or their claims to priority of discovery in the realm of economical truth. My object is to give a brief but just outline of the labors of the principal thinkers, with the practical aim of preparing my readers for a better apprehension of the discussions which follow.[1] It will be seen that most of the writers fall naturally, and without much reference to their nationality, into three great schools, according to their conceptions of the nature and limits of the science. The founder of the first school was Quesnay; of the second, Adam Smith; and of the third, Condillac, or Whately. The distinguishing marks of these schools will pretty clearly appear as I proceed.

The distinctions of the Roman Law have been known in England from an early time, even while the body of the Common Law was slowly developing itself in that country; and consequently, while the English writers generally have been late to recognize as on a parity with each other, the three great classes of salable things, there has always been a tendency in the English courts to do so; and accordingly, in English law, as well as in Greek and Roman law, *claims* of all sorts, personal *services* of every kind, as well as all *tangible goods*, have been held to be "vendible," and contracts in all these

[1] See for particulars the works of the various authors referred to; Mr. J. R. McCulloch's Introduction to his edition of Adam Smith's *Wealth of Nations;* Mr. Macleod's *Principles of Economical Philosophy, passim;* and the same author's Lectures in the University of Cambridge, England, during the autumn of 1877.

were enforced in the courts. Formerly, indeed, if not at present, in English law language, the word *Commodity*, now more properly restricted to corporeal things, covered, just like χρῆμα in Greek and Res in Latin, all three classes of valuable things; and the Supreme Court of Judicature Act, passed by Parliament in 1875, enacts that the doctrines of Equity, which in relation to claims or credits are simply the doctrines of the Roman law, shall supersede the Common Law in all cases in which these come in conflict. But the economical writers have been very slow, as we shall now see, to recognize distinctions already made for them in the language of the law.

Omitting the pamphleteers, who not seldom struck upon an important truth here and there in their zealous debates on questions of taxation, trade, poor-laws, or other point of government policy; and who are to be regarded as the pioneers in economical discovery, pushing their way into the wilderness in one direction and another, and thus, as it were, piloting the great writers who came after,—John Locke may first be mentioned, whose "Two Treatises of Government" were published in 1690, in justification of the English Revolution of 1688, in which he incidentally illustrates the distinction between utility and value, and all but establishes this one of the fundamental truths of Political Economy, namely, that value is the birth of effort, and not the gift of Providence. He says:—"*For it is labor indeed that puts the difference of value on everything;*" again:—"*Whatever bread is worth more than acorns, wine than water, and cloth or silk than leaves, skins or moss, that is wholly owing to labor and industry;*" again:—"*It is*

labor then that puts the greatest part of value upon land, without which it would scarcely be worth anything;" and once more: — "*Supposing the world given, as it was, to the children of men in common, we see how labor could make men distinct titles to the several parcels of it for their private uses.*"[1] These passages are an early, if not the very earliest, statement of a truth destined in our own day to transform the face of the science of economy; but Locke himself was hardly aware of its pregnant nature, and did not deduce from it the conclusions which it is well able to bear. In the controversy concerning the recoinage of silver money in the same reign, Locke did good service by his tracts on money, in preventing the lowering of the currency standard, and in diffusing sound principles (not unmixed with several errors) on the nature of money. He justly taught that it was as absurd for the State to attempt to fix the price of money, as to fix the price of cutlery or broadcloth.[2]

David Hume, more distinguished as a historian and writer on strictly philosophical subjects, must yet be mentioned with honor in any sketch of the rise of the science of economy. He was the friend and forerunner of Adam Smith. His Political Essays were published in 1752. The titles of some of these are as follows: — "Of Commerce," "Of Money," "Of Interest," "Of the Balance of Trade," "Of the Jealousy of Trade," "Of Taxes," "Of Public Credit." In these essays are to be recognized, not only the clear-flowing style which makes it always a

[1] Locke, book ii. sections 39, 40, 42, 43.
[2] Macaulay's *England*, chap. xxi.

pleasure to read Hume's "History of England," but also liberal sentiments largely emancipated from the fetters of the mercantile system. The views propounded are interesting even where they are not sound. Of commerce, he says, "*Foreign trade, by its imports, furnishes materials for new manufactures; and, by its exports, it produces labor in particular commodities, which could not be consumed at home. In short, a kingdom that has a large import and export, must abound more with industry, than a kingdom that rests contented with its own commodities. It is therefore more powerful, as well as richer and happier.*" I am aware of no earlier hint of the great truth afterwards fully developed by Say, that there can never be a general over-production, than these words from the same essay:—"*If strangers will not take any particular commodity of ours, we must cease to labor in it. The same hands will turn themselves towards some refinement in other commodities which may be wanted at home; and there must always be materials for them to work upon, till every person in the State who possesses riches, enjoys as great plenty of home commodities, and those in as great perfection as he desires;* WHICH CAN NEVER POSSIBLY HAPPEN." The absurdity of the then current notions concerning the Balance of Trade is triumphantly exposed by Hume, in the essay under that title; and in the conclusion of the essay on the Jealousy of Trade, occur these noble words:—"*I shall therefore venture to acknowledge, that, not only as a man, but as a British subject, I pray for the flourishing commerce of Germany, Spain, Italy, and even France itself.*" Hume throws some new light on the subject of Money

although his discussion of it is marred by the assumption, that a less quantity of the metals would answer every purpose of commerce as well as a greater, and have as much value; which would only be true on the supposition that the less quantity cost as much effort to produce it, and its minuter subdivisions were as convenient in exchange; — a false assumption from which he deduces this very false inference: — "*Were all our money, for instance, recoined, and a penny's worth of silver taken from every shilling, the new shilling would probably purchase everything that could have been bought by the old; and domestic industry, by the circulation of a great number of pounds and shillings, would receive some increase and encouragement.*" Are men, then, usually willing to consider $\frac{1}{12}$ equal to $\frac{1}{12}$? Besides, Hume did not attempt to analyze value, or to ground comprehensively the science of Political Economy.

So far as Great Britain is concerned, that attempt was first made by Adam Smith, who published in 1776 his book entitled "The Wealth of Nations." Of this book, Mr. Buckle affirms that "Adam Smith contributed more, by the publication of this single work, toward the happiness of man, than has been effected by the united abilities of all the statesmen and legislators of whom history has preserved an authentic account." It is certain, that several of the more important propositions of our science are established in this book beyond the reach of controversy, and that they have already exerted a prodigious influence over the legislation of Great Britain and of many other countries also. This writer, who has frequently been called, as Aristotle has been called by others, the father of Political Economy,

was born in Kirkcaldy, Fifeshire, Scotland, June 5, 1723. He was educated in the University of Glasgow, and in Baliol College, Oxford. Between 1752 and 1763, he was Professor of Moral Philosophy in the University of Glasgow, and delivered lectures on natural theology, ethics, jurisprudence, and public economy; the lectures on ethics were developed into the "Theory of the Moral Sentiments," published in 1759 on which he falsely supposed his permanent fame would rest; the lectures on public economy, which have not been preserved, are thought to have formed the nucleus of his "Wealth of Nations," as he is said to have advocated in them the doctrine of Free Trade, which was at that time held also by the most enlightened men in France, Italy, and Spain.

In 1764, Smith went to France, where he resided nearly three years, and became intimate with Quesnay, the founder of the first school of Political Economy, soon to be characterized, whose doctrines are clearly seen to color many parts of the "Wealth of Nations," and to whom indeed Smith intended to dedicate that book, had not Quesnay's death prevented it. Returning to Kirkcaldy, where there is still a paved walk to the sea-shore called "Adam Smith's Close," and where the tradition is still alive, that he used to pace back and forth along the shore muttering and gesticulating, he passed there, in retirement, the ten years previous to its publication in the preparation of his famous book. It will be noticed that the publication took place in the very year in which the Independence of the United States was declared; and this book itself was a sort of declaration of independence of the false principles and

foolish policy of the Mercantile System. Like the document of Jefferson, that also excited universal attention: both alike mark an era; and the results in the economical world of the treatise of Smith have been scarcely less striking and beneficent than the results in the political world of the document of Jefferson. Still, conceding the merits and the originality of Adam Smith as much as we may, it is not just that either he or any other should bear the title, — "father of Political Economy," — because the science has grown up very gradually through the various contributions of a great many thinkers, though perhaps the most prominent name among them all is now and always will be the name of Adam Smith.

Dr. Smith entitled his work, — "An Inquiry into the Nature and Causes of the Wealth of Nations." Unfortunately, he does not anywhere tell us in what "wealth" consists. He does not attempt to give a definition of that word. Archbishop Whateley makes a good point, when he says, that Smith's title supplies only a name for the subject-matter and not a name for the science itself. From the frequency, however, with which Smith uses the phrase, "the annual produce of land and labor," we may infer that that was in general his idea of "wealth." If so, his idea was very faulty; for he himself classes "labor" among the valuable things; but labor is no part of "the annual produce of land and labor." Besides, Smith counts as a part of fixed capital "the acquired and useful abilities of all the inhabitants or members of the society;" but "abilities," so far as they are natural, certainly are no part of "the annual produce of land and labor." Moreover, Smith rightly

reckons as a part of circulating capital "bank-notes and bills of exchange;" but these clearly enough are not "the annual produce of land and labor." Many things are bought and sold every day which are not the "produce of land and labor," either as separate or combined; and many things which are the "produce of land and labor," whether separate or combined, cannot be sold at all at certain times and places; and therefore, Smith's idea of "wealth" was at once too narrow and too wide. But it is well to note from the points just made that Smith, too, held with those of old that there are at least three kinds of valuable things.

Notwithstanding the lack throughout his book of clear definitions, and of a consistent use of terms, which has given rise to endless controversies, Smith comes at last in a remarkable passage to the very root of the whole matter. He says: "A guinea (which may be called the produce of land and labor) may be considered as a bill for a certain quantity of necessaries and conveniences upon all the tradesmen in the neighborhood. The revenue of the person to whom it is paid does not so properly consist in the piece of gold, as in what he can get for it, or in what he can exchange for it. *If it could be exchanged for nothing, it would, like a bill upon a bankrupt, be of no more value than the most useless piece of paper.*" This is just the truth. Here Smith admits in ample terms that even a gold guinea, and hence all kinds of things, depends for its value on its *exchangeability.* If he had organized his matter around *this* point as a centre, instead of "the annual produce of land and labor," his book would never have become

antiquated; for he had the art of making his discussions interesting, even when they were not sound; he had the art of bringing the truths discovered by others and those first demonstrated by himself into a sort of system, some parts of which indeed are not consistent with other parts, — as when, for example, he allows that a state may regulate the rate of interest, and that some wines bear a high price because they are scarce and fashionable; and he had the art beyond most writers, of making the facts of history throw a blaze of light upon the points he had in hand.

Though Adam Smith well refuted the fundamental point of Quesnay, namely, that the physical earth is the only source of values, he still gave a false preference to agriculture over other forms of production, to the home trade over the foreign trade, to material commodities over the other forms of value, to labor as a cause of value over desire as the other cause, and even to certain forms of salable effort over other forms equally salable. Still, he deserves, and has received, great praise for demonstrating, that, in commerce, both the parties are gainers; for exalting labor, and showing the immense advantages of its division; for advocating with all his might the unshackled freedom of labor and trade; and for mercilessly exposing the weak points of the restrictive and regulating devices of the mercantile system.

Most of the English writers on this subject, since the time of Dr. Smith, may be fairly said to belong to his school. They have corrected some of his errors and perpetuated others of them, have made additional contributions to the science in several respects, but in the main have followed out his prin-

ciples, — like him, for the most part, confining their discussions of value to material commodities, regarding labor rather than desire as the cause of value, ignoring personal services as such, and, till recently, giving little attention to the great subject of credit. Mr. Malthus, author of a very famous theory of population; Mr. Ricardo, author of a scarcely less famous theory of rent, — both of which theories will be considered further on in these pages; Mr. McCulloch, a copious and very useful writer, who clearly discriminates between utility and value, but erroneously regards labor as the sole constituent in the latter; Mr. Senior, author of the able, but not sufficiently comprehensive, treatise in the "Encyclopedia Metropolitana;" and Mr. John Stuart Mill, whose book has been widely read in both hemispheres, who treats some parts of the subject with great success, but who with all his logical power is often inconsistent with himself, who fails to give clear definitions and abide by them, to whom the word "wealth" is a stumbling-block, who endeavors to rear the edifice of our science on quite too narrow foundations, who at one time makes "materiality" and at another "susceptibility of accumulation" "essential to the idea of wealth" instead of a true exchangeability, who does not seem even to try to escape the limitations of Adam Smith, and whose influence as an economist has consequently declined of late; are the principal figures in the long array of writers of this school. They have the great reputation that attends indubitable success. They have put the doctrines of Free Trade upon an immovable basis in Great Britain, and thus exerted a potential in-

fluence towards their establishment throughout the world.

Mr. Horner, Mr. Thornton, and Mr. Huskisson, were the joint authors of the Bullion Report made to Parliament in 1810, in which the true principles of metallic and of paper money are stated with demonstrative ability. Since the passage of the Bank Act of 1844, English writers have given a great deal of attention to the theory of credit. Mr. Macleod's "Theory and Practice of Banking," Mr. Patterson's "Economy of Capital," Mr. Bonamy Price's "Principles of Currency," Mr. Hankey, Mr. Lawson, and an able anonymous author, all "On the Bank of England," are very useful books. Mr. Fawcett's "Political Economy" would deserve to be noticed in any case, but becomes remarkable when it is remembered that the author is blind. Mr. Jevons, of Manchester, is an economic writer of great originality and of severe scientific method; but he seems to me to err in making the science too exactly mathematical and formal.

Mr. Longe, a London barrister, in 1866, and Mr. W. T. Thornton, in 1869, vigorously attacked in turn the long accepted doctrine of the wages-fund; but the late Professor Cairnes, whose book on the "Character and Logical Method of Political Economy," appeared in 1874, again defends that doctrine in common with most of the other doctrines of the English School. Sir Anthony Musgrave, now (1878) Governor of Jamaica, in some "Studies" published in 1875, questions with acuteness the positions of his contemporaries in relation to Money and Trade.

If the French have done less than the English in building up the science of Political Economy, it must yet be said, that some of their contributions to that end have been of the very first importance. The French are apt to do well whatever they think is worth doing at all. As early as 1360, Nicole Oresme, a French bishop, moved by the bad state of the coin of the realm, wrote in Latin a treatise on Money, which, after having been long lost to the world, was discovered about twenty years ago by the German economist, Roscher, and has since been translated into French by M. Wolowski. "Oresme sets forth the principles of coinage and seignorage with a precision nowhere surpassed."[1] The French have also the honor of publishing the very first general treatise under the title of "Political Economy." It was issued at Rouen in 1613. What is more important, to them also is due the credit of furnishing the first writer who undertook a systematic analysis of the sources of value, and whose ingenious speculations gave rise to the first school of Political Economy. This was M. Quesnay, a physician attached to the Court of Louis XV., whose views were published in different forms about 1758. His main points expressed a powerful reaction from the principles of the Mercantile System as embodied in the policy of Colbert, the famous finance minister of Louis XIV. That policy gave preference to industries of the towns and cities. M. Quesnay, whose father was an advocate and a small land-proprietor, appeared as the champion of agriculture. His system assumes that the physical earth is the only

[1] See Prof. Walker's *Money*, in preface.

source of true values, and consequently that labor is incapable of producing any new value except when employed in agriculture. Artisans and merchants, according to Quesnay's system, are unproductive laborers, because there is in their case no *net* produce remaining, as there is in agriculture, over and above the expenses of production. The system mistook the nature of *rent* of land; and tacitly assumed that all values are material in form. This was a great defect; inasmuch as even the ancients conceded that *labor* may be sold, and that *rights* may be sold, in the same way as material things are sold.

The novelty of the theory, however, its simplicity, its scientific shape, and the liberal commercial policy coupled with it, gave it for a time great reputation and great influence. There was much truth in it. For instance, Quesnay says: "We must distinguish between *biens* (goods) which have value in use and not value in exchange, and *richesse* (saleable things) which have both value in use and value in exchange. For example, the savages of Louisiana enjoy many *biens*, such as wood, game, fruits of the earth, which are not *richesse*, because they have no value in exchange." Thus Quesnay fully recognized the fundamental principle of Political Economy. So did all his numerous disciples. Le Trosne says: "Value consists in the relation of exchange which exists between such and such products. In a word the quality of *richesse* supposes not only a useful property, but also the possibility of exchange, because value is nothing but the relation of exchange. The earth in truth, only gives products which have

the physical qualities to satisfy our wants; it is exchange that gives them value; a quality relative and accidental. But as it is the products themselves, which are the sole matter of exchange, it follows that we can say with truth that it is the earth that produces not only all *biens* but all *richesse*."

Quesnay died in 1774, eighty years of age, but he lived to see his disciple, Turgot, become prime minister of France, and to witness the first fruits of his doctrines in the establishment of freedom of trade in corn, both internal and external, in that country. Turgot proceeded to propose, in accordance with the principles of his master, the freedom of labor at home and of trade abroad, and the substitution of *a single tax on land* for the existing taxes on a multitude of articles. One of Quesnay's books was entitled "Le Droit Naturel" (Natural Rights); and all his disciples were firm advocates for freedom of person, freedom of opinion, and freedom of exchange. One of them, the elder Mirabeau, though he abused his gifted son, called himself the "friend of men," and was so far carried away by zeal for Quesnay, that he put his work, in point of benefit to mankind, on a level with the invention of printing and the invention of money.

Another of Quesnay's books was entitled "General Maxims of the Economical Government of an Agricultural Kingdom." One of these maxims declares that a nation suffers no loss by trading with foreigners. Another exposes the fallacy of the doctrine of the balance of trade. Still another says: "Let entire freedom of commerce be maintained for the truest, surest, and most profitable regulation

of commerce both internal and external consists in entire freedom of competition." Of course these maxims are inconsistent with the main point of the "Agricultural System," as Quesnay's views came to be called, but they are consistent with the whole truth; and their advocates exerted so powerful an influence in France, that in 1786, William Pitt, who, as an undergraduate at Oxford, had mastered the book of Adam Smith,[1] had little difficulty in concluding with the French government a treaty of commerce and navigation, by which was established, on the payment of moderate duties, "reciprocal and entirely perfect liberty of navigation and commerce between the subjects of each party in all and every the kingdoms states, provinces and territories, subject to their majesties in Europe for all and singular kind of goods in these places." This excellent treaty was soon swept away by the oncoming of the French Revolution, in whose councils nevertheless the principles of the Physiocrats, as Quesnay's disciples were called, held a strong sway, as is seen in the decree for the equal division of lands, which has been the strength of France ever since.

Adam Smith himself, while much indebted to the founders of the first school, exhibited their scientific foundations as too narrow, and so superseded it by the second school, which in turn has been superseded by the third school, to whose origin we now turn.

To make the year 1776 doubly memorable in the history of this science, the French philosopher Condillac published in that year a work entitled "*Le Commerce et le gouvernement considérés relativement*

[1] Green's *Short History of the English People*, p. 769, English ed.

l'un à l'autre." This work was comparatively neglected at the time, and has never shared the popular favor accorded to the other writings of the same author, but the definition of the science given in it namely, that it is the science of commerce, found many years afterwards an intelligent champion in Archbishop Whately, to whom the definition is commonly and perhaps properly referred; and they must be regarded as the founders of the third great school of political economists, whose most distinguished modern representatives have been Bastiat in France and Macleod in England. In his lectures delivered at Oxford in 1831, Whately proposed as a good name for our science the term CATALLACTICS, the science of exchanges; very recently Macleod has proposed the term ECONOMICS; it is not likely that either the one or the other will ever supersede the old Aristotelian term.

In 1803, appeared in Paris, Say's "*Traite d'économie politique*," which soon became, and is even yet, a standard work. Say is a skilful expositor of the science, an able advocate of the freedom of commerce, and the original contributor of the important demonstration that there cannot be a general glut of products — a general over-production. His doctrine of value, however, is infected with a fundamental error, namely, the confusion of value with utility, which one of his own countrymen was destined completely to expose, and to replace with the nucleus of satisfactory truth. Say is rather a follower of Adam Smith than of Condillac, and belongs accordingly rather to the second than the third school of political economists.

Frederic Bastiat, who had previously shown himself a powerful champion of Free Trade, and the most formidable antagonist of Socialism in France, published in Paris in 1850 a book entitled "*Harmonies économiques*," which carried Political Economy to a very advanced position, and is the most important contribution to the science since the time of Adam Smith. The gifted author died the same year in which his book appeared, leaving unfinished an intention to recast and complete it. It is not strictly a treatise of Political Economy, as it does not touch upon several of the most important subjects comprehended in that title, such as Money, Foreign Trade, Taxation, and others, but there is in it a masterly definition and exposition of value, and a vigorous demonstration of the harmonious mechanism of society, by which, through the agency of liberty and property, God has designed the progressive amelioration of mankind. "All legitimate interests are in harmony" is the key-note of the book. Bastiat encumbers his discussions by the attempt to use technically the term "wealth," and his chapter under that title is singularly perplexed and confused, affording again for the hundredth time an illustration of the impossibility of using that word to advantage for any scientific purpose whatever. While unfolding the laws of value in their manifold applications, Bastiat incidentally but most effectually demolishes the vagaries of communism, and establishes the right of property upon unassailable grounds. M. Bastiat defines Political Economy as the Theory of Exchange, and Value as the Relation between two Services exchanged. His system turns on

the technical use, definition, and analysis of the term *Services*. He derives all the economic phenomena out of the fundamental facts of human Wants, Efforts, and Satisfactions. Value cannot exist separately from human efforts. Utility resides in the materials and forces of Nature. "*But these natural forces, in themselves, and apart from all intellectual or bodily exertion, are gratuitous gifts of Providence, and in this respect they remain destitute of* VALUE *through all the complications of human transactions. This is the leading idea of the present work.*" Thus he himself expresses the matter.[1]

Bastiat's indebtedness to the Physiocrats is plain from the quotation already made from Le Trosne; his indebtedness to Condillac, the founder of the third school, is very plain also, inasmuch as his technical terms are nearly the same as Condillac's, especially these, "wants," "desires," "estimations;" but his indebtedness to his own genius and to the circumstances of his time is greater than all. No economic writer has ever shown so much literary skill as he; very few, if any, have surpassed him in clearness and power of thought. His wit enlivened, as his analysis illumined, the dark places of the subject. His is yet the central figure in the third school of economists.

Mr. Macleod, who was bred a lawyer, and who, as such and as land-proprietor, became interested in Political Economy on the practical side, is a very able, and almost the only recent English, representative of the same school. Before he had ever heard of Bastiat's name, he was trying to reconstruct in

[1] Stirling's Translation of *Harmonies*, page 62.

Great Britain on Bastiat's principles the foundations of this science. First, in his "Theory and Practice of Banking," since republished in different forms; then in his "Elements of Political Economy." issued in 1858, and since expanded into his "Principles of Economical Philosophy;" and lastly in his "Dictionary of Political Economy," which is not yet completed, Mr. Macleod has shown himself to be learned, original, and indefatigable. Lawyer-like, he is copious, controversial, almost belligerent. He makes up for some lack of literary skill by his vast stores of information gathered from every land. His books have already changed, and cannot fail in the end to change greatly, the economic opinions of his countrymen. Till now, however, his views have found a readier acceptance in France and in the United States than at home. His definition of the science is the one enforced in these pages also, namely, the Science of Exchanges. This definition is drawing to itself the most recent investigators in France, England, and America; and the scientific development of it has already put political economy into a new and better posture. According to this view, *capacity of being exchanged for something else* is the only quality requisite to bring a material commodity, a personal service, or an incorporeal right within the sphere of economic regulation.

M. Wolowski, a Polish refugee in Paris, but after 1834 a naturalized Frenchman, Professor in the School of Arts, founder of the company of "Crédit foncier," and a copious writer on economic subjects; and M. Chevalier, Professor of Political Economy in the College of France, a friend and disciple of

Bastiat, very distinguished for his part in negotiating the commercial treaty with England in 1860, have been the most prominent of recent economists in France.

The Italian writers, though voluminous and respectable, have originated comparatively little within the field of this science. The earliest of them investigated especially the nature of money, and came to the sound conclusion that governments have no right to tamper with the standard of value used by their subjects. Italy too, as well as France and England, felt the strong reaction against the Mercantile System during the latter half of the eighteenth century. In 1764, the first professorship of Political Economy ever established was instituted at Naples, and Antonio Genovesi was appointed to lecture in it. He was an ardent Free Trader. So also was Beccaria, appointed to a similar professorship instituted in Milan in 1768. So also was their contemporary Verri. A collection of the best Italian writers on the subject was undertaken, under the patronage of Napoleon, in 1803, and subsequently completed in fifty volumes octavo. A modern collection of Italian writers and of foreign works translated into Italian is now (1878) in course of publication, and is to include several French, English, and American books. It is entitled *Biblioteca dell' economista*, and is edited by Professor Ferrara of the University of Turin. Amasa Walker's "Science of Wealth" has already been translated for this collection.

The Germans have done more perhaps for the science of economy through their public action in

the Zollverein, than through the private contributions of their numerous economical writers. The Zollverein, or Customs Union, was commenced by Prussia in 1818, and has received the adhesion from time to time of other German States, until now it embraces all of Germany except Austria. Within this broad territory, embracing a population of about 40,000,000, the duties on imports are uniform, and uniformly low; and there is no duty at all on exports since 1873.[1] All interior custom-houses are swept away. No foreign articles are excluded; many are admitted free of duty; and those on which duty is charged are arranged in thirty-three simple classes, the duties being always specific (generally by the hundred weight), except in the case of railroad cars and river-ships, on which the duty is eight and ten per cent. of value. The commercial prosperity induced by these liberal regulations, the steadily enlarging revenue from these low duties, and the growth of domestic industry by the side of these practically unrestricted importations, have taught the world a more valuable lesson than often falls to the lot of an individual thinker to teach. Seeing these undoubted advantages, Austria has concluded a similar Zollverein with her dependent states, Hungary and Dalmatia, covering in all 35,000,000 souls, and with similarly gratifying results. Their tariff classes are only twenty-two in number, and their duties on imports amounted in 1871 to 23,522,156 florins. The German Zollverein has lately made liberal commercial treaties with Austria, Italy, and Spain, and

[1] Zolltarif vom 1 October 1873 an. I am indebted to my friend Prof. John Conrad of Halle, for a copy of this.

is managed by a customs' parliament chosen on the principle of universal suffrage by the people included in the confederation. It is true that the founders of the Zollverein were not wholly free from the prejudices of the mercantile system, but the results of the experiment so far confirm anything rather than the principles of that system. Friederich List, an early champion of the Zollverein, some time also a resident of the United States, who published in English his "Outlines of a New System of Political Economy," at Philadelphia, 1827, and "*Das Nationale System der politischen Oekonomie*," in Stuttgart, 1841, and who, while advocating the principle of protection in his books, displayed a multifarious activity in behalf of many liberal schemes; Lorenz Stein of Vienna, a copious writer and zealous free-trader; the late Professor Rau of Heidelberg, distinguished as a lecturer; Professor Roscher of Leipsic, author of a very full "History of Political Economy in Germany" (1874); and Professor Conrad of Halle, a clear writer, admirable lecturer, and unwearied statistician, may suffice as examples merely, of the individual economists of Germany.

The circumstances of the United States, as well in colonial vassalage as in an independent position, have been favorable from the beginning to the cultivation of economic studies. The Revolution itself was a movement in resistance to parliamentary laws of trade. The Constitution, while it gives to Congress the power "to regulate commerce," forbids taxes on exports, and all inter-state impediments to free traffic. The country has had experience with almost every variety of paper money. There have

been two great banks of the United States, State banks innumerable, under all sorts of regulation, and now there is opportunity to watch the working of a vast national banking system. Much interest has attached to the mining of gold and silver in the western half of the continent. The coinage laws from the first have been experiments as to the relative value of the precious metals; and a new law (1878) in relation to silver coin has shaken the country from one side to the other. Tariff discussions have been in order from 1789 till the present time, and are likely to continue; the alternations of public policy in respect of foreign trade have kept the minds of the people more or less open to this great question, which is now being earnestly debated both in Congress and out of it; so that attention to economic subjects, however great heretofore, is likely to be greater in time to come.

While there have always been economic writers and speakers in the country, there has never been a national text-book generally accepted, such as the English have had for a century in the work of Adam Smith. Hence there never has been, and is not now, a well-formed public opinion even on the vital questions of money and trade. Some of the Secretaries of the National Treasury, especially Hamilton, Gallatin, Walker, and McCulloch, have treated some branches of the general subject with marked ability. Some Congressmen also, for example Webster, Calhoun, Benton, Silas Wright, Garfield, Schurz, Burchard, and Wood, have been fair economists; but it cannot be said with truth that the usual action of Congress has been guided by much economic wis-

dom. The fiscal and commercial laws have often been complicated and conflicting. Some of the officials in the governmental departments have distinguished themselves for ability in special parts of the subject: for instance, Mr. Wells, as Special Commissioner of the Revenue, and since as a private gentleman, has presented such facts and reasonings in relation to the national industry, commerce, and money, as have deserved and have received the profound attention of the people; General Walker, as superintendent of the census of 1870, has furnished a thesaurus, whose collection was guided by the economic instinct, and whose facts are useful for economic illustration; Dr. Linderman, as Director of the Mints, has shown himself to be a master in all matters pertaining to bullion and coins; and Mr. E. B. Elliott, as a mathematician and statistician of the Treasury, has gained a name in many lands for his science and skill.

The formal treatises on Political Economy in this country, of which the first was written by Daniel Raymond, 1820, fall mostly into two groups, namely first, those modeled mainly after the ideas of Adam Smith; and second, those modelled mainly after the ideas of Henry C. Carey. Into the first group come easily the books of Raymond, Rae, Wayland, Bowen, Bascom, and Amasa Walker. All these writers, and others of their kind, furnish fresh contributions indeed to Political Economy both in information and in scientific distinctions, but they are contributions under a plan or scheme furnished by another. Both Professor Bowen and Amasa Walker present much original discussion on the subject of Money; and the

former has lately done good service as a member of the Silver Commission of 1877. In his recent and full monographs on "Wages" and "Money," General Walker has both honored the name of his father and gained in the science an enduring place for himself. Thus the second school of Political Economy has had many disciples in America, numbering even those, who, like General Walker, have successfully refuted certain points and principles usually held by that school. Of John Rae, 1834, John Stuart Mill says: "In no other book known to me is so much light thrown, both from principles and history, on the causes which determine the accumulation of capital."

The other group must be noticed the more particularly, because Mr. Carey claims as original with himself some of the fundamental positions of M. Bastiat. It is certain that these positions are common to the two writers; and it is to be presumed that M. Bastiat profited by some of the views of Mr. Carey, whose first work dates from 1835; but there is enough that is distinctive in the two authors to justify the claim of each to originality and merit, and also to preclude the classing of Mr. Carey and his followers in the third school of economists. In some respects they belong to that school; but in other, and especially in practical, respects, they constitute a knot by themselves; they occupy an outlying province. All the writers of the third school insist on the freest possible conditions of international trade: Mr. Carey and his group are protectionists, so-called. All the writers of the third school believe in a sound metallic money as invariable in value as can be, and

in paper money (if any) instantly convertible into that: Mr. Carey and his followers believe in large issues of irredeemable paper money. The writers of the third school regard Political Economy as concerned only with exchangeable things of the three kinds, and with the conditions and consequences of their exchange: Mr. Carey gives a definition much broader, — "the science of the laws which govern man in his efforts to secure for himself the highest individuality and the greatest power of association with his fellow-men." Writers of the third school hold Political Economy to be a science pure and simple: Mr. Carey's group esteem it both as a science and especially as an art. The third school believe, that the less governments have to do directly in matters economical the better: Mr. Carey's followers emphasize governments as large and constant factors in such matters. And lastly, the third school holds the whole earth to be one so far as exchanges are concerned: Mr. Carey's school (if it be destined to become one) exalts the individual nation as over against the world, and is proud to be called the "Nationalist School."

Around Mr. Carey are grouped Stephen Colwell, Peshine Smith, Horace Greeley, William Elder, Professor Thompson, and others. As the central principles of Mr. Carey may be enumerated the following: That land gains its value from labor; that, generally, poorer soils are first cultivated, then those more fertile and difficult; that, what would be the cost of their reproduction rather than their actual cost of production, determines the value of commodities that the interests of classes and individuals are really

harmonious; that there is a tendency to increase in the wages of labor, and to diminution in the rate, though increase in the aggregate, of the profits of capital; that the advancement of society corresponds to the degrees of association and liberty in it; and that the prices of land, labor, and raw materials tend to approach the prices of finished commodities.

CHAPTER II.

FIELD OF THE SCIENCE.

In the preceding chapter on the History of the Science, I have used the term "Science" without strictly defining it. It is time now to inquire exactly what a science is in general, and what is the precise field of the science of Political Economy in particular.

A Science is the body of exact definitions and sound principles educed from and applied to a single class of facts or phenomena.

In this general definition of a science, in which, as covering all the cases and including all that is essential, a full trust may be put, the word "body" is used in its pregnant sense as implying an organic arrangement of parts. A jumble of even true definitions and principles does not make a science, but only these when placed in a just order and dependence. As in the human body all the parts are reciprocally means and ends, so in a science all the definitions and principles and illustrations must be so arranged as to make up a symmetrical whole.

It will be noticed also, that this definition applies to any science in all stages of its growth. No science is yet completed; but just so soon as any correct definitions and principles are drawn from and applied to any *class* of things, and these definitions and principles are orderly arranged in a *body*

there is an incipient science; and its progress towards perfection will proceed in precisely the same manner in which its foundations have been laid; new definitions and principles will gradually be discovered, and these when applied to the class of things from which they have sprung will lead to corrections and readjustments and enlargements of the science; and no matter how far these processes may be carried, the general definition with which we start will also be found ample at the end of the journey.

There must accordingly be a *class* of facts before there can be a science of them; and the conception or definition must include everything that possesses the quality that is the subject of investigation. In other words, the terms of a science are *general*, and not *particular*. From the very nature and purpose of a science, as well as from the mode in which alone it can be built up, it cannot tolerate facts that come partially but not completely under its fundamental definition. This definition must strictly constitute a *class* of things, that is, include all things that really, for the purposes of the investigation, belong together. Thus arithmetic, as the science of number must be inclusive of all things whatsoever that can be numbered; while the other qualities of those very things, besides number, may well subject them to still other sciences. So, if Political Economy be the science of exchanges, it must include in its scientific view all things whatsoever that are economically exchanged. Exchangeability will be the quality that constitutes the class of things with which the science is conversant. There is such a

class of things; and accordingly, Political Economy possesses the first grand condition of a science.

It is at this point that we can see the failure of some otherwise great writers on Political Economy. When Adam Smith talks of "the annual produce of land and labor," he gives us no distinct and general conception of what the subject of Political Economy is. He does not start with a clearly-defined *class of things;* and, consequently, there is a cloudiness and lack of scientific precision in some parts of his book, in striking contrast with the vigor and logical sequences in the other parts. The same is true of John Stuart Mill. On his first page he says, "Every one has a notion sufficiently correct for common purposes of what is meant by wealth." A little further on, "It is no part of the design of this treatise to aim at metaphysical nicety of definition where the ideas suggested by a term are already as determinate as practical purposes require." Mill, then, as embodying the conception that lies at the basis of our science, gives us the word "wealth," and assumes that both he and his readers have "a notion sufficiently correct" of what is meant by that term; but, unfortunately, the sequel shows how ill-founded this assumption really is. Once, indeed, he gives us a clear conception in connection with that word: "*Everything therefore forms a part of wealth which has power of purchasing.*" But he almost immediately confuses this conception, when he says, —"I shall therefore in this treatise, when speaking of wealth, understand by it what is called material wealth." But a little further on he says, "The skill, and the energy, and perseverance of the artisans

of a country, are reckoned part of its wealth no less than their tools and machinery." Also, "acquired capacities which exist only as a means, and have been called into existence by labor, fall rightly as it seems to me within that designation." But in another place and contrariwise, "The production of wealth is the extraction of the instruments of human subsistence and enjoyment from the materials of the globe." Again, "*it is essential to the idea of wealth to be susceptible of accumulation.*" Also, "I should prefer, were I constructing a new technical language, to make the distinction turn upon the *permanence* rather than the *materiality* of the product," since services "which only exist while being performed cannot be spoken of as wealth except by an acknowledged metaphor." Still further, though credit is obviously neither material nor permanent, — "Credit, though it is not productive power, is purchasing power." And, "Credit, in short, has exactly the same purchasing power with money."

I have quoted enough, and more than enough, to show two things: first, how inconsistent Mill is with himself in respect to that general conception of its subject-matter on which our science is to be built up; and second, how useless the word "wealth" is even in the hands of a professed logician, for any scientific use whatever. On the other hand, when Condillac, or Whately, or Bastiat, or Macleod, by their very definition of the science, recognize a definite class of things with which alone the science has to do, namely, valuable things, or what is just the same, exchangeable things, a clear conception is ob-

tained at once, having which as the prime condition, a true and lasting science may be had, provided only the next right steps be taken also.

There are two processes concerned in the building up of sciences, namely, first, Induction, and second, Deduction. Induction is the process by which we pass from less to more inclusive propositions; and Deduction is the process by which we pass from more to less inclusive propositions. The subsidiary process of Verification must of course accompany the two fundamental processes, in order to make sure that they have been correctly performed; but verification itself is nothing but a new induction or deduction, in different terms, made to test the validity of the former one. With the exception of pure Mathematics and the formal Logic, which are wholly deductive, all sciences appear to be both inductive and deductive in their methods; and this is certainly the case with Political Economy, which offers an ample field for both processes. Its present definitions and principles have been slowly reached by unnumbered inductions from particular facts, as well as through unnumbered corrections and verifications secured by deduction from principles accepted at the time. The two processes go on hand in hand at every step. If the science be not now one of assured position and of commanding influence, it is not because the processes by which other great sciences have been built up are not equally open to this, nor because the facts which it surveys, which have been and are of vast consequence to the welfare of mankind, do not lie in a definite and accessible field.

Lord Bacon was the author of the true doctrine of Generalization, that is to say, of the method of building up sciences. If he himself put more emphasis on the inductive part, that is, on the gathering up of general definitions and propositions from particular instances, it was owing to the reaction from the opinions and practice of his time; nevertheless, he did not neglect the deductive part, that is, the application of general principles inductively obtained to the explanation of new cases. He says: "Axioms duly and orderly formed from particulars easily discover the way to new particulars, and thus render sciences active."[1] Political Economy is one of the most fortunate of the sciences, in that it offers, in the commercial experience of all nations, and in the constantly recurring examples of exchange under the widest possible variety of other circumstances, abundant opportunities to frame inductively and test deductively every one of its definitions and propositions. Experience is to this science what experiment is to some of the other sciences. It has also a great resource in feigned cases, which, provided only that they be cases possible to occur, afford a potent and often available means of educing or testing its principles.[2] Political Economy, accordingly, richly possesses the second of the conditions of a great science.

Sciences may be divided into physical and moral sciences. Physical sciences are those concerned with the classifications and laws of action belonging to material substances; while moral sciences are those

[1] *Novum Organon*, i. 24, quoted by Mr. Macleod.
[2] See Macleod's *Economical Philosophy*, p. 27.

concerned with the classifications and laws of action belonging to beings possessed of desires and of will. In the sense of this distinction, Political Economy is a moral science; inasmuch as it is exclusively concerned with those circumstances and actions of men, which find their end in the determination of *value;* and since, as will be abundantly shown hereafter, no value was ever determined, or ever can be, except through the desires and will of men. It so happens also, that while there is much in the conduct of all men that is variable and uncertain beforehand owing to their free will, that part of their conduct that is related to the creation of values has been observed to be, under given conditions, remarkably uniform in all ages and countries. The desire to possess, the impulse to exchange, the repugnance to labor except in view of a return, the pressure of recurring wants, and the satisfaction experienced when these wants are met, are the most certain and universal attributes of human nature; they are all open to observation and experience; the strength of the impulses is capable of being measured through their results, and of being expressed numerically; and, accordingly, of all the moral sciences, Political Economy is that one, which has, perhaps, the broadest and firmest footing, which is already the most fully developed, and whose chief propositions are least likely to be overturned by any probable changes of the future. Its methods are entirely similar to those of the chief physical sciences, and its main conclusions scarcely, if any, less secure than theirs.

Thus Professor Bascom writes of the simplicity, universality, and certainty of the impulses that lead

men to exchange: "Between one dollar and two dollars a man has no choice, he must take the greater; between one day and two days of labor, he must take the less; between the present and the future, he must take the present. This is not a sphere of caprice, nor scarcely even of liberty; the actions themselves present no alternative, and, if an alternative giving an opportunity for choice does arise, it arises from some partial or individual impulse, — from some one of those transitory and foreign influences, which, while rippling the surface, neither belong to nor affect the current of the stream."

There is, however, another current sense of the word "moral," in which Political Economy is not a moral science at all; and that is the sense in which it is used as synonymous with "ethical," or "obligatory." Paley defines Ethics as "the science of Duty and the reasons of it;" and it is in this ethical sense that we speak of the science of Morals. Now, this idea of obligation, on which the science of morals is founded, and the idea of value on which the science of economy is founded, are totally distinct ideas. There is one word that marks and circumscribes the field of morals. That word is Ought. There is one word that marks and circumscribes the field of economy. That word is Value. Political Economy does not aspire to place its feet upon the ponderous imperatives of moral obligation. It finds a solid and adequate footing upon the expedient and the useful. As a science, it does and must discuss and decide all questions upon economical grounds alone. As a science, it has no concern with ques-

tions of moral right. If it favors morality, it does so because morality favors production. It favors honesty because honesty favors exchange. It puts the seal of the market upon all the virtues. It condemns slavery, not because slavery is morally wrong, but because it is economically ruinous. Moral science appeals only to an enlightened conscience, and certain conduct is approved because it is right, and for no other reason. Political Economy appeals only to an enlightened self-interest, and exchanges are made because they are mutually advantageous, and for no other reason. Each of the two sciences, therefore, has a distinct basis and sphere of its own. The grounds of Economy and morals are independent and incommensurable.

Every science, however, has its points of contact with other sciences; and this is particularly the case with Political Economy in relation to moral science, and is the reason why the two have sometimes been confounded. The sound conclusions of the one are harmonious with the sound conclusions of the other. Both work together for the good of men, for the amelioration of their condition. Their spheres, though distinct, nevertheless touch each other. Duty and interest lie alongside. The ultimate analysis of property, for example, will, as we shall see, lead the inquirer into the higher region of moral science. In legislation also, the question is frequently at the same time an economical and a moral question. Dr. Wayland has observed that "almost every question of the one science may be argued on grounds belonging to the other." But the grounds themselves, it is important to remark, must be seen to be, and must be kept, distinct.

In the next place, the very name of the science indicates that it is a political, that is, a social science. It relates to men in a state of society, and not to men in a state of isolation. The hermit, who neither buys nor sells, who neither gives nor receives anything in exchange, is not amenable to the laws of Political Economy. So far as men satisfy their own wants by their own efforts without exchange, they stand outside the pale of this science. Under those circumstances the idea of value could neither have birth nor being, and of course there would be no such thing as a science of value. Robinson Crusoe came to lead a very tolerable life upon his desolate island by means of his own industry. He worked, but then he worked to satisfy his own wants directly. He did everything for himself. He had no opportunity to buy anything, sell anything, exchange anything. The whole course of such a life could never have developed the idea of value, and the record of the whole experience of such a solitary individual would require no such word as value. If God had made men so that their varied wants would best be met by applying their own efforts to satisfy these wants directly, without the intervention of exchange, there would have been, there could have been, no such science as the one to which attention is now directed. In that case, men would live, if they lived at all, in perfect isolation. Every man would satisfy his own desires by his own efforts. There would be no society, and no exchange.

But it is evident at the very first glance, that the Creator has not made men thus. Society is God's handiwork. It is the most complicated and the

most wonderful, as it was the final, work of his hands. The first man, as he stood alone in Paradise, was indeed a wonderful structure, — wonderful in his body, and in all his mental and spiritual powers. But it was not good that the man should be alone. Society must be provided for; and in providing for a society of human beings, God impressed upon that organization, as upon all others, its own proper and peculiar laws. These laws embrace its entire organization, in its lower, as well as in its higher, parts. They cover the phenomena of exchange, just as they cover the phenomena of morals; and no intelligent observer can watch their working, when left intact and free, without being stimulated and gladdened by the beneficent results to which they lead. If the footsteps of providential intelligence be found anywhere upon this earth, if proofs of God's goodness be anywhere discernible, they are discernible, and are found in the fundamental laws of society. Certainly, if every man could satisfy all his desires as well, by putting forth his efforts to that end directly, he would do it. He would grow his own food, make his own clothes, write and publish his own newspaper, be his own doctor, in one word, perform all needed services for himself. But God has so ordered it that he cannot do this. He cannot, in a state of isolation, with all his efforts, procure for himself one thousandth part of the comforts which he easily procures for himself by less efforts, through exchange. Society and exchange are, under God's ordination, matters of necessity, if men are to rise in a scale of comforts perceptibly above the brutes. And the reason is this. There are obstacles, in al

directions, to the satisfaction of men's desires If the desires are to be met, these obstacles are to be surmounted. But if one man undertakes to surmount any considerable number of these obstacles, he miserably fails. His powers are not adequate to the task; and hence we say, that in a state of isolation, men's wants exceed their powers. But, if he devote himself to surmounting one class of obstacles, as, for instance, those in the way of procuring suitable clothing, his powers are adequate to this, he soon acquires skill in it, he learns to avail himself of the gratuitous help of Nature, and the facilitating processes of art, he is able to realize large products along his line, and is now in position to offer valuable services to society. Meanwhile other men have been devoting themselves each to another class of obstacles, have concentrated effort and skill upon them, have succeeded by the help of Nature and art in surmounting them, and now offer their valuable services to society.

Now, then, these services are mutually exchanged in all directions, and men find, as it is God's clear design that they should find, that, by making given efforts along one line, and exchanging them for corresponding efforts along other lines, they obtain vastly greater satisfactions for their various desires than they could obtain by direct effort. Why? Because there is now a vast increase of useful products in existence. Here we have reached, provisionally, the true explanation of the gains of exchange. It is not so much that by exchange men get better and cheaper articles, as it is that they get more of them. By the division of employments, which is only possible

under a system of exchange; by the fact that, under free exchange, men avail themselves of all the varied advantages of Nature and position; the number and variety of useful products created, the number and variety of the services which men are able to render to each other, are immeasurably augmented. More is produced, more is to be exchanged, and therefore there are more satisfactions of all men's desires. Political Economy, therefore, which unfolds the reasons and the laws of exchange, finds its only field in a state of society. It is truly a political, that is, a social science.

There is another reason why Political Economy is a social science: it touches at certain points on the action of Government. For example, the minting of the current coin, which is so indispensable to the ongoing of exchanges, has always been considered as a function of the government. "Whose is this image and superscription?" asked our Lord. The answer came then, as it would come now in substance the world over, "Cæsar's." It would seem as if the government stamp authenticates the weight and fineness of the coin better than any other known expedient can do it; and, if so, our science must acknowledge a direct obligation to society through such action of its government. The whole matter of taxation, also, which is certainly an economical topic, is closely connected with questions of government; and the form and amount of taxation depends at last on the action of government, though the views of the economists have already been influential in determining these. The laws of property, of sale, and of bequest, all of which are of supreme

importance in an economical point of view, hinge also on governmental action. All this shows that our science touches at several vital points on the far more comprehensive science of government, and marks the fact, that, as no individual can be completely isolated from society, so no science can be completely isolated from the rest of the family of sciences. More or less each touches and influences the rest. Still, we shall find it to be a dictate of sound reason as well as a sharp lesson from experience, that the less government has to do in matters purely economical the better. The points of contact we concede; the asserted jurisdiction and control we deny. Self-interest, which is the motive power in exchange, while at a few points it accepts the help, will not at other points tolerate the interference, of government.

Finally, in determining now the *exact* field of our science, we will throw out at once all the definitions of it, which include the word "wealth" as a part of the definition. As we have seen, the sense of this word was too indefinite in the mind of Mill to give him any hold at all of a broad and constant economic conception, which is the first condition of a true growth in this science; and if this be so, it is certainly too indefinite in the minds of common men to make it possible that it should serve any useful scientific end. As a matter of fact, this word is the bog whence most of the mists have arisen, which have hitherto beclouded the subject. The word is too *concrete* to do the work assigned to it in these definitions. It means in most men's minds only *material* things. Even Mill says, "it is essential to

the idea of wealth to be susceptible of *accumulation.*" But he also says, what is contradictory to that, — " Everything forms a part of wealth which has purchasing power." Now material things are not the only things, nor by any means the most important things, which have purchasing power. Labor has purchasing power. Rights have purchasing power. If we could estimate the sums paid out as wages of *labor* in this country for a year, from those of the President of the United States, down to those of the common day laborer, including the rewards of all professional skill; and if we could estimate the sums paid out in the same time as a return for *rights* of all sorts, such as bonds, shares, leases, and other credits; we should soon discover that material things form but a small part of the purchasable things. If a general term be needed, as it is, to include all three kinds of purchasable things, let that word be *Property* rather than *Wealth.* The word *Property* in its original Latin had an abstract instead of concrete meaning, and denoted the *right* of an individual, namely, *his right of possessing, using, enjoying, selling, and destroying, anything.* In English, the word has very nearly the same meaning. It has taken on, in some people's minds, a more concrete sense, as if it meant land, houses, cattle, and so on, but this to nothing like the same extent as the word " wealth." The word Property then, may be used in a scientific sense to denote the whole mass of valuable things. It will be so used in the following pages, in the same sense as Ulpian gave to it, namely, " *That is Property which can be bought and sold.*"

In dropping the word "wealth" as a technical term, Political Economy has dropped a clog, and its movements are now relatively free and certain. The chief reason of the slow progress of the science hitherto has been, that it tried to use a word for scientific purposes which no amount of definition and explanation and manipulation could make suitable for that service. Happily there is no need to use this word. The word *Value* is by far the most important word in the science; and, for a reason already given and others soon to be given, the word *Property* may best be used when one wishes to express the aggregate of valuable things.

We also throw out at once all those definitions of the science which try to give it a broader scope than the single word Value gives it. M. Say defines it as "the economy of society; a science combining the results of our observations on the nature and functions of the different parts of the social body." This is far too broad. Society is a vast organization, and there is no one science that can embrace it all. Government, Morals, and Economics, all have their place within this great sphere. So M. Sismondi regards "as the object of Political Economy the physical welfare of man, so far as it can be the work of government." This is too broad and too narrow, and too confusing, all at the same time Other things besides economics and government contribute to "the physical welfare of man;" economics contribute to other parts of man's nature besides his "physical" nature; and the uniting of "government" and "political economy" in this way forbids a clear general conception of the latter.

We locate the field of the science just where Whately places it, — "catallactics, or the science of exchanges;" just where the German Kiehl[1] puts it, — "Die Lehre von den Werthen," — The doctrine of Values; and just where Macleod places it, though we do not like the word "quantities" in this connection, — "the science which treats of the laws which govern the relations of exchangeable quantities." This definition, the science of exchanges, or its precise equivalent, the science of value, gives a perfectly definite field to Political Economy. Wherever value goes this science goes, and where value stops this science stops. Political Economy is the science of value, and of nothing else. To determine with distinctness what value is, to separate it from some things which have often been confounded with it, and thus to lay a foundation for the science at once satisfactory and complete, will be the work of the next chapter. But it is in order at this point to call attention to the second grand reason of the slow advance hitherto made in this field of inquiry. Value is a relative word. It is usually defined as purchasing-power, that is to say, the value of anything is its power of purchasing other things. It is not an independent quality of one thing, as hardness is a quality of a stone, but it is a quality of one thing as estimated in a corresponding quality of something else. It is not a quality, in and of itself, of gold, but a relation which gold holds to other things which gold will buy. The notion of value is not conceivable except by a comparison of two things, and what is more, of two things mutually exchanged. Politi

[1] *Anfangsgründe der Volkswirthschaft.* Seite 1.

cal Economy therefore is based upon a relative idea, and has to do from beginning to end with a relation. Now in this there is an inherent difficulty, and a difficulty too which can never be obviated. It lies in the very nature of the subject. Men much more readily apprehend an absolute idea than a relative one. They more easily follow a discussion touching the independent attributes of single objects, such as length, breadth, thickness, and many others, than a discussion touching value, which is not an attribute of any one thing, but a relation subsisting between two things I am not aware that this difficulty has ever been remarked on by any writer, but I am at the same time very sure that it constitutes the principal difficulty in this class of inquiries, and has been a main reason of the tardy progress hitherto made in them.

In thus circumscribing the field of Political Economy, and yielding ground that has been sometimes claimed as falling within it, we all the more assert complete jurisdiction over the territory as thus defined. No other possible science can have anything to do with the gaining of property by means of *exchanges*. Theft is out of the question here. So are gifts. It makes no difference what a man's *motives* may be in buying and selling, it makes no difference what his ultimate *purposes* may be as to the results of his buying and selling, the buying and selling must proceed in accordance with the principles of this science. Saint and sinner must plough with the same heifer. The laws of *value* are absolutely universal. One man may get rich for the sake of making a display, and another man may get rich for

the sake of doing good, but the *getting rich* is one and the same process forever. As Professor Bascom well says, — "Whichever one of a thousand motives engages man in the pursuit of wealth, once in that pursuit, these all conform to one method, and acknowledge one law." Morals constitute a great sphere, as we shall see more fully hereafter, and persons are in it for certain great purposes; the same persons are also in the sphere of economics for other great purposes; the two spheres are coördinate with each other, not one in subordination to the other; economics have to do with *persons* just as directly and constantly as morals have to do with them; and the golden rule is equally applicable to persons acting in either sphere. The value of material things, the value of human efforts, and the value of incorporeal rights, — in short, *every value* is determined only by two persons, acting face to face in direct reference to each other as *persons*. Whatever others have done, therefore, or may hereafter undertake to do, I propose solely to investigate the motives and the conditions that govern men in their *exchanges*. Such investigations have a definite field of view; and if properly pursued, will lead to a statement of those laws that constitute the Science of Value. To these, then, we next proceed; and first of all, to an analysis of Value itself.

CHAPTER III.

ON VALUE.

If I take up a new lead-pencil from my table, for the purpose of examining all its qualities, I shall immediately perceive those which are visible and tangible. The pencil has length, a cylindrical form, a black color, is hard to the touch, is composed of wood and plumbago in certain relations to each other, and has the quality, when sharpened at the end, of making black marks upon white paper. These qualities, and such as these, may be learned by a study of the pencil itself. But can I learn, by a study of the pencil itself, the *value* of the pencil? Is value a quality? By any examination of its mechanical, or by any analysis of its chemical properties, can I detect how much the pencil is *worth?* No. The questioning of the senses, however minute, the test of the laboratory, however delicate, applied to the pencil alone can never determine how much it is worth. These methods will discover the *qualities* that belong to the pencil as such, but I must take another method altogether to determine its *value.*

Will the origin of the word Value help in finding a method by which I may discover the value of the pencil? The word is derived from the Latin verb VALERE, *to pass for, to be worth.* There is a hint of

a *comparison* in the original meaning of the term itself. Will the current use of language assist me any further in finding out the way to learn the value of my pencil? In current language, when the value of anything is asked, the answer always comes in the terms of something else. We ask, How much is it worth? The answer is, so many cents or dollars. The cents or dollars are very different things from the things whose value we inquire after; and thus we see again more clearly that value implies a comparison of two distinct things; and, if so, of course it is useless to try to ascertain its value by a study of the pencil alone. But what kind of a comparison between two things is needful, in order to ascertain the value of either? There is no use in laying down a certain number of cents by the side of the pencil for the purpose of fixing its value, as we lay down a carpenter's square by the side of a stick to ascertain its length; because the cents have no common physical quality with the pencil, as the square and stick have in common the physical quality of length. A simple comparison determines the relative length of the square and the stick, and it makes no difference in the result whose the square is or whose the stick is. A borrowed square is just as good to determine length as any other, since that circumstance does not affect the terms of the comparison: also, one man is competent to make the comparison, and it is not needful that he be the owner of either of the things compared.

But is a man who does not own a thing competent to fix its value? And is a man who does own a thing competent to fix its value by himself alone?

The true answer to these questions brings out two peculiarities of that comparison by which value must always be ascertained. Besides the two things compared, there must be always two persons comparing and each of these two persons must be virtually the owner of one of the things compared. Because I think my pencil is worth fifteen cents, is it therefore worth fifteen cents? Somebody else must think so too before that fact can be announced. Also, the comparison that two thieves make between two pieces of stolen goods would not go far in public estimation towards fixing the value of either piece of goods. Somebody, then, who owns the cents, must make a comparison with somebody else who owns the pencil, or the value of the latter is not likely to be truly ascertained.

But besides such a comparison, essential as this is as towards the end in view, another step is needful before I can announce the value of the pencil. Not simply a comparison but an *action* also is necessary. I think it is worth fifteen cents; an owner of cents, with whom the comparison is made, thinks so too; is it therefore worth fifteen cents? That is more than I can tell yet. I say to him, Will you take it and give me fifteen cents for it? He replies, I think it is worth it, but I am not ready to give that sum for it this morning. The value of the pencil is not yet determined. In order to that there must be an actual EXCHANGE of the pencil for the cents. There must be two things, two persons, a comparison, an actual exchange by which each person shall receive in fact or in ownership that previously held by the other, — each rendering something *for the sake*

of the thing received, before the determinate *value* of anything is possible to be stated. There may be expected value, estimated value, but actual value there is none, until a real exchange has settled how much the value is. The value of anything is something else already exchanged for it. Value is not simply a relation subsisting between two things, but an actual fact established in connection with those two things. *Quid pro quo* is the universal formula of value. The pencil is *not* worth fifteen cents, because I have not yet succeeded in obtaining that sum in exchange for it.

Not dealing in pencils, nor liking to chaffer, and finding it a little troublesome to discover what the value of the pencil *is*, I ask myself what its value *was* when I purchased it? That is an easy question. Two days ago I paid for it the sum of ten cents, United States currency. It was the storekeeper and I. I owned the cents and he owned the pencil. We compared these two pieces of property together, and agreed to change ownership in them. I gave him the cents for the sake of the pencil, and he gave me the pencil for the sake of the cents. How much is my pencil worth? I do not know. How much was it worth two days ago? Ten cents exactly.

If this preliminary view be just, it is clear that value is not in any true sense a quality residing in any one thing, but is a relation of mutual purchase established between two things. Nevertheless, it is often convenient to regard value as a quality inhering in a commodity or service. The convenience of such expressions as, "the pencil has value," "gold has value," is so great, that science will not consent

to forego the advantage of using them, even though they are not scientifically accurate. Science justly prefers to make her language intelligible and popular, even at the hazard of perpetuating a misapprehension. On such subjects as these, she is compelled in part to use language as she finds it; but she is culpable if she does not fix at the outset with absolute distinctness the meaning of her terms, however popularly current, and then use the terms, always in the same sense, never confounding a term with other terms of a similar but not identical significance. In allowing, therefore, such expressions as, "gold has value," I do not use the term in any other than its defined sense, I do not imply that value is a simple quality, but I employ shortened forms of expression long consecrated by usage, and avoid circumlocutions sure to become tedious. So also, by using language that may imply that value exists before it is realized in an actual exchange, I do not admit that value exists independently of an exchange; men employ foresight, put forth exertion, practice abstinence, in reference to a future realization of value: it is proper, at any rate it is necessary, to speak of them as already employed upon *value*, and of value itself as a purchasing-*power* residing in this or that. A concession to the exigencies of language is not a departure from the exactness of science. It is not, accordingly, true, speaking strictly, that value is a quality of gold in the sense in which weight is a quality of gold, because circumstances are easily conceivable, and have often occurred, under which gold would have no value at all. To the crew of a boat abandoned at sea, among whom the last biscuit had

been rationed out, a bag of gold belonging to one of the men would not purchase a biscuit belonging to another. The inherent qualities of the gold are present. It is still hard, and yellow, and heavy. But valuable it is not. It will not purchase anything. Value, therefore, is not an inherent and invariable attribute, but is the relative power which one thing has of purchasing other things. This power in any one thing will vary according to time and place and circumstances. It may cease altogether, as in the case just supposed, or it may rise under other circumstances to a very high degree; but whenever it exists, it exists with reference to some other thing, which either is, or is supposed to be, exchanged with it. Ten cents had the power of purchasing my pencil, and my pencil had the power of purchasing ten cents. In this transaction the idea of value is developed. A similar transaction first introduced that idea into the world, and the endless succession and variety of such transactions have kept the idea in the world, and will keep it here till the end of time. Value, then, speaking strictly, is not an independent quality of the pencil, any more than it is an independent quality of the cents. Both are necessary in order that the value of either may be conceived of. The value of the cents is estimated, is measured by the pencil; and the value of the pencil is estimated, is measured by the cents. In one word, value is always relative, and never absolute. To say that anything has an absolute value is a simple contradiction in terms.

But why was I desirous to part with good United States money for the sake of the pencil, and the

storekeeper to part with a good pencil for the sake of the money? The answer to this question will ground the science of value on the unchanging principles of human nature. I experienced a want which the pencil was adapted to satisfy. He experienced a want which the money was adapted to satisfy. But between my want and its satisfaction, both of which were personal to me, there lay an effort, to be made either by myself or by somebody else in my behalf. So, between his want and its satisfaction, both of which were personal to him, there lay an effort, to be made either by himself or by somebody else in his behalf. If I had chosen to do so, I might have made the direct effort necessary in order to supply myself with a pencil. I might have made the pencil for myself. It would indeed have been a long and tedious process, would have required a learning of two or three trades, a journey to some plumbago-bed, the working and preparation of the mineral, and various other subordinate processes; still, in the course of half a life-time it might perhaps have been done, and I might by direct efforts have supplied myself with a pencil as good as that which I purchased. So, too, the storekeeper, unless the laws had prevented it, might have procured for himself by direct efforts the metal cents which I gave him in exchange for the pencil. He might have dug the ores for himself, refined, alloyed, and minted them. Had we chosen respectively to take this course, and each been able to satisfy his own particular desire by his own unassisted efforts, the processes in either case would have had no relation to Political Economy. There would be in each

case a want, an effort, a satisfaction, but there would be no exchange. As a matter of fact, however, we exchanged the efforts which lay between our respective desires and their respective satisfactions. I desired a pencil, he relieved me of the effort necessary to make it, and I experienced the satisfaction. He desired the cents, I relieved him of the effort necessary to procure them, and he again experienced the satisfaction. We each experienced our own desires, and our own satisfactions, but we exchanged efforts. Precisely in this exchange of efforts arose the phenomenon of value. I parted with my cents, which had cost me an effort, in order to satisfy my desire for a pencil, because my effort, represented in the cents, was less than the effort it would cost me to create the pencil. The shopkeeper parted with the pencil, which had cost him an effort, in order to satisfy his desire for the cents, because his effort, represented in the pencil, was less than the effort which it would otherwise cost him to procure the cents. We exchanged efforts, therefore, for our mutual advantage.

The principles of human nature, then, on which the laws of value are grounded, are these: Men have desires, are capable of making efforts to meet these desires, and experience a satisfaction when the desires are met. These three are indisputable and universal facts. But while the desire and the satisfaction are strictly personal to one man, that is to say, belong to him and cannot be communicated to another, it is not so with efforts. Efforts are exchangeable. You have a desire, I make the effort to meet it, and you again experience the satisfaction

On the other hand, I have a desire, you make the effort to meet it, and I again have the satisfaction. We exchange efforts, but experience our own satisfactions. Desires, efforts, satisfactions, constitute the one circle of Political Economy, and value arises in every case from a comparison of two corresponding efforts. Efforts are naturally irksome. Everybody wishes to realize as large a satisfaction as possible from a given effort. If, by making that effort for another, a larger satisfaction will be realized than by expending it directly for one's self, there is an immediate and pressing motive to make the effort for another, and to reach the satisfaction, not directly, but indirectly, that is, by exchange. A precisely similar motive actuates that other person. If his given effort will realize more for himself by being put forth for the first man, and by accepting the first man's effort in return, he too will be anxious to exchange efforts with the first. There is a mutual advantage in thus exchanging. A given effort realizes better satisfactions for each of the parties, and the reason for exchanges is thus seen to spring from the most active and invariable principles of human nature.

The exchange of the cents for the pencil, and the pencil for the cents, is a simple case of value, but it is not the simplest. In this case there is an exchange of one commodity for another commodity, the idea of value is instantly developed, and we say that the pencil is worth ten cents, or, what is exactly equivalent, ten cents are worth the pencil. There are two things in every exchange, — that which is parted with and that which is received. Attention

should be constantly directed to both. Many errors in science, and numberless mistakes in legislation, have arisen from not attending to this circumstance, as if it were the glory of trade to sell rather than to buy, whereas it is not possible to sell without buying, because the pay must be taken for what is sold. In every exchange, therefore, of commodity for commodity, the value of each is expressed in the other, and the relation between the two purchasing-powers is adjusted. This is the common case witnessed in the shops, on the street, and in the market-places. This is one case of value; and there are, as we shall soon see, but five other possible cases, and each of these presents us, in principle, with nothing different from this. Sometimes, as in foreign commerce, for example, when commodities are rendered, a credit-claim is taken in return, and this credit-claim is afterwards exchanged against another credit-claim, or against some personal service, or against other commodities, as the case may be. So in domestic trade, goods or labor are often sold on *credit*, as it is called, that is, against a claim to be realized in future, or are paid for in paper money, which is itself a credit-claim, as well as sold against other goods or metallic money or personal service, in which case the transaction is closed up at once. These surface-differences do not alter at all either the notion of value or its laws. Each repeated purchase and sale, no matter in which form, presents us over and over again with the same phenomenon, namely, the equalization through exchange of two purchasing-powers. This is value, and is the sole subject of our science.

The simplest case of value, however, will throw light upon the more complex ones, and will be found to include them. Two farmers, who are neighbors, find on talking over their respective crops, that one has more hoeing and less haying this year than usual, and the other less hoeing and more haying. A says to B, "Come over and help me hoe in June, and I will go over and help you hay in July." B agrees. It is a mutual advantage. And so, to use the old expression, which is better here than any scientific terms could be, they change works. B does a service for A, and A does a service for B. The two services balance each other. They are mutually exchanged one for the other; and in the very proposal thus to exchange them the notion of value is conceived, and in the exchange itself value is both produced and measured. B's help in hoeing is worth A's help in haying.

This exchange of one service for another service presents the simplest case of value; and I now proceed to show that it essentially includes all other cases. If it can be shown that value is always and everywhere the same thing, that it is always and everywhere THE RELATION OF MUTUAL PURCHASE ESTABLISHED BETWEEN TWO SERVICES BY THEIR EXCHANGE, Political Economy will be seen to possess one grand characteristic of the great sciences, namely, simplicity. This can be shown.

Induction has been busy more or less for more than two thousand years in trying to gain a complete classification of Values, and thus to reach a complete definition of Property. Of course the attention of men was first drawn in the way of buying

and selling to *tangible* things, and the balance was very early used to equalize the things exchanged according to an estimation mutually agreed on by the two parties. Thus "Abraham *weighed* to Ephron the silver he had named in the audience of the sons of Heth" as a return for the land received by him "for a possession." Thus the early Romans called buying and selling *mancipium*, — *taken by the hand*, — because that formality was required in the transfer of certain things. When land was sold, a turf was sometimes cut from it and passed over into the hand of the purchaser in token of the sale. The balance was much used in all sales — *per æs et libram* — even in imaginary sales, as when a father manumitted a son. But society has never advanced far in any country, before it has been observed by somebody that *intangible* things are bought and sold also. Even if Aristotle did not perceive that personal services or *labor* are a part of property, the author of the Eryxias stated that clearly; and even if the Greeks did not see that abstract *rights* are property, the Roman lawyers announced it in the clearest terms. Keen eyes among the moderns have watched for some other species of property than these three, and have not found it. The Induction is completed for all time. The particulars have all been generalized, and not one outlying case is left. Property, as including these three kinds, has been neatly defined by Ulpian, and the definition can never be improved.

We have, then, but six possible cases of value, since there are only three kinds of things that are ever exchanged *for the sake of each other*. These are: —

1. A commodity for a commodity, as the pencil for the cents.

2. A commodity for a service, as a gold eagle for a lawyer's advice.

3. A commodity for a claim, as a Howard watch for a copyright.

4. A service for a service, as the above case of two farmers.

5. A service for a claim, as a year's work for a U. S. bond.

6. A claim for a claim, as a U. S. bond for rail road shares.[1]

Now what is mutually transferred in all these cases, is the ownership or property in something. The Latin word *proprietas*, from which our word *property* comes, means both etymologically and legally *what is exclusively one's own.* What is exclusively one's own may be rightfully sold, provided the consideration be sufficient, and may thus become exclusively another's. Material products may or may not be passed over to the purchaser at the time of the sale, but the *ownership* goes over to him in all cases. Personal services, unlike material products, are not commonly resalable by the purchaser; sometimes they are, as when one hires out for a time his own hired man. Most species of incorporeal property are transferable at will, as bank checks, patent-rights, and promissory notes. But this transfer of ownership, a feature in all cases of value, though less obviously so when simple services are rendered, does not present the best aspect for the complete understanding of value. That aspect is presented through the term *services.*

[1] Compare Macleod's *Banking*, page 9.

It is mutual services, as well as mutual ownership, that are exchanged in these six cases; and the word services carries us deeper into the central phenomena of value. Thus the client, with five dollars in his pocket, is just as much in position to do the lawyer a service, as the lawyer is in position to do him a service. The counsel is serviceable to the client, and the dollars are serviceable to the lawyer, and so they exchange. And just so when commodities are exchanged with each other. The hatter serves you with a hat, and the shoemaker with a pair of boots, and you serve them with six dollars each; or if the hatter be in want of boots, and the shoemaker of a hat, they serve each other with their respective products. In every case of value, therefore, without exception, what is really exchanged, whether a commodity intervene or not, are mutual services; and value is then produced, and only then, when two persons are in position to render each other a service; and the respective services being rendered, that is exchanged, and the balance being struck, we have the value of one expressed in the other.

If this view of the matter be correct, the definition of Value that has just been given must be correct also. This analysis of value brings us directly to *persons* as the central point of the science, and makes outward *things*, though still of vast importance in their *relations* to persons, entirely subordinate to the desires and estimates of the persons themselves. Even in the exchange of tangible things, which I have called commodities, the wants and tasks of persons are the chief element in the transaction; the character and skill of persons as such become still

more prominent in the exchange of what I have called personal services or labor; and in the sphere of claims or credits, which always relate to future time, almost every thing hinges on the character of persons through the confidence they are able to inspire. As I have been obliged to use the term "things" in two senses, the specific sense as opposed to persons and the general sense as including whatever is exchanged, so I have been obliged to use the term "services" in two senses, in the specific sense as personal services or labor, and in the broad sense as *rendering anything for which something is demanded in return.* No confusion will arise from these ambiguities, for the context will always show in which sense the terms are used. Also, people sometimes do for others what are called services, out of sympathy, from benevolence, from duty; but the characteristic of these is that they are free; nothing is demanded in return. These, therefore, fall in the sphere of morals, and are outside the pale of Political Economy. There is no such thing as exchange proper within the field of morals, and there is nothing else but exchange proper within the field of economy. This principle alone marks the boundary-line between the sciences referred to. A service, then, in the language of this science, and as the word will henceforward be used in these pages, is anything rendered to another in view of a return, and for the sake of a return. The man who furnishes you a barrel of apples, does you, in this sense, a service equal'y with the physician who attends upon your fever; and you pay them both on precisely the same principles. You render to each an equivalent ser-

vice in return. To pay them money is to render them a service, just as to furnish you apples and medical advice were a service to you. Whether a commodity, as apples, intervene or not, is, as far as value is concerned, a matter of indifference. The more specific use of the term "service," as opposed to a commodity, is indeed convenient, and will, doubtless, continue to be used: the broader sense is exceedingly useful, and, by its aid, we clear up the whole subject of value.

This ultimate definition of Value, namely, that it is THE RELATION OF MUTUAL PURCHASE ESTABLISHED BETWEEN TWO SERVICES, is somewhat like the definition of the physiocrats, still more like the definition of Bastiat, and yet it is different from them both. The physiocrats said, that "*value consists in the relation of one thing exchanged for another.*" Two things are to be said about this: first, as the physiocrats admitted only one kind of property, — *richesse*, — and consequently only one kind of exchange, that of material products, their definition is too narrow, — their word "thing" meant only a physical thing exchanged; and second, there is an indefiniteness about the relation itself as expressed by them, — the kind of relation is not clearly given. Bastiat's definition, — "*the relation of two services exchanged*," — escapes the first fault by means of the word "services," but does not escape the second fault. Our definition steers clear of both; and as an elephant tests the bridge, first by one foot and then by another, and then by all his weight, so I am willing that this definition should be tested by all economists, however cautious.

The definition of a general and abstract term ought certainly to be both general and abstract. In this point of view, Macleod's definition, however excellent in most other respects, seems to me to be defective. He says: "*The value of any economic quantity is any other economic quantity for which it can be exchanged.*" Yes; but this does not answer the question, What is *Value?* It answers the question, What is the value of any specific valuable thing? I confess also to a shade of dissatisfaction with Macleod's use of the term "quantity" in this connection. I admit that every valuable thing whatsoever may be measured by money, and in that sense is a "quantity," and this is undoubtedly the sense in which the gifted author uses the term, but the associations of it in most men's minds are too concrete to make it a perfect vehicle of the thought. To them, a quantity means a mass or mess of something. When Siddons acts, and Mehlig plays and Kellogg sings in public, there is indeed an economic rendering, and, if Mr. Macleod insists on it, an economic "quantity," though he will pardon me for thinking that "service" is a better word in that connection. The reasons why we may feel complete in our definition of Value will appear in a more and more striking light as we proceed, and until we conclude.

In the first place, this definition covers naturally and easily all those anomalous cases of value which have been so hard to reduce under any other general view. Take for instance the case of the value of the diamond. The English school, and especially Mr. McCulloch, claim that labor is the source of value, and that the purchasing-power of everything is pro-

portioned to the labor which it has cost. Not at all is this the law of value. Mere effort, mere work, in itself considered, has no tendency whatever to create value. Much effort, much work, as by a dull but laborious writer of a book, may issue in very little value. Little effort, little work, as by a skillful pleader in the courts, may issue in very great value. Labor is not so much a *cause* of the value expected to accrue as it is a *result* of the value expected to accrue. Whately puts this just right when he says: "In this, as in so many other points in Political Economy, men are prone to confound cause and effect. It is not that pearls fetch a high price *because* men have dived for them; but, on the contrary, men dive for them because they fetch a high price." In other words, value always has its starting-place in DESIRES; and, although effort of some sort and in some degree is always associated with desire in the realization of value, the effort alone is not the cause of the value, nor can the value be said to be proportioned to the effort. For example, as I am strolling along the sea-shore, I accidentally perceive a splendid diamond among the pebbles. It is but a moment's labor to appropriate the prize, but do I on that account sell my diamond for one dollar less to the jeweller or the prince? No. I am now in position to do a great service to anybody wanting a diamond. I demand a large service in return, and get it. I say to the man who wants it, give me ten thousand dollars for my prize, and you shall have it. It would be poor mercantile logic for him to reply: Your labor is not worth more than one cent a minute, and it did not cost you but one

minute's labor to get that gem, and certainly one cent, therefore, is a fair price for the diamond. He rather reasons in this way: Can I by going myself to the diamond-bearing regions, or in any diamond market elsewhere, procure for myself so good a gem as this by a less sacrifice than ten thousand dollars. He resolves this question mentally; and, if negatively, I am sure of getting my price. In that case I am offering him a service worth at least ten thousand dollars. No one else is in position to render him the same service at so favorable a rate. If, on the other hand, there be other diamond dealers offering gems as good as mine for less than ten thousand dollars, then I have pitched my demand too high; my service is not worth that sum, because there is some other person ready to render the same service for a less sum. The value of my diamond, therefore, is proportioned, not to the labor which it has cost me, but to the service which I am able to render to the purchaser with it, compared with the service which he is able to render to me. I take advantage of his desire for the diamond, and crowd up the price as near as I can to the point at which he will either forego the possession of a diamond altogether, or can obtain a similar one from some other party. He takes advantage of my desire for the money, and crowds down the price as near as he can to the point at which I can either find another purchaser, or should prefer to retain the diamond myself. The comparison and adjustment of these two, my service to him and his service to me, fixes, for that sale, the value of the diamond.

And here we must stop to notice what an exceed-

ingly good word the English language provides us with, in this term *service*. It explains perfectly all anomalous, as well as all common cases of value. It combines in its own proper meaning all the elements which make up and which vary value. First, it implies always two persons, the person rendering and the person receiving the service. Next, it always implies some effort on the part of the person rendering, and some satisfaction on the part of the person receiving the service. Thus when one service is spoken of there are always implied two persons and two things, and the two things are the effort of one person and the satisfaction of another. But when two services are spoken of as exchanged, as is always the case in Political Economy, there are implied, as before, two persons, each of whom makes an effort for the other, each of whom is recipient of a satisfaction which comes from the effort of the other and each of whom estimates in the light of his own satisfaction that which is received as compared with that which is rendered. It is this reciprocal estimation alone that constitutes value; and it is the excellence, I may almost say the glory of the term service, that it gathers up in its own signification all the elements which go to determine value, and which ever vary its amount. As here is the very kernel and core of our science, illustration will be well bestowed at this point. Let the parties be A and B, in position to render each other a mutual service. A has a desire which B's effort can meet, and B has a desire which A's effort can meet. Up to the point when the exchange takes place there are only four elements that play any part in the transaction as

preparatory to it, namely, two desires and two efforts. In the act of exchange itself two other elements come into being, namely, two relative estimates, A's estimate of B's effort for him as compared with his own effort for B, and B's estimate of A's effort for him as compared with his own effort for A. As a result of the exchange, and as that for the sake of which the whole series took place, there appear two other elements, namely, two satisfactions. Here is the whole of it. Now, then, any change in any one of the first four elements will vary value; and there is nothing else in the world that can vary it. If A's desire for that which B is ready to render be lessened, the other elements remaining the same, A's estimate of B's effort as compared with his own is lessened, and value is at once affected. If A's desire be increased, other things being equal, his estimate of B's service as compared with his own is increased, and value is affected. Just so any diminution or enhancement of B's desire for that which A is ready to render, acts at once upon B's estimate of A's effort as compared with his own, and consequently acts at once upon value. Again, any change in either effort as compared with the other, such as its becoming more or less onerous than the other, will of course affect the estimate of the one as measured by the other, and of course also will vary value. These first four elements then are not only the elements out of which value subsequently springs, but also are the elements any change in any one of which, the others remaining the same, will tend to vary value, and without a change in some one of which, relatively to the others, value never will be

varied. The term services expresses just these elements which play and vary as preparatory to the realization of value. Value itself is realized from the adjustment of the fifth and sixth elements, that is to say, from the equalization of A's estimate of B's service with B's estimate of A's service. This adjustment also, together with the remaining elements, the two satisfactions, are all implied in the expression mutual services, or, if you please, two services exchanged. If any of my readers object to this paragraph as abstract, I have only to reply that it is no more abstract than the subject-matter; and if any of them find difficulty in the relative nature of the transaction unfolded, in the fact that the views and comparative estimates of two persons must be kept in mind throughout, I can only say, that this science starts with a relation and has to do with a relation every step of the way to the end. This is the one intrinsic, unavoidable difficulty that lies at the threshold of the science; and whoever, by taking pains at the outset, familiarizes this difficulty to his thoughts, and thus overmasters it, will walk thenceforward with positive pleasure through the whole economic domain. And if there ever was a science grateful for a word, as lessening its inherent difficulties and helping explain its phenomena, Political Economy, which has wandered these twice forty years in the wilderness of wealth, thankfully accepts in the term service its latest and most important gift.

In the second place, the definition of value which is here given expands the field of Political Economy to its natural limits. Even Adam Smith, and the

English economists generally, while defining wealth as consisting of material commodities only, have experienced a difficulty in excluding from the domain of the science certain mere services, and in denying that value resides in these services. Some have endeavored to avoid the difficulty in one way and some in another. Some have stigmatized those who render a mere service to society as unproductive laborers, and have gifted with the title of productive laborers all those who bring forward some vendible commodity. John Stuart Mill, as we have seen, enlarged his definition of wealth so as to take in all those sorts of mere services whose action goes directly to swell the volume of material commodities. It is conceded then that value resides in some services; why not then in all services which are put forth for the sake of a return? Why allow value to a service which comes to be embodied in a commodity, and deny the term to another service just as necessary to our comfort that is not thus embodied? Why class the brick-maker as a productive laborer, and refuse the epithet to the hod-carrier, without whose help the bricks would never reach their ultimate destination? The truth is there is no ground for this distinction; and the very difficulty which the various writers have found in trying to make it, is a pretty sure proof that it ought not to be made at all. By making its definitions such that value can only be supposed to reside in tangible commodities, Political Economy excludes itself, without any good reason, from a large portion of its own field. Let us see if there be any good reason. For example, a man buys a spelling-book for his boy, for the

sake of his learning to read. He then hires a teacher to teach him to read. According to the usual definitions the spelling-book has value, while the service of the teacher has none. But why has it none? It has to be paid for, certainly, as much as the spelling-book has to be paid for. There are two separate exchanges; first, of money for the spelling-book, and second, of money for the service. Both are made with the same object in view, namely, that the boy may learn to read. The want of a spelling-book and the want of a teacher are the two external obstacles in the way of reaching that object; and the father overcomes them both by similar means, that is to say, by an exchange; and there is no such difference in the two transactions as will justify or even tolerate the distinction sought to be made between them. The teacher sells his service. The shopkeeper sells his book. The father renders a service to each equivalent to that received from each. Political Economy now claims jurisdiction over both transactions alike, and affirms value as truly of the service as of the commodity, and more truly of the service than of the commodity, inasmuch as it stands ready to prove that so far as value resides in any commodity it resides there simply in virtue of the human services which have been concerned in its production and which will be subserved by its exchange. What is ultimate, therefore, in all exchange, is services and not commodities; and the services which are bought and sold in every department of life, the services, for example, of the lawyer, the physician, the clergyman, the teacher, the editor, the musician, fall as much within the province of Polit-

ical Economy as the traffic of commodities in the market-place. Our science asserts its claim of jurisdiction wherever services are mutually exchanged.

A third advantage of the definition of value now given, and one closely connected with the last, will be seen in the fact that it frees the discussion from a perplexing error which has long infected this class of inquiries, namely, that value is somehow or other connected with matter. This notion has controlled the definitions of wealth; has led, as we have just seen, to groundless distinctions among services; and has taken possession of language so thoroughly that no judicious writer will attempt at this late day to dislodge it from that strongest of the citadels of error. Rather than disturb the current nomenclature of business he will allow such expressions as these to stand: Gold *has* value, strawberries *have* value. But it is very easy to show that value does not reside in matter, or in any form of matter, but only in human services exchanged; and that, therefore, value is never of God's creation, but always of men's exertion. We shall see abundantly, before we finish the chapter, that utility is one thing and value quite another. No effort of men can add one particle to the existing matter of the globe, but it has been supposed that the efforts of men, by changing the form of existing matter, impart the quality of value to it, and that thenceforth the value remains fixed in the matter itself. The efforts of a woodman, for example, with the coöperation of nature, can transform the stock of a tree into wooden bowls, and value is now supposed to reside in the vendible bowls, and the current language is, that each bowl *has* a value

of fifty cents. Why has it a value of fifty cents Clearly enough, to reward his *service* who felled th tree, and sawed the block, and then hollowed out the bowl. But the service having been employed upon the matter, and being embodied in it, is not what is really sold now the matter, and not the service? I answer, No. What is really sold is the service, and not the matter. And this, which at first sight might not be thought important, but which is really very important, becomes apparent as soon as we reflect that any changes in the conditions of the service instantly affect the value. Our woodman has on hand a stock of one hundred bowls, which he offers for sale at fifty cents apiece, as fairly rewarding his personal services in their production. But, unknown to him, an enterprising neighbor has invented a machine which enables him to make bowls in every respect equal to the others, and to offer them at twenty-five cents apiece. Whoever now wants a wooden bowl can have that service rendered him for twenty-five cents return. The first man finds that he cannot sell a bowl for over twenty-five cents, and that his stock of one hundred has sunk at once in value from fifty dollars to twenty-five dollars. What is the matter with his bowls? The matter is not in the matter. The matter is all there, and the form of the matter is all there, but the value is just one half escaped, because the service which he can render to a buyer by a bowl has been, by the enterprise of his neighbor, just one half lessened. Value then follows the fortunes of services, and varies as they vary, just as much when they have been employed upon commodities, as when they are independent of them,

and we see that the value resides in services compared, and not in matter at all. To render and receive *services* are a function of *persons*, and the qualities of matter are subordinate to that.

I now proceed to indicate the manner in which language came to be used in such a way as gives color to the notion that value resides in the commodities rather than in the services. An instance will bring the whole subject before us clearly In many parts of the United States delicious wild strawberries may be had in their season for the simple picking. The pastures and meadows are open to every comer, and the strawberries are considered to belong, not to the owners of the fields, but to any one who takes the labor of picking the fruit. Let us suppose that my family are fond of the berries, and that no member of it likes to undergo the labor of picking them, and that I hire some girl, who offers her services for the purpose, to go to the fields and gather some of the fruit for us. When she returns I pay her for her service. She does not conceive of any value residing in the strawberries themselves. Neither do I. She makes a series of efforts for the gratification of my family, and is paid for her efforts. Language recognizes the true state of the case, and she does not say now that she *sells* us the berries, and we do not speak of *buying* the berries of her. She thinks only of her service, we think only of her service, she is paid only for her service: language is exact in the premises. The next day, as the girl is about to go for us again, my neighbor says to her, "You bring me as many and I will pay you as much." The third day, a

second neighbor makes a similar bargain with her, and she brings strawberries for the three families, and is paid in each case for her service. The girl, on the fourth day, taking it for granted that we shall be likely to want strawberries that day also, does not wait to be sent, makes no bargain for her services beforehand, but goes and gathers the fruit. This time there is a change of language when she comes to my door. She now offers to *sell* me *strawberries*. "How much are they worth?" I ask. She names probably the same sum which she had before received for the service of picking the same quantity. She could not materially increase it, because there are doubtless other girls who are ready to render the service which she before rendered, at the same rate. But attention is now drawn away from the service to the berries, and the idea of value is attached to the berries, and language adopts the illusion, and says, "the *berries* are worth so much." Who does not see, however, that the transaction is substantially the same as before? Who does not see that it is only by a figure of speech, convenient indeed, but still only a figure, that the berries are now said to *have* value? If there be no difference in the last case as compared with the former cases in the two desires and in the two efforts, it is plain to reason that there can be no difference in the value, and consequently no difference in that which is really sold. But my desire for the berries, my effort as represented in the price paid, her desire for the money, and her effort as represented in the picking, are all just as before. She expected me to take them, and I took them as before. The value, therefore, the purchas-

ing-power, resides not in the berries, but in the service; that is to say, in that which she renders as compared with that she receives; and it is only a freak of language which leads us to suppose otherwise. This is but a simple instance, but the principles of the instance are applicable to all commodities whatsoever. It is only mediately and figuratively that commodities can be said to have value at all; and if we use the common language, and say that they have value, we must always remember that they have it simply and solely in consequence of the human services which have been employed upon them, and which may be subserved by them, as related to those other human services for which they may be exchanged. If this be true, and it seems to me certain that it *is* true, it throws a flood of light upon the whole field of value. More attention must be given hereafter, in Political Economy, to persons, and less to things. Man and his wants, man and his efforts, become at once the chief topics, while the material products on which efforts are employed, and which minister to wants, sink in relative position. It follows also from this distinction, that there is not so much difference as is commonly supposed, when a man works for others, and when he sets up for himself, — between a journeyman and a master. The journeyman sells his services, and the master sells nothing more or other than his own services. The services of the master may not be manual, they may be merely supervisory, or they may be connected with the use of his capital; but the finished product, when it is ready for the consumer, represents the aggregate of the human services which

have been employed upon it, and whoever sells it, sells those services, and its ultimate value is determined, as all other value is, by a double comparison, the purchaser's comparison of the service of the product to him with that which he renders, and the seller's comparison of the service he receives with that of the product. Service for service, in the last analysis, rather than commodity for commodity, is the rule of value and the law of exchange.

It may be observed, in the fourth place, that a principal merit of the definition of value insisted on in this chapter, is the discrimination which it allows between utility and value. It is absolutely essential that these two ideas be not confounded. But they are confounded in all the earlier writers on wealth. The word wealth itself inextricably confounds them Whole discussions in Adam Smith are marred by his not consistently attending to the distinction, which he himself draws in one place, between "value in use and value in exchange:" meaning by the former expression simple utility. Say mixes up the two ideas even more completely than Adam Smith does; and the errors of the two writers in this respect gave rise to the twentieth chapter of Mr. Ricardo's book,[1] in which the difference between utility and value is pretty clearly unfolded. Mr. McCulloch, too, always insists upon this difference, and correctly maintains that the distinguishing characteristic of utility is, that it is gratuitous; although the theory of value of each of these writers is too narrow, unduly restricting the field of Political Economy by assuming that value rigidly inheres in com

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modities only. The example of these writers shows that the distinction referred to can be made even under their definition of value, but it is not so easily and practically made as under the true definition, because in the true definition attention is inevitably drawn to two persons, instead of to one thing, and utility, which is simple capacity to gratify any desire, is neatly discriminated, even in the nomenclature itself, from the mutual efforts by which the mutual desires are met The word service enables us to draw the distinction, and to hold it fast.

Utility, then, is the capacity which any thing or any service has to gratify any human desire whatsoever. Political Economy has nothing to do with the estimation in which different desires are held by a philosopher or a moralist. It is enough to constitute for it utility, if anything will meet anybody's desire or serve anybody's purpose. In this sense, which is the etymological and only just sense of the word, ardent spirits have utility just as wheat has utility. The same thing may have no utility for one man, a low utility for another, and a very high utility for a third; since the first has no desire for it, the second a feeble, and the third a strong desire for it. Desires are personal to individuals. There is no common standard with which they may be compared. They are not exchangeable. Utility is the capacity which anything has of meeting any one of these desires at any time or in any place. But some things have this capacity in a high degree which are never exchanged, which are never bought or sold, and which consequently can have no value. The air we breathe, the light in which we recreate our-

selves, the water we drink from the spring or brook, all have the highest utility, but no value. They connect themselves with no service. We give nothing for them. They, and such as they, are the direct gifts of God. They are gratuitous.

But utility is always present in all value also, since it is an element in all service; and the utility that appears in connection with value is always derived partly from Nature and partly from man. It is impossible to say, in any given case, how much is attributable to Nature and how much is attributable to man. It might seem at first sight, as if, in the case of the diamond, or in the case of the strawberries, the utility were wholly the gift of Nature, but the diamond undiscovered among the pebbles, and the strawberries unpicked upon the meadows, can hardly be said to have utility, much less value. The human service that fits each of these to meet a present desire is an essential contributor to their utility. On the other hand it might seem as if the utility of a painting were wholly referable to the art of the painter; but the tenacity of the canvas, the flexibility of the brush, and the brilliancy of the colors, are the contribution of Nature. Although, therefore, all utility that ever appears in connection with value is partly due to the efforts of men, it is none the less essential to clear thinking in this department to separate distinctly in the mind the utility from the value. The utility of a service may be great and its value little; the utility of a service may be great and its value also great. They are distinct things. They become, as it were, commingled in the service rendered, but the utility is one thing and the

value a distinct thing. Utility is ultimate: value is mediate. Utility is absolute with reference to the individual: value is always relative. The utility involved in every valuable service is derived from two sources, — the free contribution of Nature, and the onerous contribution of man; but the value of such services in general tends perpetually to become proportionate to the onerous human contribution, and not to the aggregate utility. If the service be unique, if only one person or a few be in a position to render it, no useful principle can be laid down, which shall discriminate the two components of the utility; but in respect to the vast mass of services, of which a market rate can be predicated, it is very clear that the competition with each other of those who are ready to render them, will fix the current value at a point which shall just about compensate for the onerous elements involved. That portion of the utility which is the free gift of Nature will be very nearly a common factor in that whole set of services. The action of competition will eliminate this common factor, and tend constantly to determine value on the basis merely of what man has done to impart utility to those services. Thus, if ten men bring ten horses to the market to exchange against money, though the utility of the horses be derived in large degree from the free gifts of Nature, yet there are some of the owners who will be willing to part with their property at a price that will compensate them for what they themselves have contributed towards that utility. The action of these will tend to fix the price of the whole ten. There is no tendency in value, then, to proportion itself to the aggregate utility of a service,

but there *is* a tendency in value to proportion itself to the aggregate of the onerous human efforts represented in a service.

This principle, which I deem important, perfectly accounts for the low value of many services, which may be said nevertheless to have a high utility. The girl brings delicious strawberries to my door in summer. Their utility is great, their capacity to gratify my palate and that of my family is exquisite, but her effort in picking and bringing them is relatively little, and therefore it is little that I pay her. She cannot charge me one farthing for all that has been done for the fruit in the wonderful laboratory of Nature. Should she attempt to do so, there are doubtless other girls willing to bring me the fruit for a fair equivalent for their personal efforts only. Utility and value, then, are different things; even the physiocrats recognized this in their well known distinction between *biens* and *richesse;* some things, as air, have a high utility and no value, and other things, as strawberries, may have a high utility and a low value.

The history of economy is full to a surfeit of the theoretical errors and of the practical blunders which have come from confounding value with utility; and from not attending to the fact that all utility, until some human service has been mingled with it, is absolutely free. God is a Giver. He gives sunlight, and air, and water, in abundance. He gives the earth, with all its materials, and with all its powers, and with all its spontaneous fruits, gratuitously to man. At the very first, He gave to man, "dominion over the fish of the seas, and over the fowl of the

air, and over every living thing that moveth on the earth." So far forth as these gifts minister directly to men's wants, there is utility indeed, but no value. But since, for the most part, human services are required to mould these gratuitous materials, to harness these gratuitous powers, to make these gratuitous fruits and animals available for use, and since services for this purpose are exchanged among men, value springs up in connection with these utilities, but must not be confounded with them. The utilities, disengaged from the service, are free. God never takes pay for anything, and has not authorized anybody to take pay in his behalf; what is paid for is the service of man, and not the bounty of Nature. Even the powers of Nature which men avail themselves of by machinery, such as water, wind, and steam, all work for nothing: water gravitates, and wind blows, and steam puffs, for nothing. These all, and such as these, help to create utilities, but ultimately no value. Value is in the service which makes the machine, and in the service which tends it, but in the power which moves it, unless that power be human muscle, there is no value.

Value must be carefully distinguished from Price. It is very interesting to notice in the passage from the Roman Law quoted in our first chapter, that the point involved in this distinction, was a matter of discussion among the Romans at a very early time. Two views were maintained in that discussion. The question was, whether the buying and selling of goods was anywise different from the exchanging of goods, — "for example, whether a man, or a piece of land, or a garment, can be the *value* of another thing

Sabinus and Cassius think value can dwell in another thing too; whence is that which was commonly said, — buying and selling *is* carried on in the exchange of goods, — *and that view of purchase and sale is very old.*" For this last statement I am very thankful, for it is the only proof in existence that I know of, that the Romans occupied their minds with this innermost question of Political Economy. Sabinus and Cassius were substantially right, as we have seen, since, no matter what the nature of the two things exchanged, each expresses perfectly the value of the other; and we shall see in the chapter on Money, that, when goods are paid for in money, there is no change in any law of value, but only a new word is used, namely Price. Apparently on the basis of this slight difference, however, another view was had at Rome, and is even said to have "prevailed." "Writers of a different school took the opposite view, and thought exchange of commodities was one thing but buying and selling another thing; furthermore, they thought the matter could not be explained in the case of exchanging commodities *which thing* seems to have been sold as property and *which* given as the price, for reason does not allow that *both* things appear to have been sold and given as the price; but the opinion of Procullus has deservedly prevailed, who says, *exchange* is a particular kind of business transaction different from "*selling*." It is indeed different in one little particular.

Both these Roman views hold clearly that the value or price of any thing is the other thing, whether goods or money, exchanged for it, and thus

justify the proverbial good sense of the Romans. Condillac, on the other hand, perceiving that two estimations always precede an exchange, held that *value resides in the minds of men.* Because people give value at one time to things to which at another time they do not, he held that value is founded on estimations, and that *value* exists before the *exchange* takes place. This was in reaction from the false view that value is an absolute quality inherent in things, independently of the opinion men have of them. But Condillac went too far in the opposite direction. Minds do indeed have an essential part to play in determining value, but if there were no outward *manifestation* of these mental states, no *phenomenon*, no effect by which the estimation of the mind can be *measured*, there could be no economic science, because there would be no class of *facts* open to observation and induction. Condillac makes this distinction between Value and Price: value, being a mental estimation, is what a man *would* give for anything if he could not get it for less; price, the result of contention, is what he actually *does* give; and, therefore, value and price are not always convertible terms. The true distinction turns rather on whether the return service be money or something else.

It is precisely because we have in all cases the return service as the outward expression and measure of the desire of him who renders the service, and because it makes no difference which of two services exchanged be regarded as the return service, that our science has an objective character, notwithstanding the strong subjective elements that have a part in

it. The science is reared on the firm ground of objective realities. Even rights are objective realities that can be enforced in the courts. Accordingly, I cannot help thinking that Professor Jevons[1] is on the wrong track when he describes Economics "as a Calculus of Pleasure and Pain," and endeavors to apply strict mathematical forms to the varying moods of mind. He says: "To me it seems that our science must be mathematical, simply because it deals with quantities. Wherever the things treated are capable of being *more or less* in magnitude, there the laws and relations must be mathematical in nature. The ordinary laws of supply and demand treat entirely of quantities of commodity demanded or supplied, and express the mode in which the quantities vary in connection with the price." To me it seems, on the other hand, that the only sense in which the term "quantity" can be applied to the whole of the six cases of exchanges is, that the services can always be measured by *money*. If that single circumstance be sufficient to make economics an exact mathematical science, very well; I will not pronounce upon that; except to say, that money seems to me a measure of *services* and not of *quantities* at all. When I pay a dentist $5 for pulling out a tooth, the money seems to me a measure of his services, and of nothing else.

The *price* of anything, then, is its purchasing-power expressed in money; the *value* of anything is its purchasing-power expressed in any other purchasing-power whatever. Price is a relative word, but specific; value is a relative word, but general. When

[1] *Theory of Political Economy.*

we speak of the price of a service, we mean the sum of money which that service will buy; but when we speak of the value of a service, we mean the command in exchange of that service over other services generally. Thus, we say, "This coat is worth twenty-five dollars;" that is its price. The value of the same coat never could be completely expressed, because it would require a comparison not only with hats and gloves and boots and vests, but with all other things which are ever exposed for sale. Therefore, for convenience' sake, value is commonly reduced to price. By knowing the price of various things, we readily compare their value relatively to each other. Thus, when we know the price of the coat at 25 dollars, and of gloves at 2, of hats at 5, and vests at 10 dollars, we easily determine the value of the coat as estimated in gloves, hats, and vests, namely, that its value as compared with theirs, is respectively 12½, 5, and 2½ times theirs. The value of anything may remain nearly uniform while its price may greatly vary. This will always be owing to some great change in the money of the country. In this country, from the spring of 1862 till the spring of 1878, the current money was much depreciated as compared with gold, the premium on which over the paper money varied at different times from 1 to 185 per cent. There was, in consequence, a universal rise of *prices* reckoned in paper money, but it may be said in general that *values* remained much as before; that is to say, a given number of paper dollars so-called fell in their power to command general services, — prices rose, — while these services continued to command each other in exchange much

as before, — values were comparatively steady. This illustration brings out the privilege we have, or rather the necessity we are under, whenever special attention is called to *one* of two services exchanged, to speak of *its value* as liable to vary, meaning its purchasing-power over other services. Value is always a consummated relation; but there is no harm, rather there is a necessity, in conceiving and speaking of one service as rising or falling in *value* at different times, according as it commands more or less of other services. As before remarked, this is a concession to language, and not a departure from the exactness of science.

Moreover it is not possible that there should be any general rise or fall of values, as there may be a general rise or fall of prices. A rise in the value of anything implies a fall in the value of those things with which you compare it, that is to say, if it will buy more of them, they will buy less of it. Its rise in value implies their fall in value, and conversely. Every rise in value of any service involves a corresponding fall in other services; and every fall in value of any service involves a rise in value of other services; and therefore, a general rise or fall of values is impossible. Nothing is more common than a rise or fall of value in particular services. Suppose, for instance, an improvement in machinery by which broadcloth can be made with one half the former effort, and that no change has been made in the efforts requisite to make the gloves, hats, and vests of our former example, and no change in the views of those who wish to exchange them. The coat will sink at once to about half its former value, not

only in relation to gloves, hats, and vests, but in relation to everything which does not happen to be affected by a similar depressing cause. It is correct to say that the value of the coat has fallen. As estimated in gloves, hats, and vests, its value now is only $6\frac{1}{4}$, $2\frac{1}{2}$, and $1\frac{1}{4}$ times theirs, respectively. But while coats have fallen in relation to the other commodities, the other commodities have risen in relation to coats; and if similar improvements should be made in the machinery by which gloves, hats, and vests are made, so that one half less effort will bring these also to market, views of parties as before remaining unchanged, they will exchange now for coats exactly in the same ratios as at first, namely, $12\frac{1}{2}$, 5, and $2\frac{1}{2}$, respectively, for 1. As soon as the improvements affect all the commodities equally, value stands just as it did before the first improvement was made. Views of the parties remaining the same, it is only an advantage or disadvantage affecting some services and not others, that will vary their value in exchange: whatever affects them all equally will have no effect upon value. Thus, a universal rise of wages in any country, provided it could and did affect all departments of effort in the same relative degree, would not have the least effect upon other values; and we have just seen that a general rise of *prices* lately experienced in this country had little effect upon the general purchasing-power of services other than money, but was only a token that the one service, money, had fallen relatively to them.

I proceed now to inquire whether there is, or can be, any invariable *measure* of services, or, as it has

been commonly called, *measure of value.* A full discussion of this point can best be had in the coming chapter on Money, but it is in order here to ask whether there is *any* standard or measure, by a comparison with which we may determine the general purchasing-power of different services. It has commonly been supposed that there is such a measure, and political economists have expended a great deal of strength in endeavoring to discover what it is. The results have hardly been commensurate with the zeal and patience of the search. Adam Smith seems at one time to regard labor as the best measure of value, that is, the quantity of labor which any commodity will buy as the best gauge of its power to buy commodities in general. At another time he seems to think that corn is a better measure of general exchange value than labor. Others have thought that price furnished the best attainable standard of comparison; in other words, that the quantity of gold or silver which anything will purchase, will best enable us to determine the quantity of all other things which it will purchase. Others still have supposed that the cost of production of any commodity would give the most accurate rule by which to decide the value of the commodity; and still others, as Mr. Carey, have suggested the cost of reproduction. But the truth is, a measure of value in the sense in which it has been sought after by these writers, is something impossible to be realized. It never would have been sought after, unless value had been supposed to be a rigid quality inhering in commodities, and, when once placed in them by whatever process, to be invariable. We have seen, however, that value

is not a quality inhering in any one thing, but is a relation subsisting between two services which two persons are in a position to render to each other; and that this is not an inflexible relation, but is variable by any change in the views of the two persons, by which either of them puts a different estimate upon the service about to be rendered as compared with the service about to be received. We have seen sufficiently already, that there are four things, and only four, any change in any one of which will vary value; and that these four things are two desires and two efforts, the two desires belonging to two persons, and the efforts made by two persons each for the other. Now these four elements are in their very nature so liable to vary, and as a matter of fact do so constantly vary, that no man who clearly perceives what value is, will waste time and ingenuity in searching for an invariable standard of that which in its nature is variable and relative.

While no invariable measure of value is possible to be found, there are certain limitations and principles of much importance which ought to be given in this connection. Although labor alone, as we have seen, cannot be regarded as the cause of value, for, if it were asserted to be such, the inquiry would be pertinent, what is the cause of the value of labor; yet, value always stands in connection with human efforts, and, the mutual desires being presupposed, there are always limitations of value lying partly in the effort made by the person serving and partly in the effort saved to the person served. In every exchange, each of the parties is reciprocally serving and served, and it is clear that they would not

exchange unless the service which each renders to the other is less onerous than the effort which each would have to make if each served himself directly. It costs a certain effort for me to bring water from the spring; I am willing to pay a neighbor for bringing it for me, but I should not be willing to make a greater effort for him in return than the effort is to bring it myself; neither should I be willing to make an effort for him which I regarded just as onerous as the bringing the water: unless there is some service which he will accept less onerous to me than that, I shall continue to bring the water for myself. On the other hand, he will not render the service to me of bringing the water, unless it be less onerous to him than the doing that for himself which I am ready to do for him. This principle, applicable to all exchanges whatsoever, draws on the one side the outermost line, beyond which value never can pass. It may be asserted with confidence that no man will ever knowingly make a greater effort to satisfy a desire through exchange, than the effort needful to satisfy it without an exchange. Moreover, within this outermost limitation which is made by the comparative onerousness of the respective efforts, there is a second limitation of a similar kind. To pursue the same illustration, while I should never make an effort for another in return for his bringing the water, greater than that required to bring it myself, the return effort may be very much less than that effort, and may sink down to a point, below which I can get no one to bring the water for me. Suppose I estimate the effort required to bring the water myself as 10; and that there are

several persons who would be glad to do that service for me for a return service which I estimate as 8; and that there are two persons who are willing to do it for something which I estimate as 6; and that there is only one person who will do it for a return service which I regard as 5. It is evident that the extreme limits of the value of that service to me are 10 and 5. Higher than 10 it cannot go, lower than 5 it cannot sink. I should render the service estimated as 8, rather than forego having the water brought for me; but I shall render the service estimated as 5, just as long as there is any one person who will make the exchange with me on those terms. If he declines the exchange, I fall back on one of the two persons in the class above him, and value rises now from 5 to 6. It will be steadier at 6 than it was at 5, because there are two persons ready to render the service at that rate. If each, however, in turn should give out, I should then be obliged to fall back upon the larger class ready to serve me for a return service of 8. At this point the value would be very steady from the presence of numerous competitors anxious to serve me at that rate, and it could by no possibility rise above 10. Between 10 and 5 the value may fluctuate, but it cannot overpass these limits in either direction. Therefore we may say that the maximum value of any service in exchange is struck at the point where the recipient will prefer to serve himself, rather than make the exchange; and the minimum value of any service in exchange is struck at the point below which the recipient cannot get himself served. These two limits, it will be observed, are found in the two elements which we have called efforts.

But there are also limitations of value in the two elements which we have called desires. In the foregoing illustration, it is supposed that my desire for the water is all the while of uniform strength, and the desire of each of the three classes willing to serve me for the return service is uniform also, though each class makes a different estimate of the comparative efforts. Let us now suppose that the efforts on either side remain invariable, but there is a change in the element of desire. Any capacity in anything to gratify any desire of anybody is utility. For simplicity's sake, let us look only to the one man who was ready to bring the water for a return service which I estimated as 5, and suppose that he is the only man who will do me the service on any terms. Let now the utility of the water to me be increased, and let him know that fact, all other elements remaining as before, and he can crowd up the value of his service towards 10, according to the intensity of my desire. Of course he cannot crowd it over 10, but the limit below that will now be determined by the relative strength of my desire. On the other hand, if my desire be as before, and the two efforts as before, and his desire for my return service be increased, and I know it, and I the only man who can render him such a service, I can crowd down the value of his service below 5, according to the intensity of his desire. Of course I cannot crowd it down below a point, which we will call 3, at which, rather than continue his service at that rate, he will forego the exchange altogether. But value may vary between these limits, 10 and 3, according to the varying intensity of our mutual de-

sires. If it should so happen that both these desires, my desire for his service and his desire for mine, should increase simultaneously and proportionably, value would not be affected; the exchange would go on at the same rate as before. Or if both desires should diminish simultaneously and proportionably, value would not be affected. The same is true of efforts. If both efforts suddenly become twice as onerous, or one half as onerous as before, the desires remaining the same, the value of the two services estimated in each other would stand just as before. Thus we see that the natural limits of value, and all the variations in value, are to be sought for and will be found in the play and interaction of the four elements out of which value itself springs.

We shall now be able to understand clearly what is the one universal Law of Value, — a law applicable alike to all three classes of exchangeable things, and comprehending perfectly all variations in all values. This is termed the Law of Demand and Supply. *Demand is the Desire of purchasing something coupled with the Power of purchasing it.* In other words, demand is the desire of one person for something from the hands of another, who also desires something from the hands of the first, when both are willing to part with what they now have from that motive. *Supply is any exchangeable thing offered for sale against any other exchangeable thing.* These definitions are stated in the most general terms.

Now, as Value is always a resultant of four elements, and only four, all changes in value must be due to change in one or more of these elements relatively to the others; and the universal Law, which

shall account for the existence of value, and for its amount at both extremes and at all intermediate points, must be found in just these elements. These elements are expressed in the terms Demand and Supply. Market-Value is the rate at which services of all sorts are exchanging at the present time in the various departments of society. What determines that rate? What determines that corn is now selling in the market for one dollar a bushel? Two desires come in to determine it, — the desire of people for corn, and the desire of farmers for money. Two efforts come in to determine it, — the effort of farmers to raise and bring a bushel of corn to market, and the effort of people to secure one dollar in money. The presence of corn in the market, or its being ready to be immediately brought there and offered in exchange for money, constitutes what is called a Supply of corn; money offered, or ready to be offered, in exchange for corn, constitutes what is called a Demand. This is commercial language, and is sufficiently accurate, although it must be remembered that each commodity in reality constitutes a Demand for the other, and is a Supply in reference to the other. But, speaking commercially, the money ready to be offered for commodities is the Demand, and the commodities ready to be exchanged for money are the Supply. What, then, is the law of market-value? The law of market-value is the equation of supply and demand: that is to say, the rate of the exchange is adjusted when money enough is offered to take off within the usual times the commodities on hand. Demand and supply are thus equalized, and the current market-rate is deter

mined. If demand for any reason becomes quickened, and the supply not increased, there is competition among buyers for the stock in market, and market-value tends to rise. If demand becomes sluggish, the supply remaining the same, there is competition among sellers to dispose of their stock, and market-value tends to sink. So far it is the action on value of the element of desire, which expresses itself through demand. How far can this action go? Demand being increased, supply remaining the same, value rises: how far does it rise? In the *ratio* of the increased demand, say some; if the demand be one third increased, the value will be one third higher. By no means is this true. The value may rise far higher than that proportion, or it may not rise in anything like that proportion. It depends upon circumstances, and upon the nature of the commodity. We must remember that demand not only acts upon value, but value acts upon demand. As value rises, the number of those whose means or inclinations enable them to purchase at the new rate is constantly diminished. There are ten persons who may wish an article at one dollar, of whom not over four will wish it at two dollars, and perhaps only one at three dollars. Every rise in value then, under the influence of increased demand, tends to cut off a part of that demand, that is, to lessen the number of those who will purchase at the increased price; and the value will rise only to that point, whatever it be, where an equalization takes place between the supply and demand, between the quantity of corn, for example, offered at the enhanced rates, and the quantity of

money in the hands of those willing to exchange it for corn at the enhanced rates. Thus we see that every rise or fall of demand, and the consequent rise or fall of value, tends to check itself. An increased demand for any article or service, other things being equal, enhances its value; but the enhanced value in turn lessens the demand by lessening the number of those who will purchase, and the new market-rate is struck at the point of equalization between the old supply and the new demand. Just so, if demand is slackened, value declines; but declining value in turn increases the demand by bringing the article within the range of a larger number of purchasers, and the decline is arrested at the point of equalization between the new demand and the old supply, and a new market-rate is determined. Everything oscillates under the variations of demand, but the point of stable equilibrium, if I may use the expression of anything so unstable as market-value, the point of stable equilibrium is always the equation of supply and demand.

In the preceding paragraph we have supposed supply to remain unchanged, and have followed the law of value through the variations of demand, which, money being invariable, as is here supposed, expresses the element of desire. Supply expresses the element of efforts, and market-value varies with the variations of supply. We have seen that every rise or fall of demand tends to check itself, and will check itself even without variations in the supply; but it is commonly checked at an earlier point by variations in the supply. A brisk demand enhances value, and enhanced value commonly stimulates sup-

ply, and increased supply checks the rise. A slack demand lowers value, and lowered value commonly lessens the supply by the action of holders and speculators, — holders withdrawing their stock for a better market, and speculators buying now when the article is cheap, to store away till it shall be dearer. Thus rise of value from increased demand is doubly checked; first, by restricting the number of purchasers, and second, by increasing the supply: the fall of value from slack demand is doubly checked; first, by enlarging the number of consumers of a now cheaper article, and second, by diminution of supply by the action of holders and speculators. This law of the equalization of demand and supply, thus doubly and harmoniously working, is the most comprehensive and beautiful law in political economy. It is all-comprehensive. Its operation in the field of personal services and in the field of commercial claims, though perhaps less obvious at first, is equally certain and universal as its operation in the field of material commodities. But we must note the action on value of changes in supply only, demand continuing steady. If the supply be short, and cannot be increased at all, as is the case with choice antiques and certain gems and paintings by the old masters, value may rise to any point, and will be struck, as before, at the precise point of equality of the demand then existing with the supply there offered. The French government paid, in 1852, 615,300 francs for a painting by Murillo, which had belonged to Marshal Soult. The genuine Murillos are comparatively few, and their number cannot be increased, and their merit causes a strong desire to possess them,

and their value rises in consequence of the limitation of supply to a point beyond which no one purchaser can be found. When this painting was offered in Paris for sale, many parties were anxious to purchase it, but the equation of demand and supply was reached, and its value was determined only when one party distanced all other competitors and offered a sum greater than any one else would give. There was one painting; there could be but one purchaser; value rose under the influence of demand, and could not be checked by increase of supply; and the equation was complete when the demand was practically restricted to one party, and that the highest bidder. The same principle controls all sales of this sort.

If the supply, instead of being absolutely limited, can only be increased with difficulty, or after the lapse of time, similar but less extreme results will be observed. Suppose pianos are selling in any community at $300 each, and there are twenty persons in that community who wish a piano immediately and that there are but fifteen pianos on hand, and the number cannot be increased for six months. The value will rise above $300. How much above? To that point, whatever, it be, at which only fifteen of the twenty will be willing to purchase at the new rate. The equation of supply and demand will be reached by a rising value which cuts off five competitors This is the principle, working only roughly indeed in practice, — working only by the estimates and good judgment of dealers, — but the principle is this. A better illustration of this class of cases is, perhaps, the grains and other products of the earth

When these have been gathered there is no more home supply for a year. Any deficiency in the crops will raise their value, not at all in the ratio of the deficiency, but according to the relations of the diminished supply to a new demand. It will depend on the facility of importation, and other causes, but it has frequently happened that an estimated deficiency of crops amounting to one third has doubled and even quadrupled the usual prices.[1]

In the only remaining, and far more numerous class of cases, in which the supply of commodities and services can be readily and indefinitely increased, every rise and fall of value is speedily checked by the action of supply; and the comprehensive and harmonious law already referred to keeps value in this class of cases comparatively steady.

The general theory of value has now been given. In the light of it, we may see how wide of the mark are they, who regard the study of values as materialistic in contrast with what is personal and spiritual. Political Economy does indeed make the same distinction as the Roman Law does between a Person and a Thing; but it exalts the *person* as over against the *thing*, and finds its only interest in things as they stand related to persons. It adopts, in short, the definition of man as "an animal that exchanges." It is able to prove that exchanges are beneficial to men's physical, mental, and spiritual natures; and is consequently averse to anything that stunts the growth of men to their full stature as exchangers. It would guard the rights, preserve the morals, and exalt the dignity, of *men*, in order

[1] Tooke's *History of Prices*. Quoted by J. S. Mill.

that they may both render and receive the full benefits of all possible *exchanges*. While we shall find no case of value, or its variations, which our general theory does not cover and explain, we shall still find important principles which act in particular cases on Demand and Supply, and thereby must act upon Value. We have, then, now seen what Value really is; how it practically arises; the elements which alone can vary it; and the universal Law which limits it.

CHAPTER IV.

ON EXCHANGE.

The strength and safety of our conclusions in Political Economy are derived from the simplicity and certainty of the forces at work. No man has ever denied the great facts that lie at the basis of exchange. That men are possessed of desires, that efforts are necessary in order to meet these, and that satisfactions are the result, are propositions universally admitted. From these simple truths spring all the laws of our science. Efforts are exchangeable. One man may and does put forth the effort necessary for the satisfaction of another man's desire. But since the effort is not for himself but for another, and since to put forth efforts is not naturally agreeable to man, and never becomes so, except in connection with the satisfaction to which they minister, he will demand for his effort some corresponding effort made for him. This is a simple fact. No man will work for another for nothing. But he will work with alacrity and persistency in view of a suitable reward.

This reward is the return service whatever it may be, and thus it happens that society is one vast hive of buyers and sellers, every man bringing something to the market and carrying something off. We speak of the commercial classes, but all classes are

commercial. Everybody exchanges. You [illegible] thing for me, and I will do something for you, is the fundamental law of society. From this results the division of employments, and all the various professions. Every man brings his own product and exchanges with society as best he may. The farmer brings his produce — and exchanges. The mechanic brings the product of his skilled labor — and exchanges. The laborer brings his strength, and the teacher his knowledge, and they are ready to do service — for a consideration. The merchant, the physician, the lawyer, the clergyman, the editor, the lecturer, the singer, the actor, and so on to the end of the list, are all in position to render services to society, and justly expect to receive an equivalent service in return. Indeed, when we look out upon society, the most striking thing we observe about it is, that these exchanges are going on, in a thousand directions at once, determining all employment and professions, reaching everywhere and permeating everything, and all this the more rapidly and perfectly as knowledge and civilization advance.

The amount of these mutual services, as they are measured by money, in any progressive country, not to mention the world at large, is something amazing. This little State of Massachusetts, containing but 7,800 square miles, made of manufactured goods in 1875, $532,136,333 worth to sell. This was only a *part* of *one* class of salable things offered in one small State. The foreign commerce of the United States for the calendar year 1877, amounted to $1,176,000,000.[1] The foreign trade of Great

[1] Report U. S. Bureau of Statistics.

Britain for the same time, amounted to $2,978,355,000. All this represents but a small part of the traffic going on in these two countries in *tangible goods* alone. The volume of domestic trade in commodities is always many fold larger than the volume of foreign trade. The volume of *wages* of all kinds paid in these two countries in a year is a sum impossible to be ascertained. As a mere hint of the amount of transactions in *claims* in these countries, it may be said, that the average *daily* clearings of credit paper in the New York clearing-house alone from January 1, 1872, to April 1, 1878, have been just $78,000,000, and that the average daily clearings at the London Bankers' clearing-house alone are just about £20,000,000. Since, then, as a matter of fact, exchanges on a gigantic scale are going forward, not in the market-places only, but in every department of life; since men do constantly put forth onerous efforts to satisfy other men's desires in order to receive back from them the results of corresponding efforts in return; there must be in these exchanges some great GAIN. We now inquire particularly what this gain is. What is the motive that leads men universally to exchange?

The answer to these questions will bring us to the gratifying conclusion that the laws of exchange are based on nothing less solid than the will of God. The desires of men are not only various in kind and indefinite in degree, but also tend to increase in variety and extent by the progress of knowledge and freedom. To the gratification of almost all these desires, however, there are obstacles interposed, some of which are physical and some moral; and these

obstacles are so great in all directions, that the powers of the individual man are utterly incompetent to surmount them. They mock at his weakness, and throw him back upon his destitution. Without association with his fellow-men, there is no creature so helpless, so unable to reach his true end, as is man; and therefore it is, that the impulse to association is one of the strongest of our natural impulses. Men come together, as it were by instinct, into society; and, associating themselves together in a society, it is very soon discovered, not only that there are various desires in the different members of the community which are now readily met by coöperation and mutual exchange, but also that there are very different powers in the different individuals in relation to those obstacles which are to be surmounted. There is a vast diversity in natural gifts. One man has physical strength, with no mechanical ingenuity; another combines with a feeble body a wonderful knack for contrivance; a third has a philosophical turn, liking to examine into the laws of nature; and a fourth has a bent and genius for traffic. Now, then, Nature speaks in this diversity of gifts in as loud a voice as she can utter, in favor of such a degree of association and exchange as shall allow a free development of these varying capacities, while they work upon the obstacles to the gratification of men's wants which are appropriately opposite to them. Mr. Carey is right in his principle that the degree of individuality depends on the degree of association, each advancing hand in hand with the other; but he seems to me to be wrong while he lacks confidence in the natural forces at work tending

to the highest degree of association and consequently to the highest degree of individuality. There is no social force stronger than interest, and interest is driving society continually to exchange, and to a wider and wider application of the principles of exchange, that is to say, to a higher and higher degree of association, which allows of course a continually freer development of individuality. When interest fails as a motive power, at least in this department, it is vain to appeal to or to trust an inferior and factitious motive power.

It is interest that leads men to exchange. It is because a given effort put forth for another, in view of a return, realizes more of satisfaction than when put forth directly for one's self, that exchange ever takes place. Why does it realize more? BECAUSE THERE IS DIVERSITY OF ADVANTAGE BETWEEN DIFFERENT MEN AND BETWEEN DIFFERENT NATIONS, IN DIFFERENT RESPECTS. All exchange depends on diversity of relative advantage; and diversity of relative advantage exists by God's appointment among individual men, and among the nations. Reserving this national diversity for a later discussion, it is very clear that a diversity of advantage in different things displays itself as between the individuals of every community large and small. There is no village in which one man has not an advantage over his neighbors in the making of coats, another in the shoeing of horses, another in the curing diseases, another in the keeping a school; while each of those neighbors may have an advantage over each of these in some other art or avocation. This diversity of advantage in various directions depends, in every

advanced state of society, partly upon diversity of original gifts, partly upon concentration of personal effort upon the one set of obstacles that lie in the path of a single branch of business, and partly upon the use, and familiarity in the use, of the gratuitous forces of nature which lend their aid towards overcoming these obstacles. As the result of one or two or all of these, one man comes to have a legitimate advantage over others in his own branch of business, whatever it is; and the others come to have a legitimate advantage over him in their own branches of business, whatever they are; and if he has desires which their efforts can satisfy, and they desires which his efforts can satisfy, nothing more is necessary to a profitable exchange between them than this relative advantage at different points. The tailor and blacksmith can profitably exchange their respective efforts just as soon as each has a relative superiority to the other in his own trade, provided of course each has a desire for the product of the other; and the greater the relative superiority of each to the other the more profitable is the exchange to both. This is a point of considerable consequence, and will repay some pains in illustration. If the blacksmith can shoe horses only a little better than the tailor could shoe them, and the tailor make coats only a little better than the blacksmith could make them, there will be only a slight advantage in their mutually exchanging efforts. For the sake of definiteness, let us say, that the tailor's capacity in making coats is 6, and his capacity in shoeing horses is 5; and the blacksmith's capacity in shoeing horses is 6, and his capacity in making coats is 5. Each has a relative

superiority to the other of 1, and if they exchange, there is an advantage of 2 to be divided between them. Now let us suppose that each, by exclusive devotion to his own trade, by developing his latent skill and ingenuity, and by availing himself of all the forces of nature at his command, comes to have a capacity in his own business of 15, his capacity in the other business remaining as before at 5. Each now has a relative superiority to the other of 10, and when they exchange there is an advantage of 20 to be divided between them. The motive to an exchange, and the gain of an exchange, are ten times greater than they were before. Therefore we lay down the principle, as universally applicable to all exchanges, that the greater the relative superiority at different points, the more profitable do exchanges become. If this principle is just, and I flatter myself that it will be found to be just, it follows, that every man who has anything to exchange, is directly interested in the success of his fellow-citizens, that every trade finds its advantage in the increasing development of other trades, and that all discoveries and inventions by which Nature is made to pay tribute to any art is, restrictions apart, so much clear gain to the world at large. In the light of sound principles, what has been sometimes called the jealousy of trade is simply silly.

All exchange, then, depends on difference of relative advantage, because without some difference of relative advantage, each party could serve himself directly just as well as he could be served by the other party, and there would be no motive at all for an exchange. As soon as there is any difference of

relative advantage, there begins to be a motive for an exchange, and a gain as the result; and the motive and the gain become stronger and greater as the difference increases; so that the gains of exchange are the greatest in that state of society in which the freest opportunity is allowed to every individual to employ his peculiar powers in work for which he is best fitted, in which desires are so various and employments so diversified as to give a chance for all kinds of efforts, and in which men avail themselves to the utmost of those natural advantages and gratuitous powers which lie open to their disposal. Freedom, association, and invention, are the three things which make exchanges as profitable as they can become, and which will carry society, so far as exchanges can do it, to the highest pitch of prosperity. Of these by far the most important is freedom, because, where freedom is conceded, association and invention follow in time by laws of natural sequence. By freedom is meant the right of every man to employ his own efforts for the gratification of his own wants, either directly or through exchange. Each man's right of freedom is limited of course by every other man's right of freedom which he is not at liberty to infringe; and also, in certain respects, by what is called the general good, of which the judge must be the government under which he lives. Under these limitations, which limit in common all other rights, the right of exchange is just as much of a right as the right of breathing. It stands on the same unassailable ground. Every man has a natural, self evident, and inalienable right to put forth efforts for his own well-being; and whenever two

men find that by exchanging efforts with each other, they can better promote their own happiness, they have an indisputable right, subject only to the above limitations, to exchange; and it is a high-handed infringement of natural rights, a blow aimed at the life and source of property, when any authority whatever interferes to restrict or prohibit the freedom of exchange, except that act be justified by a solid proof that other private or public rights which are as well based as the right of exchange are infringed thereby.

Happily, since governments have become more enlightened than formerly, they perceive for the most part that they have no right to interfere with this natural right of their people, and also, that, by interfering with it, they would do them an incalculable injury. The only motive to a mutual exchange of services, is always and everywhere the mutual benefit of the parties. After every fair exchange, each party is richer than before, has more satisfactions, otherwise there would be no exchange. I esteem the service I receive more highly than the service I render, otherwise I should not render it. The man to whom I render it esteems that service more highly than the service he renders to me. We are both gainers. And since almost everybody in every community has something to exchange,— either service or commodity, and nobody exchanges except in view of a gain, it is clear that free exchange benefits everybody, and harms nobody. Moreover, under a system of free exchange, every man is allowed, under the stimulus of self interest, to follow the bent of his own mind, to work away at those obstacles to the

gratification of human desires which he feels himself best able to overcome, and to avail himself of all those helps in his work, of which Nature offers to him a full store. Under these circumstances, obstacles give way in all directions: the amount of material products produced and offered for exchange is vastly augmented; the number and variety and excellence of the services proffered is indefinitely increased; the diversified and rapidly increasing desires in such a community are readily met by exchange; all peculiar facilities are taken advantage of, and the difference of relative advantage becomes great in all directions, and a new day of industrial and commercial prosperity is ushered in. Under freedom all men have the greatest possible motive to produce, because they can dispose of their efforts to the best advantage. They can purchase with these efforts what they will, and when they will, and where they will. Thus freedom leads to extended association, and, speedily also, to the invention of machinery and all labor-saving appliances. Therefore, since free exchange indefinitely multiplies, in number and variety, the services which men may render to each other; since, by means of it, men's satisfactions bear a larger and larger proportion to their efforts; and since the only possible motive to an exchange is a mutual benefit of the parties, no reason can be given, no good reason ever has been given, why exchanges should not be the freest possible.

After long centuries of meddlesome and vexatious interference with the freedom of industry and the rights of exchange, by limiting the number of ap-

prentices to each artisan, by dictating what should and what should not be manufactured or grown, by attempting to determine what should and what should not be imported and exported, and by arbitrary burdens on certain classes, and arbitrary privileges granted to others, the more enlightened nations of the world have come at length to perceive that riches and power and progress are dependent on free exchange, at least within their own boundaries. Common sense reigns now, for the most part, in this thing, within the limits of the individual nations. When Bonaparte brought half of Western Europe under French dominion, the previously existing custom-houses and toll barriers of the interior fell as by a stroke, and free trade became the rule between French, Dutch, Germans, Italians, and Spaniards, — all who were subject to his sway. But when his vast empire was dissolved into its original independent kingdoms, up shot the custom-houses again, around all the petty frontiers, and each State was busy to reimpose on itself the fetters which his powerful hand had broken.[1] Just as if the benefits of exchange depended on the accident that the parties to it are subjects or citizens of the same government!

Opposed to free exchange are monopolies. A monopoly is a legal restriction imposed by the government upon the sale of certain services or commodities. This restriction is ostensibly laid for the benefit of certain persons or classes, and limits of course the competition to which they would otherwise be subject in their business, and tends therefore arti-

[1] Senior. Page 177.

ficially to raise the value of that which the privileged few offer for sale. If the view be limited to these persons alone, monopolies would certainly seem to be advantageous, but what of the purchasers and consumers of their wares? They all are obliged to pay a higher price for what, were it not for the monopoly, they could obtain at a cheaper rate, since the only object in laying the restriction, is to enhance the price for the benefit of those possessing the privilege. Monopolies, therefore, infringe the right of exchange, are unjust and odious in their nature, and are in practice abominable. Nearly all governments have been chargeable, at times, with successful attempts to make things thus artificially dear to the mass of the people. Queen Elizabeth called the power of granting patents of monopoly to her favorites "the fairest flower of her garden." Towards the close of her reign, her abuse of this power had reached an intolerable height, and some of the most necessary articles of life, such as salt, iron, calf-skins, vinegar, lead, paper, and many others, were in the hands of patentees, and could only be procured at exorbitant prices. In 1601, the House of Commons met in so angry and menacing a mood, in consequence of this abuse, that Elizabeth was obliged to promise at least, that the monopolies complained of should be abolished. The famous Act of Parliament of 1624 declares that all monopolies, grants, letters patent for the sole buying, selling, and making of goods and manufactures, shall be null and void. This Act effectually secured the freedom of industry in England; and in the opinion of excellent authorities, has done more to excite the spirit of in-

vention and industry, and to accelerate the progress of riches in that country, than any other in the statute book. The Act excepts, however, patents for fourteen years to the true and first inventors of new manufactures within the realm, and also the grants by Act of Parliament to any company, for the enlargement of foreign trade. Under this exception, the East India Company possessed, up to 1834, the exclusive right to vend tea in England. During the last years of this monopoly, and notwithstanding the quantities of tea smuggled into the country, the people of England paid more than $7,500,000 a year for their tea beyond the price at which tea of equal quality was sold, under a system of free competition, in Hamburg and New York. Opium is still, for purposes of revenue, a government monopoly in British India. In France, tobacco is a close monopoly in the hands of government for revenue purposes. It is noticeable that monopolies never realize to their possessors the full pecuniary advantage of which the public are robbed by their action. Thus, while Englishmen paid $7,500,000 *extra* annually for their tea, the Company, by their own showing, did not realize much more than half that sum from their privilege; owing to the inertness of their servants removed from the stimulus of competition. "The spirit of monopolists," says Gibbon, "is narrow, lazy, and oppressive. Their work is more costly and less productive than that of independent artists; and the new improvements, so eagerly grasped by the competition of freedom, are admitted by them with slow and sullen reluctance"

A second form of monopoly is that in which gov

ernments by restrictive duties try to exclude foreign competition in certain articles, leaving the domestic dealers open only to home competition. This is done in connection with, sometimes under color of, levying duties for revenue. Duties laid for this purpose, however, as we shall see more fully hereafter, are very different in principle, amount, and action, from those properly laid for revenue. They violate a natural right of exchange, as the others do not, and are always followed by injurious consequences. Sometimes the hope of unusual gains from producing an article whose foreign supply is thus restricted, seduces capital and labor from other profitable channels and concentrates them upon this business; and the home competition, thus artificially stimulated, becomes intense and feverish, the business is overdone, an element of distrust and unsteadiness is introduced, the weaker houses are ruined, and only the stancher firms tide over the depression consequent upon overdoing, and control the market for a while at a monopoly price. But the losses of home competitors; the losses of those who would otherwise have been foreign competitors; and especially the losses of those home producers who would have exchanged products with those foreign competitors, overbalance many fold these gains. Sometimes, again, home competition is even less active after the imposition of such duties; and then the manufacturers and dealers, relieved, in great measure, from the stimulus of competition, are less on the alert for improvements, less attentive to the quality of their goods, less compliant to their customers; and the consumers are obliged, not only to

pay a tax levied for the benefit of the monopolists, but also an additional tax on account of their want of enterprise and spirit.

Very different is the third form of monopoly, that involved in the granting of patent-rights and copyrights. Society does well in protecting, by law, inventors and thinkers in the sole use of their respective productions for a limited time. Otherwise, men would have less motive to think and to invent, since in that case only the public-spirited and the rich would or could devote themselves to an important branch of the public progress. A patent or copyright is merely a return service which society renders for a service received. It violates no man's right of property, as an ordinary monopoly does, but is a provision to protect a right of property. In the United States a patent lasts for seventeen years, and is not reissued. A copyright lasts for twenty-eight years, and may be renewed by the author, his widow, or children, for fourteen years longer.

A patent-right or a copyright, as the very name implies, is a species of property. It has sometimes been improperly called *intellectual* property, in contradistinction from *material* property, because the right is not embodied in any outward thing, but remains a *right* only. Political Economy has not hitherto given to this whole class of valuable things the attention that is undoubtedly their due; but we have seen that anything is property that can be bought and sold; and patent-rights and copyrights are constantly bought and sold, and therefore, are property; and they are property just as much as, and on the same grounds as, any material thing or

any personal service. Not all material things are salable, but only a part of them, and at certain times; not all offers of personal service are always able to find purchasers; not every intangible right is welcomed in the market; but whenever any of these, and just so far as any of these, and only because some of these, find a return service ready, do they become property. All three classes of valuable things, accordingly, find a complete unity in the idea of *property*. Also, since, when a material thing is rendered, a right to it is transferred from the present to the prospective owner, and when a personal service is rendered the purchaser has thereafter a right to what is thus purchased, and when a claim, or hope, or technical right of any kind, is bought, the buyer has now a new right of his own, — all three classes of salable things again find their unity in the idea of *rights*. They also find their unity in the idea of *services*. Again, they find a complete unity in the idea of *exchanges*. Lastly, they are unified in the idea of *value*. In their commercial and scientific sense, in which alone we have to do with them, these five words have just the same meaning. One or another of them is better than any of the rest in certain connections as emphasizing some aspects of what is at bottom *one* transaction. So the words will be used in these pages.

The points made in this chapter may be summarized as follows: —

1. *Exchanges are immense in amount as measured by money.*

2. *Exchanges always depend on diversity of relative advantage as between the parties exchanging.*

3. *The greater this diversity the more profitable exchanges become.*

4. *Exchanges should be free because they are natural and beneficial.*

5. *Governments are less guilty than formerly of curtailing exchanges.*

The great struggles of mankind in all history past have been around three points as centres: first, freedom of person; second, freedom of opinion; third, freedom of exchange. In consequence of the struggle around the first point, personal slavery has now mainly disappeared from the earth; in consequence of the struggle around the second point, the freedom of opinion, and especially of religious opinion, has gained great victories in all lands, although much remains to be done before its complete triumph is assured; while, in consequence of the struggle around the third point, one barrier after another has been thrown down, one monopoly after another has been conquered, until it is pretty generally acknowledged at present that freedom of exchange is just as sacred as freedom of person and of opinion, and the struggle will certainly never cease until the liberty of contract and delivery, subject only to conditions of morals, health, and revenue shall be international and universal.

CHAPTER V.

ON PRODUCTION.

While it is impossible to make discussions in Political Economy amusing, it is also impossible intelligently to conduct them without constantly coming to conclusions which are most cheering. We shall find a gratifying law underlying the operations of production, which demonstrates that God designed man to be a producer, and to produce under conditions of constantly increasing advantage. The world with its forces, and man with his motives, are so admirably constructed, that these conditions of increasing advantage cannot fail, under freedom, to redound to the benefit of the masses of men. We will first determine what production is, and then the cheering law that underlies it.

Every man who puts forth an effort to satisfy the desire of another, with the expectation of a return, is, in the language of Political Economy, a Producer. The Latin word *producere* means *to expose anything to sale*. Our derived word *to produce* means the same. The Latin poet Terence uses the expression, "producere servos," *to offer slaves for sale*. He did not mean to say that the person of whom he was speaking brought the slaves into being or transformed them in any way, but only brought them out to sell. We must rid ourselves at the outset of the notion, accordingly, that is apt to linger about this

word, namely, that it is only to be applied to forms of *matter*, that it means to *make* something, or to *grow* something, or at least to *transform* something, only. In common language, the growth of the farm is called *Produce*, but only when it is offered for sale, in which sense we speak of the *produce-market.* The fundamental meaning of the root-word both in Latin and English, is *effort with reference to a sale*, and this is the exact scientific sense in which I propose to use the word and its derivatives. *A product is a service ready to be rendered. A producer is any person who gets something ready to sell and sells it*, whether that thing be a commodity, a service, or a claim. Political Economy is interested in all classes of producers alike, and demands a fair field for every person who has *anything* to sell which is in demand on the part of others, provided first, that he do not cry his wares offensively in any way or infringe the right of anybody else to his own time and quiet, and provided second, that his solicitation and sale do not interfere with the public health, morals, or revenue. Production is blessed; but let no producer trifle with the interests of his fellow-men that are higher than his or their individual gain. Even Science, while claiming all its own field, may deprecate infringements in its name upon neighboring fields: —

"God speed the ship! — But let her bear
No merchandise of sin,
No groaning cargo of despair
Her roomy hold within.
No Lethean drug for Eastern lands,
No poison-draught for ours:
But honest fruits of toiling hands,
And Nature's sun and showers."

These lines of Whittier touch also incidentally upon the three requisites of Production. These are, first, Natural agents, including not only "nature's sun and showers," but all the forces and fertilities and agencies of free nature, that men may avail themselves of in preparing services to exchange with other men; second, Labor, — "the toiling hands," the inventive brains, the eloquent tongues, and the skilful manipulations of every name; and third, Capital, of which the poet's "ship" is an instance, — the results of previous toil reserved to help on some future sales. These three conspire in all production, and especially in all production of material things. Nature comes first with her gifts; present toil aided by the results of past toil does all the rest in production. Natural agents assist and sustain the processes, but they are not of equal rank in production with man and his efforts.

Production is always Effort, but it is not every kind of effort that is production. One of my boys is now playing the piano in the parlor; it is effort for him, — irksome effort, — but as he has no intention ever to sell his acquired skill on that instrument, it cannot be called *productive* effort. It is effort put forth for altogether other than commercial reasons. The effort of his music-teacher, however, who comes here to give him his lessons, is productive effort, inasmuch as it is put forth solely with reference to a sale. Efforts of all kinds that find their purpose and end in an exchange, are Production; efforts put forth for amusement, for self-improvement, for benevolence, for personal or family gratification, are not Production. Political Economy has to do with pro

cesses only as these are related to sales; and it makes no difference what kind of processes they are, if they have that design and issue.

I ought to notify my readers that this nomenclature is broader than that which has hitherto been current. Adam Smith confined production to the occasioning of changes in material objects. He gifted with the title of producer the farmer, the mechanic, the miner, the hunter, and fisherman, because they bring to the market a material commodity; and refused the honor of the term to those who render simple services, however essential. This is wrong. It proceeds from an inadequate analysis of value. That which is produced, that with which we have to do, is not matter but value. They who originate value are producers. But we have seen that value is not an attribute of matter, but a relation of services. The service may be employed upon matter, may be embodied in it, but what is really sold is not the matter, but the service; and services are all the time being sold, as those of the singer, the teacher, the clergyman, which have no connection whatever with matter. These services have purchasing-power, these persons originate value, and therefore, they are producers. Certainly, in an inventory of all values, a certain part would be found connected with material objects, but not the largest part. Our language must be broad enough to cover all the cases. Therefore, Production is the rendering of any service for which something is demanded in return.

Standing over against Production is its correlative Consumption. This word is derived from the Latin *consumptio;* and, like that word in Latin, has two

meanings in English; first, *wasting*, *destroying*, or second, *using*, *employing*. The second is the sole economical sense of the word, although many writers have not escaped the taint of the ambiguity. While many things that are purchased are destroyed as to form almost immediately, many other things that are purchased are not thus destroyed, while both classes alike by their sale are economically "consumed." Mr. Senior proposed as an improvement in nomenclature, the expression "to use" instead of the expression "to consume." But the words "to consume," "consumer," and "consumption," are too strongly intrenched in our science to be dislodged; corresponding words in French and Italian, though rather derived from *consummare* than *consumere*, are used economically and similarly; and all that is necessary in any case is to define and employ them with exactness. *To consume is to purchase anything. The consumer is the purchaser, or customer. Consumption is purchase.* I have said that consumption is the correlative of production, but only in this sense, that each party to an exchange is both producer and consumer; each is producer as having prepared himself to sell something, and each is consumer as being prepared to buy something. These words are correlative just as demand and supply are correlative. There is no production independent of consumption, and no consumption independent of production; and there is no need, accordingly, of treating consumption, as Wayland and Walker have done, as a separate branch of the subject.

Two things are here worthy of notice in passing.

First, how misleading is the old definition of Political Economy as "the science of the Production, Distribution, and Consumption of Wealth." To say nothing further of the irreducible word "wealth," this definition as used by the English school implies that "production" is one thing, "distribution" another, and "consumption" still another.[1] Professor Walker makes each of these distinct from the others, and "Exchange" distinct from all three of them. Not thus at all did the Physiocrats, who originated this expression, employ it. They made, as we have seen, the grand distinction, without which there can be no clear economic thinking, between *biens* (goods not sold) and *richesse* (goods sold). According to their fundamental notion, only products of the earth could be *richesse*. The person who extracted raw produce from the earth and sold it, was with them a *producer;* the person who transformed or transported this once or more, and then sold it, was a *distributor;* and the person into whose hands it came by purchase for final use, was a *consumer* or *consommateur*. Exchange accompanied each process, and well describes the whole process. They used the whole phrase, — "production, distribution, and consumption of wealth," — as indivisible, and never dreamed that their successors would tear it into confused *disjecta membra*.[2] Second, there is in the public, and particularly in the popular mind, a false estimate of producers in contrast with consumers, as if these were separate classes, and as if the producers,

[1] See, for the latest instance of such use, Professor F. A. Walker's *Wages Question* at the opening of Chapter I.

[2] See the third of Macleod's Cambridge Lectures for a fine exposition of physiocratic doctrine.

that is as it lies in their mind, the growers and manufacturers of material commodities, were more worthy of encouragements than the consumers of these products. This is very shallow. Farmers and manufacturers are no more essential to exchange than shippers and bankers. Even in this false sense of the word, where would the producers be were it not for the consumers? Where would production be at any one point were it not for production at other points, by means of which "to consume" the products of the first point? Where would labor be were it not for the *demand* for that which is wrought?

Now let us examine the underlying law of Production. Production is effort. But efforts are irksome. Is there, then, no way to lessen efforts, to make them less onerous, and, at the same time, more productive? Yes, thank God, there is! We may bring to our aid the gratuitous help of Nature! The world is full of powers which we may employ to facilitate our work. For example, at first people ground their grain by hand; and it was a weary, weary task to sit cramped at the mill all day, and turn, and turn, and turn.[1] The effort was great, and the result was small. At length it occurred to somebody that the weight of water would turn a wheel, and that the wheel might turn the mill-stones. Once thought of, the water-wheel was soon an actual fact. Instead of human strength, Nature works now, and what is better, works for nothing! Man's service is still needed, he feeds the hopper, tends the bags, but he does not ache so badly! Nor is this all. One day's labor is now vastly more productive. More grain is

[1] Exod. xi. 5; Isa. xlvii. 2.

ground, bread comes easier to the poor, and the wheel which free water turns blesses its millions with a cheapened product!

Let us take another illustration. The old hand-loom was the only means antiquity knew of for procuring clothing. The shuttle was thrown by human muscle. Every thread cost a throw. This work was mostly done by women. The word wife is supposed by some to have been first derived from the word *to weave*. While the slave woman sat on the ground, and turned the handle of the mill to grind the grain, the wife was exalted to the dignity of the loom, and worked away at the monotonous task, thread by thread, thread by thread. Doubtless the hand-loom was a great improvement on the earlier processes, and was itself gradually improved as the centuries went by, each improvement being the substitution either of a gratuitous force of Nature for an irksome human effort, or an easier process of art for a more laborious one. Every step of improvement was a lessening of obstacles with reference to a given satisfaction. All the way up to our present admirable machinery — the power-loom, which weaves, as if by magic, while a child can tend it — every step has marked a lessening of efforts relatively to utilities. The utility, the satisfaction, the yard of cloth, has cost less and less of human effort, not only to the producer, but, through exchange, to everybody. Accidental causes in different countries may interrupt this progress for a little time in any single direction, but the law will soon assert itself again in spite of these causes. And this progress, thus briefly illustrated in the two

cases of flour and cloth, has been going on, and is constantly going on, in all directions; more strikingly, perhaps, in the production of material commodities, in which the powers of Nature may be indefinitely applied by machinery, but at the same time there are no services of any kind which are not facilitated in some degree by the progress of knowledge and experience; and the benefits of this increasing advantage come home, through exchanges, to everybody; and, consequently, the satisfactions of all bear a larger and larger proportion to their efforts.

This, then, is the underlying and benevolent law of production, that God has placed freely at men's disposal such materials and forces in Nature, that, availing themselves skilfully of these, onerous efforts bear a less and less proportion to realized utilities. Men have a strong motive to substitute, whenever they can, force for muscle, machinery for labor. The farmer who used to cut all his meadow-grass with a hand-swung scythe, then rake it up with a hand-drawn rake, and then pitch it into the loft with a handfork, now mows and rakes and pitches with a machine. And it is a beautiful consequence of this law, that all improvements in machinery, all inventions, all substitution of Nature's forces for human labor, soon become the common property of mankind. Patent rights speedily expire by their own limitation, secret processes are sure to become known, and the competition of the different men who, under a system of freedom, will be sure to use these gratuitous helps, will compel each of them to sell their product at a rate graduated only by the actual human service rendered; so that, the liberal gifts of Nature, though

seemingly monopolized at first by ingenious men, are not long intercepted in their descent towards the masses of mankind. An invention of great merit even at first does not benefit the patentee alone; as a patentee, his interest leads him to lower the price of his product, to bring it within the reach of a wider circle of consumers; and so soon as the patent has expired, the benefit has at once a wider reach. The steam-engine, for example, has long been common property. There are, indeed, certain features of the more perfect engines still restricted in their manufacture by the rights of individuals, and this will always be so while invention continues busy, but the perpetual tendency in all inventions is from individual property towards a common right. And it is here in place to remark, that the application of machinery to all departments of production, and the introduction of improved processes of every name, can hardly in the first instance be prejudicial to any, and are sure ultimately to be beneficial to all.

What is the effect on values of these processes now made easier in all directions? Clearly, since value is nothing but the relation between two services exchanged, no effect at all is produced on values, if the improvements have gone on equally in all directions. Everything exchanges just as before. If the improvements have not gone on equally, then the value, that is, the purchasing power, of those products is diminished in whose production the improvements have been relatively greater. As the service has now diminished, the value, other things being equal, has diminished along with it. For such a service less can be demanded in return. The

utility of the product, on the other hand, that is, its capacity to gratify desire, remains as before. A less effort produces the same utility. The portion of effort thus set free, however, is not probably idle. It will be still put forth to create a larger number of products of the same kind, each one of which indeed has less purchasing power than before, but the aggregate value of which is much greater than before. For example, when machinery is employed in the making of gloves, which before were cut and stitched by hand, the value of a pair of gloves, estimated in anything whose production has not been altered by a similar improvement, will infallibly decline; but the aggregate value of all the gloves made in the establishment will be greater than before, because otherwise there would have been no motive to introduce the machinery. Does, then, the machine originate value, contrary to the doctrine in the chapter on value? Not strictly. The machine originates utility, since each pair of the now increased number of gloves has the same utility as a pair of the former fewer number; and the maker is able to render a service to a greater number of persons than before; and it is true, that, for a time, especially if the process be not yet generally applied in glove-making, before value has a chance to adjust itself to the new state of things, he will realize extra gains; he will obtain, in part, the old price for his product, and it would seem, in this case, as if the machine created value. Nevertheless, it is only a transitory state of things. Just as soon as machines come to be generally employed in the business, value adjusts itself, through competition, to the real human service ren-

dered, and the extra gains of the first operators are cut off. The gain of the reduction has now become permanent to all consumers of gloves. It is this interval between the old price and the new which gives to producers the margin for their enterprise, and a sharp spur to invent and adopt improvements. The improvements once become general, the gain redounds to the whole community. The value then of all services which have been facilitated by improved processes, is constantly being lessened relatively to services not equally facilitated; and here we gain the first glimpse of a truth, which will afterwards appear in the clearest light, namely, that the value of commodities tends to decline as compared with human labor, and therefore, that there is inwrought into the nature of things a tendency towards the elevation of the masses of men in a scale of comforts.

A leading proposition of production is the following: — *Production may go on indefinitely in all directions without ever a fear of reaching a general glut of products.* This proposition was first fully developed by Say, in the fifteenth chapter of his well-known treatise on "Political Economy," and the proof of it, and some of the consequences of it, are well worthy of our attention. I shall put the proof of it in this form: the desires of men which the efforts of other men can satisfy, are unlimited in number and indefinite in degree; and therefore, mutual efforts can continue to be put forth in exchange, until these unlimited and indefinite desires of all men are all met — a goal which never can be reached. This proposition demolishes at a stroke the fallacy which

pervades Dr. Chalmers' book on "Political Economy," namely, that the universal market is limited, and therefore, were it not for the unproductive consumption of the rich and luxurious, and the equally unproductive consumption of wars, there would soon be a general glut, and production must cease for the lack of a vent for its products. What constitutes a market for anything? This, that somebody desires the service thus offered, and is willing to render a return service acceptable to the offerer. Only two things can limit the universal market, first, a lack of desires, and secondly, a lack of return services. But there can be no lack of desires at any time, and there will be the greatest plenty of return services where production is most busy and most universal. Therefore, again, no general glut of products is possible to occur. A truth which we have already seen in another connection, reappears here as a consequence of this proposition, and will reappear again and again, namely, that all persons are interested commercially, as well as morally, in the prosperity of other persons, and each nation which has anything to exchange, is directly interested in the prosperity of all other nations; because the more production everywhere, the better market everywhere. A market for products is made by products in market.

But while no such thing as a general glut of products ever did, or ever can occur, a glut in respect to certain services is very common. Through want of foresight, or miscalculation, particular services are offered in too great abundance, or of a kind not adapted to the demand, and in respect to these the market is truly said to be glutted. This frequently

happens with editions of books; more copies are printed than can be sold at remunerative prices. Also when fashion changes, the goods which were fashionable, but are so no longer, are apt to be in excess of the demand. The only precaution that can be taken to avoid losses of this character, is the cultivation of foresight, by studying as accurately as possible the nature of human desires, and the changes that have been observed to take place in them. This constitutes mercantile sagacity; and the most successful producers in all departments are those who best develop this sagacity, who adapt their services to the existing and coming demand, who, to excellence in the substance of their services, add taste and attractiveness to their form, who tend rather to lead the fashions for the many than follow in their wake. The field of production is like the billowy and heaving sea: to navigate most successfully requires foresight, a wise courage, a power of adaptation to varying circumstances, skill to veer and tack when the wind changes, and a will to run before a favoring breeze with all sails set. Production, as a general rule, is no dead level of monotonous exertion; since its sphere is life with its wants, man with his desires; and there is scope for the development of ingenious mind in almost all of its departments. Since all exchange is due to the diversity of relative advantage, whoever develops his powers of observation, of application, of adaptation, to a higher point, and avails himself more skilfully of all peculiar facilities, will reap a larger share of the harvest of exchange.

The immense increase of production, and the su-

perior perfection of products consequent upon what he calls the Division of Labor, was fully pointed out by Adam Smith. The chapter in which this author treats of the division of labor, has always been the most famous, and is still one of the most interesting in the "Wealth of Nations." We have already seen how exchange is stimulated and made profitable by the diversity of employments, and by the application of all peculiar gifts to the corresponding obstacles which lie in the path of production: this is the more general truth of which Adam Smith's principle of the division of labor is a specific part. He means by this term the dividing up of a process or employment into particular parts, so that each person employed can devote himself wholly to one section of the process. The proposition is, that by means of the division of labor, the processes of production are vastly facilitated. He cites, as an illustration, the manufacture of pins. One man draws out the wire, another straightens it, a third cuts it, a fourth sharpens the points, a fifth grinds it at the top for receiving the head. The making the heads consists of two or three distinct operations, each confided to a single person. The remaining processes are similarly divided up, and the result is, according to Dr. Smith, that in a single establishment, employing only ten persons, 48,000 pins are made in a day, while if each man went through all the processes himself, he could hardly make twenty pins a day, or two hundred for the whole establishment. Perhaps a more striking illustration of the division of labor may be found in the art of watchmaking. According to evidence brought before a

committee of the British House of Commons, there are one hundred and two distinct branches of this art, to each of which a boy may be put apprentice; and when his apprenticeship is expired, he is unable, without subsequent instruction, to work at any other branch. The watch-finisher is the only person, out of the one hundred and two, who is able to work in any other department than his own. The causes of increased efficiency imparted to production by the division of labor are reduced by Dr. Smith to three: —

1. The improved dexterity, corporeal and intellectual, acquired by the repetition of one simple operation.

2. The saving of the time which is commonly lost in passing from one species of work to another, and in the change of place, position, and tools.

3. The invention of a great number of machines which facilitate and abridge labor in all its departments. Because the simple task which complete division of labor gives to each operator is precisely what machinery may most easily be made to perform, and what the operator, if intelligent, will be most likely to devise machinery for. Add to these advantages of the division of labor these other: —

4. The saving of the waste of material, partly as the result of this improved dexterity; and frequently, also, as the result of the shorter time required to finish up the product.

5. The more economical distribution of labor by classing the operatives according to their strength, skill, and experience. The easier parts may be performed by women and by children, whose labor is

less expensive; the ruder parts by ruder hands; and only the more difficult processes by the most skilful workmen, who must be highly paid. Next to the first, this advantage is the most important.

6. There is a saving in tools. The various implements, being now in constant use, yield a better return for their original cost; and therefore their owners can afford to have them of a better quality, and this, too, facilitates production.

7. It brings the producers and consumers into more intimate and safe relations. The division of labor between the wholesale and the retail trade is of great advantage. The retailers know their local markets, and supply them without loss or waste from the wholesale reservoirs. The wholesale reservoirs neatly control the various streams of production, according as demand is slackened or intensified. Thus, for example, a large city is daily supplied with fresh meat, without the loss, perhaps, of a hundred weight.

There are some disadvantages resulting from this division of labor: —

1. The work becomes in some departments monotonous and irksome, while some variety of occupation would afford relief by employing different muscles, or different faculties of the mind.

2. There is some tendency to dwarf the mental and corporeal powers, through exclusive attention to one part only of a complicated process.

3. When this part has been learned, and long made the means of a livelihood, a person has less power to adapt himself to change of circumstances, and becomes too much dependent on the continuance of the business in that form.

The degree to which the division of labor can be carried, depends in part upon the extent of the market, and in part upon the nature of the employment. To recur to Dr. Smith's illustration of the pins: if the market would only have received 24,000 pins a day from that establishment, instead of 48,000, the division of labor could not have been carried to the same extent, because if it had been, the men would be idle one half the time. In that case, some of the men would be dismissed, and some of the separate processes be combined, and production would be less efficient from the limitation of the market. Production, therefore, is most profitable when the market is broad enough to allow a full division of labor, and complete employment to all the operatives; and, the market being presupposed, is more likely to be profitable in large establishments than in small; because, (1) the division of labor can be carried to a fuller extent; (2) more perfect machinery can be afforded; (3) relatively less superintendence is required; and (4) the scraps and ends of a large business are frequently of sufficient importance to justify one or more subordinate branches of business in connection with the main business. For example, a large saw-mill may profitably furnish lath as well as lumber, since the refuse boards and slabs may go to lath. A wholesale butchering establishment of neat cattle might profitably have, in connection with the sale of meat, a tannery to dispose of the hides, a comb manufactory to dispose of the horns, a glue manufactory to dispose of the feet, a stall for the hair, which is useful in plastering, while the offal might be chemically disposed of in fertilizers.

The nature of the employment also limits the degree to which the division of labor may be carried. Agriculture, for instance, allows less of this division than most other departments of production, because its various operations cannot, from the nature of the case, become simultaneous. When the sowing is once done, the producer must wait some months upon Nature, till his agency is again required in the reaping. This fact, that agriculture can be less facilitated by the division of labor, and by the use of machinery, than most other departments of material production, constitutes one ground of an important truth, which we shall hereafter perceive stands also on another and firmer ground, the truth, namely, that agricultural products tend constantly to rise in value as compared with other commodities.

If, in this chapter, attention has been more strongly drawn to commodities than to the other two classes of valuable things, it is not because the man who sells a mere effort is less a producer than a farmer or a manufacturer, nor because a banker, for example, is less a producer than either of them. It is because the principles are more readily seen and simply illustrated in the production of material things. The same principles apply equally to mere labor and the sale of intangible rights. We can see their application to these, however, better at a later stage of our inquiries. Labor will be considered at length in the next chapter; and Credit, which best represents the whole class of technical rights, will be fully treated still further on. In the mean time, the propositions of this chapter may be summarized thus:—

1. *Production is the getting something ready to sell and selling it.*

2. *All production is facilitated by God's free gifts: production grows constantly easier.*

3. *Inventions increase production, but tend to lessen the value of particular services.*

4. *There can be no glut of general services.*

5. *All production tends more and more to specialties.*

CHAPTER VI.

ON LABOR.

It is a curious thing, and one that draws after it very important consequences, that physical labor consists simply in moving things. When a man works with his hands, all that he does, or can do, is to produce a series of motions. Human muscles are only capable of two things, namely, producing motion, and resisting motion. All the marvellous results of human labor in all the world, have flowed from so simple a matter as the contraction and expansion of muscle. Work is motion, and weariness is weariness of muscle. The world of materials is so cunningly constructed, that, when they are moved into right position the powers of Nature do the rest, and objects of utility are the result.

When the pioneer fells a tree, he moves his axe through the trunk, and then the power of gravitation seizes the tree, and brings it to the ground. He produces a series of motions upon the tree, but the final motion, by which the century-girdled oak comes crashing to the earth, is not of his producing. Nature does that. Wool, cotton, and flax, have by nature a certain tenacity of fibre. Man moves these fibres in certain relations to each other by an instrument called a spindle, and the result is thread. Then the threads are moved in certain relations with each

other by an instrument called a shuttle, and the result is a web of cloth. The tailor moves his shears through the cloth, and then his needles, and the result is a coat, — the object of utility for which all these processes were gone through with. The farmer first moves the ground, then moves his seeds into it, moves his sickle through the standing corn, moves his corn to the granary and mill, moves his meal from the mill to the larder, at which last point the housewife begins to operate upon it in a new series of motions. She moves the meal to the kneading-trough, and, having well moved it there, moves it to the oven, and, from the oven, after due interval, moves it to the table, beyond which point it is not needful for us to follow the process.

Physical labor, then, is, and can be, nothing but this, *an effort, by which materials or implements are moved with reference to a given result.* Nature furnishes all the materials, and all the primary qualities of which we avail ourselves in production. She coöperates at every step. We pay her absolutely nothing for all she does. All we can shirk off our own shoulders, and throw upon hers, is so much clear gain. And it is a most happy circumstance that this is being done more and more completely in the production of nearly all commodities. Nature is good, to use a commercial term, for all she can be made to carry.

Now, since motion is the only thing which man is required to furnish in the production of commodities, he naturally looks around for helps in this matter. The first thing he lighted on, as a help to produce motion, was the domestic animals. The ox, the ass,

the horse, were doubtless domesticated in the very beginnings of society. Men want these animals to produce motion for them — simply that. And as they can be used in so many different places, and for such a variety of purposes, and are so cheaply reared, they are exceedingly convenient as a motive power, and will probably never be superseded. The discovery and application of the great motive powers of water and steam have scarcely occasioned a lessened demand for the earlier and humbler motors, oxen and horses. Some of my readers will probably remember the time, when the introduction of railroads was opposed by some people, on the ground that the value of horses, and the business of teamsters would thereby be destroyed. Experience has demonstrated in this case, as it does in all similar cases, that improved machinery, and improved facilities of all kinds, so far from harming any class of persons permanently, are likely to be a gain to all classes of persons. At least, they only are harmed, who stupidly hold on to the old methods.

Labor, having employed from a very early time as a motive power the domestic animals, secured after a while, as inanimate auxiliaries, the water-wheel and the windmill; and, much later, the steam engine. It is a point that has scarcely been noticed, even if it has ever been noticed at all, that all these auxiliaries, whether animate or inanimate, produce simple motions of the same kind as, and only supplemental to, the motion produced by a human arm. The most ponderous engine merely reduplicates that which the arm of a child is capable of; while in point of delicacy and firmness of touch, perhaps no

machinery has yet been devised which can subdivide and apply this motion as skilfully as the human fingers can. It is said, that some of the lace made wholly by hand, is finer and more delicate than any yet woven by machinery, although the introduction of machinery into lace-making has cheapened the product, according to Dr. Ure, to about $\frac{1}{50}$ of its former cost. What we call power, then, however produced, is simple motion. But in order to subdivide these motions and apply them to the various purposes of production, implements of all sorts are needed, and implements, as we shall see in the next chapter, are always the gift of capital. But no power however mighty or however delicate, and no implements however perfect, can ever dispense with some portion of human labor. Not until machinery can be taught to think, to adapt means to ends, will human labor cease to play a chief part in production. These therefore, are, and always will be, the three requisites of material production: LABOR, POWER-AGENTS, CAPITAL.

Besides physical labor, there are the various forms of mental efforts put forth by men to satisfy the desires of other men, and with reference to a return. So far as exertion, physical or mental, is put forth for amusement, or for a pure benevolent motive, it has nothing to do with Political Economy. *It is only exertion which demands for itself something in exchange, that is technically labor.* Labor, which is primarily mental, such as most professional labor, the labor of the editor, the teacher, the architect, has of course little connection with motion or with commodities. But it is not on that account less

useful or less valuable. The exchange of simple services depends on the same principles, gives rise to the same phenomena, and is amenable to the same science as all other exchanges. One man, as the violin-maker, offers services in which a commodity intervenes; another, as the violinist, offers services in which no commodity intervenes; each has gained in his own art a point of relative advantage as compared with other men, and these doubtless have gained some point of relative advantage as compared with them; each, by the sale of his respective service, meets some desire of the buyer, and is paid on the same principle as the other. The violin-maker of Cremona, who sold his instruments for five hundred francs apiece, was no more and no less a laborer, in the language of our science, than Paganini, who sold an hour's playing in the theatres for five thousand francs.

Labor, then, is any personal effort, physical or mental or both, professional or skilled or common, stated or occasional or casual, put forth in view of a return service and for the sake of it. The Chief Justice of the Supreme Court of the United States is, in the language of our science, just as much a *laborer* as the Irishman who is cutting sods in plain view of my window at this moment. The annual salary paid to the one is just as much *wages* as the daily pay rendered to the other. The Irishman indeed is employed and paid by an individual, while the judge is employed and paid by the whole people of the United States, but that makes no difference between them as laborers and wage-receivers. Professor Walker[1] inquires with much pains-taking

[1] *Wages Question*, p. 206 et seq.

fter the "wages-class," and, after many exclusions, finds but one, and that comparatively a small one: I, too, find but one, but that a large and all-comprehensive one. The scientific advantage of his distinction between the "salary-class" and the "wages-class," and of his other distinctions in this connection, I confess I cannot see. If a man sell a commodity for money, the return service is its *price;* if he sell a personal service for money, the return service is his *wages;* and if he sell the use of a credit-right or of any form of capital, the return service is his *profit.* We shall regard the laborers-class and the wages-class as identical; although for convenience' sake we shall make a rude distinction among laborers a little further on.

Now, the value of labor in all its grades depends on just the same condition as the value of commodities, namely, *on reciprocal demand.* Desires and efforts rule here as everywhere else within the sphere of Exchange. The laborer in every grade from the hod-carrier to the president is able to sell his service, because there is somebody else who wants that particular service and is willing to render in return what the laborer wants. The labor-giver works for a reward, and the labor-receiver finds his return for that reward in the labor itself. This reward is wages, whether received in money or in any other valuable thing. The value of the labor is the wages, and the value of the wages is the labor. It is the old case over again. It is a true and free exchange. Society is so constituted — it always has been and always will be — that most persons, either in their individual or in their collective capacity, require the personal ser-

vice of others, and are able to render a satisfactory return service. Most persons are at the same time or at some time both labor-givers and labor-receivers in relation to different persons, — both wages-takers and wages-givers. For example, as a teacher in a public institution, I am a laborer, and consequently a wages-taker; as employing a gardener in the summer, a domestic throughout the year, and at times a physician for my family, I am also a labor-receiver and wages-payer. The commonest day laborer is also at times a wages-payer. He, too, must have his doctor when sick, and, if a church-goer, contribute something for the support of the preacher or priest. There *is* no class of wages-takers only.

Since *desires* and *efforts* determine the value of labor just as they determine the value of everything else, and since first principles really control everything, because chance effects happen now on one side and now on the other, and leave the great working forces unaffected, it is important to notice that laborers, in order to be successful as such, must study the desires of the labor-takers, and adapt their service to the wants of those from whom their wages are to come. This is the first and most important point in the doctrine of wages. The more perfectly the desires of wages-payers are met on the part of laborers, the higher, so far forth, will be their wages and the more secure their employment. The wise laborer is he who studies his *market*, who adapts his effort to present and prospective *wants*, who makes himself necessary to his employer by the excellence of his *service*. That laborer will be the last one dis-

charged. That laborer's high wages will not be grudged by the payer. It is, then, the *demand* for labor, that is, *the desires of men which the personal service of other men can fill*, that is first in order in a discussion of wages. These desires are originally very various, and they become more varied and sensitive as civilization advances; they become exacting and precise within many branches of industry; and they become scrupulous within many fields of personal gratification. Hence, intelligence and skill and patience and moral character are required in successful laborers of all grades. These desires are to be met, if at all, by an intelligent adaptation to them of *personal services*. Political Economy, accordingly, calls on its toilers, not for muscular exertions only, but for mental activities also, and for the moral virtues as well, that the toilers may meet the wants of even the most fastidious, and receive their reward. It calls for the trained eye, the skilful hand, the willing and waiting effort, the comprehension that sees what is needed, and the honesty that keeps nothing back. Economics are far enough from being materialistic: they are both human and humane.

While the *demand for labor* is first in order as determining wages, the *supply of laborers* is correlative with that as the next most important element. The value of labor, the value of commodities, and the value of claims are each controlled by the grand law of Demand and Supply; and it is now our task to indicate some of the causes that affect the law of demand and supply of labor, and thus indirectly affect the law of wages. So far as the *supply* of

labor is concerned, the first interest of every laborer is to be able, so far as it is possible, to furnish a service *peculiar* to himself and *better* than anybody else can furnish. Instead of herding with other laborers of the same general grade, and being content with rendering a service *averaging* with theirs, his cue should be, to be able to do something better in some respects than any of them can do it. So he is sure just to meet the want of some wages-payer. So as a laborer he stands on *his own* legs, and so far forth is able to dictate his own wages, that is to say, to sell something peculiar to himself to another who prizes its quality. The more the laborer can put into his service something that is *unique* in the way of excellence, the more sure he is of constant and remunerative employment, partly because he is sure to find somebody who wants such a service, and partly because he is exempted from the competition of others less acceptable than himself. This point has been, perhaps, more often illustrated in the higher grade of professional labor, as in the case of John Sartain, the engraver, Charles O'Conor, the lawyer, and Meissonier, the painter; but the opportunity of this advantage is open to every laborer in every grade of effort; and there is no other thing so important to the welfare of the laboring class as that each laborer shall feel that he is one by himself, that his service is and is to be *his own* to sell, and that he is bound to make it in some way different in excellence from that of his competitors. For example, a *courteous* laborer is always preferred to a rude one, a *conscientious* to an unprincipled one, a *skilful* to an awkward one, a *steady* to a restless one

a *contented* to a dissatisfied one, one *interested* in his work to make it better to one who already thinks he knows it all. This point bears intimate relations to the *supply* of laborers; and, were it attended to, as it might be, by all laborers, would make their *competition* for employment a different thing from what it is at present; it would give such an individuality, such a variety, such an excellence, to personal services, as would adapt them to the almost infinitely varied market, and take away the curse of conglomerated competition.

A rude classification of labor may be made into *common*, *skilled*, and *professional* labor. Common labor is that which can be acceptably performed by an ordinarily competent person after a little practice and instruction, without anything corresponding to an *apprenticeship* as a preliminary. Farm laborers, railroad laborers, 'longshoremen, teamsters, porters, miners, and many more, belong to this class. Wages are usually the lowest and steadiest in this class, because, owing to the ease with which the class can be recruited at any time from growing boys and immigrating foreigners, the supply is kept constantly large relatively to the demand. Skilled labor, namely, that of those who have had to pass through something equivalent to an apprenticeship in order to be able to offer their services, presents some points of difference from common labor. In the first place, their numbers are fewer, because comparatively few parents can afford to give their children the time and the money needful for them to learn a trade, or to become skilful in any art requiring education; and, as a result of this, their wages

will rule higher than common wages, because the press of competition will be less felt among them, and because, being more intelligent and consequently mobile, they can better insist on their claims, and can better distribute themselves to points where their services are in demand. In the second place, they are more likely to be subject to a strong demand than common laborers are, on account of the close connection of their labor with special accumulations of capital. Professional labor is the highest form of personal services rendered for pay, because it involves the most of time and expense in the way of preparation, because it is most often connected with high natural abilities and genius, and because for these reasons it receives the highest remuneration, or wages.

It is not pretended that sharp lines can be drawn between these three kinds of labor, nor indeed is it needful in any discussion of wages. We mean by professional labor the services of those who have received a technical education, — something more than an apprenticeship, — expressly to fit them to render these services, and who have the requisite character, talents, and genius to enable them to succeed. Clergymen, physicians, lawyers, literary men, artists, actors, and many more, render professional services loosely so called. The obstacles at the entrance to this path occasioned by the lack (1.) of appropriate natural gifts, or (2.) of the requisite industry and character, or (3.) of the means of a suitable education and training, practically exclude so many persons, that the competition in the higher walks of professional life is not such as to prevent a

large remuneration for services rendered. The demand for these is often peculiarly intense, as well as the supply peculiarly limited. When great interests of property, of reputation, or of life are at stake, it is felt that the best men to secure these must be had at almost any price. Fees and rewards for services of great delicacy, of great difficulty, or great danger, are paid by individuals and corporations and nations without grudging. Comparatively few men reach a high point of excellence in their respective professions, and they have in consequence a natural monopoly in these fields of effort, and receive for their labor a very high rate of wages.

Why could Daniel Webster demand a fee of a thousand dollars for attending to a single case in court, Paganini a like sum for an hour's playing on a violin, and Jenny Lind at least as much for an evening's singing in a concert? Because there was in each case a strong demand for a peculiar service, and only one person in the whole world who could render that service, at least in the same perfection. The demand was large, the supply was small, and the value consequently great. The highest efforts of professional skill will always receive a high reward, whenever there is one person even, who, together with a strong desire for the product, has also the power to give a service in return; and especially whenever there are many persons who have a similar desire and power, to whom, as in the case of Paganini and Jenny Lind, the service can be rendered in common without lessening the satisfaction of each individual. That the supply is small in these higher regions of skilled effort, is due partly to

the fact, that Nature is not lavish in her gifts of peculiar talents, and partly to the fact, that those who have received have assiduously cultivated them, and have reached in consequence a high point of relative advantage. These persons have what may be called a natural monopoly in their respective fields of high effort, because there are few others who have the natural gifts and the acquired skill which enable them to come in competition with them. But the objections which lie with such force against artificial monopolies, cannot be urged at all against a natural monopoly; for, if the road to excellence be open to all, and no artificial obstructions thrown in the paths of any, there is no blame but rather praise for him who distances all competitors, and demands for services of peculiar excellence a large remuneration. Exchange rejoices in all diversity of advantage that is the birth of freedom, but reprobates with all her force advantage that is gained by artificial restrictions, because artificial restrictions always infringe on somebody's right to render services for a return; and the right to render services for a return is the fundamental conception in the right of Property.

Within the great law of Demand and Supply, there are some minor principles, which go to vary the wages of all three kinds of labor, mainly through their action on Supply. We will now consider these, before passing to the discussion of what constitutes the demand for skilled and common labor. Several of these principles were mentioned by Adam Smith and in connection with them I shall present others of no less importance.

1. The agreeableness or disagreeableness of the employments will have an influence in determining the rate of wages paid to those who engage in them. The more agreeable employment will attract the larger number, and will experience in consequence the press of competition, and the rate of wages will be lessened by the increased supply of laborers. The more disagreeable employment will feel less the pressure of numbers, and will secure, other things being equal, a higher rate of remuneration in consequence. Among the elements which, in spite of the diversity of natural tastes, make any employment agreeable or disagreeable to the laborers, are (1) the less or greater exertion of physical strength required, (2) the healthfulness or unhealthfulness of the labor, (3) its cleanliness or dirtiness, (4) the degree of liberty or confinement in it, (5) the safety or hazard of the employment, (6) the esteem or disrepute of it in public opinion. To illustrate each of these in order, the stone-mason, the glass-blower, the scavenger, the factory operative, the worker in a powder-mill, the smuggler, will each receive a larger compensation owing to the peculiar element of disagreeableness involved in his employment; and he will be able to demand and secure it through the action of the disagreeableness upon the supply of such laborers. Of all these elements, public opinion is perhaps the most operative; and if this be favorable to an employment, and some social consideration be attached to it, and only common qualifications be required for it, the wages in it will infallibly be low. This is probably the main reason why so many young women prefer to teach,

rather than be employed in mills, shops, or offices, and why the wages of female teachers are so pitifully low; although each of the elements of agreeableness specified above may also contribute something towards the same result. If a business be decidedly opposed to public opinion, it must hold out the inducement of a large reward, or nobody will engage in it. This explains the abnormal gains of the slave-trade, the liquor-business, of gambling-houses, and of lotteries.

2. The easiness and cheapness, or the difficulty and expense, of learning different employments, will have an influence on the rate of wages paid in them. The more quickly and cheaply one can learn to perform the duties of a place satisfactorily, the less, so far forth, will be his wages; because there will be many who will compete with him in rendering such services; the more time, difficulty, and expense involved in learning a business, the larger, so far forth, will be the wages secured by it; because fewer persons have the means, the foresight, the patience, to prepare themselves for such an avocation. This is the principal ground of the difference in the wages of skilled and unskilled labor. The artisan has, at least, given time, and the professional man has given both time and money, to fit themselves to render the services which they now offer to society; and it is right, therefore, for them to demand a higher rate of compensation than is accorded to operatives and common laborers. But a right to demand does not always carry along with it an ability to secure: in this case it does, through the reduction of numbers which these obstacles at the entrance occasion, and the consequent weakness

of competition. To put a boy apprentice to a trade, requires on the part of the parents a foresight, an ability to get on without his immediate help, and sometimes an amount of money for his board and clothes, which all parents do not possess; and consequently, the number of skilled artisans, who must learn when they are young if at all, are relatively few compared with common laborers, and are able to realize a much higher rate of wages than they. In the professions, if we confine our attention to those persons who are thoroughly trained for them, we shall find a higher rate of compensation still, and one made higher on the same principles; although we must here bear in mind the counter-working influences which tend to increase the competition in the professions, namely, the respectability which attends them, the desire of knowledge for its own sake which is gained in connection with them, the instruction wholly or in part gratuitously offered to those in course of preparation for them, and the desire to do good, without regard to pecuniary reward, which actuates many who enter upon them.

3. The constancy or inconstancy of employment is a consideration that affects wages. If the employment be such that it can only be carried on during nine months of the year, the wages of the day or month will be greater than they would be if it could be carried on during the twelve months. The laborer looks to the aggregate earnings of the year, and will hardly take up a trade which affords employment but a part of the time, unless some compensation can be found in the higher wages for that time. This is the chief reason why the day's

wages of the mason and the house-painter, in this climate at least, are higher than those of the carpenter or smith. The coachman, also, may stand by his horses half the day or night, with no call for his services, and must have, therefore, a proportionably higher fare from those whom he does transport. In general, it is found that men prefer a constant employment with a lower rate of wages, than an inconstant one, with a prospect of higher pay for the particular jobs actually done, and because they prefer that, those who take up with the other are able to secure a higher rate of pay in their less eligible avocation. Counter working this, however, are the desires which many men have, for intervals of leisure in their business; and the opportunity to make these intervals subservient to another branch of business or means of livelihood.

4. The amount of trust involved affects wages. Men in responsible positions secure a higher rate of pay for their services than can be accounted for, except by a reference to the unwillingness of people to intrust great interests to others, unless they are men of established character for probity. Such men, men who combine all the other requisites for an important post, with a well-known honesty, are comparatively rare; and, when they are found, will receive a very high compensation for their services. Treasurers of corporations, cashiers of banks, and holders of trust-funds generally, are examples in point. Shall we say, then, that men offer their honesty in the market, as they offer their skill, and are paid for the one as for the other? No! Their skill has been acquired to sell, and for no other reason

but their honesty, if it be genuine, has another basis altogether; and he who is honest, simply because honesty is the best policy, is not honest at all! The very characteristic of honesty is that it cannot be bought! It has a moral, and not a mercantile foundation. In point of fact, a man who has the full confidence of his fellow-citizens, as an honest man, and at the same time all the other qualifications requisite for a post of high pecuniary trust, is in position, partly on the ground of his honesty, to render a high service, and will receive for that service a high reward; but I protest, in the name of morals, against the notion that honesty is a marketable article: it is rather an underlying element of moral character, which fits men indeed to render certain services, but the honesty is maintained, not for the sake of the service, but has an independent basis of its own. So, also, most people would prefer a deeply religious man for a preacher and spiritual guide, but it is a perversion of language to maintain that in rendering these services a clergyman sells his religion. It is true that he sells services to the appropriate rendering of which his personal piety contributes one element; but the piety is not nourished for the sake of the services, but for its own sake, and it must not be confounded with that which is sold. Accordingly, while the clergyman's vocation is sacred, and belongs to the sphere of religion, his salary belongs to the sphere of exchange, and its determination is wholly a business transaction. This distinction ought to be better understood than it is; and both clergymen and people need to be reminded that the spiritual things

belong to one sphere, and the carnal things to another. The amount of a clergyman's salary, and the time and mode of its payment, are matters of pure business; and the clergyman himself is to blame if he does not attend to them, and insist on them, on business principles.

5. The probability of success in any employment is a circumstance that has some influence on the rate of wages paid in it, through the action of this probability on the numbers of those who enter upon it. If success is problematical, fewer will engage in such a business, and those who do engage in it and succeed will reap a very high reward. Ten boys, for example, put to the blacksmith's trade, ordinary capacity being presupposed, will probably every one succeed in becoming a tolerable workman; but of ten boys of the same capacity put apprentice to an engraver, probably not over three would ever reach any high degree of skill and success; and therefore, the pressure of numbers will be felt much more in the former than the latter art. So also, those who take jobs by contract, and who consequently assume some risks, are usually paid at a higher rate than those who do work by the day. It is true that this is owing partly to the fact that the contractor commonly uses his own capital, and must therefore be paid profits as well as wages, and also that the wages of superintendence are due to him as well as ordinary wages; still there is a residuum of difference which can only be accounted for by the risk he runs of a successful issue. The difference in wages from this fifth cause of variation, would be greater than it is, were it not for the over-

weening confidence which most men have in their own good luck. This confidence is seen in the rush which is always made for newly discovered mining regions, and in the facility with which even yet lottery tickets are sold. It is demonstrable beforehand, on the doctrine of chances, that no lottery ticket is worth so much as it is sold for, and yet men buy on in spite of the demonstration; and experience in California and at Pike's Peak, has sadly taught how excessive was the confidence in their own success of the men who flocked to those new El Dorados.

6. Custom and prejudice and fashion, have something to do with the determination of wages in some departments. Custom, especially in former times, has been very operative. The current fees of lawyers and physicians have been largely dependent on custom, competition merely coming in to decide how many such fees a man should get, rather than lessening the amount of each particular fee. Custom determines the rates when men take farms on shares. But competition is now breaking down custom in all directions, and will soon, I think, reign supreme over the economic field. Prejudice is closely allied to custom, and has some voice still in adjusting wages, as may be seen, perhaps, in women's wages, crowded down to a point unreasonably low, as compared with the wages of men. Custom and prejudice may yield the field, but fashion, which is one form of competition, will always have an influence over wages. They who lead the styles in any department whatsoever, will always offer their services to society at an advantage to themselves, and their rate of compensation will be legitimately higher than the average rate.

7. Legal restrictions and voluntary associations are another cause acting on wages, by acting on the supply of laborers. Laws inhibiting or promoting immigration, laws appointing the fees and salaries of officials, tariff laws, whether prohibitory or only restrictive, unequal taxation, and so on, all have an agency in adjusting wages. Governments are coming, however, much more freely than formerly, to leave everything except the wages of their own servants, and those things which they choose to tax, to the simple and safe action of supply and demand. The guilds of the Middle Ages, and the trades' unions of our own day, are examples of voluntary associations for the sake of regulating the wages of the members by combined action. The restrictions in the old guilds, limiting the number of apprentices to each artisan, determining the time a man should serve before he could become a master, and so on, were very onerous, and have mostly passed away. The trades' unions in this country cannot be commended, because they tend to destroy the freedom of personal action, and bring all workmen to one level of wages. The spirit of Political Economy, which is the spirit of freedom, is against such associations for such purposes. If any man has a service to render, let him offer it freely, and make the best terms he can with whoever wants it.

8. The mobility of laborers, or the lack of it, acts on wages by affecting the supply of laborers at any place. In some countries, notably in the United States, laborers move from place to place with considerable facility under the action of demand for labor. According to the United States Census of

1870, 7,500,000 of the native population dwelt in other states than those in which they were born. Many of these, doubtless, had left their native region to obtain more fertile land, and many also to obtain more remunerative employment. The native American, more than most other persons, is not only willing to move from place to place in the hope of bettering his condition, but is also willing to change his occupation from time to time in the same hope. There is more freedom of movement locally, and less fixedness of occupation on the part of laborers and others, in this country than in any other industrial country. Even foreign immigrants here, — factory operatives, miners, and other laborers, — seem to catch after a while the spirit of the country in both these respects. There is one great advantage in all this, namely, competition becomes more uniform in all places, an unusual demand for labor at any point is easily met, and wages neither rise so high nor fall so low at special points as they otherwise would. But there is a disadvantage also, namely, the service of laborers floating locally or changing the kind of their labor can never be so excellent as service more *steady* in place and time. In Europe, on the other hand, laborers are far less mobile than with us; and in Asia still less so. There is said to be no country in Europe, in which the proportion of foreigners to the native population exceeds *three per centum*. In England, which is a small country, the difference in wages between the northern and southern counties is very marked. Professor Fawcett is authority for the statement,[1] that an ordinary agricultural laborer

[1] *Political Economy*, p. 167.

in Yorkshire, during the winter months, earns thirteen shillings a week, while a Wiltshire or Dorsetshire laborer, doing the same kind of work during the same number of hours, earns but nine shillings. The contrast between the wages of English agricultural laborers in general, and the wages of those employed in mills, mines, and furnaces, is still more striking. Competition is by no means perfect in distributing commodities so as to make their price uniform in the same country, or even in the same county; but the immobility of labor, for an obvious reason, is greater than the immobility of goods. While labor should be free to go wherever it may be in demand, the natural reluctance of most men to leave their native haunts, enables each nation to work out its chosen ends without wholesale interference from abroad. If China should precipitate itself upon the United States, or India upon England, as the mere *economical* impulse might indicate, it would be disastrous to the western nations; but Providence holds one impulse in check by a stronger one, and Political Economy deals with men as they *are*, and with exchanges as they *actually take place all things being considered*, and not as they would be were competition in all directions abstractly perfect.

9. Lastly, we must note the influence of casual events upon wages, as these events affect the supply of laborers. For example, in 1348, a terrible plague, called the Black Death, invaded England, and swept away more than one-half of its population. "Even when the first burst of panic was over, the sudden rise of wages consequent on the enormous diminution in the supply of free labor, though accompanied by

a corresponding rise in the price of food, rudely disturbed the course of industrial employments; harvests rotted on the ground, and fields were left untilled, not merely from scarcity of hands, but from the strife which now for the first time revealed itself between Capital and Labor."[1] The landowners of the country districts and the craftsmen of the towns, not understanding the law of wages, were scandalized by what seemed to them the extravagant demands of the new labor-class. Parliament, as if there were no natural law regulating such things, enacted as follows: "Every man or woman of whatsoever condition, free or bond, able in body, and within the age of threescore years, and not having of his own whereof he may live, nor land of his own about the tillage of which he may occupy himself, and not serving any other, *shall be bound to serve the employer who shall require him to do so, and shall take only the wages which were accustomed to be taken* in the neighborhood where he is bound to serve two years before the plague began." The next year, the price of labor was sought to be fixed by act of Parliament, and the labor-class, already partly emancipated, was once more tied to the soil. Afterwards, the runaway laborer was ordered to be branded on the forehead with a hot iron, and the harboring of country serfs in the towns was rigorously forbidden. All these acts of Parliament, and many more of the same kind, were powerless to keep down wages to the old standard, but were powerful to keep up ill-blood and social discontent. They prepared the way for agitators like John Ball, and for the Peasant

[1] Green's *Short History of the English People*, p. 769.

Revolt. Ball's famous rhyme condensed the communistic doctrine of his time, and of all times: —

> "When Adam delved, and Eve span,
> Who was then the gentleman?"

During the recent civil war in the United States the large enlistment into the northern army, of farm-laborers and factory-operatives, brought about a sharp increase of wages on farms and in the mills. At last the mill-owners, in this vicinity at least, closed their doors against the recruiting officers, partly because of the rise of wages consequent on the enlistments, and partly because their manufacturing was then too profitable to be endangered by a prospective lack of hands. So it is. "Scarce is ever costly."

Now, then, on the other hand, we must pass to discuss the facts and principles connected with the DEMAND for labor. As we have seen, Demand is not mere Desire, but desire coupled with the ability to render return services. The demand for labor, therefore, cannot be *unlimited*. The power to render and receive services in exchange, though vast, is, considered in reference to one generation of men, strictly limited, because the physical and mental powers of men, to say nothing of the powers of the physical earth, are limited. There may be an increase, but there must be a limit. The demand for labor, too, is limited by the demand on the part of the same persons for commodities and claims. These latter must be paid for, and that leaves so much less to pay for labor. Wages, therefore, cannot rise indefinitely for another reason than the probable increase of the supply of laborers. Al

labor is offered over against some demand of other men, and wages are the response to that appeal. Accordingly, it is easy to point out the *maximum* of wages: it is the point at which the labor-takers will sooner forego the labor than give any more for it. It is easy also to point out the *minimum* of wages: it is the point at which the labor-givers will sooner forego wages altogether, than take any less wages. Between these extremes marked out by the intensity of the demand on both sides, the rate of wages will fluctuate back and forth according to circumstances.

Persons who put forth a demand for *labor*, in distinction from a demand for commodities and claims, may be divided into two classes: first, those whose demand for labor has the end of immediate gratification, such as employers of domestic servants, physicians, lawyers, actors, singers, and so on; and second, those who employ labor for the sake of selling something by its means, for an ultimate profit, such as manufacturers, merchants, railroad men, and so on. The question with individuals of the first class is, Can I afford to employ this labor? that is, Have I at hand the return services to pay these wages in, and will the gratification justify the payment? The question with the other class is, Will the direct products of this labor, or something made ready to sell and sold by means of it, repay the present expenditure with a profit besides? As a general rule, the second class of employers puts forth the steadier demand for labor, employs skilled rather than common or professional laborers, looks sharply after the efficiency of its

laborers, acts with reference to prospective rather than present markets, expects back more than is now expended, and only proceeds on accumulations of capital soon to be treated of.

In respect to the first class of employers, — remembering what has already been said about professional labor, — the following is all that needs to be added so far as demand and consequent wages are concerned. There are a great many persons in all countries who desire such services as common laborers can render, and are able to pay for them at a moderate rate only, since their desires are not intense nor their means very ample. There are everywhere common desires for personal comforts and for ordinary gains in connection with a small capital, just as there are often intense desires for personal distinction and for extraordinary gains in connection with a large capital. Common laborers, being numerous for the reason already given, compete with each other to secure the wages thus offered by those who desire their services. In many cases, these services could be and would be dispensed with, if a high rate of wages was demanded. Under these circumstances, a general market-rate of wages for common labor is determined, — an equalization of demand and supply is had, — and the rate is always moderate, because the service of the labor-givers has few elements of scarcity or difficulty about it, and because the return service of the labor-takers is not proffered under the impulse of unusually strong desires. Of course, a market-rate thus established is liable to change from time to time, being higher in flush times and lower in dull times, and the better

individual laborers will get and ought to get the better wages. The number of laborers is of course, an element, the general prosperity and hopefulness of employers is another element, and the amount and productiveness of capital is still another element, but this has more immediately to do with wages under the second class of employers.

Before passing to those, it ought to be said, that there is no *unit* of labor, and consequently no unit of *wages*. There can be no strict *measure* of physical and mental exertion; and even if there could be, that would not furnish a unit of wages, because wages are a *resultant* of exertion on the one side and of desires on the other; and there can be no strict measure of *desires*. Hence, in a doctrine of wages, only general principles can be laid down. For instance, it is said, an agricultural laborer in England could earn, six hundred years ago, but thirty-four grains of standard silver in a day, while now he can earn three hundred and fifty grains. Accepting this as true on an average of laborers at the two epochs, — what follows? That the laborer now puts forth ten times the exertion of his predecessor? No! That the demand for the labor is ten times greater now than then? No! Even a grain of standard silver, though physically the same now as then, is by no means the same in point of value. Silver has become relatively more abundant in the course of these centuries, and hence is cheaper as measured by commodities in general or by labor in general. Labor itself has become more efficient, and is aided by better tools and a more advanced science. Besides, *a day's labor* is no sound measure of comparison as between different

times or different countries at the same time. How long are the respective days? How efficient, how well trained, are the respective laborers? How much armed with labor-saving appliances? Nothing is more indefinite than the phrase, "a day's labor;" and no fallacies are more patent, or more common, than those which turn on "days' works" and "days' wages" in different countries.

The second class of employers operate in connection with *capital;* and we must now anticipate the discussions of the next chapter, so far as to say, that all capital constitutes an immediate and pressing demand for labor. Whoever desires a service which a laborer can render, and lays by something to pay for that service, creates that instant a demand for labor; and especially, whoever accumulates raw materials which laborers are to work up, builds, buys, or keeps machinery which laborers are to tend, or puts himself in position to suffer loss by the ownership of lands, ships, or other property whatsoever, unless laborers be employed to make them productive, creates thereby an instant demand for labor. All such accumulations whatsoever, destined in the owner's mind to be employed in further production, all implements, buildings, and improvements, designed to assist labor, and raw materials which labor must work up, are capital; and capital must be constantly united with labor, or the owners will suffer an inevitable loss. The presence of capital anywhere constitutes a demand for labor. The more capital there is anywhere, the stronger the demand for labor; and capital, therefore, is the poor man's best friend. Mr. Carey regards the laborer as at a

disadvantage compared with capital, because the laborer must at once dispose of his product, or starve; which seems to me a superficial view of the relation, because capital submits to an instant loss when it declines to employ labor. Capital does not like to lose its profit any more than the laborer likes to lose his bread. In a true and general view, the one is under just as much pressure to employ laborers, as the other to get employment. They come together of necessity into a relation of mutual dependence, which God has ordained, and which, though man may temporarily disturb it, he can never overthrow.

Also, let us notice that the aggregate of all his forms of capital helps to make up in the mind of the capitalist his motive for employing labor, because the more he has invested in buildings, machinery, and materials, the more urgent is the necessity to employ laborers, in order to make the investment productive; although only a part of the capital is free to be offered in payment of wages. Demand for labor is constituted, strictly speaking, by that part of the capital which is available to be offered in the form of wages, but it is clear, that, as a rule, demand, that is, the portion of capital designed for the payment of wages, may increase under the influence of increased desire for laborers, and an increased desire for laborers is a necessary consequence of the increase in the aggregate of capital. Whether the portion designed for wages *will* increase or not, on an increase of capital, will depend on the action of laborers. It is certainly possible that capital may go on increasing, while the portion designed for wages, or rather the portion advanced in the way of

wages, may remain stationary, or even be diminished, owing to the competition of an increased number of laborers and the diminished compensation going to each. If the number of competitors remain about the same, and they intelligently comprehend their position, the size of this wages-portion will necessarily increase with all increase of aggregate capital. There is no known proportion between aggregate capital and the wages-portion, though this subtle connection between the two is certain. The United States Census of 1870 ascertained the proportion between the *wages-portion* and *finished products* in the manufacturing industries of this country to be nineteen per centum; and perhaps statistics may one day throw light upon this larger and more intricate problem. I do not remember to have seen noticed by anybody this influence of the whole capital on the desire for laborers, and consequently on the wages-portion, yet it seems to me a point of much importance in unfolding the relations of capital to labor.

What we have loosely called skilled laborers, accordingly, have a hold on their employers somewhat more firm than common and professional laborers have on their employers. Capital is conservative. Capital is anxious to increase itself. Capital knows its dependence upon its laborers. But it is a great mistake for laborers to suppose that there is no limit to wages, that they can crowd their employers indefinitely. The *motive* of these employers is *profits;* and when profits disappear, this demand for labor disappears also, except under certain transitory conditions, when, rather

than lose their customers and get out of the channels of trade, employers will go on for a little at a loss to themselves. But this loss is ultimately a greater loss to the laborers for reasons to be unfolded in the next chapter. And it is a still greater mistake for laborers to suppose that their own industrial qualities are a matter of indifference so far as wages are concerned. Wages are paid out of the joint products of the employers' capital and the laborers' industry; and when that industry is the best in quality and the steadiest in quantity, the product will be the greatest, and the part going to wages larger than ever. It is a pity that there is so much misunderstanding and ill-feeling between employers and skilled laborers whose interests are at bottom one, and whose relations ought to be so cordial. Most of the so-called labor-troubles have been between these two classes, owing in part to ignorance of economical truth on the part of both, owing sometimes to pride and petulance on the part of employers, and oftener owing to unreasoning jealousy and aggregated action on the part of laborers. So it has always been. Labor-troubles are almost as old as civilization. The poet Euripides, in his play of the "Supplicants," both indicates facts as they were then, and points out a hope in which we may share, that these middle classes by a better harmony with each other may yet "save the State:" —

> "In each State
> Are marked three classes: of the public good
> The rich are listless, all their thoughts to more
> Aspiring; they that struggle with their wants,
> Short of the means of life, are clamorous, rude,
> To envy much addicted, 'gainst the rich

> Aiming their bitter shafts, and led away
> By the false glosses of their wily leaders.
> 'Twixt these extremes there are who save the State,
> Guardians of order, and their country's laws."

Returning now to generals, the aggregate Demand for labor in any country needs a *name*. That demand is something offered or promised to laborers. It is either in hand, or expected to be in hand. The motive for offering it, is on the part of the non-capitalist, present gratification of some sort; on the part of the capitalist, ultimate profit; that which both these classes are willing to pay rather than forego the service, or what we have called as related to the laborers *maximum of wages*, requires a name as related to the employers; for it is certainly a substantive thing, though its amount, just as every actual value is, is determined by the minds of men. Till a better term offers, I shall call this amount the WAGES-FUND. The aggregate of wages actually disbursed in any country may fall below this amount, but can never overpass it. If the laborers are intelligent, and use their privileges as individual parties to a bargain, the amount of values actually disbursed as wages will closely approximate this wages-fund; and it is evident, that the number of laborers with their varied industrial capacity then and there desirous of work, is another substantive element towards determining the current rates of wages in the various departments. It is in the interest of wages, first, *that the industrial capacity of the laborers should be high;* second, *that the amount of the wages-fund as now defined should be large;* third, *that the intelligence and mobility of the*

laborers should crowd actual wages toward the limit of the wages-fund; and fourth, *that the number of competitors able and anxious to render just the same service at the same point should be few.* This, I believe, is the general law of wages everywhere.

I acknowledge the force of the objections urged by Professor Walker and others, against the definition and doctrine of wages-fund as given by many economists and in my own earlier editions. The strict-division-theory of any wages-fund among any number of actual laborers is not tenable, and the true doctrine of wages is much indebted to these gentlemen. For one, however, I cannot consent to give up the term "wages-fund" as now defined, nor refuse to walk in the clear light its meaning sheds on the whole field of wages. The wages-fund is not to be conceived of as rigidly determined in amount by employers beforehand, because these intend to get appropriate labor for the least that they can, and only to pay more whenever they must; nor is it to be conceived of as a stock always entirely created already, because employers expect that the wages will ultimately come out of the products of the present work; nevertheless, so far as industrial enterprises are carried on intelligently, whether wages are provisionally advanced out of an existing fund to be replaced from the current products or await the realization of these products, there is in purpose and effect what is now called a wages-fund, and the rates of wages of all labor, result from a distribution of this fund among the laborers who compete for portions of it in accordance with the principles already unfolded.

We see now what to think of some remedies popularly recommended for low wages: —

1. Government ought to interfere to better wages, at least to designate a minimum below which they shall not go;
2. Public opinion ought to be brought to bear upon employers to induce them to give sufficient wages;
3. There may properly be combinations among the workmen themselves for the purpose of dictating the rate of wages to the employers.

Each of these remedies is a delusion, and so is every other proposal that ignores the law of wages just established. That which pays for labor in any country, is a certain wages-fund created or in process of creation, which cannot be increased by the proposed action of government, nor by the influence of public opinion, nor by combinations among the workmen themselves. On the other hand, the number of laborers in any country cannot be diminished by the proposed action of government, nor by public opinion, nor by combinations among themselves. Suppose there has been free and intelligent competition on both sides, and that the average rate of wages as thus determined, is one dollar per day to each laborer. Suppose that everybody thinks that this is insufficient, and that government accordingly issues a decree that wages thereafter must be one dollar and a half per day to each laborer. This decree has no tendency to increase the size of the wages-fund; *that* is determined by the general productiveness of labor, and by the division, under free competition, between wages and profits; if the de-

cree, therefore, were carried out, as it never could be, the result would be that only two thirds of the laborers there present could be employed at all, and the remaining third must be supported by charity, or starve. The wages-fund is only sufficient to give to all the laborers a dollar a day, and if the government enforces a new distribution at a rate one half higher, then one third of the laborers cannot be employed at all. All accessions to capital, all investment of profits in an enlarged business, all saving from expenditure for the sake of further production, tend to increase the wages-fund, and, the number and intelligence of laborers continuing as before, the rate of wages tends also to rise. Or, if there be no accessions to capital, the wages-fund consequently standing as before, and the number of laborers be diminished, as by emigration to new fields of effort, or by enlistment in armies, the competition of wages-payers for labor will be increased, and the rate of wages will also tend to rise. The reversed suppositions will give, of course, reversed results, and wages will go down.

Though not in the way proposed, there is a way in which government may act most beneficially upon this matter of wages. By faithfulness to its peculiar trust, that is to say, by making the rights of person and property as secure as possible, it gives an impulse to enterprise, a spur to industry, makes the desire of accumulation effective, and thus indirectly but most powerfully contributes to the increase of capital, to the fund out of which wages are paid. Also, by fostering the means of education, and by the diffusion of knowledge among all

classes, government acts beneficially upon the laborers, to make them intelligent, to impart to them that character and self-respect which fits them, in exchanging services with capital, to demand and secure their full rights in the exchange. It is not denied that capital takes advantage of the ignorance and immobility of laborers, and sometimes secures their services at a less rate than the just relations of capital to labor then and there would indicate, but the remedy for this is not in arbitrary interference of government in the bargain, but in the intelligence and self-respect of the laborers which shall fit them to insist on a just bargain. In this whole sphere of exchange, the just and comprehensive rule always will be, that when men exchange services with each other, each party is bound to look out for his own interest, to know the market-value of his own service, and to make the best terms for himself which he can make. Capital does this for itself, and laborers ought to do this for themselves, and if they are persistently cheated in the exchange, they have nobody to blame but themselves. Government should give them all facilities for intelligence: they should give themselves a character, and cherish a hearty self-respect, which there is nothing in their position to diminish: towards such laborers, capital occupies no vantage ground in an exchange of mutual services.

Public opinion can do something towards bettering the wages of labor, in countries where they are low, by organizing means to assist the laborers in distributing themselves at points where their services are most in demand. Societies in our sea-

board cities, whose object it is to aid immigrants to pass on from those cities where labor is very abundant, to the country towns and to the West, where it is relatively much less so, are commendable in their purpose and spirit. So also are emigration societies, in countries situated as Ireland has been, where centuries of misgovernment combined with centuries of ignorance, produced a temporary pressure of population on the means of support. Where such pressure exists, as it does also in China, it is a good thing for public opinion to be favorable to emigration to newer and more fortunate countries, and liberally to assist in the distribution of labor to those points, wherever they may be, where capital is ready and anxious to employ it.

It may surprise some who are familiar with books on Political Economy, that I do not here adduce the influence of public opinion in restraining population as favorable to wages, and inveigh against the force of that spring of population which the Creator has coiled up in the nature of man, as compared with the weakness of that power by which the earth produces sustenance for man. Mr. Malthus, and other economists, have discussed at length the tendency in the law of human fecundity to outstrip in its results the law of diminished returns from land; and have expressed an apprehension that the time may come when the earth shall be unable to support her children They have enlarged upon the well-known fact that in the United States population doubles every twenty-five years; and have calculated that, at this rate, the inhabitants of every country would, in the course of five centuries increase to above a million

times their previous number; that the population of England, for example, would, at this rate, in that time, exceed twenty million millions, — a population which could not get standing-room there. Such a rate of increase certainly needs to be checked; and Mr. Malthus divides the checks to population into the positive and the preventive. The first increase the number of deaths, the second diminish the number of births. The principal positive checks are war, famine, and disease; the principal preventive check is prudence. Of course it is better that the check which limits fecundity should come into play, rather than those which decrease longevity; and these writers are at pains to inculcate upon the laboring classes prudence in marrying, and temperance after marriage. These discussions are interesting in themselves, and have attracted much attention; but I cannot regard them as particularly pertinent to discussions on wages. God has endowed mankind with a strong impulse towards procreation. But experience has shown that it is not too strong for the purposes for which it was given. Experience has also shown that, as society advances, and men come more and more under the influence of reason, and affection, the preventive check comes silently and effectually into operation. Experience has shown also that food and comforts have more than kept pace with the stride of population; since the inhabitants of the world, as a whole, were never so well fed and clothed and housed as now. The abstract antagonism of the law of the increase of population with the law of the increase of food is admitted; but HE who is author of the laws is author also of natural counter-work-

ings of them; so that a practical *tendency* towards their coming into conflict is denied. Each human being is as much constituted by Nature to receive services as to render them, and each is naturally able to become a capitalist; economical laws present no obstacles to all men's becoming rich; most men are unwilling, some are unable, to fulfill the moral conditions of getting rich; while scarcity of food has been caused much more by the maladministrations of government than by the law of population.

But will not strikes accomplish that for the raising of wages which neither government nor public opinion can effect? A strike is a combination among workmen for an increase of wages. They agree to stop work altogether until their employers shall comply with their terms, and raise their wages to a certain definite sum. It is not to be denied that workmen thus possess, under many circumstances, a very considerable reserved power which they can bring to bear upon their employers. When the processes of production are going briskly forward, when the manufactory is thoroughly furnished with competent hands, and profitable orders are in waiting, it is no laughable thing for the owner to be told, of a cloudy morning, that his hands have all stopped work, and refuse to lift a finger, until he shall agree to pay them wages at a rate which they themselves dictate. Of course, his first impulse is to discharge every man of them, and endeavor to fill his factory with new hands But this he cannot always do. At best it will take time. Meanwhile his wheel or engine must be idle, customers be lost, orders unfilled, and profits nowhere. And so, many an employer has surrendered

to a strike, when he felt that it was all unjust, rather than undergo a still greater loss. It is admitted that workmen may sometimes strike and gain their point, but it is none the less true for all that, that strikes are false in theory and pernicious in practice; that they spring from utter misapprehension of the true principles of wages; that they embitter relations between employers and employed which ought to be cordial and free; and that they rarely or never are permanently advantageous to the workmen themselves.

In the first place, then, strikes are false in theory. It is a very old adage, that it takes two to make a bargain. Express this in the language of Political Economy, and it will take this form: When two men have mutual services to exchange, let them come to a fair agreement as to the terms on which they will exchange. Certainly, let each make the best terms he can, but let the bargain always be free. If one party, who happens to have the power to do it, uses compulsion upon the other, it ceases to be a bargain at all, and becomes a sort of robbery. If, driving with my good horse along a lonely road, I meet another man driving an inferior one, and he, being the stronger man, compels me to exchange horses, it may be all very well for him, but I protest that it is no bargain. It is robbery. Now, workmen bring a certain valuable service to the market, just such a service as the capitalist wants, and he has to offer just such a service as they want, namely, wages. Now let them come to a free and fair agreement on the terms of their exchange. Let the workmen by all means make the very best terms they can; let

them insist to the last penny on all which they can get elsewhere, for the value of their service is determined, as the value of every other service is determined, by what it will bring. Let the employer do the same. Let a fair bargain be struck. There is no objection to this kind of striking; and the more intelligence and skill and self-respect a workman has, the better prepared he is to strike the bargain and secure his just due. If the employer will not yield him this, let him have done with it at once, and go elsewhere. Or, if a just bargain has been struck, and afterwards circumstances shall so alter that he thinks he can rightfully demand more, let him frankly demand it, remembering always that it is an exchange he has to do with, and that it takes two to make a bargain. If he does not get for his service what he thinks he ought to get, let him quit. He has a perfect right to quit. All this is legitimate and fair and above board.

But a strike is wholly different. This brings compulsion into play. A combination among workmen to leave an employer in the lurch, and especially a combination which forces into its ranks by cajoling or menaces, those who are unwilling to join it, is of itself a confession of the injustice of the claim. If the claim be just, there is no occasion to extort it. If the value of the service rendered be equal to the sum demanded, if this can be obtained elsewhere, there is no need of consultation and conference, combination and conspiracy. Let each man go quickly where he can get the most for his service. The fact that this is not done, that means are brought to bear upon the employer which are not ordinarily used in

bargains, — means of the nature of a threat — that the justice of the claim is not relied on in a case where, more than anywhere else, justice can enforce itself, that full and free explanations are not had, that no notice is given, that great damage is expected by their action to accrue to the employer, all this seems to forget that the transaction between employers and employed is a case of pure exchange, a simple bargain of one service against another service. Therefore, I say, that strikes are false in theory.

But this is not the worst of it. Strikes are pernicious in practice. And the reason for this is that they tend to lessen the wages-fund. The production of all material commodities is a joint process. Capital and labor both conspire in it. The gross returns belong wholly to the capitalists and the laborers. The profits of capital and the wages of labor are paid out of these returns and from no other source. It is for the interest of both capitalists and laborers that these returns be as large as possible, because they are wholly divided between the two, and if the whole be large the parts will also be large. Gross profits being taken out, the rest is wages; or, more strictly speaking, wages being taken out, the rest is gross profits. It makes no difference practically that the wages have been advanced to the laborers while the production was still going forward, since the wages really come out of the proceeds of the joint process. The capitalist never means to pay ultimate wages out of his accumulations, and ought not to be expected to do so, and were he obliged to do so it would soon be worse for the laborers, since

these accumulations are the gross capital feeding the wages-fund. It is not only just but needful for the laborers, that wages shall be paid out of the proceeds of that on which labor is now expended. Whatever, then, tends to lessen these proceeds, necessarily lessens the wages-fund. Any interruption of the process of production by strikes, any want of full and hearty coöperation between the two parties to the joint process, will, if continued, infallibly make the wages-fund smaller.

Suppose it takes three months to realize the returns in some branch of manufacture. If, when the workmen are paid off at the end of one three months, they all strike at the beginning of the next, and both parties hold out for three months, what is now the chance for higher wages? It shall go hard even if they get as much as before. And why? Because the mill has stood idle, and the owner has lost three months' profits on the whole investment connected with the mill. They have lost wages for three months, and now when they come to begin again, they may not be able to wait, as before, till the end of the cycle, and their wages must be advanced out of a fund smaller than it would have been but for the strike. The employer usually advances wages out of his own, or borrowed capital, expecting to be repaid from the results of current work. Sometimes his mere expectation of large returns acts favorably on the wages-fund. But this employer has lost profits and customers by the strike, and his business is disarranged. His workmen by inflicting a loss upon themselves have found an opportunity of inflicting a loss upon him. Their loss is undoubtedly the

greater of the two. Therefore, I say, strikes are commonly, and almost necessarily, a disadvantage to the workmen themselves. The case just put is a strong case to show the principle involved, but all interruption whatever to the processes of production by strikes, all consequent embittered relations between employers and employed, all want of hearty working together of the labor with the capital, tend to diminish the gross returns, and consequently, both the wages-fund and profits. As far as this point is concerned, there is no sense or reason in the common jealousy of workmen towards employers. There is no real antagonism between them. Their interests lie along the same line. They are partners in the same concern. Workmen who are intelligent, prudent, skilful, will infallibly get their due. Employers who are humane, urbane, fair, will find their account in it.

In this whole discussion it has been needful to treat of laborers as if they formed a distinct class of themselves, and as if the capitalist class were also a class by themselves distinct from laborers. As a matter of fact, and in this country especially, the class-laborers shade constantly into the class-capitalists, as the returns of our saving-banks show, and most of our capitalists are laborers also, at least to the degree of superintending actively their own capital. This alters no principles.

It has been proven many times by experience that the legalized use of an inferior money operates decidedly against laborers as a class, as well as against those in receipt of fixed incomes. Wages experience very late the rise of prices consequent upon a

depreciated currency; because laborers as a class are slow to perceive the change in the purchasing-power of the medium, and are consequently slow to insist on their just rights in the now altered circumstances; while the fall of wages, late to rise under a poor money, is apt to be prompt enough under a return to better money, because employers see the change at once, and act quickly in accordance with their own interests. In general, it may be said, that all departures from sound legislation, particularly in regard to money and taxation, are sure to make against the laboring classes, and the only certain remedy for such legislation is in their own intelligence and vigilance.

Laborers work for the sake of wages, but it is an honor to human nature that there are very few men who would be willing to work at any wages in doing things that they know to be useless. For example, to carry stones from one heap to another, and then carry them back again, for no ulterior purpose, is a task that few would be content to perform even for very high wages. Man is not a machine. His mind must be somewhat interested in the work of his hands; and this is another point at which our field of Economics touches the field beyond of Aims and Ends.

In discussing labor and wages, it will be noticed that I have made no reference to a subject a good deal agitated at present in Europe and somewhat also in the United States, namely, to coöperation. This is a scheme originating with laborers themselves, under which they combine, either to purchase their necessaries in common and hence at cheaper

rates because avoiding all profits of middle-men; or, more especially, to engage in joint production, the workmen furnishing the capital, all being copartners, and of course all sharing *pro rata* the profits of the concern. All this is well; and in countries where laborers are under traditional disabilities, it may be very promotive of their welfare; but any one can see that no new economic principle is involved in it. The workmen unite the character of capitalist and laborer in their own persons, and both receive wages and share profits; but the principles which determine the amount of each are the same as if the two went in opposite directions. The practical success of the scheme will depend in each case upon the question whether there be any of the workmen of sufficient organizing and executive ability to carry it through. Workmen should have a chance to do this everywhere: it is done essentially whenever two or more workingmen organize a firm to carry on any business. In the United States the greatest freedom prevails; there is nothing to hinder any laborer from becoming a capitalist; nearly all our capitalists were formerly laborers; the savings-banks are open for the smallest gains; and the shares of most joint-stock companies are open to everybody who has means to buy them. There is only one consideration that seems to justify in this country any special jealousy of laborers as such, towards capitalists as such; and that is the fact, that the legislature does sometimes confer, by means of corporate charters, and otherwise, certain extraordinary rights upon capital. So long as capital and labor rest solely upon their natural rights, neither can have the advantage of the

other; but so far forth as advantage is given to capital by law, it is unjust to labor, and ought to be vigilantly watched and counteracted by laborers. The legislature, whether state or national, cannot be too scrupulous in this whole matter. The proper limits of legislative action upon economical subjects are pretty narrow. Capital and labor should both have the utmost liberty of action compatible with social security; and the *equal rights* of each will, in general, best be reached by leaving both to take care of themselves, subject only to general laws relating to person and property. If the legislature yields to special claims of capital, it must expect to hear labor also knocking at its doors. If capitalists "strike" for artificial profits by means of a protective tariff, why may not laborers "strike" for artificial wages? The former have set the latter a bad example. Much of the recent discontent of labor has come from this greed of capital demanding and securing for itself special privileges. Let alone. Legislatures are not wise enough to settle the great questions involved between capitalists and laborers. They are not wise enough, and never will be, to say, for example, how much wages capitalists shall pay, or how many hours per day adult laborers shall work. To attempt to regulate any such things as these by legislation is an economic abomination.

We may summarize thus: —

1. *Labor is physical or mental effort which demands for itself something in return.*

2. *That return is called wages.*

3. *Wages depend on the great law of Supply and Demand.*

4. *Other influences on wages are but secondary at best.*

5. *Labor may be loosely divided into common, skilled, and professional.*

6. *Employers may be loosely divided into those who pay wages for a present gratification, and those who pay wages for an ultimate profit.*

7. *Capital thus has intimate relations with wages, and the two are not antagonistic.*

8. *Bad money is worse for wages than for profits, but is bad enough for both.*

9. *Governments have small functions in wages-questions, as in economics generally.*

CHAPTER VII.

ON CAPITAL.

Labor is an *original* element in Production: in getting something ready to sell and selling it, effort, physical or mental or both, begins, accompanies, and concludes the process. The various forces of Nature are also an original element in production; and we have already learned that these powers work gratuitously and unweariedly in the service of man. But neither of these elements can reach their full efficiency without the aid of the third and last requisite of production, namely, capital. Of this we are now to learn what it is, how it arises, how it works, and what its influence is upon the progress and amelioration of society. As we were not able to complete our view of wages without a reference to capital, so we can not understand the marvellous contribution of power-agents to production without a similar reference. Here is another of the trinities of Political Economy. Labor leans on its counterpart,—capital; and natural agents ply their work and plough their way through instrumentalities which are capital. But capital is not an *original* element. It is itself a product of the other two elements. It is indeed a product, but so essential an element in further production, that labor and power-agents can go but a very little way without its constant and accu-

mulated coöperation. Power-agents are free; labor demands a return; and capital, which is a sort of embodied labor, demands also a reward for its use; the owner of the capital is frequently a distinct person from the present laborer; but Political Economy is able to show that there is no natural opposition of interest between capital and labor, that capital is as dependent on present labor, as labor is dependent on capital, that each is equally interested in the prosperity of the other, and that thus a deep and admirable harmony subsists in this part, as in every other part, of the social organism.

The word Capital is derived from the Latin *caput*, a head, a source, and gives intimation in its etymology of its scientific meaning. The word *caput* is often used in classical Latin for a sum of money put out to interest, and its derivative *capitale* is also used in the same sense, at least in medieval Latin; and from this form of the word have come into English not only *Capital*, but also, by corruption, *Cattle* and *Chattels*. Flocks and herds were at one time the principal wealth of our ancestors, and the same word came to be spelled differently as applied to animals, or to inanimate things of value. The notion implied in our word *source* came along in all these words, and hence Capital may be scientifically defined as *any valuable thing, outside of man himself, from whose use springs a pecuniary increase or profit.*

The definition that I formerly gave, namely, "*Capital is any product reserved to be employed in further production*," is indeed equivalent to the one now given, but it does not so distinctly exclude personal

services from the category of capital. The boundary line between labor and capital cannot be clearly drawn, unless the physical, mental, and moral powers of man himself, so far as these come into play in personal services, are discriminated from the external commodities and claims, which alone can be properly capital. Labor is the exertion of physical and mental powers for the sake of a return. Its remuneration is wages. Its principles have been already unfolded. Capital, on the other hand, is some valuable thing, always a commodity or a claim, reserved from immediate use in enjoyment for the sake of an increase to its present value through its employment productively.

It is fair to apprise the reader that this definition is somewhat different from that given by any other writer. Mr. Carey defines capital as "the instrument by means of which man obtains mastery over Nature," including in it the physical and mental powers of man himself, and thus hopelessly confuses the boundaries between capital and labor. Mr. Macleod defines capital as "any economic quantity used for the purpose of profit," making it expressly inclusive of professional talents, and this seems to open the definition to the previous objection. Most writers, I think, would define with Mr. Senior, "an article of wealth, the result of human exertion, employed in the production or distribution of wealth." Besides the inherent ambiguities in the word "wealth," this definition is indistinct, as not indicating whether commodities only, or commodities and claims only, or commodities and claims and personal powers may be capital.

I have considerable confidence that the definition now given will be found to cover all the cases, to obviate many difficulties, and to take the life out of many disputes. Personal powers are used for the sake of a *return;* capital is used for the sake of an *increase.* Personal powers cannot be parted with, although their exercise gives birth to value; capital can always be parted with, and become fruitful in the hands of another. When it is said that a young man's integrity, or his acquired skill, is his *capital,* the word is used in a metaphorical, not in a scientific sense. The meaning is, that these qualities are *like* capital in some respects. Of course it will be understood that the Class Capital is a smaller class under the great Class Values; and that the same article of value may be at one time capital, and at another time not capital, according to its destination. Money in the hands of individuals is sometimes capital and sometimes not, although the whole money of the nation, considered as belonging to the nation, is wholly capital. Credits, that is to say, claims for the payment of money or other valuables, are capital or not, according as they are kept for convenient use, or for accruing profit. Any piece of *transferable* property may become capital, either as *retained* by the present owner for the sake of a greater than its present value to be obtained by means of it, or as *purchased* by another person with the same intent.

There are many products devoted to immediate consumption; that is to say, to the gratification of present desires, without any reference to the rendering of future services by means of their help. Such

products are not capital. They are a portion of the avails of the community, they are valuable, but capital they are not. All capital is values, but all values are not capital. Only that portion is capital which employs, assists, and pays for labor. All raw materials are capital, all machinery is capital, all funds destined to purchase these, and all funds destined for wages, are capital. As all values reside in services exchanged, so all capital resides in services accumulated with reference to an ultimate exchange. It is only in the intention of the owner that capital can be discriminated from other products destined by him for the gratification of himself and his family, or for benevolent purposes. Take a hardware manufacturer, for example, and he has a stock on hand of finished hardware, a part of the proceeds of which he will put back into his business in the form of materials, tools, and wages, and another part will go in the form of personal and family expenditure, and it is only his intention that discriminates the first part, which is purely capital, from the second part, which, as far as he is concerned, is not capital at all. It may indeed become capital in the hands of those to whom he pays it out; and will become so, in case they destine it as an aid to further production in their several lines of business. The whole mass of capital, then, in any country, is the whole mass of those products, of whatever kind, which are destined in the mind of their owners to be retained as an aid towards rendering future services to society.

How does capital arise? We have seen that there are obstacles which lie in the way of the gratification of men's desires in all directions, and that

these obstacles can only be removed by human effort. When a man devotes himself to one set of these obstacles, with a view to surmount them, he is not long in discovering, that if he had certain tools, his work would be greatly facilitated; and having discovered that, it will not be long before he will attempt himself, or induce others to attempt, to invent such tools. The beaver gnaws down the tree with his teeth, from generation to generation; but man is a being more nobly endowed than the beaver, and no sooner had he occasion to fell trees, than something of the nature of an axe suggested itself to his ingenuity. It is true, that his earliest attempts at axe-making were probably of the rudest sort, but just as soon as anything was devised, whether of flint or shell or metal, that rendered easier the labor of felling a tree, capital made a beginning along that line of obstacles. Among the more gifted races, progress in this direction was perhaps more rapid than we are wont to think it was, since Tubal-cain, even in the times before the flood, is said to have "hammered all kinds of implements out of copper and iron." At any rate, we are at no loss to explain the origin of capital: it is found in the motive that exists everywhere, and that always existed, to lessen, if possible, a given irksome effort that is the condition of a given satisfaction. And this origin of capital gives the key-note to its universal use and indefinite expansion. Tools are invented and employed for no other reason than this, that, by means of their help, the human effort is lessened relatively to a given satisfaction. The powers of Nature, such as those which make the grain grow, bring the

tree down, turn the water-wheel, impel the locomotive, and send the message round the world, all stand ready to slave in the service of man; but in order to make their aid available for human purposes, there must be a plough, an axe, a wheel, an engine, an electric machine. These, and all other implements whatsoever, from the tiniest needle to the most ponderous engine, are products created and retained for the sake of further production. They are capital. They are not capable of yielding in themselves an ultimate satisfaction to human wants, but they mediate between the powers of Nature, which they enable us to make available for our purposes, and those ultimate satisfactions. Nature furnishes all the powers, and all the natural qualities of objects, but labor can go but a very little way towards making these available for the satisfaction of human wants, without the aid of implements and contrivances which are produced by labor; and which, being retained as an aid to future labor, are capital. Since it requires tools to make tools, the progress of capital at first was very slow; but, since every advance in mechanical contrivance makes still further advances easier, there is a natural tendency, which facts abundantly exemplify, to a more and more rapid progression in the number and perfection of all implements of production. The same motive that impelled to the first invention, has impelled to the whole series of inventions since, and will constantly impel to further inventions till the end of time. This motive, — and there is no motive that actuates man more universal, — is, to lessen the onerous effort of human muscle, and to throw upon the

ever-willing shoulders of Nature more and more of the burden of production. Every step of this progress gives birth to a larger and larger proportion of satisfactions relatively to efforts; marks an increasing control on the part of man over the powers of Nature; and gives promise for the time to come of greater advantages still in both these two directions. And it is because capital brings gratuitous natural forces into service, and the more so as capital progresses, that the value of those things created by the aid of capital tends constantly to decline as compared with the value of those things, in whose production capital less conspires; and in the chapter following the next will be developed from this point one or two important laws of value.

The power of capital in reproduction is something marvelous. Capital breeds capital. Even the ordinary annual interest of money, if regularly compounded with the principal, will double that principal in a very few years. But the rate of interest, which is usually reckoned by the year, must not be confounded with the rate of profit, which may accrue by the day, by the week, by the month, or shorter irregular periods. Some interesting facts are mentioned as occurring in the retail provision trade of Paris. Turgot instances that, in his time, the money lenders charged the petty dealers two sous a week for the loan of three francs. That is interest at the rate of 173 per cent. *per annum*. But if the dealer sold his three francs' worth of victuals for three francs and a half every day, as is likely, his profit, omitting Sundays, would be at the rate of 5,216 per cent. *per annum*. That this way of doing business is still

kept up in Paris, as it used to be also in London, appears from a speech of a member of the late Legislative Assembly of France, who says, that a five-franc piece borrowed in the morning will buy provisions that may be sold for eight francs in the course of the day; twenty-five centimes are paid in the evening without complaint as the interest on the money; that is at the rate of 1,800 per cent. *per annum;* but the rate of profit is 21,600 per cent. *per annum*, or twelve times the rate of interest.[1] Even at a very small ratio of profit to principal on each transaction, a money capital turned quickly over accumulates with a startling, almost incredible rapidity. Equally wonderful is the power of capital in the form of machinery to hasten, facilitate, and accumulate production.

Now, then, having seen what capital is, and the human motive that brings it forward in production, we next inquire after its remuneration. *The remuneration of capital is technically called profits:* just as wages are technically the remuneration of labor. The present proposition is, that profits are the legitimate reward of a service, just as much, and in the same sense, as wages are the legitimate reward of a service. The distinctive service of the capitalist as such, as distinguished from the service of the laborer, consists in his voluntary *abstinence* from the use and enjoyment of that which he contributes in aid of further production. If a man puts a thousand dollars, which he might spend upon his immediate gratifications, into a machine to be used in his business, the money immediately becomes capital; the

[1] See Macleod's *Economical Philosophy*, p. 219.

owner practices abstinence, and for this abstinence justly expects a reward. This reward we call profit. The expected profit is the only motive for the abstinence. He will not be content simply to get his thousand dollars back, for that he has now: he must have his thousand dollars with a profit. Suppose A to be a manufacturer of flax fabrics, B to be a farmer in his neighborhood, and C an expert mechanic acquainted with the current modes of spinning and weaving flax. A has a capital of $10,000 invested in his business, in buildings, machinery, materials, and wages-fund, which nets him $1000 a-year clear profit. At the end of the year, the question with him is, whether he shall spend this $1000 unproductively in immediate gratifications, or, adding it to his capital stock, increase his business with it. If he concludes to do the latter, he must forego the use and enjoyment of his $1000 for the present, he must practise abstinence; and this he will not do, and ought not to do, except in view of increased profits to accrue from his business at the end of the next year. If more flax is to be spun and woven in his factory, more money must be invested to buy more materials, to pay more laborers, or to pay for more or better machinery. His contribution to the prospectively increased production is $1000, transformed by his intention from simple property to capital, devoted to production by a voluntary abstinence from its present use and enjoyment, in view of a future reward or profit. It is a service rendered by one man to a joint process to be performed by many, and gives him a just claim to a portion of the product. Is exertion irksome? So is abstinence. Are

wages legitimate? So are profits. B as a farmer might devote all his fields to growing food and fruits for the gratification of himself and family, but since A now wants more flax fibre for his factory, he gives up a part of his acres to growing flax, and this becomes a part of A's capital in the form of raw material; and the money received for it may become capital in B's hands by being spent either in agricultural improvements, or in buying additional land. The mechanic C, by giving time, exertion, and money to the work, may invent an improved machine for spinning flax, to be introduced into A's factory. The machine becomes a part of A's capital, and the money paid to C for his machine is partly wages, a reward for the labor bestowed on its construction, and partly profits, to replace to C the money used in making the machine, together with a reward for his abstinence from the use of this money until the machine was sold. Thus we see that capital, whether in the form of wages-fund, materials, or implements, is always the result of abstinence; and that whoever abstains from the present enjoyment of anything, in order that that something may contribute to a future production, renders an essential service; and, consequently, that the reward of such abstinence, or profit, is just as legitimate as are wages This is very clearly seen in the common case in which one man loans capital to a second, to be used by that second in his own business. Brooks has a thousand dollars in hand which he is at liberty either to enjoy unproductively, or to employ himself productively, with the assurance of a profit; but is willing to forego the use of it for a year in favor

of Smith, who is anxious to enlarge his business. Brooks' abstinence is a clear service to Smith; and at the end of the year, therefore, Smith not only refunds the thousand dollars borrowed, but also sundry other dollars besides as a specific reward for this specific service. If Smith keeps the money ten years or twenty, it is no more than just that he should pay this sum every year till the principal is refunded, because the service is every year repeated, the abstinence is still practised in his favor. Therefore, capital once acquired by abstinence, becomes, if the abstinence be continued, a legitimate source of perpetual revenue to the owner, as well as a perpetual source for the maintenance of laborers. Whoever transforms his property into capital, establishes thereby a permanent fund whence he may draw an income, and laborers support, in perpetuity; because the capital, though constantly disappearing in production, as constantly reappears in products, with profits added: a fact which shows the folly of the popular opinion which regards more favorably the man who spends his money freely and unproductively, than the man who, turning his money into capital, building a mill, or making other permanent investments, creates by that means a fund in the community, out of which permanent wages and permanent profits can be paid. The strength of the motives to abstinence in any country will depend largely upon the character of the government, and the organization of society there; these motives being generally strongest where liberty of action, equality of privileges, and security of property are the greatest.

We turn now to the relations of capital to labor, and to that law of the distribution of the products between capitalists and laborers, which was promulgated by Mr. Carey, and which justifies his claim to be regarded as an important contributor to the science of Political Economy. As I regard some of the positions of Mr. Carey as erroneous, and shall animadvert on them in that view, I wish at this point to bear testimony to his merit as the discoverer of the beautiful law of distribution, in the light of which the future condition of the laboring classes in all countries, if they are only true to themselves, seems hopeful and bright. Capitalists are interested in profits, and laborers are interested in wages; is there, then, as is commonly supposed, a deep-seated antagonism between them? None whatever. No profits can be realized unless labor be united with the capital, because it is labor alone that works up the raw materials, tends the machinery, and disposes of the products. Capital not united to labor remains barren, giving birth to no profit, nay, itself commonly becoming less. At any rate, the idle mill and hoarded gold yield no profit. Without the profit there will be no capital; since no man will practise abstinence without the hope of a reward: but without the labor there will be no profit; and therefore the very presence of capital in any community, constitutes of itself a demand for labor. The more of capital in any community, the greater the demand for laborers, since it is through laborers alone that the profits are realized. But the greater the demand for laborers, the greater the reward of labor; and, therefore, laborers as such, are

interested in nothing so much as in the increase of capital, and in the strength of those motives to abstinence, out of which capital springs.

Capital must have laborers. Laborers desire remunerative employment. It is the old case of values over again. Labor offers a service to capital, and capital offers a service to labor. They exchange to the mutual advantage of both, and one is as independent as the other. The workmen may hold up their heads. They offer an honorable service on which capital is absolutely dependent for its existence. They offer a service as legitimate and as respectable, as that of the clergyman who preaches their sermons and baptizes their children, and are paid on precisely the same principles. Let no employer feel too much exalted towards his workmen. The money he renders them is no whit better than the work they render him. The exchange is honorable, and the parties to it on the same level of advantage. They are as necessary to him as he is necessary to them. As a capitalist he cannot exist without them; as laborers they cannot exist without him. He is one blade of the shears, they are the other blade, and it takes both blades to cut. It is absurd to ask which blade cuts most, because there is no cutting at all, unless both blades work together.

More than this. Capital and labor are not only essential to each other, but also each is bettered by the prosperity of the other. If capital realizes a good round rate per cent., every capitalist is anxious to enlarge his business, whether as lender or active operator, and employ as much of his wealth as possible, as capital. This process increases capital. If

men constantly put their profits only back into their business, which, under a high rate per cent., they will be pretty sure to do, capital rapidly increases. But increase of capital is, in its very nature, an increased demand for laborers. An increased demand for laborers, other things being equal, infallibly raises wages; just as an increased demand for anything else raises its value. Therefore, laborers are directly interested in the prosperity of capital, because the prosperity of capital leads to its increase, and its increase leads to higher wages. As a matter of fact, high profits and high wages, so far from being incompatible, usually accompany each other.

But is the capitalist equally interested in the prosperity of laborers? I think so. That he has to pay high wages is not necessarily a dead loss to him. This is no game of grab, in which what one gains another loses; it is a case of joint production, in which two parties conspire, and in which whatever helps to enlarge the gross amount produced, helps to increase the share falling to each party. If then, as they undoubtedly do, high wages tend to make the workmen more intelligent, industrious, frugal, and inventive, they are not a loss to the capitalist, but a gain. Larger gross returns are thereby secured. Improved intelligence and skill of workmen affect production, just as improved machinery, secured by the aid of capital, affects it. Both alike enlarge the aggregate of products to be divided between capitalist and laborer. Now, in the division of products thus rendered larger in amount, what hinders capital from getting a fair share? When a firm is prosper-

ous, are not all the partners benefited? All that is produced is to be divided; if more is produced, more is to be divided. Intelligent, industrious, skilful workmen, are best for production, are best for the capitalist, and therefore, high wages, which tend to make them so, and which are a consequence of their being so, are to be paid without grudging. When the matter is sifted to the bottom, it is seen that capital is as much interested in the prosperity of labor, as labor is interested in the prosperity of capital. All legitimate interests are in harmony.

I am now prepared to prove that all increase of capital, while it redounds to the benefit of capitalists, redounds in a still higher degree to the benefit of laborers. The demonstration is Mr. Carey's, and is the law of distribution above referred to. The proof is this. The rate per cent. of profits invariably goes down as a country grows older and richer. This is a simple fact of history, which no one will dispute. It has been exemplified alike in ancient and in modern times, so that one is at a loss whence to take the best examples, when all the examples are so good. In England, three centuries ago, the legal rate of interest was ten per cent., while now the average rate is barely four in that country, and lower still in Holland. During the first years of mining operations in California, from eight to fifteen per cent. a month, with security of real estate, was paid for the use of money, which enormous rates have now declined to rates not much higher than those paid in the States along the Mississippi River, and in these also the rates are constantly approximating those current in the older Eastern

States. It may be assumed, therefore, as an indisputable fact, that, as capital increases, the rate per cent. for its use tends steadily to decline; but, while less profit is received on every hundred, there are also more hundreds, and consequently, there is an absolute gain to capitalists as a class, and both an absolute and relative gain to the laborers. Let us take to figures. Let $100,000,000, while the rate of profit is six, and $500,000,000, when it has fallen to four, be expended in payment of simple wages. So far forth, the value of the products to be divided yearly, will be represented respectively by $106,000,000 and $520,000,000. In the first case, $6,000,000 is profits, and $100,000,000 is wages. In the second case, $20,000,000 is profits, and $500,000,000 is wages. Here is an absolute gain to capitalists. Profits have gone up from six to twenty millions, are more than three times as great as before. But wages have gone up both absolutely and relatively. They have risen from one hundred to five hundred millions, and are *five* times as great as before. Profits have risen in the ratio of one to three, but wages in the ratio of one to five. This arithmetical example is put for the sake of illustration, but the principle holds good in every case where the rate per cent. goes down in consequence of the increase of capital, and therefore the advantages of ever enlarging capital are even greater to the laborers as a class than to the capitalists themselves. Most assuredly, if capital now takes less out of every hundred, more is left to labor. Profits and wages are reciprocally the *leavings* of each other, since the aggregate products created by the joint agency of capital and labor are

wholly to be divided between them. This demonstration is extremely important; for it proves beyond a cavil, that the value of labor tends constantly to rise, not only as compared with the value of the material commodities which, by the aid of capital, it helps to create, a truth we have seen before, but also as compared with the value of the use of its co-partner capital itself; and therefore, that there is inwrought in the very nature of things a tendency towards equality of condition among men. God has ordered it so. Self-interest is indeed the mainspring of movement in the economic world; but no man can labor intelligently and productively under its influence, without at the same time benefitting the masses of men. His very savings, productively employed, are poor men's livings.

It only remains to speak of the forms which capital assumes, and to divide these, in general, into circulating and fixed capital. Circulating capital comprises all those products, the returns for the sale or consumption of which are derived at once and once for all. Such are generally (1) all raw materials; (2) most of funds for wages; (3) completed products on hand for sale; and (4) all commodities bought and held for the sake of resale. Fixed capital comprises all those forms of capital which are purchased or held with a view of deriving an income from their *use*. Such are generally (1) all tools and machinery; (2) all buildings used for productive purposes; (3) permanent improvements in land; (4) all investments in aid of locomotion, such as railroads, canals, ships, and everything subsidiary to these; (5) all products loaned or rented, or retained for that purpose; and

(6) the national money. "The test of fixed and circulating capital is the inquiry, Are returns secured by the retention, or by the transfer, of the particular product? Tools in the hands of him who uses them are fixed, in the hands of him who manufactures them, circulating capital." [1]

As civilization advances, and the aggregate of all forms of capital enlarges, there is a tendency towards a relative increase of fixed capital, as compared with circulating. This disproportion would become greater than it actually does become, were it not for the fact that almost all forms of fixed capital are subject to a rapid deterioration of value, due partly to usual wear and tear, and partly to the progress of improvements, in consequence of which, what is old soon becomes antiquated. In nothing, perhaps, is actual cost of production so useless a guide to present value, as in machinery, and other forms of fixed capital. New and easier methods are being constantly invented, and the result of their introduction is to lessen the value of the old apparatus, and consequently to lessen the value of the aggregate accumulations of fixed, as compared with the current value of circulating, capital. Production looks perpetually to ends; and estimates means just in proportion to their present efficiency to reach the end proposed. If the end can be reached by a cheaper process, in any department, the value of the former means will fall; and the value of the former results secured by these means, other things being equal, will fall also. It has been estimated, that at the present time, the proportion of circulating capital to fixed in France, is one to eight; in England, one to three; in the

[1] Bascom's *Political Economy*, p. 71.

United States, three to five; proportions which are believed to be much higher in favor of fixed capital than formerly obtained in those countries.[1] It is also worthy of notice that a too rapid and general conversion of circulating into fixed capital may prove temporarily injurious to large classes of persons. If all carriage-makers, for example, instead of selling their carriages outright, and making new carriages with the proceeds, should let them out on hire, receiving their value only in instalments, it is evident that they could not make so many carriages as before, and that their workmen would suffer by the change of method. So too, if, while a national debt is being contracted for war expenditure, general business become dull, and capitalists, preferring the steady income from the national bonds to the uncertain gains of business, largely invest their circulating capital in bonds, it is very clear that many laborers would suffer a disadvantage. In the same view, a mania for building railroads, or any other impulse, by which large masses of floating capital are suddenly transformed into fixed capital, will surely be followed by some temporary distress.

It follows from all that has preceded, that a value must first come into being, and be contemplated as existing, before it can possibly become capital, because it is a distinct purpose of the owner to use it for a profit that *capitalizes* it, that is, transforms it from a mere value into the special form of value — Capital. It also follows from what has preceded, that the vast destructions of war are mainly a destruction of *capital.* War cannot be carried on except by means of property actually existing, nor for

[1] Carey's *Social Science*, iii. 56.

any length of time or to any great extent except by means of property existing in the form of capital. These savings previously employed productively are the source whence war-supplies are drawn; the capital is absolutely destroyed; the war-debt remaining is only a memorial of this destruction, and an obligation resting upon somebody to create new capital with which to replace the old; the debt does not carry on the war, but transfers the capital from individuals to the government; and war, accordingly, is the greatest enemy to exchanges, because it annihilates a portion of the central agencies which carry them forward.

We may gather up into the following propositions the substance of the present chapter: —

1. *All capital is products saved for further use in production.*

2. *The motive for the saving is the increase accruing.*

3. *Mere hoards are not capital, but become such when lent for interest or otherwise used productively.*

4. *The more capital the more use of free Nature, and the more demand for paid laborers.*

5. *The more capital the larger the aggregate of values produced, and the less the value of each particular of the aggregate.*

6. *The more capital the higher the rate of wages, and the lower the rate of profit.*

7. *Profits are the leavings of wages.*

8. *Fixed capital increases relatively to circulating, and both are the poor man's friend.*

9. *War destroys capital, communism threatens it, strikes impair it, while peace and good-will reduplicate it.*

CHAPTER VIII.

ON LAND.

The test of a definition, a generalization, a theory, is found in those seemingly anomalous cases with which all science has to do, and which come with such apparent reluctance under her painstaking classifications. If a definition given, or a generalization propounded, reduce into order these outlying cases without violence, as well as cover easily the more central phenomena, there is at once created a strong presumption of their truth. Does it cover all the cases? Does it account for all the observed facts? These are tests of definitions and of principles. The questions relating to the value of land and of its products have been among the most vexed questions of Political Economy, have exercised a vast amount of ingenuity, have led to careful and commendable observations and investigations in the whole field of agriculture, while the diverging views that have been taken, the arguments adduced, the conclusions drawn, and the spirit manifested, in these discussions, form the most unrefreshing portion of the history of the science. These questions, however bitterly debated in the past, are approaching, even if they have not already reached, a satisfactory solution. The value of land and of the products of land have been almost uniformly

regarded in economical theories as anomalous matters, to which peculiar principles are applicable. The amount of land-rents, the value of land products, and the value of the land itself, have been supposed by most of the second school of economists to be determined in a different way from all other values. Anderson, Smith, Ricardo, McCulloch, Senior, Mill, and many more, although differing much among themselves as to the details, have been agreed as to the main point.

Now, the presumption is always against the existence of a few outlying cases, whenever the induction has been long and carefully conducted by many persons, and the generalization appears on all other grounds to be sound and comprehensive. The Theory of Rent, first promulgated by James Anderson, a Scotch farmer, and then elaborated by David Ricardo, a London banker, — a theory long vaunted as a great discovery and most certainly true, — stands out in contradiction to the general laws of Value as we have now learned them. Mr. Carey was the first economist of note to dissent from this theory, and to labor to overthrow it. Mr. Perronet Thompson and Dr. Thomas Chalmers pointed out that it contained the fallacy of inversion. In France, Say, and afterwards Bastiat, opposed the Ricardo theory of Rent. As early as 1855, Mr. Macleod had "no hesitation in saying that the Ricardo theory of rent is a mere delusion; that it is fundamentally erroneous, inasmuch as it inverts the relation of cause and effect." It seems to me that the means are at hand for combining what is true in all these views in a clear and self-consistent manner, and for

settling the dispute for all time. I feel sure that all the parties are right in some respects, and are wrong in some respects, and am not without hopes of being able in this chapter to reconcile the differences, and to show on the one hand that the value of land, of its products, of its rent, are not at all anomalous cases of value, but arise and vary from human services rendered and received, just as all other values do, and on the other hand that the "law of diminishing returns from land," which is a part of the English view, is a true law of Nature.

Under our division of Values, *land is a Commodity*, just as a horse is, or as a steam-engine is. Men did not originally make the land, neither do men make horses, nor do men make the iron ore, out of which most parts of the steam-engine are made; but men modify the land as God made it, come into possession of it in some way, gain for themselves a *right* to sell it, and prepare it to be sold, just as men break and train horses and prepare them to be sold, and just as men by many processes transform the iron ore into the steam-engine. Ricardo[1] says that "rent is that portion of the produce of the earth, which is paid to the landlord for the use of the original and indestructible powers of the soil." As a matter of fact, and as we shall see, *there are no such powers;* and even if there were, it would be impossible to separate the portion paid "for the use of the original and indestructible powers of the soil" from the portion paid as interest on the capital expended to bring that land from the state of nature to its present state. There is scarcely any land anywhere

[1] *Principles of Political Economy and Taxation*, p. 47, 2d ed., 1819.

fit for cultivation without more or less expenditure of labor and capital upon it; and the "powers" of the earth, instead of being "indestructible," are in a constant process of wearing out, and require a constant application of labor and capital to keep up their fertility. Besides, who is authorized to take pay "for the use of the *original and indestructible* powers of the soil? And who can put himself into a position where he can *enforce* such a claim? Land accordingly, like all other commodities, and like all other valuable services derives its *utility* partly from the free contribution of Nature, and partly from the onerous contribution of men; and, as we saw in general in the chapter on "Value," the *value of land*, as of all other services, tends perpetually to become proportionate to the onerous human contributions, and not to the aggregate utility. There are unique cases in lands, as in other things, in which the action of competition may not expel the common factor, — nature's contribution, — from all influence on price; but these cases are of no more importance in lands than in horses, or other things, and themselves come completely under the law of Supply and Demand. Our generalization, therefore, in regard to Commodities, is not at fault when it touches upon land. Land comes under it easily and perfectly.

Moreover, all our other definitions and principles will now be seen to include without violence the facts of land. Desires first and then efforts, — the utility to each party of the respective services, and then the equivalents rendered by each, — these are always the elements out of which the value of land,

the value of its products, the amount of its rent, must and do spring; otherwise, our science would lack the generality which alone can constitute it a science. Whatever makes land more an object of desire than it was before, whether increased fertility or a location now become more advantageous, will, so far forth, increase its value; and whatever makes the equivalent offered for it more an object of desire to the holder of the land, will, so far forth, diminish its value; while the reversed conditions in each case will give of course reversed results. Let us see whether the definitions and principles already familiar to us will not apply perfectly to the value and rent of land.

A series of propositions, and discussions under them, will bring out what seems to be the truth in this whole matter.

1*st. The whole earth with all its productive powers was given to men gratuitously of God under the simple direction that they replenish and subdue it.*

No provision was made for particular ownership. The whole earth, thus bestowed without partiality upon a whole race, had in all its spontaneous products a great utility, but, for a time, no value whatever. The spontaneous fruits, when gathered by any person, might become thereby possessed of value from his effort expended, but to the land itself, on which no human efforts had been expended, the idea of value could not have attached. No man would have *thought* to say to another under such circumstances, This field is mine: give me something for it, and you shall have it; and if he had, that other would not give it, because such fields

were open on every hand to his occupation gratis. It is not in human nature to render anything for something which may be gratuitously obtained; value has no place in a sphere where everything is free. But it is well worth while to notice, that under God's command, the earth was not only to be replenished but *subdued*. Under this word subdue, and under the work implied in that, came in the first idea of ownership in land. When a family commenced this work of subjugation upon a piece of land, when they enclosed it, settled on it, tilled it, in any way whatever improved it by an expenditure of their own toil, then first dawned upon their minds the idea of possession, then first began the land to be possessed of *value*, since now the family would justly say to another, If you want this field, you must give us an equivalent for what we have expended on it. If the transfer took place, is it not very plain that what was sold, was not so much the inherent qualities of the soil as the result of the efforts expended in its amelioration? The qualities of the soil lay indeed at the foundation of the *utility* of the parcel; that utility, however, had been increased by the efforts of men; and the *value* of the parcel, the equivalent rendered in return for it, would be gauged, in general, by this second factor in the utility. The first family received the soil and its powers gratuitously, and then expended a series of efforts on its improvement; but a similar series of efforts bestowed on other gratuitous land in the neighborhood would make it as eligible as this now is; if, therefore, the family insisted on more than an equivalent for their exertions actually be-

stowed on the land, the other would reply, For as much labor as you have given to your land, we can make other free land as good as yours, consequently we can give you no more than a fair equivalent for your efforts. The *value* therefore of the parcel sold, would be determined, not by the gratuitous elements involved, but by the onerous elements involved, that is to say, by the efforts already made by the first family in connection with the land, as compared with the efforts of the second involved in the remuneration offered It is not possible in the nature of things that God's bounty to the whole race should be thwarted by any number of individuals through exclusive appropriation on their part of this bounty. What they received gratuitously, they must gratuitously transmit; what they have wrought of permanent improvements on the land, they may justly demand a recompense for, and can secure it. By their expenditure of efforts they have saved to the purchaser a like expenditure of efforts, and for these they can demand, and he will be willing to concede, a recompense; but if they go further, and demand pay for the natural qualities of the soil which God gave and they have not improved, for the sun that shines, and the rain that falls on it, the demand is blocked at once by the common sense of the purchaser. He replies: There is land enough in its natural state, with inherent qualities as good as yours, the same sun shining on it, and just as much blessed rain falling on it, which I can have for nothing. I cannot give you something for that which costs you nothing, and which I can get for nothing.

As long as there is abundance of land still open

to occupation, everybody will concede that this line of argument is just, and that the general value of land cannot rise above the estimated measure of the human efforts actually bestowed on its improvement. Though less obvious at first, the principle still holds true after all the land has been taken up. Improved farms are always for sale in every country, lands once appropriated and ameliorated are perpetually changing hands, and some men are always found willing to part with land, as with anything else, for what it has cost them. If some proprietors try to exact a price for their land made up of compensation for what they and their predecessors have done upon it, and for what they or others have done in some proximity to or connection with it, together with something added for what God has done for it, their cupidity is usually thwarted by the readiness of others to dispose of their land for a fair equivalent of their own or others' onerous exertions. Human motives are such, and everything is so providentially arranged, that men cannot, as a rule, sell God's gifts; it would be derogatory to the Giver, if they could.

Lands in cities, or in the neighborhood of them; lands of unusual fertility, or possessing superior building sites; lands containing rich mines or a remarkable water-power; sometimes excite extraordinary desires to possess them, and bear in consequence an extraordinary price. Still the efforts, care, and abstinence of their owners, or of others, have made up an essential part of their present utility. They are assimilated in the law of their value to other unique products. Of such lands no

market rate can be predicated, because competition has no play. Their utility, like every other utility that underlies value, is partly the contribution of nature and partly the contribution of man, but competition in this case has not its usual opportunity to eliminate from its action on price that portion of the utility that is the free gift of nature. Their price, consequently, is only gauged by the service which the owner can render the purchaser by them. With these unimportant exceptions, which themselves come with precision under our fundamental principles, the value of land follows the law of other values, arises only in connection with human efforts, is open to free competition, is not affected by the utility that comes from nature, rests back upon the right of making efforts for one's own welfare, and of not parting with the result except for an equivalent, is a clear case of service for service, and varies like other values under the law of demand and supply.

What might be thus inferred from the nature of the case, is abundantly confirmed by facts. As a matter of fact and experience, lands are absolutely *valueless* until some portion of human effort has been expended on them, or in reference to them. They may have utility, but they have no value. Nobody will give anything for them. The United States government has been selling for years some of the best lands in the world for one dollar and a quarter an acre, and this after the lands have been surveyed at government expense, local governments provided for the settlers, and mail facilities and other privileges guaranteed to them. The same govern-

ment is now giving away similar lands in homesteads to actual settlers, merely taking for the title-deeds nominal fees, whose aggregate amount does not begin to meet the expenses incurred in connection with these lands. If lands had value, independent of human exertions, then would the English companies and individuals who received grants in the seventeenth century of vast tracts of as fertile land on this continent as the sun ever visited in his diurnal revolutions, have become rich as Crœsus; but these companies and individuals did not become rich at all, but rather poor. The amount realized from the sale of their lands fell far short of reimbursing the expenses of colonization; and, after incurring debts and endless vexations, most of the companies and proprietors were glad to be rid of their lands at any price. It is a current proverb now in regard to wild lands at the West, that the more a man has of them the worse off he is; and it is a maxim also in the newer settlements everywhere, that improved lands are worth the present value of the improvements and no more. Mr. Carey is at pains to prove, what might be expected beforehand, that the value of lands in old countries is now less than they have cost of actual human efforts in their subjugation and improvement. The progress of capital and inventions enables similar work to be done now at greater advantage, and consequently the results of former work have fallen in value. While, therefore, value in land arises solely in connection with human efforts of some sort standing in some relation to that land, it is important to observe that the value is not always proportioned to those efforts. The

efforts may have been misdirected; the desires calculated upon may have taken another turn; the utility sought to be conferred may not find the requisite natural utility underneath; and so, there is a greater diversity in the value of lands than in the amount of efforts expended upon them.

It is also worthy of remark that the element of profits frequently finds place in the price of lands. Land may be purchased and held a long time with a view to ultimate profits. Little may have been done for the land originally, and little in the mean time, and yet the ultimate price be large, because the purchase-money should be replaced with compound interest. *Abstinence*, therefore, which is one form of effort, has often to do with the value of lands. Also, the efforts of certain men put forth exclusively towards ends of their own, as in locating a railroad or a manufactory, may benefit the lands of other men as much as efforts put forth with that direct intent. These lands become thereby more *desirable* and therefore more *valuable*.

It is also worthy of mention, that lands do not rise in price under a depreciated currency so promptly, and probably not so much, as commodities do. This has been widely noted in this country of late. The reasons are, first, that lands, being more stable than commodities are, do not feel the same necessity of being constantly insured against still greater depreciation; and, secondly, that as a depreciated currency makes against agricultural products, so far as any part of them is exported, lands tend to diminish in value from this cause.

2*d*. *The powers of all land, under more laborious*

culture, agricultural skill remaining the same, are subject to the law of diminishing return; in other words, increased labor upon it, though increasing the aggregate return of produce, does not secure an increase proportioned to the increase of labor.

I shall use the short term "produce" to denote exclusively what might be expressed by the longer term "agricultural product," although I am not sure that good English usage has made any distinction between "produce" and "product." I mean by it all the fruits of the earth cultivated for the sake of their sale. The above is the fundamental proposition on which Ricardo, and the English writers generally, lay such stress, and on which they found the law of Rent, and the necessity of restraints on population; while Carey and Bastiat, impliedly if not expressly, deny the proposition, and of course, the inferences deduced from it. In my judgment, the proposition cannot be logically denied. The law of diminishing return from land is a law of Nature, and has played a very important part in the occupation and culture of successive portions of the earth's surface. The proof of the proposition is all the better for being short. If by doubling the labor on a piece of land, double the produce could be secured, and by quadrupling it, quadruple, and so on, there would be no reason why any man should ever cultivate more than a square acre, or even a square rod. He has a strong motive to confine his culture to a small space, just so long as the amount of produce is in the ratio of the labor expended, because there is less locomotion of tools and fertilizers and crops. The fact that he extends his culture from one acre to another, and then to

distant acres, notwithstanding the inconveniences and expense of transportation, is an irrefragable proof of the proposition in question. Increase of agricultural labor and expenditure on a given space of land will secure a larger amount of produce, but as a general law, the increased amount will not be proportioned to the increased expenditure. If it were thus proportioned, if the law of diminishing return did not exist, then, for purposes of agricultural production, a square acre is as good as a continent.

It is through this law of diminishing return, that the Creator has secured the gradual occupation by men of almost the whole earth. There is a strong tendency to leave the old acres to advance upon new, the old countries to emigrate to new, whenever the returns begin to bear a more unfavorable ratio to the labor bestowed. The farmer will advance from the first to the second acre as soon as he thinks that more produce can be obtained from it by a given amount of labor than can be got by a like expenditure of additional labor upon the first acre, allowance being made for the increased inconvenience; and so, cultivation has gradually extended itself, and men have become dispersed over the whole earth. Other principles leading to dispersion have undoubtedly coöperated, but this is the fundamental one, operative at all times, changing the course of population, and consequently of empire.

Mr. Carey seems to think that this proposition is dependent on another, and endeavors to break down this by an attempt to break down that other. That other proposition is, that in the course of occupation

the best lands are entered upon first, and that afterwards recourse is had to the poorer soils. He attempts to prove that the exact reverse of this is the historical fact, that cultivation has always been begun upon the poorer soils, and that afterwards the river bottoms and strong lands have been drained and cleared and tilled. This discussion, however interesting in itself, is irrelevant as far as the law of diminishing returns is concerned, because that law is nowise dependent on the order in which soils of different productive power are entered upon in cultivation; it is true of all soils, whether rich or poor, whether entered upon in the order of their fertility, or in the inverse order; and I cannot help thinking that Mr. Carey puts upon this matter of the order of occupation, which he asserts has always been from the poorer to the richer soils, an estimation altogether disproportioned to its importance. Whenever men have entered upon new countries, they have undoubtedly selected those lands first which seemed to them most eligible, reference being had of course to their present means of subduing them; and whether these lands proved ultimately to be better or worse than other parcels which they might have chosen, is a point, which, however determined, has no effect to disturb the fundamental proposition in hand.

3*d*. *The operation of the law of diminishing returns is retarded by all improvements in agriculture.*

The discovery of new and more available fertilizers, the invention of better agricultural implements, the light thrown by chemistry upon agriculture, the consequent adoption of better methods of culture

and rotation of crops, the more perfect adaptation to the various soils of the kinds of produce sought to be raised from them, all these and similar improvements tend to increase the ratio of the produce to the labor, and disguise the law just established. The lands that are now under cultivation may be made, under more skilful modes of culture, to yield indefinitely more than at present, and the vast still uncultivated lands of the world may come to render an incalculable quantity of food to the world's population; but yet, as improvements are naturally less continuous in this than in some other departments of production, as invention has less play, as there is less opportunity for the division and coöperation of labor, as nothing can materially shorten the time during which the fruits of the earth must ripen, it is certain that possible improvements will never override the law of diminishing returns; and, consequently, that the value of agricultural products tends to rise relatively to manufactured products generally. Labor, for a reason already given, and produce, for the reasons now given, have risen and tend steadily to rise, as estimated in general commodities.

4th. The rent of land is the measure of the service which the owner renders to the actual cultivator, and does not differ essentially in its nature from the rent of buildings in cities, or from the interest of money.

Mr. Ricardo's famous doctrine of rent, is for substance, this: there are some lands in every country whose produce just repays the expenses of cultivation, and consequently yields no margin for rent; and the cost of production on these rentless and poorest lands under cultivation, will determine the

price of the produce; and as there can be but one price in the same market, the produce raised on more fertile lands will be sold for the same price, and this price, besides paying the cost of production, will yield a rent rising higher according as the land is more fertile; so that the rent paid on any land is always a measure of the excess of productiveness of that land over the least productive land under paying cultivation; and therefore, an increased demand for food in consequence of increased population, and the higher price resulting, will force cultivation down upon still poorer soils, or else compel a higher culture for less remunerative returns on the old soils, according to the law of diminishing returns, which in either case will raise the rents on all the soils above that grade that just repays the expenses of cultivation; so that it is the sole interest of landlords, as such, that population should be dense and food high, their interest being directly antagonistic to that of the other classes of the community.

This very ingenious and complicated theory, which is supported by many other authoritative names besides that of its author, is too mechanical and rigid to be a good scientific statement of universal facts. It is true that, if 150 bushels of wheat are raised each with x hours' labor, and 50 each with $x + y$ hours' labor, and 200 are wanted, the price of the whole, offered at once, will not be below the rate $x + y$ for the whole 200; but this fact is not sufficient to make the price of food and the rent of lands anomalous cases of value, and it never would have been supposed so, had not England been under infamous corn laws which forbade importations, and

made everybody tributary to landlords. If a war breaks out, and the founders have only 150 cannon on hand, which cost x, and the order comes for 200 to be delivered at once, of which fifty will cost $x + y$; the founders will as certainly be paid for the whole 200 at the rate $x + y$. When the trade in corn is free, the Ricardo law of rent loses its formidableness, and the simple law remains, applicable to all products that have a market-rate, that that rate must be sufficient to compensate the cost of that portion produced with greatest difficulty, otherwise that portion would not be produced. Of course, those who produce at the greatest advantage will realize extra gains from this market-rate, so far forth as their advantage does not depress the market-rate. So far as lands are taken on shares, or on permanent leases, or so far as their products are exchanged directly against other commodities and services, the law of Ricardo has little application. As a matter of fact, too, there is sometimes more than one price of similar products in the same market-town, although there is a strong tendency towards one price of similar goods of the same grade; and prices, especially prices of produce, are varying all the while from other causes than those affecting the cost of production. The following seems to me to be the whole truth in regard to rent. That portion of utility in lands that is the free gift of Nature is mostly a common factor eliminated from value by the action of competition, as in the horses and strawberries, by which illustration was made in the chapter on Value. When not thus eliminated, that part of the utility may raise the rent as well as the price, but the ex

ception in either case is practically unimportant, in both cases is amenable to the law of services exchanged, and, the exception aside, the rent of lands is a simple recompense for the use of a productive instrument, made such by human efforts. The owner has become proprietor of all the results of the onerous exertions put forth upon that land, or in any connection with that land, and allows the lessee the use of these results. Because the owner practises *abstinence* in the lessee's behalf, *rent* is substantially the same as *profits;* and as gross profits include the wages of superintendence, so rent also partakes of the nature of wages, so far forth as the owner still takes an active supervision of his property. Proximity to markets, degree of fertility, state of improvements, and the variations of supply and demand, will influence rent.

5th. That division of land is best for purposes of production, which gives farms approximately equal in size to the cultivators; and the best tenure is the fee-simple.

Taking the last part of the proposition first, the fee-simple is better for production than any other tenure, because when one owns the land he tills, he takes a greater interest in it, it is his own, he has a constant motive to improve it, to make the production from it as great as possible, since all it produces is his own. If men work from motives, and if the energy and persistence of the work be proportioned to the constancy and press of the motives, then will the fee-simple most certainly make the aggregate of produce greater than any other tenure of land. Moreover the fee-simple immeasurably

improves the character of the cultivators. The masses of men are educated and developed by nothing so much as by the ownership of land. It tends to make them industrious, thrifty, independent, hopeful of the future, anxious to give their children better privileges, as well as better lands, than they themselves had. The testimony on this point is abundant from many countries, and it all goes to show that the peasant proprietor is a happier and more virtuous, as well as a more industrious and productive man, than the mere tenant and farm-laborer; while similar testimony, as well as common observation, proves, that lands under the copyhold tenure, or leased at will, are far inferior in point of improvements and production, to contiguous lands held in fee-simple. The zeal of absolute ownership, especially if it be a limited ownership, has been observed to produce almost magical effects, as well upon character as upon lands, transforming after a while the poorest into excellent lands, and thriftless and desponding laborers into frugal and enterprising proprietors.

The practical play of the fee-simple draws after it such a division of lands into farms moderately large and approximately equal, as can be shown to be most favorable to the largest aggregate production. Wherever there is no primogeniture and no entails, and owners can consequently sell a part or all their lands, whenever it is their interest to do so, lands naturally fall into those hands which are most capable of using them productively, because such persons can afford to pay more for them than anybody else; and the division that follows this impulse

of self-interest and this freedom of exchange is likely to be into farms tolerably equal in extent and moderately large. Such a division has naturally taken place in New England, in the Middle States, and at the West; while in the South, the institution of slavery led to the system of large plantations and few land-owners, which system, I believe, will now, under the auspices of freedom, give way to the better system of small farms and numerous proprietors. That the latter system is more profitable in reference to production, as well as advantageous in point of national character and a broadly based and sound development of the national resources, is evident from a few considerations, and has been exemplified distinctly in the diverse experience in this respect of France and England. 1. When the mass of the agricultural population are owners of the soil they till, the motives to productive cultivation are brought to bear most universally. These motives are interest and hope. There is a high pleasure in possession, and in self-guided exertion, a strong stimulus to get as much as possible from the land, and at the same time to keep good and ever improve its condition. When the great body of the land of any country comes under the action of such motives as these, then will the amount of production be the greatest. 2. Aristotle quotes from "the African" the saying that the best manure for the land is the foot of the owner; a saying which is often attributed to Dr. Franklin, and which is as true as if its origin did *not* date back some centuries before Christ. Franklin had read Aristotle. Personal supervision, to be most effective, must be limited in

its sphere; and the best agricultural knowledge and skill becomes comparatively weak when it attempts to exhibit itself on too broad a surface. Because a man can cultivate one hundred acres better than any of his neighbors, it does not prove that he will cultivate fifty acres additional to them better than a neighbor of inferior skill, who is the owner of those fifty and no more. 3. The possession of small freeholds educates and gives energy to the masses. That educates a man which calls forth varied efforts of intelligence and will. To protect and advance his own interests, to attend upon the seasons, to watch and wait, to foresee and plan and labor, all this will secure that a nation of freeholders will never be a nation of ignorant, indolent barbarians. 4. National strength is best secured and maintained wherever there is a broad basis of independent yeomanry to lean back upon when heavy taxes are to be raised and strong blows of battle are to be struck in behalf of the nation.

France and England are instructive examples in this whole matter. In France, since the abolition of all entails and primogenital rights by the revolution of 1789, and under the action of the law requiring the equal partition of a man's landed estate among his children, the lands have become subdivided into small parcels, averaging about fourteen acres to each owner. Out of a population of 37,500,000, 8,897,000, or nearly one fourth, are proprietors of land either in town or country. Of improved and unimproved lands there are in France about 122,500,000 acres owned by individuals. The number of different lots of land, however, is about

140.000,000, or considerably less than an acre, on the average, to each lot. About ten of these lots, on the average, are included in one assessment of the land-tax; the whole number of such assessments being 14,123,117. Of these fourteen million assessed properties, more than seven million are worth less than $1,000; more than two million are worth between $1,000 and $2,000; nearly two million more are worth less than $3,000; while only 53,000 properties are worth more than $100,000. The estimated value of all these lands is $31,000,000,000; and the annual net income $937,500,000. These figures, which are all taken from the official returns of the French government for the year 1866, are very significant of the beneficial results of the land system of France. In point of a regular increase of agricultural products; in point of an industrious, frugal, cheerful peasantry; in point of a very general desire and ability to purchase land; in point of showing that subdivision ceases so soon as the lands, if divided further, would be less profitable in production; in point of pauperism; in point of national strength and weight, in spite of a centralized and repressive government; in point of an ability in the peasantry to loan to government, in an exigency, large sums of money in the aggregate; a long experience has shown that the practical workings of this division have been most happy.

In England, on the other hand, the monster-farm system prevails, 710 individuals own one fourth of the entire geographical area of England and Wales, the aggregate holdings of the 100 largest private owners are 3,852,000 acres, the Duke of Northum-

berland owns in one county 181,000 acres, the universities of Oxford and Cambridge own 235,553 acres in all parts of England and Wales, the entire acreage is but 34,537,158 acres, the total number of landowners out of London is 972,836, but only 269,547 of these are holders of one acre and upward, and 43,000 of these possess over 100 acres.[1] The national results of this system are what we should expect they would be. There are upper and middle, and lower and lowest classes, but a homogeneous English *people* are not to be found. Particular results are seen, in part, in what has been justly called the irretrievable helotism of the laboring classes; in an average of 1,169,043 persons in the three kingdoms relieved by means of the poor-rate on a specified day during twenty-three years, from 1849 to 1871 both inclusive, of whom on the average 207,890 were able-bodied adults; in an annual poor-rate raised by taxation of $53,187,225 during the twenty-three years on an average, some of which, however, was expended for other purposes; in unmeasured inequality in fortunes and comforts; in the lack, felt alike in war and peace, of a large class of sturdy yeomanry, the strength of a state; and in a consequent sinking of relative position, power, and influence, former times being held up with the present, as compared with France and the other first-class powers. No degree of merit in the other parts of the English system, can ever compensate the want of just and broadly liberal laws of land. Still, the merits of other parts of the system are alleviating results even here. Wages are rising. Pauperism

[1] *Domesday Book* of 1875.

is steadily declining. Only 784,006 persons in England were in receipt of relief on the 1st of July, 1874. The estimated population of that kingdom at that date was 23,649,000 souls, the ratio of paupers, accordingly, to the whole population was then but 3.32 per cent. The ratio on the corresponding day in 1873 was 4.70 per cent. 203,866 fewer persons received public charity in 1874 than in 1870, the comparison being made on corresponding days of each year.[1]

The "encumbered estates law," applicable only to Ireland, passed by Parliament in 1848, has had the beneficial effect of multiplying the number of landed proprietors in that island. Under this law there can be brought into market, in whole or in parts, estates encumbered with debt, and thus shut out from improvement. "The proceeds of the sale are paid into the Court of Chancery, to be distributed by that court as equity may require, between the owner, his creditors, the various encumbrancers, the heirs at law, and all other interested parties."[2] Thus millions of acres of heavily mortgaged lands have passed from the hands of their nominal owners into the hands of absolute proprietors, whose title is perfect because parliamentary, and whose interest and zeal are said to have changed already the face of their lands. In the first five years of this system, more than one tenth of all the landed property in the island was sold in the Irish Encumbered Estates' Court; and the land thus sold was divided into about five times as many distinct estates as before. Up to 1870, the value of the lands sold in this way

[1] *Pall Mall Gazette.*

[2] Bowen's *Political Economy.* 1st ed., page 521.

amounted to $170,182,015. There are 20,815,460 acres of land in Ireland. The population in 1871 was 5,402,759. The proportion of paupers to the population in 1870–74 was only 1.30 per cent. The average death-rate during the same years was 1.67 per cent. of the population, while the death-rate in England was 2.25. Recent parliamentary legislation has relieved the Irish of their forced tribute to the English Church; and the hope may be indulged that Ireland has already entered upon a period of substantial improvement and prosperity.

Still, the assassination of the Earl of Leitrim in the spring of 1878 brought into discussion in Parliament and in the public press of the world, many landed abuses still practised in Ireland. The late Earl owned 95,000 acres in Leitrim and two other counties. About twenty landlords in Ireland have more land than he had. Notwithstanding the parliamentary law of 1870, that the evicted tenant is entitled to receive the value of the "tenant-right," that is, the unexhausted part of improvements made on the land during his tenancy, capricious evictions are still common, the late Earl practised them on a large scale, and was murdered either for this or a still worse perversion of his position as landlord.

The "Agricultural Holdings Act" for England alone, came into force on the 14th of April, 1876; but a legal notice of exemption served previous to that day, allowed a large proportion of the landlords of the country, including the Queen and the Commissioners of the Church-lands, to throw themselves out of the operations of the Act. It is permissive rather than compulsory in its operation and does not

promise to effect much improvement in the relations of tenants to landlords, or to secure the much-needed "tenant-right" on the expiration of leases. Indeed, the law has been called a mere "homily to landlords."

We may condense the discussions of this chapter into the following propositions: —

1. *A just generalization covers readily all the relevant cases.*

2. *Land is a commodity made such by human efforts, and its sale, its produce, and its rent, come under the ordinary laws of value.*

3. *It is not the law of diminishing returns, nor differences in fertility that cause rent, but the price of produce under demand and supply.*

4. *Superior soils pay a rent, because the price of produce justifies the cultivation of inferior soils.*

5. *Rent, therefore, is no part of the cost of production, and no element in the price of produce, because it does not affect demand for or supply of produce.*

6. *Rent is one share in the profits of agriculture.*

7. *Fee-simple is better than any leases; long leases are better than short ones; and reasonable tenant-rights should be guarded by law.*

CHAPTER IX.

ON COST OF PRODUCTION.

THERE are only three categories of valuable things: first, commodities; second, services; and third, credits. Credits will shortly be considered at length in the chapter under that title; services have already been specially treated in the chapter on "Labor;" and the general principles of value already laid down cover alike all three of the categories. But there are certain subordinate principles of our science, which are applicable to commodities alone. Land, so far as it is ever subject to sale, is, as we have just seen, a commodity; its products are *commodities;* the hired laborers who till it, render *services;* and the leases, under which the tenants cultivate it in lieu of their landlords, are *rights*, or credits. These three things are intimately associated of course, inasmuch as they are all salable, and thus all come under one *genus.* Still, in the present chapter we must bring forward some supplementary matters relating to value, which concern commodities alone, and which could not properly be discussed until the subjects of labor, capital, and land, were, at least in their ground principles, understood. We are now in position to be able to analyze the *Cost of Production* of those material things exposed for sale, which are technically called Commodities.

While we were inquiring, in the chapter on value, whether such a thing as a measure of value were possible, it was remarked that some political economists have thought that the cost of production of any commodity is the most accurate measure of its general purchasing-power; and it might have been added, that these writers consider that there is such a thing as *natural* value distinct from market value, that natural value is the cost of production, and that market value oscillates perpetually around that, and tends constantly to return to it. How far these views are just, how far cost of production constitutes a law of value within the all-comprehending law of demand and supply, is the point to which attention is now directed.

It is noticeable, that while almost all people put forth onerous efforts to satisfy the present and immediately prospective wants of other people, in view of receiving back from them corresponding efforts to satisfy their own present and immediately prospective wants, there are some people, who have both foresight and capital, who set to work to make preparations in reference to services which they expect to render some time in the future; and it is evident that this matter of the cost of production has an especial bearing upon those classes of production in which permanent investments are made, looking to future rather than to present exchanges. It becomes necessary to attend to cost of production simply because cost of production is sometimes an exact measure of one of the elements out of which value springs, namely, the element of effort. When a surgeon, for example, charges fifty dollars for cut-

ting off a man's leg, cost of production is an impertinent phrase in relation to such a service, and is no measure of the effort; but when a capitalist invests $20,000 in a cutlery establishment, hires all his labor, and at the end of the year has produced 5.000 knives, cost of production has a definite meaning as applied to each one of the knives, and is an accurate measure of the one element of effort, which goes, together with other elements, to determine its value. It is not true at all that cost of production alone determines the value of the knife, or is a measure of the value of the knife, but it *is* true that, in this case, and in all cases in which a commodity is produced by a definite capital invested for a fixed time, and by labor wholly hired, or estimated as hired, the cost of production is an exact measure of one of the four elements which go to determine value, namely, of one effort. Now let us suppose that when these knives are exposed for sale, no such return efforts are offered for them as are estimated by the maker as compensatory and remunerative. He may, in order to avoid a still greater loss, sell his knives below the cost of their production, but it is evident that he will not go forward at present in his enterprise of making knives. He will suspend operations, or withdraw from the business; and his action in this respect will affect the supply of knives to lessen it; and the next equalization of demand and supply will be likely to adjust a market value more favorable to knife-makers. Or if, when the knives are exposed for sale, they meet with an exchange at very remunerative rates, our capitalist is now stimulated to increase his production, to put back

his profits into his business, and perhaps to invest in it additional principal. His action in this respect will affect the supply of knives to increase it; and the next equalization of demand and supply, or if not the next, some subsequent one, will be likely to adjust a new market value less favorable to knife-makers. Thus it is seen, that absolute cost of production influences value not directly, but remotely, through its influence on supply. To suppose and to say that the cost of production of one commodity determines its value in an exchange with another, is to perpetuate the old mistake of ignoring the second commodity, is to reiterate the fallacy that value is an independent quality of one thing, is to confuse the whole subject of value. When the writers referred to speak of the "natural value" of any commodity, they mean its absolute cost of production; but, at this stage of our inquiry, it surely cannot be necessary to repeat the thought already so often expressed in substance, that an analysis of one component part falls far short of determining the resultant of four component parts. I do not think the expression "natural value" is calculated to be useful. From the very meaning of the word "value," if it is to have any consistent meaning at all, there can be no other kind of value than market value, that is, value in exchange.

But while all this will doubtless be conceded to be just, there are other points of view in which the cost of production of any commodity comes to be a very important matter. From its obvious relations to supply, already exemplified, it is constantly, though indirectly, influencing the value of the commodity

itself; and in respect to permanent investments, looking solely to future production, it becomes the main inquiry; because, while the cost of production can never determine the purchasing-power of the product, it is always one element in determining it; and also, especially, because the improvements which are all the time being introduced into the mechanical and other processes of such production, which improvements always tend to lessen the cost of the product, have the effect to lessen the value of all permanent investments, unless similar improvements be inaugurated in connection with them. The march of improvement is so constant, that old machinery and old processes are rapidly depreciated; and a calculated cost of future production in one establishment is almost sure to be disturbed by new labor-saving inventions in other similar establishments, which will be able in consequence to offer the commodity at a lower rate than the rate estimated; in which case the value of the product will not conform to the estimated or even actual cost of production in that establishment, but will pitilessly fall to the point at which similar commodities are offered by the more fortunate producers. For these reasons we must inquire carefully after the elements of cost of production.

These elements are two: cost of labor, and cost of capital. These are the only onerous elements that enter into production. Assisting the processes are, indeed, the natural powers of land, water, wind, steam, electricity, and so on, but as these are always gratuitous, they form no element of cost. Labor must have its wages, and capital must have its

profits, and also a sinking-fund from which to replace the original capital when worn out or expended. It will be in vain to search for any other ingredient of cost than these two.[1]

1. By cost of labor is meant, of course, its cost to the employer, and not to the laborer himself, in reference to whom the phrase would have no definite meaning. Now, if we make an exhaustive analysis of the cost of labor to the employer, we shall find that there are three things, and only three things, that go to determine its cost. 1. Efficiency of the labor. 2. The rate of nominal wages paid. 3. The cost of that in which the wages are paid. To illustrate each of these in order:— If a capitalist hires two men to work for him at the same rate of wages, and if the one is twice as efficient a laborer as the other, the cost of his labor to the capitalist is one half less than the cost of the other's labor. The first element of the cost of labor is its efficiency If a capitalist, accustomed to pay one dollar a day, is now obliged to pay one dollar and a half a day to his laborers, their efficiency remaining the same, the cost of labor is increased in the ratio of 2 to 3. The second element is nominal wages. If that commodity, whether money or other, in which wages are paid, varies in cost to the capitalist, the cost of the labor compensated by that commodity, nominal wages and efficiency remaining the same, is varied thereby of course. We shall discover in the next chapter that the value of money is by no means invariable, as we have already learned the variable nature of all other values, and accordingly the third

[1] Compare J. S. Mill's *Political Economy*, book iii. chap. 4.

element of cost of labor is the cost of that in which the labor is paid. It is easy to see that there is nothing else, aside from these three things, that can ever affect the cost of labor. This analysis is not given here for its own sake merely, but for some ulterior purposes, of which the first is to show, how various are the ingredients that enter into the computation which men ought rationally to make before engaging in extended enterprises of production. They must make calculations on the prospective cost of production, since that is one element that will determine the value of their future product. In doing this they must calculate the cost of labor, and the cost of capital; and the cost of labor alone involves, as we have just seen, three variables, no one of which can be safely neglected in the supposed estimation.

The second purpose is to explain from the analysis, that a great diversity of nominal wages may exist in different countries without necessarily affecting the cost of labor. If English wages, for example, are, nominally, one half wages in the United States, it is very poor logic to jump to the conclusion, that the cost of labor in England is one half less than in the United States. That will depend partly on the efficiency of the labor, and partly on the cost of that in which the respective labor is paid. If English laborers are only one half as efficient as American laborers, then a difference of one half in nominal wages, cost of money in the two countries being the same, will occasion no difference at all in cost of labor. Because nominal wages in England are lower than with us, many people think and

maintain, that the English have an advantage over us, whereas it is notorious, and admitted even by themselves, that American labor is more efficient than English labor, and therefore there is no such difference in cost of labor as the difference in nominal wages would indicate, even if there be any difference in cost of labor at all. Just at this point great confusion has existed in the popular mind, and some by no means harmless fallacies are still current, arising from the want of a due analysis of the cost of labor. It is probable, all the elements being allowed for, that the cost of labor in one country is not very widely different from its cost in other countries; because, if there were much difference, there would be a greater difference than is actually observed in the rate per cent. of capital; and this conclusion is strengthened, when it is remembered, that in those countries in which the cost of labor is supposed to be low, as in England, the rate per cent. of capital is also low; and in those countries, as the United States, in which the cost of labor is supposed to be high, the rate per cent. is also high. Before leaving this point, I wish to remove one or two causes of misapprehension, which have frequently infected discussions of wages. The terms "high and low wages," are often used ambiguously; some meaning by the words, a high or low nominal rate; others, a high or low degree of comforts enjoyed by the laborers, as the fruit of their wages; others, still, as Ricardo, using the words high and low in relation only to profits, in which last sense, if wages are high, profits are low, and conversely. In the first two senses, wages and profits may both

be high, or both be low, at the same time and place, but not in the last sense. When the first sense is meant, the expression should be *money wages;* when the second, *real wages;* when the third, *relative wages.* Had this nomenclature been adopted and consistently employed, many an angry dispute and many a false conclusion would have been avoided. Also, it has been thought by some, that high money wages create high prices of commodities, that is to say, that things are dear because laborers have been paid a high price for their agency in producing them. This does not follow. Their labor may be very efficient, and may be assisted by first-rate machinery and the price of the commodities may be low, although the money wages may be high. Money wages must not be confounded with cost of labor, because it is only one element of cost of labor. A higher cost of labor in any department of production, other things being equal, will tend to raise the price of the product, but not higher money wages alone. Price is value expressed in money, and general rise or fall of prices is usually due to changes in the currency. An inflated currency produces high prices, first of commodities, later of labor, later still of land, and last of all if at all of produce, some part of which is exported, and whose whole price tends to be the foreign price of that part. A common cause raises both labor and goods. On the other hand, it is sometimes supposed that the exact reverse of this takes place, and that money wages become high simply because the commodities which the laborers consume have become high. This is an error similar to the other. If an inflation of the

volume of the current money of the country has supervened, then the price of labor rises by the same impulse that carries up the price of commodities. Both are effects; neither is the cause of the other. But if the currency has remained sound and stable, a high price of any of the commodities consumed by the laborers, has no tendency, that I can perceive, to raise the rate of money wages. The higher price of those commodities may have arisen from deficient harvests, or from a higher cost of labor in those departments, from inequality of taxation, or other similar causes; but no one of these enables capital to share the gross proceeds of production on better terms with labor. Neither money, nor real, nor relative wages can rise, as I see, merely from high prices of the commodities which the laborers consume. It seems to me, accordingly, that much clear light is thrown from this analysis of the cost of labor upon the whole vexed question of wages.

The third ulterior purpose of presenting this analysis is briefly to unfold the principles according to which the division between wages and profits is practically made. It was Mr. DeQuincy who first called profits the *leavings* of wages; but this is only true when by wages is meant the *cost of labor*. The gross products created by the combined action of capital and labor belong in common to the capitalists and laborers, and are to be divided between them in some way, and the analysis in question enables us to perceive just how they are divided. Cost of labor being deducted, the rest goes to capital as a matter of course, and the proportion of this part to the whole capital marks the per cent. for the given

time. If this part falling to capital is large for every hundred invested, the rate per cent. is high; if small, low. The efficiency of labor and the state of the currency being as before, a rise of money wages will lessen profits, but no rise of money wages accompanying increased efficiency of labor, or resulting from inflated currency, has a tendency to lessen profits at all. The capitalist as such is interested in having cost of labor low, but not in low money wages necessarily, because a low cost of labor is consistent with high money wages, and with high real wages too. Very efficient labor may be very highly paid, and yet leave to capital a high rate per cent. We here see again from another stand-point, and from a deeper view, a truth we have seen before, that there is no real antagonism but a real harmony of interests between capitalists and laborers. Both are alike interested in the combined efficiency of capital and labor, that is to say, in the amount of gross products created; and, in respect to the division of this gross amount, there is no more collision of interest than in making the dividends of the year among the partners of a commercial house. The cost of labor must first be defrayed; and this depends on its efficiency, its nominal rate of remuneration, and the present purchasing-power of money. What is left is gross profits, and the relation that this bears to the whole capital invested decides the rate per cent. So far of cost of labor.

2. The second element in the cost of production is the *cost of capital;* and this also must be analyzed into three variables, no one of which can be safely neglected in a computation which has for its object to

decide a prospective cost of production: — 1st, The rate per cent.; 2d, The time for which the capital is advanced; 3d, The form of the capital as liable to slow or rapid deterioration. We must look at the influence of each of these elements on cost of production.

(1.) Let us suppose that the rate per cent. at Amsterdam is 3, and the rate at New York is 7, that the cost of labor is equal in the two cities, that the time of advance is one year, and that there is no liability of the capital to wear out; a commodity made at Amsterdam with an outlay of $100 can be sold for $103, while the same commodity made at New York with the same outlay cannot be sold for less than $107. The current rate per cent. is one element of the cost of capital, and through this, of the cost of production.

(2.) The effect of the time of advance on cost of capital is more striking. Let the same supposition be continued, except that the time of advance in New York be extended to four years. The commodity will sell in Amsterdam, as before, at $103, but in New York for not less than $131. This principle is well illustrated also in the case of wine, which to reach its perfection requires to be kept a number of years. Even under the same rate per cent. which we will suppose 6, a commodity made in six months with an outlay of $100 may sell for $103; while wine grown in the same six months at the same outlay, kept five years, cannot be sold without loss for less than $133. If the period of advance be long, and the rate per cent. be high, the cost of capital from the two causes enhances enor-

mously the cost of the product; so that, it is only countries like England and Holland, in which the rate per cent is very low, which can successfully engage in enterprises requiring a large capital to be invested for long periods before returns are realized. This accounts for the fact that mining operations in Mexico and South America have been largely carried on by foreign rather than American capital. One million of Dutch capital at three per cent., expecting to realize returns only after twenty years, will be remunerated by a product selling for $1,806,111; but under like circumstances, American capital at seven per cent., must have a return of $3,869,685, or lose.

(3.) Most forms of capital, especially that invested in buildings, machinery, and the like, more or less rapidly wear out, and a sinking-fund must be reserved from gross profits in order to replace the principal. This is the third element in cost of capital, and through this cost, influences the cost of production, and through cost of production, affects, in the manner already pointed out, the value of the product. Suppose there are two commodities A and B produced in two establishments, in each of which is invested a capital of $11,000, in one of which is a machine costing $1000, which is wholly worn out by one year's use, and in the other a machine costing the same sum, which will last however for ten years. Let the rate per cent. be ten, and the time consumed in completing the products be one year. There is a difference in the cost of capital in the two establishments, and this difference indirectly but immediately appears in the value of the respective products. To A must be charged not only $1100, the interest on

the capital at the current rate, but also another $1000, wherewith to replace the machine already worn out by the year's production. A cannot be sold without loss for less than $2100. B however will cost less. To it must be charged, as before, $1100, current rate of profit on the capital invested, and only $100 to replace after ten years' use the machine. B therefore can permanently sell without loss for $1200.

Now, then, if my readers are willing to follow me a little further along this dry and dusty road, we shall be able to draw some important conclusions in respect to value as depending on wages and profits. While we have been seeming to attend to only one of the four elements out of which value springs, namely, one effort, or which cost of production is always an exact measure whenever the effort is embodied in a commodity made jointly by paid labor and capital, we have really been attending to the other effort also whenever that effort is similarly embodied; and since gold and silver money is a commodity, like any other, we have incidentally, in this analysis of cost of production, taken some steps towards determining the value of money. Now, cost of production is made up of cost of labor and cost of capital, and the first general conclusion is, that if the cost of labor for any reason be enhanced, nothing can prevent this higher cost from taking effect and exhibiting itself in lower profits. The second conclusion is, that money-wages, or any rise or fall of them, provided they are uniform, or uniformly rise and fall, in those departments of production whose commodities exchange with each other,

have no effect at all upon value, since they are common factors in two costs of production, and like all common factors, cancel each other; but any inequality of money-wages in these departments that affects the cost of labor, will have an indirect but controlling influence on the value of the commodities. The same is true of profits. So far as the rate per cent. is common to all branches of production, the capital advanced for the same period, with a similar risk of deterioration or loss, and so far as any one or all of these advance or recede uniformly and together, they do not affect the value of any of the commodities produced. But inequality in any one of these points, varies the relative cost of capital, and consequently, the cost of production, and consequently the value of the product. It is at this point precisely that there is opened up to us a clear view of the influence of machinery upon values. So far as machinery brings into play, as it always does, a gratuitous natural force, it is outside the pale of value; but since the machinery itself is one important form of capital on which rate per cent. must be paid, the more machinery employed relatively to labor in the production of commodities, the more do profits enter into the cost of production, and the more powerfully do changes in the rate per cent., in the time of advance, and in the risk of deterioration, tell upon the value of commodities so produced, as estimated in other commodities.

In other words, the more, or the more durable the machinery in the production of a commodity, the larger the element of profit in the price now absolutely reduced; on a rise of the rate per cent. there-

fore, the value of the commodity made by more or more durable machinery will relatively rise.

Having traced completely the influence of machinery on profits, a few things must now be said on its influence upon wages. Formerly the prejudice was almost universal, and is still wide-spread in many parts of the world, that the general introduction of labor-saving appliances does an injury to the laborers by taking away their work. So strongly has this been felt by the laborers, that in England, and especially in Ireland, mobs and riots have usually accompanied the introduction of machinery into those departments of production in which hand-work had previously prevailed. If *work* were what laborers really wanted, the prejudice in question would cease to be such, and become a sound opinion; since the only object and result of introducing machinery is to lessen work, at least with reference to a given product; and the laborers, to be consistent, should not stop with opposing new inventions, but should destroy all forms of existing capital, that there might be work a plenty for simple human hands. What the laborers really want, however, is not work, but wages, or rather, those commodities for which their wages are expended; and the question is, whether labor-saving processes tend to lessen, not work, but work's remuneration. There is no form of proof that I know of, which amounts to a moral demonstration that the substitution of machinery for labor cannot lessen the laborer's wages; the opposite has perhaps sometimes happened, and is possibly liable to happen, especially in agriculture, in certain transitory states of society. But the general appeal can be

made to experience with all safety. As a matter of fact and experience, it has not been found true that the introduction of improved processes, the substitution of Nature's forces for human muscle, has deteriorated the condition of laborers in those departments into which the inventions have been brought, or the condition of laborers generally. Exactly the reverse has usually taken place; and wages are apt to be highest rather than lowest in connection with the most and the most durable machinery, and higher rather than lower, after the introduction of more and better machinery. Operatives in manufactories, for instance, are, as a rule, better paid than farm laborers; and better paid in the first class than in the inferior establishments. Teamsters, in this country at least, and I suspect in all countries, are as well to do as before the construction of railroads. So of spinners, weavers, and artisans of every name. In explanation of these general facts, it may be noticed, (1) that labor is always required in the construction and repairs of all kinds of labor-saving appliances, and so far forth, a new market for labor is opened up in place of any loss of market possibly resulting from their introduction; (2) these forms of capital always tend to cheapen the products which they help to create, and such products because they are cheap find a wider circle of consumers, and more must be produced to supply a now broader market, and so far forth the demand for labor may be stronger than it was before; (3) These improvements cheapen also the commodities consumed by the laborers themselves, and therefore a given rate of wages now secures for them a higher grade of com-

forts. Combining these observations with the law of distribution already pointed out, and the conclusion is fairly established that the effect of machinery is, and will be, rather favorable than otherwise to the laboring classes.

Now, as a result of this entire discussion, attention must be called to a generalization, which has been more or less fully noticed by several writers, and with the presentation of which, this branch of the subject will be concluded. Since, by the aid of the different forms of capital, and such a division of labor as that every part of it is made most efficient, the cost of production of most kinds of manufactured articles tends to decline as compared with the cost of production of food and raw materials, in whose production these advantages are less perfectly attainable, there is a constant tendency towards approximation in the value, and, if money remain unchanged, in the price, of raw materials and of finished products; and in the degree of this approximation will be found a gauge of the success with which gratuitous natural forces and improved facilities of art have been made available in production. This single statement, clearly perceived in its grounds, grasps and holds the principal results of our discussions thus far. Examples of the principle offer themselves on every hand. Let us look at cotton cloth. At the opening of this century, the average price of raw cotton was just about twenty cents a pound; at the middle of the century, and onwards, the average price was just about ten cents a pound. At the first period, although accurate tables are wanting, the average price of cotton cloth

could not have been less than sixty cents a yard; at the second period, it could hardly have been more than ten cents a yard. The absolute price of raw cotton diminished in the interval in the ratio of 2 to 1; while the absolute price of cotton cloth diminished in the interval in the ratio of 6 to 1. Relatively to a yard of finished cloth, the raw material greatly rose in value, since at the first it took three pounds to buy a yard, and at the last but one pound. There was a marked approximation all the while of the price of the finished product towards the price of the raw material; in other words, less and less difference of price was due to the cost of manufacture, which lessening cost marks the ever-increasing efficiency in the production of commodities of the gratuitous powers of Nature applied through machinery. According to Dr. Ure, the introduction of machinery into the manufacture of lace, lessened the cost of that product in the ratio of 50 to 1; and thereby, and to that degree, approximated the price of a pound of such lace towards the price of a pound of the cotton from which it was made. Food, raw materials, and labor, and the last more than the other two, tend steadily to advance in their power to command, that is, to buy, most kinds of finished products; and therefore, the millions who labor with their hands, and the other millions who own the soil and till it, have already advanced, and will still more advance, in a scale of comforts, with the advancing centuries.

In the second paragraph of our first chapter the ground was carefully laid out for the discussions of this treatise. The principles of human nature

out of which exchanges spring, which, as regards the mass of men, are almost as invariable as the laws of nature itself, have now in accordance with that plan been analyzed and unfolded; the providential arrangements in the physical earth and in the laws of society, through which it is manifestly God's design that exchanges among men should be made and multiplied, have now been examined into and justified by the human welfare to which they contribute; and it only remains, to make that important inquiry into the laws and usages devised by men to facilitate or impede exchanges, then referred to as concluding our task. We pass now, accordingly, into the last general branch of our subject, and begin with Money.

We may give a summary of the present chapter as follows:—

1. *There is only one kind of Value cognizable in Political Economy.*

2. *Cost of Production is the measure of one effort in one class of exchanges.*

3. *Cost of labor and cost of capital are the two elements of it.*

4. *Each of these may be analyzed into three elements.*

5. *High wages do not import a high cost of production.*

6. *Machinery is not hostile to the wages of labor.*

7. *Raw materials tend to approach in price the finished commodities made from them.*

CHAPTER X.

ON MONEY.

THERE is no use in saying that money is such a mysterious and complicated agent that nobody can understand it. That is the language of indolence. Money is wholly a matter of man's device; it was invented, just as any other instrument is invented, to accomplish a certain purpose; and it would be strange if men cannot comprehend what men themselves have devised. In all departments of God's works, indeed, we constantly meet with what cannot be fully comprehended nor perfectly fathomed, because an infinite mind has been there at work upon an infinite plan. But there is no such profundity in the works of men; unfathomableness is not an attribute of human skill; and since money is an instrument devised by men to aid them in accomplishing a certain purpose, it is as unreasonable to pretend that it is incomprehensible, as it would be to pretend that the steam-engine is incomprehensible. I hold it for certain that whatever men have devised, men can comprehend.

Though it seems like a paradox, it is yet strictly true, that this very circumstance, namely, that money is of men's devising, which makes it certain that men ought easily to understand it, has itself given rise to all the difficulties and mysteries that

have surrounded the subject of Money. A strict law of Nature, say, the law of gravitation, when once it is cleared up, remains forever transparent, — there is no longer any difficulty about it; but a natural law, with which the choices of men have to do, which may be modified and in a certain sense controlled by human *actions*, becomes from that very circumstance liable at times to misapprehension and even to mystery. All economical laws are of this second class, because nature and men combined have to do in the determination of every case of value whatsoever; and even within the sphere of *economical* laws, a further distinction must be drawn, which was hinted at in the second paragraph of this treatise, and which really divides it into its two branches. The *Providential* elements in economics, — both physical and social, — are relatively fixed; so are those principles of human nature related to exchanges, which may be said to be *universal* in their character, — such, for instance, as the preference to receive a larger rather than a less return and to render a smaller rather than a greater effort; but there are other principles of human nature related to economics more variable in their character, — such, for instance, as a nation's choice of the *kind* of money it will use or of the *kind* of taxation it will impose. It follows from this, that some economical laws are more *general* than others, owing to a less variation in the human impulses concerned: it follows, for example, that the law of landed rents, or the law of the approach of the price of the raw materials to that of the finished products, is more universal in its terms than most of the propositions of Money or of Taxation can be.

Bearing this principle in mind, I hope to be able to clear up the whole subject of Money completely. I should lay myself open to a charge of gross inconsistency, if, while insisting that money is a human device, and that men therefore ought to understand it, I did not myself understand it, and could not unfold it so that others may understand it also. I hope to go so carefully and surely forward into this topic, that even "the way-faring men[1] shall not err therein." In this case, we will not begin with definitions and justify them afterwards, but will come up to them step by step, and, as it were, justify them beforehand.

1. Exchanges may go forward to a certain extent, — may begin and become profitable, without the use of any money at all. Men at first exchanged services directly for each other, without the intervention of any medium. This form of trade is called Barter. Hiram, king of Tyre, furnished to Solomon a certain quantity of cedars from Lebanon, and Solomon, in return, furnished the Tyrians a certain quantity of wheat and oil. This may serve as an instance of barter, although money had been in current use long previously to that transaction, as is seen in the purchase by Abraham of the cave and field of Machpelah, for which he weighed out four hundred shekels of silver, current money with the merchant. It is obvious, however, that while barter is a great deal better than no exchanges at all, there are inherent difficulties in that form of exchange. Under pure barter, exchanges are pretty much limited to those parties each of whom is in position to render

[1] Isaiah xxxv. 8.

to the other such services, and in such quantities, as the other stands in direct and immediate need of; it is not enough, under these conditions, that a man should have a service to sell, but also he must find a man who wants that specific service, and more than this, a man who not only wants that specific service, but also has a service to render in return, such as the first man wants. If A has wheat which he wishes to exchange for a coat, he must find a party who wants wheat, and who also is in position to render a coat in exchange for it, and moreover who wants just as much wheat as will pay for a coat, no more and no less; if he wants more, he may have nothing to render in exchange for the excess which A is willing to accept; if less, A may have nothing which the other wants, besides wheat with which to help pay for the coat. Even in the simpler states of society, the inconvenience, loss of time, and deterioration of commodities involved in direct barter, are very great, and in more advanced states of civilization would be intolerable, if it were possible, as it is not, for society to become advanced under those conditions. Exchanges are so limited in time, place, and variety, association is so hampered, and the development of all peculiar talents so impeded, under a system of simple barter, that one of the initial steps in the progress of all societies has been to hit upon some expedient to lessen these intrinsic difficulties; and so to facilitate exchanges.

2. The invention of money was nothing in the world but the selection by certain people in a certain locality of some commodity then and there

valuable, that is capable of buying *some* things then and there, and giving to that by general consent the capacity of buying *all* things then and there salable. The thing made money, whatever it was, had a *limited* purchasing-power to start with, — no instance to the contrary has ever been shown; the making it money was merely the common consent that thereafter it should have a *general* purchasing-power; so that, whenever anybody had anything to exchange, he might first exchange it for this product *valuable before* but now *generally valuable*, and then with this product in hand he might buy whatever he might want at any time or place. Money makes no alteration in any law of value, but merely substitutes for convenience' sake in every transaction in which it plays a part, a universal for a specific purchasing-power; a book, for example, has a specific purchasing-power; there is somebody who wants it, and is willing to give a sum of money for it; and the owner by the sale of it parts with a product which has only the power to purchase something from a few persons, and receives a product which has the power to purchase something from all persons; it is not true to say that the book is worth more than the money, or the money is worth more than the book, because they are just worth each other, as is demonstrated by the sale; but it is true to say that the seller of the book has substituted in the place of a limited purchasing-power, of which he was proprietor, a general purchasing-power, of which he has now become proprietor; and that the command of the money, which has no more value than the book had, does carry along with it a supe-

rior command over purchasable articles generally In one word, value in the form of money is in a more available shape for general purchasing, than value in any other form. This is the exact expression for what truth there is in the common vague remark, that money is different from all other commodities; in point of value, it is different from other commodities in just one respect, namely, while they have the power of buying some sorts of things from some persons, it has the power, derived from the usages of society, to buy all sorts of things from all persons.

3. This simple change, which seems in itself so little and easy and natural, has changed in its results the face of the world! It makes the selected commodity seem to the minds of men to be a quite different thing from what it was before. It removes, as by a stroke of the hand, most of the inconveniences of Barter. So soon as a commodity selected to be money by one people comes to be acceptable as such to all other peoples, the advantages of its use are vastly multiplied. Experience has shown, and a little reflection will explain, how that there is no machine that has economized labor like money; no instrument which plays so important a part in production; no invention, unless it be the invention of letters, which has contributed more to the civilization of mankind. While men still exchanged in kind, and knew no other mode, the purchasing-power of a service was very much confined in place, and would not be parted with except in view of the return service actually there present, — the ultimate parties to an exchange must for the most part come together locally, in order to effect an exchange; under a

money system, this is no longer necessary, for it is sufficient to constitute a market for any commodity that it is wanted anywhere on the globe, the middle man, paying the seller for it in money, transports it thither, and receives back his money with a profit from the ultimate consumer. Thus money brings conveniently buyers and sellers together commercially, no matter how far separated locally. So, also, money generalizes any purchasing-power in point of time. The fruit-dealer, for example, must dispose of his product quickly, or it perishes on his hands, but by transmuting his perishable product into money, he may keep its power of purchase locked in this form as long as he lists; the money, indeed, is only good to purchase with, but it puts an interval at the pleasure of the holder between selling and buying, and with this generalized power in his pocket he may buy when he will, and what he will, and where he will. Money, too, makes any purchasing-power portable, divisible, and loanable. A man may carry the value of his farm in his purse, and may divide it up for a thousand different purchases, and especially is able to loan it in this form, to receive it back again with interest at a future day.

4. It is obvious, and yet important to notice, that, whatever made the commodity selected as money originally desirable and valuable, it has now become desirable and valuable for other and wider reasons. The tobacco of Virginia, for example, in the early days of that colony, became valuable at first on account of the demand for it as a narcotic both there and in England; but so soon as it was made a legal money in the colony by the

general consent already described, its value depended in part upon another set of causes. Demand and supply still controlled its value, just as before, only parties who had not desired it as a *commodity* merely desired it then as *money*. Its convenience as money widened the circle of those willing to receive it and to render a return for it. It is true, that some received it only because they could pay it out again; but that made no difference so far as value is concerned; it was valuable before under a certain demand, and continued valuable under an additional demand; we can not say that it became *more* valuable under that demand, because we do not know how the combined demand affected the supply; we may probably say, that the value became *steadier*, if not larger, under the double demand, than under the previous single one; and the vital point to note is, that the *value* of *money*, previously valuable as a commodity only, is maintained under the law of demand and supply, just as all other values are, the only peculiarity being this,—that, as a *generalized* value and a potent social agent, money is in demand by everybody who has anything else to sell.

5. It follows from this, that money *as such*, whatever may have been the ground of its original value as a commodity, is always received *in order to be parted with*. It is not bought, as other things are, *for its own sake*, to be used and enjoyed, but is only bought to be sold again. Men will sell everything to buy it, with the sole intent to sell it again to *buy* something; and the odd thing about it is, that everybody buys it to sell again, not at all as the specu-

lator buys cattle to sell them again at a higher price, but, the money remaining constant in their minds, they sell for it something they care less about *in order to buy with it* something they care more about. Money is, therefore, a *medium* in men's exchanges. I do not give this as a definition of it, because I am going to give a much better one pretty soon, — I give it as a grand *characteristic* of money at all times and in every place. The word "medium" in this proposition, is to be taken in its etymological and strict sense, as something that comes between two extremes, and serves also to relate them to each other. Money is exchanged for other things, as a means, and not as an end; it is a very great help in exchanging all other things, but is never exchanged for itself in an ultimate transaction. Small boys, indeed, swap cents, but men, the miser excepted, who is under a deplorable fallacy of the senses, use and estimate money first as the medium which facilitates the real exchanges of society. What is really exchanged is the wheat, the cloth, the lumber, the furniture, the service of every kind, and money is but the instrument making those exchanges easy, which might perhaps go on without it, though with difficulty and loss. It is somewhat like a railroad ticket. Transportation to a given place is what is really bought when one buys a railroad ticket. The evidence of the purchase is the bit of paper. It comes in as a medium between the traveller and the railroad company, and while it facilitates the real exchange, it also partly disguises it. The resemblance holds in the main feature, but in two respects the likeness fails; money is not

a specific ticket for one purpose, but is a general ticket for all purposes of purchase; and secondly, money really stands as a value in its own right, at the same time it is serving as a medium, while the ticket does not. Still, we are all desirous to get money, not for the sake of the money, but for the sake of those things which the money will buy. We part with it freely and constantly for those things which we care more about. What we really care for is what the money will buy, is the command over all services and commodities which the possession of money insures. If we could give our own service or commodity, whatever it is, and receive directly in return the service or commodity which we want, whatever it is, there would be no need of money. This is generally inconvenient, and sometimes impossible. Therefore we introduce a middle term between the two extreme terms. Money is a good mean which helps exchange the two extremes.

6. We are getting on towards a just conception and a true definition of Money, though a few more points must still be noted as preparatory to that. It is a result of the fact that money serves as a medium in exchanges, that the power of money as a medium is multiplied by what has been called *rapidity of circulation*, by which is meant, that, a brisker use of the volume already in circulation will reach the same end as an increase of its volume. As in mechanics, so in money, the whole power is the product of mass and velocity. Money is like any other tool; the more constant its use the more profitable its agency. The quick movement of a

small mass is better than the torpid movement of a large mass, both in what it saves of expense, and in what it presupposes of the general conditions of exchange. The value of the money of any country is a small fraction of the value of that which it helps to exchange directly; and a very small fraction indeed of the value of that which it helps to exchange indirectly through credit by means of its denominations; for, as we shall see better further on, money works not only as a medium direct, — itself exchanged against other services, — but also as furnishing those *denominations* of value, like the *dollar*, which are always used in bargaining, and in those cases of credit in which settlement is not made by money, but by offsetting one piece of indebtedness against another, which denominations can spring only from the use of money as a direct medium. Therefore we see that the hub and the spokes and the rim of the wheel of exchange consist of personal services, credit-claims, and all commodities but money, while, to borrow the famous comparison of Hume, money itself is but the grease which makes the wheel turn easier. It would be a vast mistake to suppose, as some of the ancients did, that the grease is really the wheel.

7. While money thus makes easy the revolution of the wheel of exchange, it follows also from its nature as a medium, that the dimensions of the wheel itself are vastly greater than they would have been had it not been for money. Money indeed helped exchange the products that already existed at its first invention, but by far the largest part of products since have come into existence largely through

the agency of money. We get quite too low a view of the function of this potent agent, if we think of it merely as an aid in circulating products that would have existed whether or no; some products would have existed whether or no, and money certainly is of great use and convenience in helping bring these to the ultimate consumers; but this is a partial and wholly inadequate view of the function of money as a medium of exchange. The fact that such a medium is in universal circulation, and that the holders of it are ready to exchange it against any sort of services adapted to gratify their desires, exercises a kind of creative power, and brings a thousand products to the market which would otherwise never have come into existence. Since money will buy anything, men are on the alert to bring forward something which will buy money; and since money is divisible into small pieces, an incredible number and variety of small services are brought forward to be exchanged against these pieces, which services we have no reason to suppose would ever be brought forward at all, were it not for the strong attraction of the money.

8. From this last point of view we may gain another connected with it, namely, that money must be a very important part of the *capital* of the world. Capital as we have already learned, is any product outside of man himself from whose use springs a pecuniary increase. The circulating medium of any country is the most active, the most profitable, and the most essential of all those instruments reserved in aid of further production. The axe, the plough, the spindle, the loom, the wheel, the engine, are

all instruments, are all capital, and they each aid respectively some part or parts of the processes of production; but money is a form of capital which stimulates and facilitates all the processes of production without exception. Just as we have seen that money is a form of value generalized, so is it also a generalized form of capital, that is to say, it is an instrument capable of aiding all production in every department, while every other instrument is capable of aiding but few processes in one department. Without money, there could be no thorough division of labor, because there would be no adequate means of estimating or rewarding each one's share in a complicated process. By means of money, all services, small or great, contributing toward a common product, are neatly measured and paid for by some one, who thereby becomes proprietor of the whole product; or, if the contributors choose, they may wait till the product itself is sold, and then the money received is divisible without loss to each contributor, according to the service rendered. Thus the influence of money, as capital, pervades the whole field of exchange, from centre to circumference, facilitating every transfer, and stimulating to new transfers.

9. If money be, as it is, a *medium* in exchanges and thus a peculiar kind of *capital*, the question is pertinent, How much of it is wanted? Clearly, only so much as will serve the purposes which such a medium is fitted to subserve; there should be enough fairly to mediate between the services actually ready to be exchanged then and there, and also enough fairly to call out other services, proper and profitable in the then circumstances of society, and

whose only obstacle to a profitable exchange then and there, is the lack of a facilitating medium. All increase of money beyond this point, which the very nature of money itself marks out as the boundary, leads to a diminution in value of every part of it, to a consequent disturbance of all existing money contracts, to a universal rise of prices which are illusory and gainless, to unsteadiness and derangement in all legitimate business, and to a spirit of restless enterprise and speculation, which seeks to draw off the excess of money in untried and reckless experiments. The real subjects of exchange are mutual efforts, mutual services, and money is the instrument merely that comes in between the real services exchanged to facilitate the exchange; and therefore it seems to me to be perfectly conclusive on the point to remark, that the quantity of money needed in any country, or in the whole world, is limited by the number of the services ready to be exchanged, to facilitate the exchange of which is the good purpose and end of money. The physical and mental powers of men, which alone give birth to services, when considered, as they must be in this connection, as belonging to a given number of men at a given time and place, are strictly limited; and although the presence of money then and there is both a stimulus and an aid to their bringing forward services of all sorts to the market, there are obvious limitations both in their powers and in their circumstances; and the quantity of money needed among them is just that quantity which will fairly act as a medium in exchanging the services which they are able and willing to render to each other. All increase in

the quantity of money beyond that point would have, and could have, the only effect of increasing the nominal prices of services, without making the services themselves any greater in number or better in quality. It is with money exactly as it is with any other form of capital, allowance being made for the fact that money is a kind of generalized capital. How many ships does a commercial nation need to employ? As many as will fairly take off its exports and bring in its imports. Ships are wanted for one definite purpose; and when enough are secured to answer that purpose, all additions to the number will lessen the value, that is, the purchasing-power of ships generally. So of all instruments whatever. Enough is as good as a feast. Enough is better than more. In regard to every form of capital, the point of sufficiency is determined by the quantity of work to be done.

10. It will help us now, having seen some of the more obvious functions of money, to look at some of the commodities that have served as money at different times and places. We have already in the first chapter quoted passages from Homer, which indicate that *oxen* were already an incipient money in the Heroic age. We cannot certainly infer, when it is said in Genesis that "Abraham departed out of Egypt very rich in *cattle* and silver and gold," that any of these were anything more than articles of valuable merchandise; but it is certain from the Latin name of money, *pecunia*, derived from the word *pecus*, meaning cattle, that cattle were the money of the early Romans, and Pliny says that Servius Tullius stamped the first bronze money

with the *image of cattle*, — probably indicating by that, some equivalence in value between the two. Cattle at any rate have been used as money among pastoral people very widely in place and time, and are still so used in Africa.

Before Pheidon coined silver money in Greece (869 B. C.), copper *skewers* were used as money in that country, of which six made up a drachm which was afterward both a coin and a weight, the coin being worth about seventeen cents of our money, — rather more than a Roman *denarius*, — and the weight being about sixty-six grains avoirdupois. The word drachm is derived from δράγμα, *a handful*, and the sixth part of it, called an *obol*, from the Greek word meaning a *spit*, became also both a coin and a weight, which makes it evident that these skewers were used in connection with roasting meat, and that one of them was originally both a unit of value and of weight. In Adam Smith's day, in certain districts in Scotland, *nails* were still used as small money, which is a forcible reminder of these old Greek skewers.

Cowry *shells* are used in the East Indies and also in Africa in the place of small coins, and have sometimes been imported into England from India to be exported in trade to the coast of Africa: these count in Bengal at about 3200 to a rupee (46 cents). The New England Indians also used beads of shells of periwinkles (white), and of clams (black), of which 360 made up a belt of *wampum*, as they called it, the black being counted worth twice as much as the white; and the English colonists accepted the wampum in their exchanges with the Indians, regarding

a string of white as equal to five shillings, and a string of black to ten shillings, and afterwards made it legal tender for small sums among themselves, and even counterfeited it. *Bullets* also once passed in Massachusetts at a farthing apiece, and were legal tender for debts of less than one shilling. The shells had a value as ornaments to the Indians, and the bullets were useful to the colonists, previous to and separate from their use as money. The same will be noted of all the other things now to be mentioned.

Cakes of *tea* have passed as money in India, and elsewhere; and it is said, that at the great annual fair at Novgorod in Russia, the price of tea has first to be determined before the prices of other things can be settled upon, since that is a kind of standard of values in that great mart. *Salt* has been current money in Abyssinia; *codfish* in Iceland and Newfoundland; *beaver-skins* in New Netherlands, New England, and the western parts of America; *iron* was money in Sparta; *leaden* money was known to the ancients, and is still current in the Burman empire; the earliest coins proper, were undoubtedly of *bronze*, a mixture of copper and tin, and Sicilian, Roman, and old British coins of *tin* alone are known to have been struck; the Romans first coined *silver* money in 269 B. C., and *gold* money in 207 B. C., though gold coins had been known in the East long before they were stamped in Greece, which was about the time of Alexander the Great, say, 333 B. C.; and Herodotus makes the statement, that the Lydians of Asia Minor were the first to make a coinage of *electrum*, which some claim, was a mix-

ture of gold and silver, of which ancient specimens are still existing.[1]

I do not try to give a full list of the things that have been used as money in the early states of society. Indeed, so great is the need of some such form of generalized value, in order that exchanges may grow to any considerable size, that there would be no ground for surprise in any list however large and varied. It may be held for certain, however, that nothing has become money in primitive times or states of civilization, which was not previously *valuable*. The apparent exceptions to this do not seem to me to be real exceptions. The Carthaginians had a kind of leather money, which originally enclosed bits of the precious metals, and circulated in virtue of them, though they afterwards came to circulate as bits of leather only, as counters, in a way that will be explained later. According to the Venetian traveller Polo, China had in the thirteenth century, a money made of the bark of the mulberry tree, cut into round pieces and stamped with the name of the sovereign, which money it was death to counterfeit or to refuse to take in any part of the empire. If we had the whole history of this money, I am sure it would ally itself either with the other commodity-moneys now being treated, or with the modern credit-moneys made legal tender to be treated hereafter. The French writer Montesquieu, asserted that there was in use in the last century among the people of the coast of Africa, what he called "an ideal money," "a sign of value without

[1] See comments on this passage in Herodotus in Macleod's *Econ. Phil.*, vol. i., p. 367.

money," the unit of which was called the *macoute*, which was subdivided also into ideal tenths, called *pieces*. This statement was startling, as implying a denomination without the thing denominated, as implying a standard of value which had no basis in a valuable thing. It was discovered, however, afterwards, that this money of account had its origin, just as we should suppose it must have had, in an actual *macoute*, namely, a piece of stuff, a fabric, which they had used first as a commodity-money, and afterwards its *name* as a money of account. A valuable thing may become money, and then its name may become a denomination of value, and still later a bit of leather or a bit of paper may be called by the same name and in a certain sense take the place of the same thing. All this will be clear by and by.

As civilization has advanced, and the nations have come into closer connection with each other, experience has already driven them for the most part to drop the more tentative and factitious commodities in favor of the precious metals so-called as the best material for money. Gold and silver coins are now acceptable in almost all parts of the known world; and in many parts of the world nothing else is acceptable as money; experience has shown in their almost universal adoption the superiority of these coins over all other forms of money; and we shall soon see the grounds of this manifested superiority.

12. We are now ready to look into the inmost nature of money through an ultimate definition. MONEY IS A CURRENT AND LEGAL MEASURE OF SER

VICES. The word "legal" in this definition is not always to be pressed to its utmost signification, but denotes anything sanctioned by law or *usage equivalent to law*. The other words are to be taken in their full and technical meaning. It is believed, that, while the definition is short and simple, it just covers the whole ground and no more. It is not enough that a certain commodity be *legal* as money, it must also be *current* in order to be a true money. In this country since 1862, gold coins, though legal tender all the time for all debts, have not been *current* in the full sense of that term, and hence have not been the money of the country. Till 1878, gold coins were required to pay *duties* with, and the *interest* on the public debt, and were used to a small extent in a few branches of private business, and were not otherwise in the hands of the people. They were not strictly money, but bore a premium over the current money of the country. To be money, then, a commodity must be recognized as money by law, or custom as strong as law, and also circulate among all classes of the people as a medium in their exchanges.

But money becomes a *medium* in exchanges, because it first becomes a *measure* of Services. I used to think that the two functions were separate, and of equal rank. I now see that one only is original, and that the other is derived. Even Aristotle saw that money is a Measure, inasmuch as he defined property "anything that can be measured by money." I am now convinced, in opposition to Professor Jevons,[1] who thinks there are four characteristics of

[1] *Money and the Mechanism of Exchange*, p. 13.

money, that money as such has but *one primary* characteristic difference from other forms of value, namely, this *measure*-quality, this *standard*-quality, this publicly recognized function as a *common measure*, to which all other values are constantly referred. This additional attribute put upon money by the action of society in law or custom is not what imparts its *value* to money, since an ounce of uncoined gold is *worth* within a very small fraction as much as an ounce of gold coins, but it makes the money a far more convenient instrument to purchase with, inasmuch as money, having now the attribute of making all other values easily commensurable with itself, becomes at once something which everybody is willing to receive, because everybody knows in general what its power will be to purchase all other things. In other words, money becomes a medium in exchanges, just because it has already become a measure of Services in general; and there are not in reality two prime functions of money, still less four, but only *one*. This view seems to me to simplify the subject of Money very much, and I am confident that it will be found to be scientifically correct, and we shall have many means of testing its accuracy as we proceed.

The only thing common to salable things is the fact that they all are *salable*, and if they are to be made in any way commensurable with each other, it must be by means of one of their number assumed as a *standard of comparison* with the rest. This is just what is done when anything is selected as money: it was valuable before, but now it has become a *standard*, with which other valuable things

may be compared in the single point of their *value*. In other words, to render *money* is to render a Service, which, from its very nature as money, is capable of measuring all other Services whatsoever. Without some common measure of services, it would be inconvenient, not to say impossible, to carry on traffic at all. For instance: A baker has only loaves of bread, and wishes to buy a hat, a horse, a house. How many loaves shall he give for each? Unless there be some common Service, in the terms of which these differing values can be expressed, and by means of which they can be brought into numerical relations with each other, it would be an awkward piece of business to effect even the *three* exchanges; and every time the baker wished to buy another article, there must be a rude and slow calculation from independent data, to decide upon the terms of the exchange. Let now some common service be introduced, in the terms of which each of these values can express itself, and the difficulty disappears in an instant. "My loaves are worth ten cents each," says the baker. "My hat is worth ten dollars," says the hatter. Their saying so does not indeed *make* it so; but each has come to that approximate conclusion by a relatively easy comparison of two services; and if the loaves bring ten cents and the hats ten dollars, the terms of their exchange are one hundred for one, and there is no need of parleying. So of the rest; so of everything that is ever bought and sold. Money becomes by common consent a measure of them; because it measures them, it makes the interchange of them far easier; because it measures them, it becomes a medium

between them; and because money rendered is itself a Service, it is a natural and universal measure of all other Services.

I used to say, in common with many economists, that "money is a Measure of Value." That phrase is objectionable, because value is always relative to two services exchanged for each other, and to say that money is a measure of that *relation* is neither so simple nor so ultimate as to say that it is a measure of each of the services that enter *into* that relation. The Services may be conceived of and spoken of separate from the Value into which they merge, although they come into existence solely for the sake of that resultant value; so money may be conceived of and spoken of separate from the exchanges in which it finds its sole significance; and it is strictly accurate to say, that money, itself a service, is a measure of all other services, considered as constituent elements of the values into which they fall. I am not without hopes, accordingly, that competent economists will concede, that here is an improvement in the nomenclature of our science. *Money is the measure of services.* Its other functions are the result of that.

As *all* values are the result of a *comparison*, it is not strange at all, rather it is natural and inevitable, that there should arise in connection with them some such comparative measure as money is; and it is of some consequence to notice, contrary to what has often been said, that the real measure is the *money itself*, and not its denominations, — the *thing*-dollar and not the *denomination*-dollar. The denominations are used in bargainings and calcula-

tions as representatives of the money itself, and thus indeed in a secondary sense serve as *measures;* but the subtle connection between the thing and its name, between money and its denominations, and the differences between the two, need to be clearly unfolded, because most of the current fallacies about money take their rise just at this point. An illustration will best serve us here. The original measure of Services in France, England, and Scotland, was the pound weight of silver. No coin of that weight was ever struck; but a pound of silver was cut into 240 coins called pence. Twelve of these pence were called a solidus, or shilling. Thus as applied to silver, the symbols lb. and £ denoted equivalent weights, the former of uncoined metal, the latter of metal coined. But in course of time, *more* than 240 pence so called, and at last in Elizabeth's reign, 744 pence, came to be coined out of a lb. of silver. Yet all the while, 240 of these pence were called a £. £ and lb., both a contraction of the Latin *libra*, were no longer equivalent. The lb. of weight continued stable: the £ of money had dwindled to less than one third. Yet the *name* pound continued to attach to 240 pence, although the pence embodied a less and less quantity of silver. Each actual penny had less silver in it, and though it was still called a penny the *denomination*, though spelled as sounded as above, represented less silver, and therefore, less *value*, than before. The denominations follow the fortunes of the coins, whose names they are, to the frequent loss of the unthinking, who suppose the same *name* must represent the same *thing*. In 1834, the gold eagle of the United States was reduced in

weight from 270 to 258 grains troy, and the alloy increased from one part in twelve, to one part in ten. These changes took out more than six parts of gold in every one hundred parts, in all the gold coins of the country. Yet all the coins bore the same names as before. Other things remaining equal, the coins lost about six per centum of their purchasing-power, or in other words, general *prices* rose in that proportion; the *measure* became smaller; and the words *dollar*, *eagle*, and so on, though outwardly unchanged, varied simultaneously and equally with the change in the coins.

Also, coins are liable to change in their function as a measure from changes in the general purchasing-power of the metals. If for any reason an ounce of gold will buy less of other things than formerly, the coins cut from that gold will buy less than formerly, and this change in the *measure* is followed of course by a corresponding change in the *denomination*. Other tables of denominations have a basis independent of the things which they help to measure, and are not variable by the quality or quantity of those measurable things. A French metre, for example, is an invariable unit of length the world over; so is one of Troughton's inches; but this is not true of the denominations of money at all. *Pounds sterling*, *dollars*, *marks*, *francs*, are denominations of *value*, which is itself a variable relation. Such denominations, consequently, are not an independent standard to which values themselves can be referred, as lengths are referred to the metre, but vary with the varying purchasing-power of the coins. The *dollar*, as a denomination, means more

or less, just according as the DOLLAR, as a coin, buys, that is, measures, more or less. Still, it is vastly important for the interests of exchange that the accepted measure of Services be as little liable to fluctuations as possible, especially in all cases in which lapse of time is involved before the exchange is fully consummated. For the same reason in kind, only multiplied a thousand-fold in force, that the bushel measure should be of the same capacity in sowing-time and in harvest, to sell by and buy by, always a bushel, no more and no less; and the yard-stick an inflexible measure of length, always thirty-six of Troughton's inches, no more and no less; so, as far as it is possible in the nature of things, ought the measure of Services, and hence its denominations, to represent year in and year out a uniform degree of purchasing power.

In the place of our expression, "the measure of Services," and the foregoing explanation consequent upon its use, Professor Walker[1] prefers the phrase, "the common denominator in exchange," and Professor Price[2] is fond of the formula (and it is a good one), "the tool of exchange," and Mr. Macleod,[3] who is more or less fortified in his view by Bastiat and Price, strangely insists that money is "the representative of Debt." He says: "The quantity of money in any country represents the amount of *Debt* which there would be if there was no money; and consequently *where there is no debt there can be no money.*" The unfortunate use by some countries of

1 *Money*, pp. 280, et seq.
2 *Practical Political Economy*, 1877, p. 363.
3 *Elements of Banking*, 1876, p. 17.

a paper money, which is indeed a form of debt, gives some plausibility to the notion that money is a representative of debt; and perhaps the fact that money is often used to pay debts previously contracted, and that debts are usually contracted in the terms of money, gives some additional plausibility to this view; but as Mr. Macleod himself goes on to say, that "no substance possesses so many advantages as a metal for money," and that "all civilized nations therefore have agreed to adopt a metal as money, and of metals, gold, silver, and copper have been chiefly used," I do not see how he can consistently hold that a gold dollar, or gold sovereign, whose value is in no sense due to the process of coining, whose value is as substantive and independent as any value in the world can be, becomes through coinage and circulation a representative of debt. Instead of saying, as he does, "where there is no debt there can be no money," I should confidently say, where all transactions are settled at once in solid money, there can be no debt.

13. This brings us to the considerations which determine what is the best money. Historically, coins of gold, silver, and copper, have been proven by an experience of about 2,500 years to be more acceptable to the people of the world as money than any other substances. There is a presumption, accordingly, that these in proper adjustments with each other constitute the best money. These have never been anywhere of equal value with each other: an ounce of gold has always been more valuable than an ounce of silver, and this than an ounce of copper. Moreover, the relative value of the three

in each other has never continued permanent, even after the law has sought to ascertain and fix it. In Asia Minor, where coinage began, gold was the standard with silver as subsidiary; in Greece silver was long the sole standard, till Philip's victories established a double standard, gold being reckoned as one to twelve and a half of silver; while in Rome, copper was the original standard, which was displaced by silver in 217 B. C., and gold was legalized by Cæsar as a co-standard in the ratio of one to about twelve, until in the reign of Alexander Severus, gold became the sole standard throughout the Roman Empire. After the downfall of that empire, gold maintained itself for a time in Spain and France, but silver gradually regained its lost place in Europe, to be again gradually displaced by gold as the *standard*. In 1717 a double standard was established in Great Britain, gold being rated to silver as one to fifteen and one fifth, but in 1816 gold was made, by a law still in force, the sole standard, the legal use of silver being limited to forty shillings in any one payment. In France, silver has held its own as a co-standard longer and better than in any other country in Europe. In 1803 the legal relation of gold to silver was fixed at one to fifteen and a half, and has so continued till the present time, except that in 1876, the right of private individuals to have silver coined for them, was taken away in behalf of the government, and, with the exception of the five franc pieces still legal tender to all amounts, the silver coins are only legal to pay debts of fifty francs. In 1871, Germany adopted the sole gold standard, and limits silver to the amount

of twenty marks in any one payment, (a mark is 23.82 of our cents). Since 1874, the Scandinavian Union permits gold alone to be coined for private persons, and limits the debt-paying power of silver to twenty krone (a krone is 26.78 cents).

As Belgium, Switzerland, Spain, Italy, Greece, and Austro-Hungary in part, act with France in monetary matters, it is plain that the tendencies are towards the adoption of gold as the single standard, and of silver as subsidiary money only. Copper, which was the only money in early Rome, and is still the only legal coinage in China, has come in most modern coinages to be a token-money only, that is, a money circulating in small sums without reference to the value of the metal. In 1738, the relative value of silver to copper in France was one to forty; in 1803, one to one hundred; and in 1852, one to about one hundred and fifty. The French copper centime (one gram), the English penny (9.149 grams), and the present United States copper cent (3.11 grams), all circulate as money much above their value as metal. Dismissing copper, then, as only useful for money in this very subordinate way, and remembering that gold and silver stood in ancient times in about the ratio of one to twelve, and stands in modern times not far from the ratio of one to sixteen, it may be said in general that gold and silver coins make the best possible money. It is convenient to have money of the two metals notwithstanding the impossibility of maintaining a steady legal valuation between them. For reasons to be given shortly, gold ought to be exclusively the standard, as it has now come to be in Europe; it

ought to be the only legal tender for large sums; but silver coins are useful for the lesser exchanges, as gold ones would be too small for the purpose; and there is no objection to the present usage of all the leading nations in lessening the weight of the silver coins below their supposed ratio to gold, so as to allow a considerable change in the market value of gold in silver without tending to export the latter from the country. England, France, Germany, and the United States have debased their smaller silver in weight, so that the *nominal* value of these coins varies from seven to fifteen per centum above their *bullion* value. This is at once a profit to the governments, and a security to the peoples that they shall not lose their small change by export.

(1.) The first and main reason why gold and silver make the best money is found *in their comparatively steady value.* Money is a *measure* of all other valuable services, and therefore its own value must be as *steady* as it can be made, and gold and silver meet this test better than anything else. Money is not a *representative* of value; it does not owe its value to the *stamp* impressed upon it; its value arises under the same conditions as every other value, and is variable by any change in any one of the four elements which alone can vary the value of anything; and it seems to me that nothing more is needed in order to remove the last vestiges of the dark cloud which has so long overhung this subject, than to familiarize ourselves first of all with the true doctrine of value in general, and then hold fast the truth, exemplified on every side, that the value of money is just like every other value. Let us see,

then, why the value of gold and silver money is so steady.

(*a.*) On account of the comparatively steady demand for these metals. Gold and silver are wanted for two general purposes: first, to be used as money, and second, to be used in the arts; and it has been estimated that about two fifths of the aggregate quantity in the world is in the form of money, and the other three fifths in the form of plate, utensils, and ornaments. Now, so far as the element of desire controls value, the purpose for which any article is desired is a matter of indifference. The aggregate desire for it for all purposes, accompanied with the offer of something with which to buy it, constitutes the demand; and the more universal the desire, no matter for what purpose, the steadier the demand, and, so far forth, the steadier the value. It is worth noticing, as a point still too little noticed, that it is not the demand for the precious metals as coin alone that determines their general value, nor the demand for them in the arts, but the combined demand for all purposes; just as the value of barley is regulated, partly by the demand for it for food, and partly by the demand for it for malting purposes. Hence an ounce of bullion of the standard fineness, destined for the smelting-pot of the artisan, is worth within a very trifle as much as an ounce of coined money. By the law of the Bank of England an ounce of standard gold is coined into £3 17*s.* 10½*d.*, and the Bank is obliged to buy all bullion and foreign coins of the standard fineness offered to it at £3 17*s.* 9*d.* per ounce — a difference of three halfpennies. Now, gold and silver are so indispensable

in the form of money, so beautiful in the form of ornaments, so well adapted to serve the purposes of luxury and love of distinction, so really useful in the arts, that the demand for them is constant and well-nigh universal; and if, in the progress of civilization, a less quantity should be desired for personal ornamentation and purposes of luxury, a greater will doubtless be required for the other uses; and so, as the demand in the past has been steady, and perhaps steadily increasing, there is every reason to expect the same for the time to come. And it contributes to the steadiness in value of the gold and silver coin, that there is at hand in the form of plate a reservoir from which a chance chasm in the coin may be replenished, or an extra demand for it answered.

(*b.*) On account of their tolerably uniform cost of production. Not desires alone, but efforts as well, regulate value. Supply is the correlative of demand; and when to a steady demand there answers a steady supply, realized under conditions of pretty uniform difficulty, there will be of course a pretty steady value. Nature herself has indicated, in a manner not to be mistaken, her intention that these metals should be the money of the nations. She has scattered them all over the earth, and so scattered them that the cost of their production has been wonderfully uniform ever since civilization and commerce began. There have been but two marked changes in the value of gold and silver throughout the commercial world in the last thousand years; the first, in the sixteenth century, in consequence of the occupation of Mexico and South America by Europeans, when the value of the precious metals diminished,

silver a good deal, it is difficult to say how much, and gold considerably less; the second, in consequence of the discovery of the gold-fields of California and Australia in the present century, which, it is thought by most, has still further diminished the value of gold. With these exceptions, and similar ones are not likely to recur, these metals have always maintained and are likely to maintain a remarkable uniformity of value, so far as uniform cost of production can give it. Even these changes became only gradually perceptible, and did but little injury to individuals, scarcely disturbing the justice of exchange or the measure of value, except in cases of long annuities and similar obligations. A universal rise of prices soon adjusted exchanges to the new state of things.

(*c.*) On account of their quantity. The amount of gold and silver in circulation in the commercial world, to say nothing of the quantity so easily brought into circulation from the reservoir of plate, is so vast, that it receives the annual contributions from the mines much as the ocean receives the waters of the rivers, without sensible increase of its volume, and parts with the annual loss by detrition and shipwreck, as the sea yields its waters to evaporation, without sensible diminution of volume. The yearly supply and the yearly waste are small in comparison with the accumulations of ages; and therefore the relation of the whole mass to the uses of the world, and the purchasing-power of any given portion, remain comparatively steady. It is probable that production at the mines might cease altogether for a considerable interval without very sensibly en-

hancing throughout the commercial world the value of gold; as it is certain, from experience, that a production very largely augmented only gradually, and after a considerable interval, diminishes its value. The mass of the precious metals has been aptly compared to the heavy balance-wheel in mechanics, which preserves an equable and working condition of the machinery under any sudden increase of the power, and even when the power is for a moment withdrawn. At this point a caution is needful. Because it is affirmed that the great amount of the precious metals is a ground of their firm value, it must not be supposed that we are going beyond our general doctrine, and introducing another element, namely, quantity, besides the four elements which, as we have so often alleged, can alone vary the value of any service; quantity, in itself, is not an element capable of varying the value of anything, but taken in connection with durability, it is an element of what might, perhaps, with propriety be called the *inertia* of value, and tends to keep the purchasing-power of gold and silver where it is. Value and steadiness of value are two distinct ideas. The present value of an ounce of gold expressed in any other commodity is decided by four things alone; but other elements besides these may help determine that that ounce of gold shall have ten years from now a purchasing-power approximately the same as now. It will depend, of course, in the last analysis, upon the relation of the then demand to the then supply; yet the vast quantity of the precious metals in existence, combined with their durability, prevent those fluctuations in the

supply which are so destructive to a steady value. It is not as with the fruits and the grains, whose value varies perpetually with the seasons, and which are so perishable that they must be sold soon or never: gold and silver are almost indestructible, and except by wear and accident, the existing mass is not liable to be lessened, and in so far as the annual production from the mines exceeds the yearly waste there is a natural provision made for the natural increase of demand, to supply the wants of the world for currency and for the arts, without much disturbing the relation of the demand and supply. The quantity, in connection with the durability of the precious metals, helps preserve to them a tolerably steady value from generation to generation.

(*d.*) On account of their fluency. Gold and silver are in demand the world over. Having great value in comparatively small bulk, they are easily transported from continent to continent; and whenever, from any cause, they become relatively in excess in any country, and thus lose there a portion of their previous purchasing-power, there is an immediate motive to export them to other countries where their power in exchange is greater, and thus the equilibrium is restored. The value of gold and silver throughout the commercial world is thus kept pretty steady by the facility with which they are carried from points where they are relatively in excess to points where they are relatively in deficiency. There is a gain in carrying them to those countries where their power of purchase is the greatest, because more commodities can be obtained for them than at home; and private motives here coincide

with public welfare, since what the traders do in transporting gold and silver, with an eye to their own interest, helps maintain at home and abroad the steady value of these commodities. This law of the distribution of the precious metals by commerce, and the equilibrium of value resulting therefrom, is as natural and beautiful as the law which preserves the level of the ocean, or that which balances the bodies of the planetary system. This has come at length to be recognized by the nations, and the laws which used to forbid by heavy penalties the exportation of gold and silver are all swept away, and these metals are now free to go, and do actually go, where they can obtain the most in exchange. It is absurd to suppose that their owners would carry them out of a country, unless they were worth more abroad than at home, and therefore the prejudice which exists still in this country against the exportation of gold is a senseless prejudice. The gold is not given away; it is sold, and sold for more than it will buy at home; otherwise it would not be carried abroad. There is the same kind of gain as in all other exchanges, and this great incidental advantage in addition, that, by means of free commerce in the precious metals, their general value is kept pretty uniform throughout the world, and a chance redundancy in one currency is drawn off to supply a corresponding deficiency in another. It may be laid down as an axiom, that no country will export, for the sake of getting other things, those things which are more needful for its own welfare; and there need not be the slightest fear that any nation which cultivates its own advantages under freedom will

ever lack a sufficient quantum of the precious metals. Under freedom, and so long as human nature continues what it is, these metals will go, and go in just the right proportions, to and from those countries which produce and offer in exchange those desirable services which other countries want. The greater the enterprise and skill, the keener the development of all peculiar and presently available resources, the more honorable and free the commercial system, the surer is any nation, whether it be a gold-bearing country or not, of securing the gold and silver which it needs. This is so, because *there* will be a good market to buy in, and they who have gold will resort thither to buy. But such a nation will also want to buy other things besides gold and silver, and when enough of the latter are secured for money purposes and the arts, the residue will be exported, perhaps to the very countries from which it originally came, in payment for some products which those countries have an advantage in producing. The United States is a gold-producing country, and exported in the years 1850–1860, both inclusive, $502,789,759, coin and bullion; and during the same period we imported from other countries $81,270,571, coin and bullion.[1] Now, there was a double advantage in that exportation. In the first place, more and better commodities were secured to the country than the gold could have bought in the country, for otherwise it would not have been carried abroad; and, in the second place, this large sum carried abroad to various countries in exchange, not only prevented the disturbing effect on our own

[1] *Report on the Finances*, 1863.

moneys of more than doubling in ten years' time our stock of gold, thus inevitably depreciating the whole mass, but also, by causing the new gold to impinge on the whole world's stock instead of on the moneys of a single nation, the shock of the new production on the measure of services, though perceptible, was reduced and deadened. The world's mass of the precious metals is comparatively torpid beneath the action of an accretion which would break down by its weight the metals of a single nation. Therefore, the fluency of gold and silver, by which they pass easily in commerce to those places where their present value in exchange is greatest, and return as easily when the conditions are reversed, tends powerfully to make their general value uniform throughout the world, and consequently to make them the best medium of exchange and the best measure of value.

(*e.*) On account of this circumstance, that every general rise or fall in the value of gold and silver tends to check itself. This principle, indeed, is applicable to the value of all commodities, but owing to their quantity and durability preëminently applicable to the value of the precious metals. The check is double in either direction. First, let us suppose that the purchasing-power of an ounce of gold or silver be rising: then, production will be stimulated at all the mines, and the more stimulated as the rise is more, and the new and enlarged supply will tend to check a farther rise, and, unless the permanent demand has been intensified, to bring back the value to the old point; moreover, when there is a rise in the value of the coin, there is a less quantity required

to do the same amount of business, and the demand for gold which causes the rise tends to be checked by the rise itself, because a less quantity is needed for money-use in consequence of the rise. This supposes, of course, that the exchanges mediated by money are no greater than before. Thus a rise of value in gold and silver checks itself by natural laws in two ways. Just so of a fall in their value. Production is thereby slackened at the mines, and the lessened supply tends to enhance value; and, if the same business is to be done as before, there is a stronger demand for money while the fall continues, and this demand tends also to restore the value. All this is in the interest of a steady value.

(*f*) On account, lastly, of this circumstance, that a stronger demand for money is met either by increasing the stock of coin, or by an increased rapidity of circulation of that on hand. A brisker demand for money, especially if it be temporary, does not necessarily enlarge the supply, or alter the value, but only hurry round the existing circulation. Oscillations in the demand are responded to by a slower or more rapid circulation. This tends most admirably to keep the value steady within certain limits. When enterprises are multiplying and exchanges are being permanently increased in number and variety, then there must be a larger amount of money, and this larger amount is secured in the ways already indicated, with perhaps slight disturbances of value; but the temporary ebbs and flows of business have no effect at all on the mass of money, but only on its movement, and its value consequently is not disturbed at all.

These six grounds appear to be satisfactory and sufficient to account for the superior steadiness of the value of gold and silver, so far as their value is determined by considerations relating to the metals themselves. We now proceed to the reasons additional to this why gold and silver constitute the best money.

(2.) The second general reason why gold and silver make the best money is found in the fact, *that governments have little to say or do about the value, quantity, or mode of circulation of such money.* In all essential respects such money regulates itself. These metals came to be money and continue to be money in one sense independent of the enactments of any government. The people chose them: they still choose them. As we have seen, coins do not owe their value to the stamp of the government, since the metal in them is worth within a trifle as much before coinage as after. Coinage publicly attests the quantity and quality of the metal in the coin, and that is all. Of the value of their coins governments say nothing. They can say nothing. That depends on men's judgments, and not on edicts at all. No law of the United States can add directly a fraction of cent to the value of a gold dollar. The law makes it consist of twenty-five and four-fifths grains troy of gold nine-tenths fine, the mint so stamps it, and thereafter it takes its own chance as to value. When, however, it is designed that both metals shall circulate together, it becomes needful that government shall fix, as well as it can, not the general value of either, but the relative value of each in each. But this value, too, regulates itself inde-

pendently of edicts. The work, no matter how well done at first by ascertaining the ratio in which they exchange in a free market, will require revision from time to time.

Some governments charge a little for coining for their people, and some do not. What is charged is called *seigniorage*. England coins gold for all comers at a seigniorage of .032 *per centum*, — practically a free coinage. France charges for gold coinage .216 *per centum;* and by the law of 1874, the United States charge nothing for coining gold. It is left to the people to say *how much* money they will have coined, and, having received it from the mint, they are at liberty to do just what they please with it, — they may hoard it, they may melt it, they may circulate it at home, and they may export it abroad, at will. Now, it is a great gain to have a money with which the government has nothing to do except to mint it, — a money that asks no favors, needs no puffing, never deceives anybody, knows how to take care of itself, and is always respectable and everywhere respected.

(3.) The third general reason why gold and silver make the best money, is found in their physical peculiarities, by which they are *uniform in quality, conveniently portable, divisible without loss, easily impressible, and always beautiful.* Pure gold and silver, no matter where they are mined, are exactly of the same *quality* all over the earth. Gold is gold, and silver is silver. The gold mined to-day in California differs in no essential respect from the gold used by Solomon in the construction of the Temple, and the silver out of the Nevada mines is the same

thing as the silver paid by Abraham for the cave of Machpelah. Nature with her wise finger has thus stamped them for the universal money; and a universal coinage, that is, coins of the same degree of fineness, and brought into easy numerical relations with each other in respect to weight, and current everywhere by virtue of universal confidence in them, though bearing the symbols preferred by the nation that mints them, is one of the dreams and hopes of economists, that will be realized in some

"Fair future day,
Which Fate shall brightly gild."

Gold and silver are sufficiently *portable* for all the purposes of modern money. Their weight is little relatively to their value. A thousand dollars in gold are not indeed carried so easily as a bill of exchange or a bank-note; and expedients are easily adopted, and have been in use since the days of the Romans, by which the transfer in place of large masses of coin is for the most part obviated; and these expedients will all be explained in the following chapter on Credit. For the ordinary exchanges for which they are designed, gold and silver coins are portable enough. I have myself carried across the ocean, incased in a glove finger and borne in a vest-pocket, a troy pound of English sovereigns, worth about $230, scarcely conscious of their weight, though easily reassured of their presence by a touch of the hand. The experience of those countries, like France and Germany, in which the money has been and is still mostly metallic, has not pronounced it onerous on account of its weight; and, at any rate, it is better to accept all the other immense ad-

vantages of gold and silver money, together with some inconvenience as to weight, if one chooses to insist on that, than to adopt substitutes every way inferior as money, except that they are lighter in our purses. They are unfortunately "lighter" in other respects also.

Moreover, gold and silver differ from jewels and most other precious things, in that masses of them are *divisible*, without any loss of value, into pieces of any required size. The aggregate of pieces is worth as much as the mass, and the mass as much as the pieces. This is a great advantage in money, because for the convenience of business, a considerable variety of coins is required, and the proper proportion of each kind is a matter of trial, and if any kind be minted in excess of the demand nothing more is required than to remint in other denominations, and the whole value is thus saved to the country in the most convenient form.

Then, gold and silver are easily *impressible* by any stamp which the government chooses to put upon them. Indeed in their natural state they are too soft to retain long the impress of the die. Accordingly, for coinage purposes they are alloyed with another metal, chiefly copper, since by a chemical law, whenever two metals are mixed together, the compound is harder than either of the two ingredients. Most of the nations now use in their gold and silver coins, one-tenth alloy, but England still adheres to her ancient rule of one-twelfth only. So compounded, coins receive readily and retain for a long time with sharp distinctness the legend and other devices chosen for them to bear. In monarchical

countries, the head of the reigning sovereign is usually stamped upon the coins; in all countries, national emblems of some sort; quite recently, some of our coins have been made to bear the appropriate legend "In God we trust;" so that, patriotic and even religious associations are connected with the current money. Although the alloy hardens the coins, yet after long usage they will lose part of their weight by abrasion, and governments usually indicate a short weight, after coming to which the coins are no longer legal tender. Thus an English sovereign weighs five pennyweights $3\frac{17}{23}$ grains, containing $113\frac{1}{23}$ grains of fine gold, and when it falls below five pennyweights two and three-quarters grains, it loses its legal tender character. Still, the abrasion is not very considerable in any one year. The Director of the United States Mint, in his Report for 1862, gave the results of some careful experiments made at the Mint to ascertain the yearly loss of coins by the ordinary wear and tear of circulation. The result of actual weighings and cautious estimates was, that the average yearly waste by wear on all the coins then in use in this country did not exceed one part in 2,400. The cost, therefore, of maintaining a metallic circulation is by no means so great as it has been usually represented. An instrument in constant use that requires only $\frac{1}{2400}$ of its value for its yearly repair, and performs well the most delicate and important functions, is a cheap and durable instrument.

Lastly, gold and silver, when coined into money, are objects of great *beauty*. This is no slight recommendation of these metals for the money of the

world. They are clean. They are beautiful. People like to see them, and to handle them, and to have them. Their perfectly circular form, the device covering the whole piece, the milled and fluted edges, the patriotic emblem whatever it be, the religious or other legend, and their bright color, are all elements in their beauty. The educating power over the young of a good coinage well kept up, æsthetically, historically, and commercially, is a matter of consequence to any country. A whole people handling constantly such money cannot fail to receive a wholesome development thereby. The new German coinage, in contrast with the old money of the German States, furnishes an illustration of all this. The new German coins from highest to lowest are very beautiful, and have already tended, and will tend more and more, to a true German nationality.

From these three main reasons we conclude that gold and silver make the best money.

14. Silver is inferior to gold as a metal for money, for the reason that it is less steady in *value*. That even gold has slowly but steadily declined in its purchasing-power since the opening of the mines of California and Australia, might have been anticipated from the increase of supply, and has been made certain by the painstaking comparison of price-lists by Professor Jevons[1] and others; but silver has declined even in comparison with the declining gold, and, what is more to the point, has shown some marked fluctuations besides. From an *annual* world-product of about $27.000,000 in 1849, gold rose to an average of $105,000,000 for the five

[1] *Fall of Gold*, 1863.

years beginning in 1850, and to $136,000,000 as the average for the five years ending in 1859, and has kept up to an annual average of at least $101,000,000 from 1859 to 1875;[1] but the annual *silver* product of the world has doubled within a comparatively short time, rising from an average of $40,000,000 in 1851 to 1861, to the amount of $80.000,000 in 1875, of which $32,000,000 was the product of Nevada. Professor Jevons gives as the final result of his comparison of prices from 1845 to 1862, both inclusive, — "the lowest estimate of the fall of gold that I arrive at is nine per centum, but in my own opinion, the fall is nearer fifteen per centum;" and there is no evidence of any kind that there has been since any rise in the general purchasing-power of gold. Under a vast increase to the stock of the world's gold, calculated to have been in the aggregate not less than £573,000,000 in the years 1849 to 1875, its value, though declining, has kept remarkably steady. The same cannot be said to the same extent of silver. In the last third of the sixteenth century, owing to the mines of Potosi, silver fell to *one-third* of its former value in England: two ounces of pure silver would buy a quarter of wheat about 1570, while six ounces was required about 1600, and not less than that ever since. The average price of silver in gold from 1833 to 1874 in the London market was just about sixty pence per ounce, never falling below fifty-eight and one half pence, and never rising to sixty-three pence. At sixty pence per ounce (444 grains *pure* silver, *standard* English

[1] Göschen's *Parliamentary Report on the Depreciation of Silver*, cited in Professor Bowen's Silver Report of 1877.

silver being .925 fine) the ratio of gold to silver is 1 to 15.716. From May, 1875, to July, 1876, the price in that market dropped to forty-seven pence per ounce, a fall of twenty-one per centum, and a ratio of gold to silver of one to twenty. The price gradually rose again to about fifty-three pence per ounce, and has remained there ever since.

Such extreme fluctuations as these, however unusual and unlikely to recur, unfit silver to be the *standard* in a great commercial country, and equally unfit it to be a *co*-standard with gold, but do not essentially interfere with its usefulness in subsidiary coins. It is easy to point out the causes of the great fall of silver in 1875 and 1876: (1.) the large increase, actual and prospective, in the silver product, — Nevada alone yielding $40,000,000 in 1876; (2.) the demonetization of silver by Germany and Scandinavia, and the actual or prospective throwing of their silver stock upon the market; (3.) the circumstances of British India, which previously required large remittances of silver thither, which demand for silver was largely cut off in 1870 to 1875, and is not likely soon to be strong again. The action of England in 1816, of the United States in 1853, of Germany in 1871, of Scandinavia in 1874, and of the Latin Union in 1876, *in making gold the sole standard of services, and silver subsidiary to that*, seems to me to have been wise on the strength of this liability of silver to fluctuation; and, consequently, the action of the United States in 1877, in trying again to make silver a co-standard, to have been unwise, and sure soon to manifest itself as such. This view will be confirmed by the discussion under the next head.

15. *A money inferior in general value will, so long as it circulates at all, drive a superior money out of the circulation.* The only exception to this is found in token-coins, and in subsidiary silver so far as that has the *token*-quality, that is, so far as its *nominal* is above its *bullion* value. These are only designed for the smaller exchanges, and are legal tender only for small sums, and are acceptable only on local and conventional grounds. The exception aside, the principle is a fundamental law of finance and has been illustrated over and over again in every age and nation. It is as solid as the substance of truth can make it, though it looks at first sight like a paradox. We naturally think that what is excellent tends rather to displace what is inferior, but with money the exact reverse is the law, and the perfect coin of full weight, instead of driving out the light and the debased pieces, is always itself driven out of the circulation by them. The reason is obvious from the nature of money. Money is merely an instrument of exchange, and nobody wants it except to buy with, and so long as the government and the community treat light coin and full coin as of equal value, receiving them indifferently in payment of debts and of taxes, it is clear that nobody will give in payment of debts and of taxes that which is really worth more so long as that which is really worth less will go just as far. The inferior pieces will abide in a market where they will fetch just as much as the superior pieces, while the superior pieces will take on a form or migrate to a place in which some advantage can be gained from their superiority. Thrown into the crucible, or exported in commerce,

this superiority immediately manifests itself; and therefore into the crucible or into the channels of foreign trade it might be confidently predicted beforehand that such money would be thrown, and all experience testifies with one voice that exactly those are the destinations of such money.

Aristophanes, the Greek comic poet, in the fifth century before Christ, seems to have been the first writer who noticed that good coins of full weight are apt to be crowded out of the circulation by the lighter and poorer pieces, and he, mistaking the cause of this, satirized his countrymen unmercifully for preferring bad coins to good, and demagogues, like Cleon, to honorable citizens for rulers. The following are the verses: —

"Oftentimes have we reflected on a similar abuse,
In the choice of men for office, and of coins for common use;
For your old and standard pieces, valued and approved and tried,
Here among the Grecian nations, and in all the world beside,
Recognized in every realm for trusty stamp and pure assay,
Are rejected and abandoned for the trash of yesterday;
For a vile, adulterate issue, drossy, counterfeit, and base,
Which the traffic of the city passes current in their place!
And the men that stood for office, noted for acknowledged worth,
And for manly deeds of honor, and for honorable birth;
Trained in exercise and art, in sacred dances and in song,
All are ousted and supplanted by a base, ignoble throng;
Paltry stamp and vulgar metal raise them to command and place,
Brazen counterfeit pretenders, scoundrels of a scoundrel race,
Whom the state in former ages scarce would have allowed to stand
At the sacrifice of outcasts, as the scapegoats of the land."[1]

Sir Thomas Gresham, financier of Queen Elizabeth and founder of the Royal Exchange and o.

[1] Translated by Sir Bartle Frere.

Gresham College in London, was the first to explain fully what Aristophanes had noticed, and what may hence properly be called Gresham's law. I shall give two or three illustrations of it. The city of Amsterdam founded its famous bank in 1609, because the clipped and worn foreign coins then circulating in that great mart of trade, drove out completely the good money which the mint of the city constantly poured in. This was a bank of deposit only; it took in all the old coins at their bullion value, and had them reminted at full weight; it gave the depositors credit on its books in the terms of the new money for all they brought in; it adjusted accounts between merchants and others by mere transfers on its books; and the city required all debts due in Amsterdam to be paid in the new bank-money, and thus took away all uncertainty from bills of exchange drawn on Amsterdam, which were previously liable to be paid in the worn coin, and were therefore sometimes at as much as ten per centum discount in other cities; this brought these bills at once up to par and kept them there, and thus made it for the interest and convenience of every business man in Amsterdam to have these simple dealings with the bank, which in turn enjoyed unlimited credit in the commercial world for nearly two hundred years.

The great English recoinage of 1696 was compelled by similar causes. Macaulay describes it graphically in his twenty-first chapter. The old silver coins were stamped by the hammer; few of them were perfectly circular; the edges were neither milled nor fluted; the superscription was not so near the edge

as that the letters were impaired by a little clipping; it was easy to pare off a pennyworth or two, and then pass the coins along; it was profitable to do it, and in vain that Elizabeth enacted that the clipper must suffer the penalties of high treason; nearly all the coin of the realm became mutilated, and about 1660 a new process of coinage was brought in. A mill worked by horses fabricated the new coins on better principles. They were exactly round, and the edges were inscribed with a legend, and they were all of just and equal weight. They were thrown out into the circulation to pass current with the hammered money, and it seems to have been expected that they would soon come to displace it. But they did not. Both were received at first without distinction by the individual traders and by the public tax-gatherers. But it was not long before the milled money was noticed to be scarce. One hardly saw a piece of it in a fortnight. The horses at the mint were all the time tugging away, and the bags of fresh money were carried continually from London Tower to London town, but the new money nevertheless became scarcer every day. In the payments made at the Treasury not one piece in two hundred was milled silver, and a merchant complained that, being paid a debt of thirty-five pounds, he only got one half-crown of good money. Indeed, the money was getting perpetually worse. False coiners multiplied, and clippers abounded more and more. The penalties of an extreme law were utterly powerless to restrain the mutilation of the coins; until, at length, public opinion decidedly turned against the promiscuous hanging of clippers: officers were reluctant to

arrest, and juries reluctant to convict, and the people sympathized with the sufferers as only guilty of a moderate fault. Thus things went on till 1695. The lighter the old coins became, the scarcer became the new ones; for who would pay two ounces of silver when one ounce was legal tender? The new money was melted, was exported, was hoarded, but circulate it would not. At length the lightest pieces began to be refused by some people, and other people demanded that their silver should be paid to them by weight and not by tale, and there was wrangling over every counter, and a dispute at every settlement, and the coin was really so diverse in its value that there was no longer any measure of value in the kingdom; business was in utmost confusion, society was by the ears, poor people were unmercifully fleeced, and shrewd ones grew enormously rich; and the Jacobites secretly exulted in the hope of being able to avail themselves of the prevailing discontent to overthrow the scarcely established revolutionary government of William and Mary; when, by the joint counsels of two such philosophers as Locke and Newton, and two such statesmen as Somers and Montague, the government took the bold resolution of recoining all the silver of the kingdom. An early day was fixed by Parliament, after which no clipped money could pass except in payments to government, and a later day after which it could not pass at all. Thus we see that there may be *depreciation* even among coins. Depreciation implies of course a *standard;* and whatever any coins are worth less than the standard coins of that class is their depreciation.

We do not know anything yet about paper money, but so excellent an illustration of Gresham's law occurred in our own time and country, that I will say, that in the spring of 1862, a paper money was made by the national government a legal tender which soon became less valuable than the gold coins. The gold coins utterly abandoned the circulation in a very few days. The paper soon became even less valuable than the subsidiary silver coins. In a few days after that the circulation was swept bare of all the silver coins. The paper at length went down below the level of even the copper cents, which at that time cost the government something less than half a cent. Then the copper cents too obediently followed this invariable law of money, they disappeared, and the people had to resort to postage stamps, shin-plasters, and other abominations, for their smallest change. Happily, we have lived to see these processes exactly reversed, and the law confirmed on its other side. When, after an interval of years, the paper had appreciated to the proper height, back came the copper cents; when it had appreciated considerably more, the subsidiary silver came freely back; and the hope is now indulged in high places, that the gold coins will soon return to the pockets of the people.

16. Alloy is of no consequence in coins so far as value is concerned. That depends on the weight and fineness of the precious metal. If the leading commercial nations could agree as to the fineness of the gold in their unit-coins, and then bring the weights of these into easy numerical relations with each other, the coins of each nation might bear the

names and emblems preferred by each, but there would be practically a universal coinage, and the pieces respectively might be legal tender in each nation. Except England, the leading nations have already adopted the standard nine-tenths fine for their gold coins. The French have taken much pains to make their franc-system universal, and have had some success as towards that end. They want their five-franc gold piece, weighing 1612.9 milligrams, to be the international unit; and have persuaded Belgium, Switzerland, Italy, Spain, Greece, Roumania, and Austro-Hungary in part, to adopt it. The last mentioned began in 1870 to coin gold pieces of eight and four florins, the same in weight and fineness as the French twenty and ten franc pieces respectively; and decreed in 1873, that foreign gold pieces of the French system be accepted in Austro-Hungary in the ratio of two and one half francs to the florin. If this system is to become international, British, German, and American gold will have to be recoined, and the British standard of eleven-twelfths fine be changed to nine-tenths fine. If our gold dollar were lowered 3.5 per centum, and the British sovereign lowered .88 per centum, very simple ratios would obtain between the moneys of the United States, Great Britain, and the Latin-Union countries. Five dollars would equal one pound and each would equal twenty-five francs; also, of course, one dollar would equal five francs and four shillings respectively. If the United States should make its gold dollar the equal of five French francs, it would thereafter circulate wherever the French napoleon now circulates (virtually everywhere), and tend pow-

erfully to make the *dollar* the future universal denomination of value, as it is already in many countries both in Occident and Orient.[1] The objections to this general plan, are (1.) the ugly fraction in the metrical unit of weight; (2.) England's preference of her old standard; (3.) the new, independent coinage of Germany; (4.) such a body of gold would have to be recoined; and (5.) the system is not decimal throughout, though the multiples of the unit would be divisible by five, the napoleon of twenty francs not being decimally related to the franc.

Mr. E. B. Elliott's plan is similar, simpler, and more metrical: Let Great Britain coin $\frac{9}{10}$ fine and increase the weight of the sovereign from 7.3223+ to 7.5 grams fine, let the French increase the weight of the napoleon from 5.8064+ to 6 grams fine, and let the United States reduce the weight of the dollar from 1.5046+ to 1.5 grams fine, and then their weights, both fine and standard, would all be strictly metrical and bear simple relations to each other. The following equivalents would obtain, namely, 4 pounds = 20 dollars = 100 francs. Each of these would weigh 30 grams fine gold, or $33\frac{1}{3}$ grams standard gold. Also, 1 dollar = 5 francs = 50 pence, each weighing $1\frac{1}{2}$ grams fine, or $1\frac{2}{3}$ grams standard. Also 1 pound = 5 dollars, each $7\frac{1}{2}$ grams fine, $8\frac{1}{3}$ grams standard.

The new German coins from highest to lowest are very beautiful, and very convenient so far as the Germans alone are concerned. It seems to be a pity, however, that in developing a new coinage of their own, the Germans should have avoided the

[1] Compare Jevons' *Mechanism of Exchange*, p. 179.

French unit, and thus perhaps have postponed the exact unification of the money of the commercial world. The new German unit is the *mark*, equivalent to 23.821 cents United States gold. The principal coin is the 20-mark piece, containing 7.168159 grams fine gold. The sovereign contains 7.3224 grams fine, and the new 25-franc piece will contain 7.2581 grams fine. If these three could be brought together, and the dollar be made equal to 5 francs, an international and universal coinage would be substantially secured. The mark-system is decimal being subdivided into groschen and pfennigs. Three marks are interchangeable with the old Prussian thaler. One English shilling equals $24\frac{33}{100}$ of cents, and two shillings English are very nearly the same as the new Austrian florin.

Mr. R. N. Toppan, of New York, has proposed the claims of a gold piece to weigh eight even grams, nine-tenths fine, as the unit of an international coinage, to which the sovereign, the half-eagle, the twenty-mark piece, and the twenty-five-franc piece, might all be adjusted with slight changes of weight, though all would have to be recoined.[1] As the decimal system of coins, which was first propounded by the United States in 1786, has been adopted by all the nations of Europe; and as the metric system, which was first proposed by France in 1795, is spreading through all civilized nations, and is already specially applied to the weighing of coins; the hope of an

[1] Letter of Mr. Toppan to Mr. S. B. Ruggles of the New York Chamber of Commerce, 1877. I have used some of Mr. Toppan's figures in the preceding pages. Mr. Ruggles is an influential advocate of the French system.

international and universal coinage in some not distant time may reasonably be indulged. I confess, that to my mind the fairest prospect to this lies through the adoption on the part of Great Britain and the United States, of the French five-franc unit, to be called a *dollar* in all languages, and to be the exact equivalent of four English shillings, and of two Austrian florins.

17. We have defined money to be a current and legal measure of Services. So far, we have treated only of coin-money; as this is the only money that stands in its own right as a commodity, and the only money that can give birth to the *denominations* of value, such as *dollars*, *marks*, and *francs*. What is a dollar? A dollar is twenty-five and four-fifths grains of a metal compound coined, of which nine parts are pure gold, and one part a hardening alloy. It is a definite *quantity* of a definite thing. It is a visible, tangible *commodity*. Government is competent, if it pleases, to alter the quantity of gold that shall make a dollar, though the people will quickly readjust the prices of services to a changed dollar; it is competent even to make a dollar out of silver, though it is not competent to cause both dollars to circulate as such at the same time; *but it is not practically competent to make a dollar out of anything else than go'd or silver.* From the way in which money originates, the material of money must be a valuable commodity; and no civilized people now tolerate any other commodity in this relation than gold or silver. Such a commodity, becoming in the way already explained an actual medium passing from hand to hand in exchanges, impresses its ***name***

on the minds of men as an ideal *measure* of services, which measure they can use, and do constantly use, without handling at the time the commodity itself. But these ideal-dollars, these denomination-dollars, need to be kept in check by a constant recurrence to actual, palpable thing-dollars. The denomination only comes into existence in connection with the use of the thing, cannot possibly exist independently of it, and needs constantly to be reduced to it (as it were by actual contact) in order to be useful as a measure. Just as men talk about inches, and calculate by inches, in thousands of cases in which no actual inch is used as a measure, and, in every case of doubt, dispute, or difficulty, have recourse to the actual inch, and thus the ideal inch is kept steady in the minds of men by frequent reference to the outward standard; so the mental measure of services, which men insensibly acquire from the use of the objective measure, needs to be kept true by actual and frequent contact with that measure.

But besides the thing-dollar and its denomination, which always go together like a man and his shadow, there is one other kind of money, — *the promise-dollar.* We must now attend to this. What is a dollar bill? How does it read? It is a promise of the issuer to pay to bearer *one dollar*, that is, this definite quantity of a precious metal. There is no mystery here. A dollar is a tangible commodity. A dollar bill is a *promise* to give this commodity to bearer. The difference between them is the same in kind as that between a bushel of corn and a man's promise to his poor neighbor to *give* him a bushel. It depends on the *man*, on his ability and

character, how much this promise is worth; and so it depends on the *issuer*, on his ability and character, how much the promise-dollar is worth. The issuer may be of such standing as to be able to secure for his promises that they become "a current and legal measure of services;" if so, they become money under the definition. There is, then, such a thing as paper money, although many high authorities are reluctant to concede that any mere promises can be money at all. For one, I cannot refuse the courtesy of the term money to paper, which my country, however unwisely, makes a legal-tender for debts. The essential characteristic of money is its possession of a *generalized* purchasing-power. Whatever circulates among all classes of the people as a medium in their exchanges is money under the definition. Still, there are but two kinds of it. Money is always either an intermediate and equivalent merchandise (coin) or promises to pay this (paper money).

But not all promises to pay coin are money, because not all have the "current and legal" qualities which alone make anything money. Paper money is always credit; but not all credits are money. Ordinary notes of hand, checks, drafts, bills of exchange, and so on, are not money under the definition. This is a distinction recognized in common language, and science has no motive to disturb it. The people know the difference between paper money and other credits. I may receive and pay out checks in ordinary exchanges, but all my neighbors do not, and they know the difference: checks are not money. The people know too, what

is the weak point in paper money. It is credit-money. It may be more convenient than coin money; its value, that is to say, its purchasing-power, may be equal to that of coin money; it may even in some circumstances bear a premium over coin money; but all this does not alter the fact that there is in it an unlucky element, an unstable element, an element which, as men are, is liable to some suspicion, the element, namely, of a present promise to be fulfilled in future. Paper money walks by faith, and not by sight. It is the sign, and not the thing signified. It is the representative of something, and not that something itself. It is a promise to pay, and not the pay itself. It is a credit, and not a quittance. And what makes this very certain is, that all paper money knows it to be true about itself. It bears this truth stamped on its very face. It does not even profess to stand on its own bottom, but leans consciously and conspicuously on some solid support. The French assignats promised to redeem themselves in land; the continental bills of the old American Congress were all to be paid in Spanish milled dollars; the bills of the Bank of England profess to be and are, redeemable in gold and silver; the present irredeemable legal-tender notes of the United States and the new national bank bills, are all in terms promises to pay to bearer so many legal dollars of the United States, that is, so many times 25⅘ grains of gold standard fine.

We see, then, precisely, the nature of paper money. It is made up of promises made by somebody to pay to somebody else a definite weight of coined metal. All civilized countries now make a certain weight of

gold or silver bullion their acknowledged standard of value; and, accordingly, paper money can only be based upon specie, since specie is the only thing that can be meant, when the promise is to pay pounds, dollars, gulden, francs. Specie is indeed a commodity, like other commodities, but then it is the only commodity that is the accepted medium of exchange in civilized countries; and therefore, all attempts to base a paper money upon land, wheat, cotton, mercantile bills, or any other valuable thing, involve a direct contradiction in terms. Our proposition is, that paper money is only tolerable when it is instantly convertible into coin; which is the same as to say, that a promise is only good when it is *kept*. An inconvertible paper money is only another name for a promise unfulfilled; and no intelligent person will ever wonder that unfulfilled promises to pay invariably become less valuable than that which they promise to pay. This is the simple secret of the inevitable depreciation of all inconvertible money, as soon as the amount of it passes a certain limit. Even a convertible money, if, by any expedients, the amount of it, together with the coin in circulation, become greater than the volume of coin alone would be then and there, will diminish in value, not indeed as compared with specie, but as compared with commodities, that is, general prices will rise. All the principles of this whole discussion hinge on the fundamental truth, that money is a *measure of services*. Being but a *measure*, and *Services* being limited at any one time and place, the amount of money needed for healthful business is limited also. This limit of quantity not being overpassed, paper prom-

ises to pay, provided they are only kept, will constitute a tolerable money. That this limit of quantity is apt to be overpassed, whenever paper money is used, whether it be inconvertible or nominally convertible; and also, that a paper money can never be successfully based on anything but gold and silver, the subjoined historical examples will abundantly confirm.

Of all the institutions that have ever issued paper money, the Bank of England has been on the whole the best managed, and its issues have gained the most confidence and the widest circulation. I take the best specimen of its kind; and if we find a comparative failure even here, we may know what to expect of the *genus* as a whole. We are not yet in position to understand Banking, because we have not yet studied Credit which is its core, but the simple function of issuing paper money, which is scarcely a part of genuine *Banking*, may be well understood at this point. The temptation to issue promises to pay in excess of the means of promptly redeeming them, always besets the issuer, because there is a *gain* in such issue at least for a time. The Bank of England has resisted this temptation longer and better than any other issuer known in history; and yet, as we shall see, its success in overcoming it has not been perfect.

This is an association of individuals incorporated under the style of the "Governor and Company of the Bank of England." The bank was a child of the English Revolution, and was incorporated by Parliament in 1694, on condition that its stockholders should loan to government, then pressed

for funds, the sum of £1,200,000, on which they were promised eight per cent. as interest, and £4,000 for management, per annum. On the strength of this capital stock, which was simply so much of government debt, the bank was authorized to issue bills to an equivalent amount, but which at first could only pass from hand to hand by successive indorsements. The first charter was terminable at the pleasure of the government any time after August 1st, 1705, by giving a year's notice to the bank, and by paying the debt due to it. The bills at first were paid promptly in coin on demand; the bank became the means of increasing the credit at home and the strength abroad of the revolutionary government of William and Mary; and consequently the Whigs were the friends, and the Jacobites the foes, of the bank. The government was strengthened in a sense by its own indebtedness; for it was felt that if James II. should regain the throne, no pound of the loan would ever be paid back. "So closely," says Macaulay, "was the interest of the bank bound up with the interest of the government, that the greater the public danger the more ready was the bank to come to the rescue." As already related under the last general proposition, the silver coins of the realm were at this time much worn and clipped; the bank had received them at their nominal value; but after the recoinage began in 1696, it was obliged to redeem its bills in new coin of full weight, that is, for perhaps 7 ounces of silver received, it was now bound to pay 12.[1] Consequently its enemies made a run upon the bank by

[1] Macleod's *Banking*, vol. 1, p. 357.

collecting its notes to a large amount and presenting them for redemption. The bank was obliged to suspend specie payments, at first partially, and then generally. In February, 1697, its notes were 24 per cent. below par.

A new charter, granted just at this time, extended the term, and doubled the capital stock of the bank, one fifth of the subscriptions to which increase was receivable in bank notes. This brought up the notes to par, and made the indebtedness of government to bank £2,201,171. This second charter practically gave the monopoly of banking in England to the Bank of England, and provided that if the bank did not redeem its notes, they might be presented at the Exchequer and redeemed out of the annuity due to the bank. In 1709 the term was again extended, the capital stock again doubled, and the interest on the whole debt reduced from eight to six per cent. Each increase of the debt due from the government to the bank carried along with it the privilege to the bank of increasing by so much the issue of its notes. Here is the vicious principle in the Bank of England. *It assumes that a paper money may be properly based on a government debt.* But upon how much of that debt? A limit must be placed somewhere; and the goodness of the money will depend after all not on the debt, but upon the coin on hand to convert the money. The bills of the Bank of England have been and are a tolerable money, not so much because there is a part of the national debt behind them, as because there is generally a plenty of solid cash behind them. In 1716 the bank was exempted from the operation of all usury laws: why the bank only,

and not other people as well, the act of Parliament does not state. In 1720, and again in 1745 when the Young Pretender made the last rally of the Jacobites, there were severe runs upon the bank; on both occasions, in order to gain time, notes were paid in shillings and sixpences. Best friends were also accommodated first, who are said to have returned the bags of money as fast as they received them. The practice of indorsing the notes became gradually disused, though the law at first did not follow the innovation.

In 1759 £15 and £10 notes began to be issued. Till then there were none less than £20. The bank kept advancing various sums to government on various conditions, mostly however at three per cent., till 1782, when the debt stood £11,642,400. When England plunged into the war of the French Revolution, the bank came under the imperious will of William Pitt. His constant demands for money could not be met, and the bank at the same time give its usual accommodation to merchants. Thus the merchants were refused. The monopoly now bore its bitter fruit. Private credit wavered, and there was a run upon the bank for cash. The bank suspended specie payments in February, 1797, and did not resume them till 1821. Government and the business men of London did their best to hold up the credit of the notes during the suspension, *but they were not made a legal tender for debts.* Government received them at par for taxes, and provided that business payments in notes would be held as payments in cash if offered and accepted as such. Debtors, having tendered bank notes, which the cred

itor refused, had certain privileges before the law which other debtors had not. The notes therefore had a *quasi* legalization, but not a forced circulation. The bank was also authorized at this time to issue £5, £2, and £1 notes. Cautiously issued at first, bank paper continued at par for several years after the suspension, which proves that when government possesses the monopoly of issuing paper money, and carefully limits its quantity, and both receives and pays it out at par, it may keep an inconvertible paper at par, or even by sufficiently limiting its quantity carry it above par. But this truth does not make an inconvertible paper a good money, because it does not make it a self-regulating money, and because government is not wise and firm enough to fix and maintain a proper limit. Though Parliament intended in successive acts to confirm to the Bank of England the monopoly of banking by enacting that no partnership of more than six persons should take up money on its own bills, yet the common law assured to private persons and smaller partnerships the right to do this; and private bankers multiplied after the suspension, since they were allowed to pay their notes in Bank of England notes. Thus the quantity of paper money gradually increased till in August, 1813, the Bank of England notes were at thirty per cent. discount in gold.

In the following years, large numbers of country bankers failed, and their notes were reduced to one half what they had been, and Bank of England paper rose almost to par, and a partial resumption of specie payments took place in 1816. In accordance with the principles of the celebrated Bullion Report

of 1810, which demonstrated that the market price of gold (in paper) and the state of the foreign exchanges were the infallible indices of the value of a paper money, Parliament, in 1819, passed an act requiring full resumption of specie payments at the bank in 1823. The resumption actually took place in May, 1821. In 1829, all notes whatsoever for less than £5 were forbidden to be circulated in England. When the bank charter was renewed for the ninth time in 1833, the bills of the Bank of England were declared to be a legal tender for debts, *so long as the bank paid them on demand in legal coin;* and the same act legalized the issue of paper money by other banks (no matter how many partners) outside of a radius of sixty-five miles from London, and also legalized banks within the radius, but they could not issue paper money. From 1694 to 1711, the issues of the bank were limited by law to the amount of the debt owed to it by the nation; from 1711 to 1844 there was no limitation on the issues, only the bank was required (the suspension excepted) to pay its notes in coin on demand; but in 1844, Sir Robert Peel gave the bank through Parliament a new constitution, under which it is still managed, and which restricts its issues to £15,000,000 on the basis of securities, of which something over £11,000,000 consists of the government debt, and for all issues beyond this amount it must have pound for pound of gold and silver in its coffers. The average amount of notes in circulation is about £30,000,000, one half based on specie in reserve and one half on securities.

The bank is also obliged to buy, and pay for in

notes, all gold bullion and foreign coins offered to it, at the rate of £3 17*s.* 9*d.* per ounce standard fine; so that, if notes depreciate as compared with coin, they can be at once changed into coin, or bullion and coin can be changed into notes if the latter are preferred. The issue department of the bank is made quite distinct from the loaning department, which latter, receiving its notes only from the issue department, raises and lowers its rate of discount according to the state of the market, but usually keeps its rate a trifle higher than the market rate, so as to be able to act as a support to private bankers and others in case of pressure. For many years the bank has conducted its business upon the sound principle of raising its rate of discount whenever the foreign exchanges become adverse and there is a consequent call for gold for exportation, and also whenever the rate of discount in the neighboring commercial countries is a good deal higher than its own. The due proportion of the paper money to the specie in reserve is maintained through a proper regulation of the rate of discount. The regulating act of 1844 restricted the issue department, but it did not restrict the loaning department. Gold can be drawn from the bank not simply by the presentation of notes, but also by the checks of depositors, that is, by those who have sold bills of exchange to the bank. Hence the convertibility of the notes can be kept up only by careful regulation of the rate of discount. Thrice since 1844 the government has authorized the bank to violate its charter, and to issue more notes than that allows on securities temporarily: in 1847, in 1857, and again in 1866. The propriety of this re-

striction has been, and is still, vehemently debated in England; and it is an open question also whether England is any richer for the use of Bank of England bills. It seems to me that the purposes of the Bank of England, as a great national bank of support, would be better met by the abolition of this restriction. Banking is now thoroughly understood by the Directors of the Bank of England; and they may be safely left to their discretion to sustain public credit in times of crisis. The Joint Stock and Private Banks of the United Kingdom are at present authorized to issue a little over £15,000,000 of bank notes. The average circulation of all the British Banks is a little less than £45,000,000. There are about £115,000,000 of coin money in circulation in Great Britain. Thus the ratio of paper money to coin money in Great Britain is very nearly as one to two and three-fourths. Almost precisely the same ratio prevails in France, in which country, however, one central institution, the Bank of France, issues all the paper money. Since 1821, no Bank of England note has been presented without being cashed at once.

France has tried paper money under remarkable conditions. John Law was born in Edinburgh, in 1671, and died in Venice, in 1729. Son of a goldsmith, he received an excellent education, and early manifested an acute intellect and a talent for finance, but was also notorious as a gambler and debauchee. He was the first to give scientific form and color to the theory (a theory that is still working in many minds) that money represents commodities, and may be based upon their value. He published this theory

in a tract, in 1705; but endeavored in vain to persuade the government of Scotland to found a bank upon his principles. He then carried his scheme to Paris, and was again repulsed; and after a residence in many cities, in which he gambled successfully, and talked finance to princes and statesmen fascinatingly, he returned to Paris in 1715, with his ill-gotten fortune, gained the ear of the Regent Duke of Orleans, presented to him a memorial containing many sound principles of monetary science combined with the fundamental vice of his system, and was allowed by him the next year to found a bank embodying to a certain extent the new idea. The idea may be well expressed in Law's own words:—"*Any goods that have the qualities necessary in money, may be made money equal to their value. Five ounces of gold is equal in value to* £20, *and may be made money to that value; an acre of land is equal to* £20, *and may be made money equal to that value, for it has all the qualities necessary in money.*"

The fallacy is patent to any one who will stop to think, because land, for example, has *not* "all the qualities necessary in money." It may have purchasing-power, but it cannot become a *generalized and current* purchasing-power. It cannot therefore be money, because it cannot be a universal measure of services. Nevertheless, for a couple of years, or so, Law's bank surpassed all hopes. Based on specie *and on state debts*, it paid its notes promptly in coin, and these for a time even bore a premium over coin. Law had touched a spring till then but little known in France, the potent spring of Credit. But his whole thought, meditated on for

years, could not be expressed through a private bank. The State should be a banker; it should collect all its revenues into a central bank, and attract the money of individuals to it as deposits; besides, the State has public property of vast value, on the strength of which paper money can be emitted and made legal tender; and thus the State, instead of borrowing, should lend to all on easy terms, and the profits thus accruing would lessen or abolish taxes. Nor was this all. The State should also be a merchant; the whole nation should form a commercial company, a body of traders, whose common treasury should be the State bank. Commerce by individuals creates great wealth; why should not the organized commerce of a State make everybody rich? The discounts of the bank, and the profits of the trade, would surely provide for the public service without taxation. These vast ideas were actually carried out. Law's bank became the Royal Bank, issuing a paper money guaranteed by the State and resting back upon the value of all national property. The money was receivable in taxes, nominally redeemable in coin, and made a legal tender. It actually bore at one time five and ten per cent. premium over gold and silver. People were anxious to exchange their coin for notes. Meanwhile a commercial company was formed in connection with the bank, to which the State ceded at first the monopoly of the commerce of Louisiana and of the Canada beaver trade for twenty-five years, and the soil of Louisiana forever; under the auspices of which NEW ORLEANS was founded, and named from the Regent, the patron of the grand system; and in succession, the monop-

oly of tobaccos, the rights of the Senegal Company, of the East India Company, of the China Company, and of the Barbary Company; until, having almost all the commerce of France outside of Europe in its hands, it entitled itself the COMPANY OF THE INDIES. Its shares rose from a par value of 500 francs, to 10,000 francs, more than forty times their value in specie at their first emission. To support such speculations, which completely turned the heads of all classes of the people, the amount of paper money reached at last the sum of 3,071,000,000 francs, 833,000,000 more than had been legally authorized to be emitted. The collapse of this most gigantic financial bubble of history was terrific. Before the close of 1720, the shares of the Company could be bought for a louis d'or, and the paper money became worthless.[1]

Thus Law's paper money ran its course in about four years. Again at the close of the century France tested the merits of paper money, and the principle that money may represent commodities, on a grand scale. As the great revolution went forward, and a scarcity of money was experienced, the National Assembly, in the spring of 1790, issued, under the name of "assignats," a paper money *based on the value of the lands* of the Church which had been confiscated to the State. The assignats were receivable in payment for these landed estates at any public sale of the same. The first emission, but not the rest, bore interest. That issue was 400,000,000

[1] Martin's *Decline of the Monarchy*, chap. i. Macleod's *Theory and Practice of Banking*, chap. xi. Bancroft's *United States*, chap. xxiii. *New Am. Cyclo.*, Art. "John Law."

francs — about one fifth the value of the confiscated lands. In September, 800,000,000 more were authorized, Talleyrand opposing and Mirabeau strongly urging these additional issues. "It is in vain," said Mirabeau, "to compare assignats, secured on the solid basis of these domains, to an ordinary paper currency possessing a forced circulation. They represent real property, the most secure of all possessions, the land on which we tread." Nevertheless, and though all assignats were legal-tender, they drooped. The government in alarm, while issuing on the one hand enormous quantities of the paper to meet the vast expenses of the Revolution, which quantities were swelled by skillful counterfeiters in the prisons and elsewhere, took strong measures on the other to prop up their market value; the use of coin was prohibited; a maximum price in assignats for everything was established by law; heavy penalties and at last death were decreed against those who refused to receive them at par; but it was all in vain. "They sink now," says Carlyle, "with an alacrity beyond parallel." In June, 1793, the assignats had fallen to 33, and in August to 16 per cent. Renewed confiscations kept the estimated value of the public domains far in advance of the par value of the assignats based upon them; but this had no tendency to prevent the depreciation of the assignats, because money is a *medium of exchange*, and its proper amount has no relation to the estimated value of any commodities at all. In February, 1796, the assignats legally issued had amounted to 45,500,000,000 francs, and had fallen to one two hundred and sixty-

fifth part of their nominal value, that is, to two fifths of one per centum.

The government then offered to redeem them at 30 for 1 in "mandats," which entitled the bearer to take immediate possession, at their estimated value, of any of the lands pledged by the assignats. According to M. Thiers, who is my authority in this paragraph, the mandats sold first at 15, then rose to 40, and in some places to 80, and soon sank again to 5 per centum. A decree of July 16, 1796, ended the matter by permitting any one to do business in any money he chose; and business, which had practically ceased under the paper money, revived again at the sight of the coin, which, of course, had been out of circulation. Thus the assignats had a course of about six years. The distress and consternation into which a country falls when its measure of value is disturbed and destroyed, as it was by the issue of the assignats, is past all powers of description. There can be no doubt that these assignats caused more suffering in the French Revolution, a hundred fold, than the prisons and the guillotine. It may be said that the government ought not to have issued them in such quantities. Perhaps it ought not. But there never has been a government yet, of the many which have issued irredeemable paper, which had the wisdom and the firmness to resist for any great length of time the temptation to emit large quantities. There is no stopping when once the issue is begun. The first batch of such paper usually banishes the coin from the circulation. There is no way to entice it back except to call in and burn up the paper. Revolutionary governments are

not generally in position to be able to do this. Ordinary national expedients are denied them. They cannot borrow. Therefore they have recourse to credit-money, which is really borrowing without interest, and when once the press is set at work it must work on with livelier speed, because just in the ratio of the depreciation is a greater amount required to meet the ordinary payments. This example is significant, because it shows the powerlessness of even the strongest and most unscrupulous governments to regulate the value of anything. The assignats were depreciating during the very months in which Robespierre and the Committe of Public Safety were wielding the power of life and death in France with terrific energy. They did their utmost to stop the sinking of the revolutionary paper. But value knows its own laws, and follows them, in spite of decrees and penalties.

18. In my judgment, the safest and most economical, and, taking all things into consideration, every way the best, money is gold and silver coin. I would have no other *money*, still less any other legal-tender. This position does not exclude the freest possible use of checks, drafts, bills of exchange, money-orders through the post-office, and any other convenient form of pure credit. These are sufficient to prevent for the most part all burdensome transfers of coin. The sphere of money and the sphere of credit are quite distinct spheres. The functions of *money* are too delicate and too vastly important to be well performed by any instrument that is essentially *credit*. Still, the leading nations of the world, including the United States, use paper money

in part; and the people of the latter between 1862 and 1878 had in effect no other money than irredeemable promises to pay, some of it issued by the national government directly, and the rest of it by incorporated banks. But, whether the money be coin or paper, or both, when it is once in the hands of the people, *the government has no right to concern itself with the rate of interest at which the people loan it to each other.* Many of the nations of the earth, and most of the States of this Union, have on their statute-books Usury Laws. We now inquire into the propriety of these.

The law of Moses forbade to the Israelites the taking from one another any interest on money loaned, but at the same time it allowed them to take such interest freely of strangers; the permission in the one case going to show that there is nothing in the taking of interest in itself unjust or sinful, and the prohibition in the other being readily explainable from the general purpose of the municipal regulations of Moses, which was to found an agricultural and not a trading commonwealth, in which every family was to possess land that could not be permanently alienated or sold, in which it was a great object to maintain the personal independence and equality of these families, in which the law for the recovery of debts was very summary and effective, lessening the risk of losing the principal, and which was to be and was sedulously separated in its usages from the surrounding nations. It has been well understood for a long time that the municipal code of Moses was local and peculiar, not necessarily applicable at all to the circumstances of

other States, and in no sense binding on the conscience of legislators; and yet there doubtless sprung from the prohibition referred to a prejudice against interest, and this prejudice was perhaps deepened in the Middle Ages and onwards by the conduct of the Jews themselves, who, in addition to their sin of persistently growing rich in spite of the endless disabilities laid on them by the people of Europe, always demanded, in accordance with the permission of their great lawgiver, a per cent. of interest from those strangers to whom they became money-lenders. The Jews were everywhere hated, and consequently the usury which they practised was hated also. The fundamental absurdity of forbidding in trading communities the taking of interest on sums loaned to a borrower which he was at liberty to use for his own profit, deterred the nations from going to the length of prohibition, unless it might be in the case of the hated Jews. There is a clause of Magna Charta, interesting as showing how early the children of Abraham became the money-lenders of Europe, to the effect that, during the minority of any baron, while his lands are in wardship, no debt which he owes to the Jews shall bear any interest. The prejudice against interest embodied itself in what are called usury laws. These, without prohibiting the taking of interest, prescribe a maximum rate per cent., which lenders may receive, and announce a penalty in case they take more. The penalty is sometimes the forfeiture of the entire interest, and sometimes of the entire debt.

Usury laws, however, have not sprung wholly from the old prejudice that to take interest was a great

moral wrong, and the greater the more was taken; they sprung also from a false notion which used to be pretty general, but which is now at length thoroughly exploded, that governments were competent to determine the value of their own money; and there has been, and is still, a curious and harmful confusion in respect to this term, the value of money. In the only proper sense of the term, the value of money means its power of purchasing services in general, and the value of money is high when a given sum of it will purchase much of general services, and low in the contrary case; but, unfortunately, the terms "high and low value of money" have also been used to denote a high or low rate of interest on money loaned, which is a very different signification, and a high or low rate of interest depend on a very distinct set of causes from those which determine a high or low value of money; nevertheless, so long as governments supposed that they could regulate the latter, it is perfectly natural that they should also suppose that they could regulate the former; and although all intelligent governments have given over the idea of being able to regulate the value of money, many of them still adhere to the idea, equally false as the other, that they are able to regulate the loanable value, or the rate of interest, at least to prevent any more than their prescribed maximum rate from being taken. Are such laws needful? Are they beneficial? Are they in accordance with sound principles, or do they violate them? Has a government any right, after it has stamped or engraved its money, and parted with it to the people in return for value received, to say

that they into whose hands it has rightfully come shall only have so much under any circumstances as a reward for foregoing the use of it themselves that somebody else may have the use of it?

Let us see precisely the nature of the transaction when one man loans money to another. It is a clear case of value. The lender does a service to the borrower, and for this service justly demands a compensation. The service is this: The lender might himself use the money to gratify his own desires. It is his money; he may use it, as he pleases, for his own gratification. Or he may himself employ it productively, and, at the end of the period, receive back his principal with the customary rate of profit. If he surrenders this advantage to the borrower, if he passes over to him the right to use this money, say, for a year, he practices what we call in Political Economy *abstinence*. For this abstinence he has a right to claim a reward, precisely as the man has a right to claim a reward who foregoes working for himself in order to work for me. This reward of abstinence is *interest*. The money-lender foregoes an advantage. He performs a service for the borrower; and, therefore, the right to interest stands on just as unassailable ground as the right to wages.

The loanable value of money varies under exactly the same conditions as every other value varies. It is determined, as every other value is, by the actual exchanges between lenders and borrowers; or, rather, by what would be the actual exchanges, if they were left free. Now for any government to compel a borrower to pay six per cent. when he might otherwise borrow for five, or a lender to take only seven pe-

cent. when his money is worth eight, is a direct violation of the rights of property. It is a forcible and pernicious interference with the freedom of contracts. It is based on the false premise that the loanable value of money is uniform, and that government is competent to determine what it is. No value is uniform. And no government is competent to determine even the maximum price of money loaned, any more than the maximum price of commodities.

On principle, then, these are the two considerations which condemn usury laws. First, it is invidious to allow other men, in every department of business, to exchange their services on the best terms they can make, without any interference or control, and then, without rendering any solid reason for it, to deny this privilege to money-lenders, who offer just as honorable and useful services to society as any other class of men. Second, it is a false notion altogether, that the loanable value of money is, or can be made, uniform; and, therefore, a rate per cent. fixed by the government constantly infringes on the rights of property, — on the rights of the borrowers, if the rate is too high, on the rights of the lender, if the rate is too low. But there are two other considerations, each, if possible, better than these, which condemn all legal rates of interest. The first is, that such laws are rarely obeyed, and can scarcely be enforced. Common sense is outraged by a law which requires a man to part with his property at less than the actual value; and when common sense is against a law, it stands a slim chance of observance. If the legal rate be six, and the actual worth be eight, who lends at six? Not

the banks. They require deposits of their customers, the use of whose money shall make up to them the difference between the legal and the actual rate. The modes of evasion are various, but they are adequate.

But usury laws, if they were not disregarded, would be even worse in their tendency than they are now. They aim, I suppose, to aid borrowers, and make it easier for them to contract loans. But are borrowers, as a class, any more deserving of the fostering care of government than are lenders? Even if it could make its interference effective, as it can not, is there any reason why government, leaving these borrowers to make all other bargains, sales, and transfers according to their best skill and judgment, should rush to their rescue only when they propose to borrow money? If they are competent to do their other business for themselves, government pays their capacity a poor compliment in undertaking to help them in the single matter of making loans; and the borrowers in turn have reason to pray to be delivered from their friends, since they, of all others, would be the men especially injured, if all the lenders obeyed the usury laws. Suppose that a borrower is in great need of a loan, and that for some reason his credit is now a little weak. Many men would be willing to loan him at nine per cent., which affords a margin for the extra risk, but at seven, which we will suppose the maximum allowed by the law, he cannot borrow a dollar, because his credit is not quite equal to the best. If, therefore, the lenders obey the law, he, and such as he, must fail. And because it is unlawful to take

over seven per cent., he will be obliged to pay those who are willing to violate the law ten or twelve, to compensate them for the risk and odium of such violation, while, under freedom, he could borrow at nine. Moreover, if the loanable value of money at the time be actually nine, while the law only allows seven, many men will attempt to use their own capital productively, who would otherwise loan it, in order to realize the high rate; and this action of theirs still further restricts the loan-market and makes it more difficult to borrow. If, then, the purpose of government be to aid borrowers, no means could be more unskilfully chosen for that end than to pass usury laws, since such laws, so far as they are obeyed, have necessarily the opposite tendency; and even when violated redound to the disadvantage of borrowers, so long as the laws themselves are popularly regarded as of any legal or moral force.

Governments have shown a noteworthy inconsistency in this matter, which incidentally proves the unsoundness of their whole action. While announcing pains and penalties to those who take or pay more than a given rate, they are careful never to bind themselves down to any given rate. Governments are always more or less borrowers, and if usury laws are necessary in order to help borrowers in a pinch, there ought to be a clause in the organic law of every country, forbidding the government to pay and its lenders to take any more than a certain rate per cent. There is no such clause in any organic law. Governments wisely follow the natural market, and borrow low when they can, and

pay high when they must. In the last months of Mr. Buchanan's administration, the United States paid twelve per cent. on a public loan, and could get but little at that. Sauce for the goose is sauce for the gander, and if usury laws are good for the citizens, some solid reason ought to be rendered why they are not good for the government. The truth is, they are not good for either, since natural laws are perfectly competent to regulate the rate of interest, and do regulate it substantially in spite of a factitious, impertinent, and mischief-making interference. The rate of interest has little to do with the value of money, properly so called. It depends on the proportion between the sums of money ready to be loaned in any market, and the amount wanted at that time by good borrowers in that market. Every rise in the rate tends to lessen the demand of borrowers, and every fall to enhance that demand, and thus every rise and fall of interest tends to check itself, and while the daily and monthly variations of the rate for first-class borrowers are very considerable, the general average of the rate by years, especially in England, where usury laws are mostly or wholly swept away, is remarkably uniform.

In 1867, the State of Massachusetts repealed all its usury laws, though six per cent. is to be understood in the absence of special agreement, and the result has been entirely satisfactory to all classes of the people. Rhode Island had done this previously, and has experienced equal satisfaction in the result. Other States will soon follow in their lead; and this relic of ignorance and prejudice will pass away Adam Smith left the "Wealth of Nations" disfig-

ured by the concession that governments might properly enough pass usury laws; but it is gratifying to be able to add, that he was convinced of his error in that by Bentham's book on usury, and fully acknowledged his conviction in the spirit of a genuine lover of truth. We conclude, then, that usury laws are needless, since interest, like all other prices, will perfectly adjust itself. They are disregarded, since lenders will loan or withhold their money according to their own keen sense of interest. They are pernicious, since they infringe the rights of property, and tend to prevent weak borrowers from having a fair chance in the market.

The principal points in this chapter may be gathered up into the following brief propositions: —

1. *Money, as a device of men, may be made intelligible to men.*

2. *Some of the difficulties about money have arisen from the variety of objects chosen as money.*

3. *Money, as a valuable thing, can only be understood when value in general is well understood.*

4. *The inconveniences of barter are so great, that it is not strange that some common measure of services was early hit upon.*

5. *This outward measure came naturally to be a medium in traffic, and even its name a mental measure in bargains.*

6. *Money is discriminated from all other values, in that it is a legal and current measure of services.*

7. *Changes or falsity in the measure disturb by losses the whole world of values.*

8. *National experiments, through successive rejections, have settled on gold as the best material for money.*

9. *Subsidiary coins may be made of silver; but Gresham's law forbids a double standard.*

10. *Paper money is only promises to pay coin; promises are liable to be broken; therefore, promises are not the best money.*

11. *Promises are tolerable in proportion as they are kept; consequently, some paper money is better than the rest.*

12. *Money depreciated from the highest standard raises prices, but not of all things equally in amount or uniformly in time: it works, therefore, great injustice.*

13. *An universal coinage would be a vast international gain.*

14. *The interest of money ought to be free to all contracting parties.*

CHAPTER XI.

ON MONEY IN THE UNITED STATES.

THE general doctrine of Money has been fully given in the last chapter. It is because the monetary history of the United States throws so much fresh light upon old truths, as well as brings out into sharp relief certain minor points not yet made, that I venture to offer to guide my readers in tracing the steps, state and national, the earlier and the more recent, that have been taken in this country towards a sound and uniform money. No national monetary history is so instructive as ours; for we have tried every variety of paper money at one time and another; the colonies issued it, the nation has issued it in different forms at different times, and the States have issued it through banks incorporated by them; since 1794, the nation has minted coins, for it has under the Constitution a monopoly of the coinage; between 1836 and 1862, the national government discarded in its own operations every kind of paper money, both paying out and demanding to receive coin money only; and only since 1863 has the nation undertaken to keep the States and the people from fabricating and circulating whatever kinds of paper money they might choose.

From the first establishment of the English colo-

nies in America, the matter of a suitable exchange-medium attracted public attention, and was found to be attended with difficulties. The colonists drew all their supplies from the mother country, and for a long time had but few native products to export in return, and consequently there was a constant tendency in the coin which reached them to flow off again to England in payment of these debts. But something must be used for the purposes of domestic exchange. Tobacco in the southern colonies, and Indian wampum in the northern, were employed for a long time as a local and legalized currency.

In 1690 Massachusetts set the first example, which was soon imitated all over the country, of issuing bills of credit, a government paper made receivable in taxes, and afterwards made legal tender in payment of ordinary debts. At first these bills, or treasury notes, were issued, not so much as a money for the people as a convenient way of anticipating the taxes, that is, to realize them at the beginning of the year, while they would be gradually paid in in the course of the year. They were like the English exchequer bills, except that they bore no interest. After 1712 a scheme originating in South Carolina came into general favor, namely, to open loan-offices for the issue of colony bills, which should furnish at once capital for borrowers, a money for the people, and interest, which would be a source of revenue to the colony itself.

But in whatever way issued, whether in the way of loan to borrowers, or in anticipation of the taxes, the essential and inherent vice of such irredeemable paper was soon everywhere apparent. There was a

constant tendency to over-issue, and consequently a necessary depreciation. There never was a government yet, of all those which have attempted the issue of inconvertible paper, which had prudence and firmness enough to resist for any great length of time the temptation to issue such paper in excess. It always has depreciated from that cause, and it probably always will. So it was, at any rate, in these colonies thus early in our history. The bills of credit were issued profusely, and depreciated indefinitely. In 1749 Massachusetts determined to abandon paper money altogether. She had tried it for sixty years, and found it fluctuating and troublesome. Bad as her own money had been, that of her neighbors had been worse. Gresham's law was busy then, as always; and Rhode Island money, the worst in the New England colonies, had the most extensive circulation. The governor of Massachusetts said in 1744, that of £400,000 Rhode Island money in circulation, £380,000 were in Massachusetts. The latter tried to persuade her sister colonies in 1743 to abandon paper money in common; but they would not listen to it; and so in 1749 she acted alone. Parliament had voted to ransom Louisburg from the New England colonies, which had captured it from France in the name of the crown; and the snare falling to Massachusetts was £138,649 sterling, and this was shipped to the colony in coin. The then ruling exchange of Massachusetts bills in silver was eleven for one, and at that rate the outstanding bills were redeemed. That colony became for a time the "silver colony." Business rapidly and steadily revived; and Rhode Island and New

Hampshire found their trade transferred thither, and their paper money heavily depreciated in contact and contrast with the newly current silver.

In 1751 Parliament forbade any more legal-tender issues in the colonies, but permitted issues in the form of exchequer bills bearing interest, redeemable in taxes in one year, or in four years in case of war. The demands of the next French war, declared in 1756, but begun earlier in the colonies, led, on the part of all the colonies except Massachusetts, to issues of new bills of the parliamentary description. These were kept from large depreciation by their interest-bearing feature, by remittances from England to reimburse the colonies for their various attempts to conquer Canada, and by their being receivable for taxes. As a specimen of how the old bills fared, the Rhode Island courts in 1763 made £7 in old-tenor bills equal to 4*s.* 6*d.* sterling. In 1763, Canada having been conquered four years before, and peace having been made with France, Parliament passed an Act forbidding the colonies to issue any more bills of any kind; but from this restraint the coming Revolution set them free; and there seemed to be no other way to provide means for the desperate struggle with the mother country, than in fresh issues of paper money.

Massachusetts was the only one of the colonies that had gotten entirely rid of its paper money, and she was wholly out of debt also, but she agreed in the spring of 1775, with representatives of Rhode Island and Connecticut, to allow their money to pass with her people, and also authorized the issue of colonial bills of her own to the amount of £100,000

in sums small enough to circulate as money. On the 23d of June following, a week after Bunker Hill, the Continental Congress began its fiscal career by voting to emit $2,000,000 in bills of credit. These were issued on the faith of the "Continent," — the Congress having no power to tax. Their vice was not the same as that of Law's money and the assignats, namely, that money may be "based" on the value of specific commodities; their vice was, that there was no natural limitation of their supply. Mere promises to pay Spanish milled dollars, unaccompanied by any provision to pay them, are not amenable to the law of supply and demand, and hence could not long maintain a steady value. These issues, too, came into competition with the issues of the separate colonies, which tended to depreciate both, as compared with silver. In less than a month another million was authorized, the liability for the three millions being distributed among the colonies in the ratio of their supposed "number of inhabitants, of all ages, including negroes and mulattoes," and the bills were to be redeemed in four annual installments, to commence at the end of *four* years. In November, three millions more were ordered, to be apportioned as before, and to be redeemed in four annual installments, to commence at the end of *eight* years. In February, 1776, four millions were ordered, one in bills of less denomination than one dollar. In May, five millions more were emitted, and in August five millions more. A year and a half had passed, and twenty millions had been authorized, besides large local issues, before a marked depreciation began. In February

and in May, 1777, five additional millions at each date were authorized, and as the issue increased, the depreciation increased of course.

Congress made persistent but futile attempts to substitute for further issues a system of loans on paper bearing interest. Also, they sought to sustain their failing credit by resolving that their bills "ought to pass current in all payments, trade, and dealings, and be deemed equal in value to the same nominal sums in Spanish dollars," and that all persons refusing to take them ought to be considered "enemies of the United States," upon whom it was recommended to the local authorities to inflict "forfeitures and other penalties." The States, as we may now call them, were also advised to make the Continental bills a legal tender, to avoid further emission of local bills, to adopt measures to redeem these, and as to the Continental bills to provide "for drawing in their several quotas at such times as had been or should be fixed by Congress," — except as to the first six millions, no such time had yet been fixed. The States meantime had combined in vain to regulate prices, — a depreciated money always raises prices, — and committees of safety undertook to punish, under the names of "forestallers" and "engrossers," the speculators who bought up commodities for a rise. There was the confusion of contracts usual under such conditions, the universal high prices, the sufferings of the poor, the gains of the artful and unscrupulous. An essayist of the time says of the paper: "We have suffered more from this cause than from every other cause or calamity. It has killed more men, corrupted the

choicest interests of our country more, and done more injustice, than even the arms and artifices of our enemy." In August, 1777, the bills exchanged for silver at three for one; and up to the end of that year thirty-four millions had been emitted. To keep up the money, Congress felt itself obliged to use the most wretched sophistries, to refer the existing depreciation mainly to "want of confidence," and to laud the paper as the only kind of money "which cannot make to itself wings and fly away. It remains with us, it will not forsake us, it is always ready at hand for the purposes of commerce, and every industrious man can find it!" John Jay, who knew better, made current such nonsense as this.

The rest of the story is soon told. During the year 1778, sixty-three and a half millions more were issued, and the depreciation at the end of that year was in the north six for one, and in the south eight for one. During the next year, though passing at the rate of twenty for one, the bills were still legal tender for the payment of debts, debtors availed themselves of this provision, and Washington himself was a sufferer under this form of social robbery. Unfortunately, he did not understand the mysteries, or rather the simplicities, of paper money. He wrote to Reed of Pennsylvania: "It gives me sincere pleasure to find that the Assembly is so well disposed to second your endeavors to bring those murderers of our cause, the monopolizers, forestallers, and engrossers, to condign punishment. It is much to be lamented that each State, long ere this, has not hunted them down as pests to society, and the greatest enemies we have to the happiness of

America. I would to God that some one of the more atrocious in each State was hung in gibbets upon a gallows five times as high as the one prepared for Haman! No punishment, in my opinion, is too severe for the man who can build his greatness upon his country's ruin." September 1, 1779, Congress publicly resolved that the issue of bills should not exceed two hundred millions in the whole; and before the end of the year, the remainder was emitted, and the press was allowed to rest. The bills were then about thirty for one. Early in 1780, Congress advised the States to repeal all laws making the bills a legal tender, and the scheme of the "new tenor" was devised, by which the old bills were to be drawn in at the rate of forty for one, and funded in government bonds bearing interest. This was the finishing blow, and the paper soon dropped out of circulation altogether. Just before the Revolutionary army in camp at Newburgh had combined to refuse it, and its circulation was wholly stopped, it exchanged for cash at the rate of one thousand for one. One thousand for one is ninety-nine and nine tenths per cent. below par, and the prices of commodities were as ridiculously high as the value of the paper was pitifully low. A man in New England or New York would pay five hundred dollars for his dinner, and never ask the landlord to reduce the bill. I heard the story in my childhood of a certain gentleman well known in those parts, who stuffed his sulky-box with Continental bills and then sallied forth to purchase a cow! It is certain that more than $200,000,000 of continental bills *were* issued in the aggregate, but it is doubtful whether

more than that were out at any one time. The loans took in some of them, and some were otherwise cancelled. The greater part were never redeemed at all. Assuming that only $200,000,000 were issued, Jefferson estimated that the nation realized from them $36,367,720 in specie value.[1]

At the very juncture of the collapse of the Continental money, the rudiments of a better system appeared. For nearly a hundred years the Bank of England had been issuing paper payable on demand in gold and silver; and Alexander Hamilton, a native of the West Indies, of Scotch and Huguenot parentage, but educated in New York and an aid-de-camp of Washington with the rank of colonel, who had been a student of English finance, thought that something similar might be done with advantage in America. In 1780, when he was only twenty-three years old, he wrote a letter to Robert Morris, a wealthy and influential member of the Continental Congress, and afterwards the Continental financier, in which after showing the causes of the depreciation of the currency, and the necessity of a foreign loan, he furnished a matured plan of a bank, by means of which the loan might be so applied as to reëstablish the public credit and become the basis of a redeemable currency. This was, as I believe, the first suggestion of a specie-paying bank in America. Hamilton's idea was briefly this: Public credit there was none; an established government there was

[1] I have used for this chapter, specially, Hildreth's and Bancroft's *History of the United States;* Hamilton's and Jefferson's *Works; Reports* of Secretaries of the Treasury; various Congressional *Reports; Report of Silver Commission*, 1877; and various other official and semi-official documents.

none; the Continental Congress was exercising the unlimited functions of a revolutionary government; under these circumstances the only way to create public credit was to unite with it the private interests of moneyed men. Establish then a bank which shall be the fiscal agent of the government; obtain, if possible, a foreign loan, and deposit it in cash in the bank; let half the stock of the bank be subscribed by wealthy men, who can reasonably look for a fair profit on their investment; let government hold the other half and have half the profits; then let the bank issue bills on its cash basis, consisting of the loan, the private subscriptions, and the product of the Continental taxes as they are gradually paid in. Thus the bank, and all subscribers to its stock, and all holders of its bills would be directly interested to uphold the government and its credit. Community would be equally benefited, since it would have a relatively sound paper for ordinary commercial purposes.

Mr. Morris found his duties as Continental financier sufficiently embarrassing; and in the fall of 1781 brought forward a scheme for a national bank, partially embodying on a small scale the ideas of Hamilton. Congress sanctioned the plan, and the Bank of North America, the first bank in this country, was established in Philadelphia. Mr. Morris, in behalf of the general government, subscribed nearly two thirds of the capital stock of $400,000, and naturally took the entire control of the institution. The reason why individuals subscribed so little is to be found in the distrust with which paper-money of all kinds had come to be regarded. Capitalists did not

believe there would be any dividends, and the people were afraid the paper would depreciate in their hands. Under these unfavorable circumstances the bank went into operation in January, 1782. Every effort was made to produce a public sentiment favorable to the credit of the bank, and its bills were the first paper handled by Americans which was convertible into coin at the pleasure of the holders. Being made receivable at the Federal and State treasuries in payment of taxes and duties, and being cautiously issued at first, the bills soon came into such circulation that the bank was able to declare dividends on its stock from twelve to sixteen per cent. per annum. Who ever heard of capitalists who could resist sixteen per cent.? The bank opened its books for new subscriptions, and the stock went up without difficulty from $400,000 to $2,000,000.

We must here dismiss the Bank of North America, the parent of all our institutions of the kind, with the remark that, although it was chartered by the old Congress as a national institution, such doubts were entertained of the competency of that body to incorporate an institution within a State, that a charter was soon after procured from the legislature of Pennsylvania; and also, that its connection with the Continental treasury ceased, on the retirement of Mr. Morris from the office of financier. It continued, however, as a State bank; and it flourishes still in a green old age among the banking concerns of the Quaker City.

Till Mr. Morris's Bank of North America commenced operations January 4th, 1782, all the paper

that had been issued in the country, whether by the colonies as such or by the central authority represented at first by the revolutionary government and afterwards by the confederation, was irredeemable paper, and illustrated the universal financial law that such paper, unless issued under very favorable circumstances and strictly limited in quantity, will depreciate in spite of everything. The bills of the Bank of North America were convertible into gold and silver at the pleasure of the holders, and they mark, therefore, an epoch in the monetary history of the country. Some silver coins had been issued in Massachusetts as early as 1652, and continued to be struck at the colonial mint for about thirty years, but the pieces all bear the dates of 1652 or 1662; and these pieces, now known and prized as the "old pine-tree coinage," were the only public coins of any description minted in the country itself until after the close of the Revolutionary war. They were shillings, sixpences, threepences, and twopences. Both silver and copper coins were, however, minted in England for the use of the colonies; and in 1722 a patent was issued by George I. to one William Wood to make coins for colonial use out of pinchbeck, in pursuance of which he had the conscience to make thirteen bright shillings, or thereabouts, out of a pound of brass. It is refreshing to add that the colonists had the sense and spirit utterly to reject Wood's money.

On the 15th of January, 1782, Mr. Morris presented to the old Congress the first plan of a decimal coinage ever brought forward. There are three possible ways of arranging a decimal system of

coinage: first, to have a very *small* unit, and then proceed only by decimal multiplication; second, to have a very *large* unit, and then proceed by decimal division only; and third, to have a *moderate* unit, and then proceed decimally in both directions. Mr. Morris proposed as the unit, but not as a coin, a quarter grain of pure silver. One hundred of these units, alloyed with two grains of copper, were to be the lowest silver coin, weighing 27 grains, and called a *cent;* 500 of them were to make a *quint;* and 1,000 of them a *mark.* Mr. Morris afterwards modified this plan, thinking the unit too small, and proposed the *pound* as the unit of account, assuming it to be 12*s.* 6*d.* sterling, and calling that 1,000, divided it decimally into the shilling 100, the penny 10, and the doit 1. As a table of coins, he proposed of gold the *crown* 1200 doits, the *half-crown* 600 doits; of silver the *dollar* 300 doits, the *shilling* 100 doits, the *groat* 20 doits; and of copper the copper doit. In all this there is a recognition of the advantages of the decimal system for purposes of multiplication, and an equal recognition of the advantages of the duodecimal system for purposes of division.

Mr. Morris resigned as financier in 1784, and the whole subject was then referred to Mr. Jefferson, whose decimal plan was adopted by the old Congress in 1786, and consisted of both denominations and coins called *eagles*, *dollars*, *dimes*, and *cents*. Each of these was to be subdivided into halves, and the dime was also to be doubled. In this scheme, accordingly, the binary system is recognized equally with the decimal. In 1786 also, an actual coinage of copper *cents*, a denomination first suggested by

Morris, but first proposed by Jefferson as the 100th of a dollar, took place under State authority in Vermont, in Connecticut, and in New Jersey; and Congress also authorized the establishment of a mint, and the next year contracted for 300 tons of Federal copper cents to be struck. These cents were coined at the Connecticut mint in New Haven, and a few of them at the Vermont mint in Rupert.

When government went into operation under the present constitution, in 1789, the action of the old Congress was reported to the new, and the matter was referred to Alexander Hamilton, the first Secretary of the Treasury. He recommended the *dollar* as our unit of coins and accounts. He had found that the Spanish milled dollars contained three hundred and seventy-one and one-fourth grains of pure silver, and he advised that our silver dollar should contain the same. Supposing that gold then stood to silver as one to fifteen, he advised also a gold dollar to contain just 24.75 grains of pure gold, and that both dollars should be alloyed one-twelfth, making the silver dollar weigh four hundred and five grains standard, and the gold dollar twenty-seven grains standard. The Act of Congress in 1792, that established the mint, appointed the coins nearly as the Secretary advised. It adopted his gold dollar unchanged, with its multiples, the *eagle*, *half-eagle*, and *quarter-eagle*, in gold; the silver dollar was alloyed more than he advised, but had the three hundred and seventy-one and one-fourth grains pure, and weighed four hundred and sixteen grains. The subdivisions *half-dollars*, *quarter-dollars*, *dimes*, and *half-dimes* were in all respects proportional to the unit. It will

thus be noticed that the credit of first introducing a decimal system of money is due not to one man but to three; that all three of the possible ways of arranging such a system were recommended in turn, and the third finally adopted; and that, while the undoubted superiority of the decimal system in an upward scale is fully recognized, the natural tendency of men's minds to subdivide into halves, quarters, eighths, and so on, rather than into tenths, hundredths, and so on, is recognized also. Eighty years have not yet naturalized among us the dime and mill, nor expelled the York shilling, the eighth of a dollar. Dollars and cents make an admirable money of account, but the decimal subdivisions of these are unnatural and have never come into much use. The true convenience is reached through a combination of the binary and decimal systems. The half-dollar is more convenient than the dime, and the quarter than the mill; and I think that coins of the eighth and sixteenth of a dollar would perhaps be useful in connection with those we now have.

It may be asked how we came to have the dollar as the unit of our monetary system. The word *dollar* is derived from a German word which means *valley*, and was first applied to coins in the mining region of Bohemia, at a place called Joachimsthal, where silver pieces of one ounce weight were coined about 1520, and were called Joachimsthaler, and then for shortness *thaler*, whence *dalera* in Spanish, and in English *dollar*. The *thaler* has remained a German money of account until our own time, and the Spanish *dalera* became so famous in the commercial world, so familiar to our fathers in their

dealings with the West Indies and other Spanish colonies, that Congress adopted both its name and its weight of pure silver. The present Mexican dollar is a lineal descendant of the old Spanish coin, though it contains six grains more of pure silver. Our new "trade dollar," designed for export only, and not legal tender at all, is almost precisely equivalent in fine silver to the Mexican dollar (three hundred and seventy-eight and three hundred and seventy-seven and one-fourth grains respectively). It is hardly necessary to add that *dime* is a corruption of the Latin *decem*, ten; that *cent* is a contraction of the Latin *centum*, hundred; and that *mill* is a contraction of the Latin *mille*, thousand.

There was a curious debate in Congress at the time as to the devices which the coins should bear. As the bill came from the Senate, where it originated, the gold and silver pieces were to have on one side the figure of the eagle, which the Continental Congress long before had adopted as the national emblem, and near this, the legend "United States of America." This was for the obverse of the coin, and so far nobody had any objection. For the reverse, the bill proposed that, in accordance with the usages of all nations from the time of the earliest known coinage, the impression or representation of the head of the President of the United States for the time being, together with his name, order of succession in the presidency, and the date of the coinage, should be stamped. This was strongly objected to in the House, as savoring of monarchy. The President's head on the coin was deemed by some a dangerous thing for the republic, and the proposal

led to a sarcastic and even acrimonious debate, and was at length defeated in the House by a vote of twenty-six to twenty-two, in which the Senate was afterwards obliged to concur, and a proposition made by Key of Maryland was carried, to substitute a figure of Liberty instead of the obnoxious head of the President; but under precisely what sort of a figure to represent Liberty was then the difficulty, and at the next session Elias Boudinot of New Jersey, afterwards the director of the mint, endeavored to get substituted for the emblematic figure of Liberty the head of Columbus, but in vain; the Republican party so-called at the time was determined that the figure of Liberty in some form should be stamped on the coins, and so it has been from that day to this.

The Mint of the United States was established at Philadelphia in 1792, and the first federal coins of silver were issued in 1794, of gold in 1795. While it was still doubtful where the ultimate seat of the national government would be placed, the citizens of that beautiful city were strongly in hopes of being able to persuade Congress permanently to abide in their town, in which the old continental body had first met, in which Independence had been declared, and which, more than any other, was popularly regarded as the head-quarters of the national Union. A notable instance of log-rolling legislation, the first in our history, transferred the capital of the country to the banks of the Potomac; but the good people of the Quaker City have nevertheless always retained the Mint, as a memorial of their earlier position in the history of the government. By the law of 1873, the mints at Philadelphia, San Francisco, Carson,

and Denver, become separate establishments, under a bureau of the Treasury Department. The term "branch mint" is abolished; and the assay offices for the stamping of bars, as well as the mints for the manufacture of coin, are responsible to this bureau, whose chief officer is styled the Director of the Mint. This designation was originally given to the chief officer at Philadelphia; and David Rittenhouse, an ingenious and self-taught mathematician, who had run several years before, by the help of instruments all of his own construction, the most difficult part of Mason and Dixon's line, was the first appointed to this post.

The act of Congress established the ratio of one to fifteen as the relative value of gold in silver to be maintained at the Mint; but, from this clause of the law, there followed important consequences, which were not foreseen, since that was not, at least in America, the true ratio of their value at that time, and being a decided under-valuation of gold, the gold coinage came into very little circulation. It was really worth more by the ounce than fifteen ounces of silver, was accordingly worth more out of the circulation than in it, and was therefore exported in preference to silver in payment of foreign balances, especially after France had changed the relative legal value to one to fifteen and one half. Thereafter an ounce of gold was worth in silver three and one-third per cent. more abroad than here, and of course the gold refused to circulate under the circumstances, giving us another neat illustration of the economical law that the cheaper money will push the dearer out of circulation.

After a long while the attention of Congress was called to this circumstance, and a law was passed in 1834 substantially rating gold in relation to silver at one to sixteen. The weight of the eagle was reduced from 270 grains to 258, and the alloy increased to one part in ten from one part in twelve. This increased at one jump the legal valuation of gold 6.58 per cent. as compared with silver, which remained as before. But this in turn was an overvaluation of gold; and the working of the natural law became immediately apparent, by which the current of the metals was reversed, silver now passing in preference to Europe to liquidate the balances of trade, and gold beginning to come to the United States, where it was now 3.22 per cent. dearer in silver than in Europe. In 1837, the standard of nine tenths fine was applied to silver also, and this increased fineness necessitated a change in the weight of the silver coins, if the relation of one to sixteen was to be maintained. Accordingly the weight of the silver dollar was reduced from 416 grains to 412½, keeping just 371.25 grains of fine silver in the dollar. There has been no change in the gold dollar since 1834, and no change in the silver *dollar*-piece since 1837. The new silver dollar of 1878 corresponds in weight and fineness with that dollar. There was, however, trouble with the silver dollar-pieces almost from the first up to 1837. Only three hundred and twenty-one of them were coined in 1805; and May 1, 1806, there is an order, in the name of the President, from James Madison, Secretary of State, to Robert Patterson, Director of the Mint, "that all the silver to be coined at the

mint shall be of small denominations, so that the value of the largest pieces shall not exceed half a dollar." The coinage of silver dollars, thus suspended, was not resumed for thirty years. The reason given for this order was, "that considerable purchases have been made of dollars coined at the mint, for the purpose of exporting them, and that it is probable that further purchases and exportations will be made." What was the matter with the new silver dollars? Nothing, only they were too valuable. Clipped and worn Spanish-Mexican coins slipped into circulation in large numbers, and drove out the good pieces in accordance with Gresham's law.

In 1853, the disadvantages of Hamilton's double standard had become apparent; experience had proven that the relative value of the two metals was not constant but variable; and it was then determined to make gold alone the legal tender, except in sums below $5, and to reduce the weight of the silver half dollar and its subdivisions, so that their nominal value should be considerably above their real value, and their exportation be thus prevented. The half dollar was reduced from two hundred and six and one-fourth to one hundred and ninety-two grains, and the smaller coins proportionally. It has been questioned whether the silver dollar was really demonetized in 1853. The law of that date said nothing about the silver dollar. It followed the legislation of England in 1816, established a subsidiary silver debased nearly 7 *per centum* in weight below the silver dollar, did not indeed take away the legal tender quality from the latter, which was then

worth about three cents more than the gold dollar, and evidently gave up the attempts of 1792, 1834, and 1837, to keep the two metals *in equilibrio*. At any rate, silver dollar pieces circulated but little in the United States even before 1853, and none at all between 1853 and 1878; and it is too soon to say with certainty what the fate of the present silver dollar is to be.

By the law of 1875, our subsidiary silver coins are brought into harmony with the silver-system of France and the Latin Union. A five-franc silver piece weighs just twenty-five *grams*, or 385.8 grains: so do two halves, or four quarters, or ten dimes, of our new silver. As they are of the same fineness also, nine-tenths, a real connection is knit with European silver. Our five-cent nickel pieces are also minted after the French metric system: each weighs five *grams*, and five of them laid along in order measure exactly a *decimeter* in length. This piece and the three-cent piece are seventy-five parts copper and twenty-five parts nickel. The one-cent piece is ninety-five parts copper and five parts tin-zinc. Debts of four cents can be paid in one-cent pieces, of sixty cents in three-cent pieces, of one hundred cents in five cent pieces, of five hundred cents in subsidiary silver, and of any amount in gold coins or silver *dollars*.

Now we return to paper money. Besides the Bank of North America in Philadelphia, the Bank of New York in New York and the Bank of Massachusetts in Boston had been opened before our present national government went into operation in 1789. These were State banks issuing paper con-

vertible into coin, but confining their business mostly to the cities in which they were located. In December, 1790, in pursuance of his duty as Secretary of the Treasury, Hamilton recommended to Congress a Bank of the United States. Undoubtedly, the Bank of England was in his mind. Undoubtedly, he was favorable to a strong central government. He argued in this report two points especially; first, as respected the people, such an institution would afford through its specie bills of a national character facilities to domestic exchanges at a time when money was scarce and confidence was low; second, as respected the government, it would furnish a good paper medium for its monetary transactions, and be a resource for its needed temporary loans. But the constitutionality of Hamilton's plan was stoutly denied in Congress. The first-rate abilities and growing reputation of that eminent statesman had already awakened jealousies both in Congress and in the cabinet. Nevertheless, a bill, in substantial accordance with the views of the Secretary, passed both houses by large majorities. Washington, before signing it, required the written opinion of his cabinet on the question of constitutionality. Hamilton and Knox took the affirmative; Jefferson and Randolph the negative; the President, as often, sided with Hamilton, and signed the bill.

On New Year's day, 1853, I had the great personal pleasure of calling on the widow of Alexander Hamilton, who survived him just fifty years. Turning the conversation on her husband's connection with the government, the old lady remarked with enthusiasm, — "My husband gave you a bank.

Jefferson thought we ought not to have any bank, and Washington rather thought so, too; but my husband said we must have a bank; and one day he said to me, 'My dear, you must sit up with me to-night, and write for me;' and I sat up all night, and I wrote it out with my own hand, and the next morning he carried it to Washington, and we had a bank!" This last was pronounced not without exultation.

With a charter that was to run twenty years, with a capital stock of $10,000,000, $8,000,000 of which was subscribed by individuals, and $2,000,000 by the United States, and the whole of which was subscribed, with a surplus, within a few hours, the first United States Bank went into operation at Philadelphia, in July, 1791. Notice this feature of the stock. Hamilton had just before persuaded Congress to assume the State debts incurred in the war of the Revolution, and to fund them, together with the certificates of the public debt, into one new and compact debt. Three fourths of the subscription of individuals to the bank stock must be in these new government stocks which bore six per cent. The demand for them, thus created, brought them instantly up to par; so that the bank was made a means, incidentally, of establishing the credit of the United States, — all its paper was now at par. This splendid success of Hamilton's financial schemes, together with the unexpected income from the new tariff, accounts in part for the immense popularity of the man; and justifies the strong expression of Daniel Webster, who said, on one occasion, that Alexander Hamilton raised the public credit of the United States from the dead.

During twenty years, the term of its charter, the operation of the first United States Bank appears to have been healthful and beneficent. It furnished a paper money secured by government stocks and by cash that was current at a uniform value all over the country; its loans, under the circumstances of the time, gave a sharp spur to industry and commerce; while its dividends to stockholders never fell below eight, and frequently rose to ten per cent. It issued no bills of less denomination than $10. As the time approached for the charter to expire, the stockholders were anxious for a renewal. They applied for such renewal, offering to pay the government a million and a quarter for the privilege of continuance. It was alleged against the bank, on the other hand, that the stock was now largely owned by foreigners, which was true; and that the directors had sometimes made, or withheld, loans, for party purposes, which was doubtful. The real cause of the opposition to the renewal of the charter was this: Instead of the three State banks, in existence when the national institution was chartered, there were now (1811) eighty-eight State banks, in some of which the States as such held stock. These banks and their friends supposed that it would be for their interest that the national bank should go out of being; that in that case, they should obtain the custody and management of the national funds, and furnish the country paper money, which the national institution had furnished. The charter was defeated, in the House by one vote, and in the Senate by the casting vote of the Vice-President, George Clinton. The bank was obliged to wind up its

affairs. It did so speedily and honestly. This was in 1811.

So soon as it was ascertained that the National Bank would not be rechartered, there was a sort of mania for the creation of new State banks. The Pennsylvania Legislature chartered forty-one in one session, and that over the Governor's veto. New England had set the example of "wild-cat" banking, but had come to her senses; she imposed a penalty of twelve *per centum* interest on all notes not redeemed on demand; and in 1813, a central bank of redemption was chartered in Boston, called the New England Bank, for the purpose of keeping New England bank bills at par. The purpose was accomplished; and when, in the fall of 1814, there was a general stoppage of all the other banks in the United States, owing to the loose way in which they had scattered their notes without providing for their redemption, those in New England stood firm. New York city bank notes were at a discount of ten per centum; those of Philadelphia, eighteen; of Baltimore, twenty; of Pittsburg, twenty-five. Money is not a commodity of which an unlimited quantity can be absorbed by business, but is an instrument for a certain specific purpose; and when more than enough for this purpose is put out, a diminution in value of every part of it is inevitable, whether the money be specie or paper, but of course an irredeemable paper is quickest and most affected. State banks multiplied even after the crash. There were two hundred and forty-six of them in 1816. It was thought by many that a new and strong central bank, on which these might lean for support, would

enable them to resume specie payment, and help them go on thereafter on better principles. Mr. Dallas, the Secretary of the Treasury, recommended in this state of things a new United States Bank. The capital was to be $35,000,000, of which government was to subscribe $7,000,000. The charter was to run twenty years, and the bank was to allow government a good bonus of $1,500,000 for the privilege of existence. John C. Calhoun engineered the bill organizing the Bank through the House, and it opened January 1, 1817, and by its help the New York banks resumed specie payment in February following, and all the rest before the close of 1819. The last war with England was just over, and the reviving enterprise and enlarged business of peace seemed to promise for the bank a prosperous career.

The new bank was not, however, fortunate in its management. It discounted on its own stock. It pushed its notes into circulation with great eagerness. It is thought, that before the end of the first year, $100,000,000 of its bills were in circulation. It is known, that in March, 1818, its discount line was $43,000,000. The bank soon fell into difficulties. Silver bore a premium of ten *per centum*, and of course was exported. In the fall, Congress ordered a committee of investigation, and a resolution was reported that the charter be forfeited. This failed to pass, to the disgust of John Randolph, who said, "a man may as well go to Constantinople and preach Christianity, as go to Congress and preach against banks." Although under the abler and more careful management, first of Langdon Cheves,

and then of Nicholas Biddle, the bank recovered its stability, it never enjoyed quite the same confidence and credit as the first bank.

This was not wholly its own fault; for in 1829, seven years before its charter was to expire, Andrew Jackson commenced his famous contest with the bank, which he kept up without intermission till the charter expired in 1836. Under this presidential and consequent congressional fire, the bank can hardly be said to have had a fair chance. Andrew Jackson had sworn its death by the 'tarnal—his usual oath—and Andrew Jackson was not a man to be thwarted. In his annual message in 1829, he gave the directors fair warning that there would be "constitutional difficulties" in the way of their securing any extension of their privileges, and in 1832 he vetoed the bill to recharter the bank. The next step was to remove from the custody and management of the bank the public moneys. Three years before the charter expired he requested Mr. McLane, the Secretary of the Treasury, to remove the national funds from the custody of the bank, and to place them in certain selected State banks. Mr. McLane declined to order the removal. Whereupon Mr. Duane of New York was appointed to the treasury. But Mr. Duane, no more than his predecessor, could see his way clear to remove the deposits. When made to understand that it was the determination of the President to have them removed at all hazards, he explicitly refused to lend himself for the purpose. The President removed Mr. Duane, and appointed Roger B. Taney, the late Chief Justice, as Secretary of the Treasury. He proved more flexible to the will

of power, and immediately gave the required order. The consequences of this step in the circumstances were immense and mischievous. The discount line of the bank was at the moment over $60,000,000. The public deposits were $10,000,000. The sudden withdrawal of this sum affected credit and disarranged business to a remarkable degree, and caused intense excitement all over the Union.

The next movement in the "great experiment," as it was sarcastically called in the politics of the day, was the issue of the famous specie-circular, which directed the receivers of the public money to take nothing but gold and silver in payment of the public lands. Speculators and others had been making large purchases of western lands, expecting to pay in paper money. The specie-circular came upon them like a clap of thunder. Their consternation was vast, and the circular, coming as it did, shortly after the removal of the deposits, made confusion worse confounded.

General Jackson went out of office, and the second bank went out of being the same year; but the inaugurated movement was completed by Mr. Van Buren, who effected the complete divorce of the government from all banks and fiscal agents whatever, first, by directing the State banks which now had the keeping of the public moneys, to distribute them as surplus revenue among the States; and, by the sub-treasury scheme, in pursuance of which the United States received in payment of all dues, and paid out in all disbursements, gold and silver only. I believe in gold and silver money, or their equivalent in representative paper which can be instant

ly converted into them, and do not question the patriotic aims of the administrations concerned, but there was something headlong and violent in this transition from the traditional policy of the government to the new system.

From 1836 to 1862 there was no national money in the United States, except the coin; the paper money of the country was furnished by a number, increased at last to over 1,500, of joint-stock banking companies, under the authority of the individual States. These bills were nominally convertible into coin at the will of the holders. Some of the States required their banks to keep a percentage of specie on hand for the redemption of their bills; but most of them required only a deposit of some kind of securities with an officer of the State, on the strength of which securities the banks were allowed to issue an equivalent value in bills; and some of the States did not even require so much as this. The fallacy of founding a paper money upon public securities, will be fully exposed in the following paragraphs; it is here only necessary to observe that our propositions, if correct, condemn the money of these State banks. Some of it was better than the rest, but none of it deserved the praise of being a satisfactory money. (1.) It was liable to great and sudden contractions and expansions in volume. For instance, the volume in 1858 was $59,570,474 less than in 1857; and in 1863, $54,885,139 more than in 1862. (2.) The ratio of paper to the specie reserved to redeem it was a high ratio. The average for the whole country in January, 1863, was four to one; in Rhode Island more than twelve to one; and in Ver-

mont more than twenty-eight to one.[1] Such a paper can only be called redeemable by stretch of courtesy. (3.) As a matter of fact, so soon as there began to be a financial pressure, especially whenever the exigencies of commerce withdrew gold for foreign trade from reserves already so small, the banks were compelled to confess, what everybody knew before, that they were unable to redeem their promises. Four or five times, during the continuance of the system, panics attacked the paper money, and the banks suspended specie payments. In these times of stress some of the banks did better than others; the Bank of the State of Indiana, for example, under the management of the Hon. Hugh McCulloch and others, maintained specie payments in the trying periods of 1857 and 1861.[2] (4.) The instability of the general system tended towards a reckless way of doing business, and led on to frequent bankruptcies, which became a just reproach to us in foreign countries. The banks contributed powerfully in times of quiet by a system of generous loaning, on which their profits depended, to induce a spirit of speculation and a willingness to contract debts, and experienced when the reaction came, how much easier it is to loan paper promises than to fulfill them. Their inability to continue in troublous times the free loans which helped to bring them on, and their repeated failures to make good the obligation to redeem their own notes, caused incalculable losses of property. There can be no hesitation in affirming that the expense of maintaining a gold and silver

[1] *Finance Report*, 1863.

[2] Letter of Mr. McCulloch, August 17, 1867.

money for all the wants of the whole country, might have been met many times over from the losses resulting from this bank-paper system. It is fortunate that the people concluded to abandon it.

When Secretary Chase assumed the Treasury Department in the spring of 1861, the state of the country, and, of consequence, the state of the finances, were appalling. Mr. Buchanan's administration had just been trying to borrow a few millions of dollars of the people, and had only succeeded in securing a very small sum, and that at the enormous rate of twelve per cent. interest. The clouds of war which had been gathering black and sullen all the winter, soon broke in wrathful peals over the head of the new administration. The country must be defended, as well as the ordinary expenses of the government met; an army must be raised, equipped, put into the field, and paid. We do not propose to follow the Secretary in his general financial embarrassments, expedients, and resources; but it is needful to our present purpose to say that, owing to the unexpected delays and disasters of the war, and to the consequent want of confidence in the public mind, he found it extremely difficult to borrow the sums necessary to be had in order to meet the expenditures of the government; and that in his first annual report to Congress, in December, 1861, he recommended, principally for the sake of facilitating the negotiation of loans, the organization of banking associations, whose circulation should consist only of notes, uniform in character, furnished by the government, and secured as to convertibility into coin by United States bonds deposited in the treasury

It is clear that if such associations should be formed, it would make a market for the national bonds to the extent in which they should invest their capital stock in them as security for their circulation. Above all things, at that time the United States wanted to borrow money. It must borrow or perish; and therefore a national banking system, based for security on the national debt, would open a market for some hundreds of millions of the evidences of that debt, and put a corresponding sum of immediately available funds into the hands of the government.

This proposal of the Secretary, involving, as it did, the winding up of the State banks as such, found at first but little favor in Congress or among the people. The banking interests of the eastern and middle States, particularly of the State of New York, from whose State bank system the idea was mainly and by acknowledgment borrowed, were especially hostile to the scheme. In his second annual report, in December, 1862, the Secretary iterated his recommendation, and enforced it at length by arguments drawn from the necessity of effecting immediately more extensive loans, from the character of the currency for soundness and uniformity thus furnished to the people, from the convenient agencies which such banks would furnish for the deposit of public moneys, and from the firm anchorage which such a system would give to the union of the States. These arguments, which found a response especially emphatic from the Western States, coupled with the assurance of the Secretary, that, if Congress should concur in his views, though conscious of the great difficulty which vast, sudden, and protracted expenditures im

posed on him, he thought he should still be able to maintain the public credit and provide for the public wants, induced Congress to frame and pass "An act to provide a national currency secured by a pledge of United States stocks, and to provide for the circulation and redemption thereof." The act was approved by the President February 25, 1863.

Every bank organized under it invests its own capital stock in the bonds of the United States, bearing interest. These bonds are transferred to an officer of the treasury, called the comptroller, at Washington, who holds them as security for the redemption of the bills of such bank, but who pays the interest on them to the bank itself, so long as the bank redeems its bills promptly and violates no provisions of the organic banking law. Ninety per cent. of the amount of such bonds thus deposited with the comptroller, provided the bonds be estimated at par value and bear interest at a rate not less than five per cent., is then furnished by the treasurer to the bank in circulating notes, engraved and registered by the United States; unless the capital stock of the bank be more than $500,000 and less than $1,000,000, in which case only eighty per cent. of the capital is furnished in notes; and if the capital be between $1,000,000 and $3,000,000, only seventy-five per cent.; and over $3,000,000, sixty per cent.

By the law of 1870, no *new* bank organized can have more than $500,000 of current notes Originally, the total amount of bank-notes authorized was $300,000,000, but this limit was increased in 1870 to $354,000,000, and the act of January 14, 1875,

removed all restrictions on the *aggregate* amount of bank notes. The act of June, 1874, allowed any national bank desiring to withdraw its notes, either in whole or in part, to deposit lawful money to take up the notes, and to withdraw the proportionate amount of bonds held for their security. Under this act, the amount of notes has fallen from its highest point, $352,394,346, down to about the original limit. By the law of 1874, the national banks are required to "keep and have on deposit in the Treasury of the United States, in lawful money of the United States, a sum equal to five per centum of their circulation, to be held and used for the redemption of such circulation." If any bank fails to keep good this deposit at the treasury, so that its notes cannot be redeemed on presentation there, the United States undertakes to redeem the notes; and so many of the bonds belonging to such bank, deposited with the comptroller of the currency as security for the redemption of the notes, are then to be sold as shall reimburse the United States for such redemption; so that it is almost impossible under the law that the bill-holders of any national bank can ever suffer any loss. The United States holds the capital of the bank in its own hands, and is thus enabled to guarantee the convertibility of the bills.

These are issued by the banks to the people in ordinary loans and payments; and every bank is required to receive on deposit, and otherwise, the bills of every other bank; and the United States pledges itself to receive these bills for taxes, excises, and all other dues, except customs duties; *and makes them legal tender in all payments itself has oc-*

casion to make except for interest and principal of the public debt. All this has made the bills acceptable to the people as paper money. They have been received as readily as the greenbacks, which are a *universal* legal tender, except in payment of customs and national bonds. Being redeemable in greenbacks, that is, redeemable in irredeemable paper, the bills have had, for most purposes, the same value as the greenbacks. Since 1863, there have been organized in all parts of the country about 2,370 of such banks, of which about 2,080 are now in operation. No bill-holder of the national banks already gone into liquidation has suffered any loss, although the depositors and other creditors have suffered losses.

Looked at as issuing paper money (and that is the only view in which we are now regarding them), the national banks are far superior to the old State banks. The privileges of the latter, so far as issuing money is concerned, were properly enough taken away by the United States under a heavy tax, so that the only paper money now current in the country is that of the government direct (greenbacks), and that of the national banks. The points of this superiority are (1.) The *publicity* of the affairs of every bank and of all banks provided for in the organic law. Each bank is obliged to furnish statements to the comptroller, under oath, of its exact condition in all details, whenever notified by him to do so; and the dates, when this will be done, cannot be anticipated; and the comptroller publishes from time to time abstracts of these statements, and annually a full report to the Secretary of the Treasury. Everything is well known and above board. The

old State banks never would give full statistics either to the Secretary of the Treasury or private investigators, and nobody could compel them. They worked in the dark. (2.) The legalized methods for the *redemption* of the bank-notes, provided only the redemption were in gold coin instead of "lawful money" — a wretched ambiguity of phrase — is all that could be asked for. Redemption is speedy and certain. The law designates January 1, 1879, as the day of resumption of coin by the government, and so indirectly by the banks. Redemption was insecure under the old system at its best. (3.) The United States absolutely guarantees the full payment of these notes, not simply as a trustee holding securities for the purpose, but as a principal pledging the public faith.[1] There is, therefore, *a nationality and a dignity* about these bills in utter contrast to the local and doubtful character of the old paper money. They circulate everywhere within the country. Nobody looks at a bill to see what particular bank issues it, because that is not the vital thing about it. In an important sense the image and superscription of Cæsar is upon every bill. (4.) All the banks which issue this money hold a *common creditorship* towards the United States, on the strength of which these notes are issued, and this is a bond binding the States and the people together, and tending thus to neutralize the centrifugal forces always at work in large societies of men. The old State bills emphasized the local divisions within the nation

On the other hand, there are strong objections to this paper money. (1.) It is founded on a wrong

[1] Amasa Walker's *Science of Wealth*, p. 233.

principle. It is the principle of Law's bank, and of the assignats. It is just as bad in principle to "base" a paper money on government debts, as on lands, or other commodities. These debts are usually salable in the market at some price, and so are lands, mercantile bills, and all the articles of a prices current. Perhaps these debts are more uniformly salable than other things are, but there is no known ratio between the proper amount of money for a country and the amount of its national debts, any more than between its money and the value of its lands. The absurdity of the principle was disguised at first by an arbitrary limitation of it. Only $300,000,000 of this money could be issued. Why not? If it be proper to issue $300,000,000 on $333,333,333 of public debts, why not more on more of the same? Any limit is purely artificial, and has now been removed. A free banking law, the logical outgrowth of the principle, has now been enacted. Over two thousand banks find it for their interest to put out and keep out as much of this money as possible. There is no natural limitation of the supply. After all that can be said in favor of this money, it is credit-money still, exposed more or less to the distrust of the people, to enlargements and diminutions of volume, to unsteadiness of value, and to inconvertibility. Money is a *measure* of Services and hence a *medium* in Exchanges: if there is to be a true measure, and a medium not multiplied beyond what the word implies, there must be some other security as to amount, than is furnished by the interest or prudence of two thousand banks. It is not with money as with other valuables. Only a

strictly limited quantity of it is needed. The more wheat the better: the more money the worse. Beyond the just limit, our *measure* is gone, and our *medium* is too big for its extremes. The only safety, under the present system of bank money, is to make the amount of paper decidedly less than what is known to be the needed amount of money, and then let coin fill the gap in accordance with its own natural laws. Under these circumstances, the paper might be kept at par all the while, and we might gain something by the convenience of the paper, and not lose much by its unsteadiness.

(2.) This paper money is *mixed up with things that are incongruous with it.* Ordinary banking, as we shall see in the next chapter, is something quite distinct from the issue and redemption of paper money. Banking is nothing but the buying and selling of debts, — banks are debt-machines, — and the people's money ought not to be mixed up with taking deposits and paying checks and discounting notes. The two things are incongruous. Even the five per centum reserve in the Treasury for the redemption of their *bills* is counted to the banks as a part of their reserve against *deposits*, which reserve must be twenty-five per centum in the large cities, and fifteen per centum in the country places. Deposits perform one function in the commercial body; money performs quite another function. Bankers seem to me to have sufficiently delicate and responsible duties, in securing the confidence of their localities, in judging of the solvency of their customers, and in proportioning their loanable means to the wants of their communities, without adding to them

unother and quite distinct set of duties. There ought certainly to be "free banking" in the just sense of those words, just as there ought to be free brick-making, but it is a miserable juggle in words to suppose that free banking means the liberty to issue just so much paper money as the people can be persuaded to receive. Nicholas Biddle, a great banker of the last generation, said: "Banks are often managed by sanguine persons anxious only to increase the profits, without much personal interest or pecuniary responsibility in the administration. The constant tendency of banks, therefore, is to lend too much, *and put too many notes in circulation.* Now the addition of many notes, even while they are as good as coin, by being exchangeable for coin, *may be injurious*, because the increase of the mixed mass of money generally occasions a rise in the price of all commodities." Besides, true "banking" is not "free" at present; government prescribes to the national banks their minimum reserve, and puts many other restrictions on them.

(3.) It is invidious to grant to any one class of men the *privilege* of issuing for their own profit a part of the national money. True, the profit of this issue is not large by itself, — Comptroller Knox says it is about three per centum, — but in connection with their other privileges under the law, the whole profits of the national banks from 1870 to 1877, both inclusive, have been by the same authority eight per centum on the annual average for the whole country. Shall we say, then, that the privilege of issue should be taken from the national banks? That is a hard question. Shall we say,

that, if there is to be paper money, it is better that the government issue it directly? I am not clear. There are strong objections to both modes; but both modes are now in operation; and in all probability, they will be for a good while to come. Congress has just forbidden the further contraction of the greenbacks; and the national banks have probably acquired *a vested right under the law* to continue to issue, at least till the expiration of twenty years from their establishment. In the mean time, the people must do the best they can. It remains true all the time, that gold and silver coins are the best money; certificates of their deposit would be the best *paper* money; *promises* to pay them are a tolerable money only when the promises are constantly kept.

National gold banks were authorized under the Act of July, 1870. Nine of these are now in operation in California, with a capital of $4,300,000, and a circulation of about $1,500,000. These banks are under the same regulations as other national banks, except that only eighty per centum of their bonds is given them in notes, and they must keep twenty-five per centum of their notes out in gold coin with which to redeem them. This adds on that side of the continent another kind of paper money to the two kinds with which we are familiar on this side.

In April, 1862, in the midst of civil war, the United States began to issue treasury notes (greenbacks) made legal tender for debts. $450,000,000 were issued in all, of which rather more than $100,000,000 have been redeemed, and the rest is still circulating. It is a question perhaps more curious

than profitable, whether the making these notes a legal tender has made them more valuable than they would have been as simple promises. So far as the demand for them to pay debts with has been thereby increased, their value has been increased, but so far as it indicated on the part of the government a lack of confidence in the validity of its own promises the tendency has been the reverse. The faith of the people in their money is more sensitive and more easily shaken than their faith in anything else; and this is one of several weighty reasons why the element of credit should not enter into the money at all. Credit, as we shall see, is good in its place, but in the people's current money it is out of place. Hence these notes, notwithstanding their legal tender character, have been much more depreciated than any form of the national bonds. This may be accounted for, in part, on the ground that the bonds bear interest, while the greenbacks do not.

In one month after the first issue of $150,000,000, the greenbacks began to droop. In July, when the second batch of $150,000,000 was authorized, the depreciation as compared with gold was already marked and firm. In the January following, when President Lincoln reluctantly gave his approval to another issue in order to pay off the soldiers and sailors, he uttered a solemn protest against the policy of thus inflating, by forced means, the current money, which, he said, "has already become so redundant as to increase prices beyond real values, thereby augmenting the cost of living to the injury of labor, and the cost of supplies to the injury of the whole country." In March of that year, $50,000,000 of

fractional paper were authorized, redeemable in sums of not less than three dollars in legal tenders, and receivable for all dues to the United States less than five dollars, except duties on imports. In July, the greenback had lost one quarter of its nominal value. In July, 1864, it had lost nearly two thirds of its nominal value, — its lowest point being thirty-five cents to the dollar in gold. In July, 1865, it was worth seventy cents. In July, 1866, it was worth just two thirds of a dollar, — sixty-six cents. From that point it has slowly risen, with many fluctuations, till it is nearly at par with gold. The variations, however, cannot be counted by the number of years, nor even by the number of days. They have been numerous on each business day since 1862, "and can only be numbered [1] by tens of thousands." *The people of this country have had no stable standard of value since 1862.* Nobody has known from month to month these sixteen years what the value of the greenback would be. *Rational calculations in business have been impossible.*

When, after a long time, the question of the constitutional right of Congress to make a mere promise a legal tender for debts, that is to say, to make a promise the same thing as its fulfilment, — a monstrous incongruity, — was brought up to the Supreme Court of the United States, the majority of the court, including Chief Justice Chase, *after most elaborate argument and consideration*, decided that there was no constitutional right to apply a paper legal tender to preëxisting contracts, and some of the judges held it was equally unconstitutional to

[1] Comptroller Knox. *Report*, December, 1877.

compel parties, in the absence of mutual agreement, to receive such paper in fulfilment of contracts made subsequent to the passage of the law.[1] After this decision was rendered, two new judges, whose opinions on the point were known beforehand, were put upon the bench, and the decision was in this way reversed, *no new points therefor being raised either by counsel or the new judges*, and the chief justice and his associates still adhering to their original opinions. It is needless to add, that the Supreme Court of the United States has suffered in the judgment of good citizens by that transaction; and it is needless to add, that the best legal and financial opinion in this country has yielded, and is likely to yield, little respect to a decision thus secured.

In the early spring of 1878, silver dollars of the weight and fineness of 1837 began again to be coined in our mints in large numbers. These are legal tender to all amounts and for all purposes, just as the gold coins are. Silver certificates are issued to depositors of silver dollars in the national treasury, in the same way as gold certificates are issued to gold depositors. The actual value of the silver dollars, however, has been thus far about ten per centum less than of gold dollars. They do not seem to be very acceptable to the people in payments, to the banks in deposits, and even to the government in customs' duties. If they come by any means into general circulation, then it is certain that gold will *not* come into general circulation. Dollars of differing values will never long circulate together in the

[1] See the admirable opinion of Mr. Justice Field.

same country. The cheaper will drive out the dearer. There are now three kinds of paper dollars, and two kinds of coin dollars, in the hands of the people, besides the subsidiary silver, of which there are about $38,000,000 in circulation.

CHAPTER XII.

ON CREDIT.

Political Economy is the science of exchanges. Because it *is* the science of exchanges, its definitions and principles must be broad enough to cover and explain all cases of exchange actually occurring or possible to occur. The nature of the things exchanged is a matter of indifference; the science has alone to do with the motives and facts of the exchanges themselves. Some exchanges are perfectly consummated at once, the things exchanged and the ownership in them are mutually passed over then and there, and there is an end. But there are other exchanges which have this peculiarity, that the transaction is not then and there ultimately closed, but one (or both) of the persons exchanging relies on the good faith of somebody to fulfill in the future a promise expressly or impliedly made in the exchange. This peculiarity is very important to be considered, and gives rise to all those phenomena which pass under the general name of Credit. Credit and Debt are correlative terms. There is no credit without debt, and there is no debt without credit. Strictly defined, *a Credit is a Right to demand something from somebody;* strictly defined, *a Debt is an Obligation to pay something to somebody;* there would be some advantage in, and there is some tendency in

commercial language towards, the use of these terms in this technical sense; but, as the *rights* alone become the subject of exchange, the terms merely relative to persons become of less consequence, and what lies between debtors and creditors may be called indifferently credits or debts; for, while it is of vital consequence to *persons*, whether they owe or are owed by others, exchange cares not which is debtor, provided both be "good," but looks alone at the *rights*, which are *property*. While, therefore, the relation of creditor and debtor is wholly a personal relation, is in substance a claim of one person on another person, and is based on good faith only, the claim itself is just as much property as anything else is property. It may be, and is constantly, bought and sold. It always involves the element of future time, and is founded on the *belief* of one of the parties in a virtual promise made by the other; hence the term credit from CREDO, *I believe*, and the corresponding term debt from DEBEO, *I owe*. The right to demand from the debtor at some future time an equivalent for what the creditor renders now, is the service which the creditor receives from the debtor at the time of the exchange. It is a clear case of value. Each renders to the other satisfactory equivalents. The right to demand a future equivalent is the present equivalent for the sake of which something else is rendered. All our definitions apply here perfectly. Considered as a mere case of value, the transaction may be said to be ended; but, considered as to the nature of the exchange which requires another exchange to complete it, the transaction is not yet ended, and Political Economy must

follow it in its principles to the end. We define Credits or Debts, then, as *Rights not yet realized.*

The amount of transactions in credits is immense in every commercial country, and is becoming constantly greater. Not only are the exchanges very common in which the right to demand future payment is one of the services rendered, but the exclusive traffic in debts — exchanges of one form of debt for another — has already reached gigantic proportions in all parts of the world. In order that this form of exchanges may take place, it is of course needful that there should be a general confidence in the public mind; in other words, a general expectation that such debts will be promptly paid. As indicating a common honor and financial ability among business men, and as facilitating the production of services of all sorts, this state of general confidence is so desirable in the sphere of exchange, that great pains should be taken that nothing occur to destroy it. Credit-exchanges are naturally more sensitive than any other, since they walk by faith and not by sight. For reasons to be adduced shortly, they are more liable to be unduly multiplied than other exchanges are. The credit system is a great blessing to mankind, but, like all other great blessings, is very likely to be abused.

Mr. Macleod, who seems to me to have cast original and important light on the subject of Credit, although endeavoring too much to apply to it strict mathematical forms, makes two preliminary distinctions. Of these, the first is, the distinction between those paper documents which convey titles to *specific things*, such as bills of lading and dock warrants,

and those paper documents which convey ***credit rights***, such as bank notes and bills of exchange. Both are transferable at will, but the former go with the goods, are a title to the goods, and have no value separate from the goods; while the latter have nothing to do with any specific piece of property, but are a general *claim* upon a person. For example, a man takes a package of greenbacks to his banker, and asks him to take care of it, and return it to him or any one else he may name, on demand, no property in the money passes over to the banker, the relation of debtor and creditor does not arise, the banker becomes the Trustee or Bailee of the money, but not its owner; but when, in the ordinary case, a customer deposits money with his banker, the property in the money passes over absolutely to the banker, the relation of debtor and creditor arises, the depositor receives a *claim*, that is, *a right to demand*, in lieu of his money, and the transaction becomes a true exchange. The banker buys the money of the customer, and sells him the right to demand back an equal sum at any time. Thus we reach, through this distinction, the exact nature of Credit.

The second distinction turns on a similar point, and clears up the ambiguity in the English words *loan* and *borrow*. I use the same word, when I say, "I loaned him the book," and when I say, "I loaned him ten dollars," but the two transactions are quite distinct in their nature. In regard to the book, I do not alienate to him my property in the book at all, I expect him to return to me that particular book, and I may even take it back without his permission: but in regard to the money, I do alienate my prop-

erty in it completely, I have no claim on that specific money but only on an equivalent amount, and I am a thief if I take that amount out of his purse because I happen to find it. I have a claim on him for ten dollars, but he must pay me voluntarily or be compelled by legal process. Thus the loaning and borrowing of chattels come under one set of legal incidents, and commercial loaning and borrowing come under another. The Latin language, rich in legal distinctions, has a word for each of these transactions; the loan of a chattel is a *commodatum*, and conveys no property; the loan of money, or other measurable thing like that, is a *mutuum*, and becomes the full property of the receiver.

The sale of a service to be rendered in future, which is the core of credit, is well illustrated by the old usage of English booksellers to advance money to authors on a book not yet written. Copyright is a right of the author to demand pay for books not yet sold after they shall have been sold. The copyright itself may be bought and sold. In an inventory of all values, accordingly, it is very clear that there must be included (1.) the property in the production of the past, or commodities; (2.) the property in the production of the present, or personal services; and (3.) the property in the production of the future, or credits. The first and last are completely transferable, and the second partially so; all are well guarded by law; and the last, though itself intangible, is commonly, but not necessarily, recorded on paper. The paper is the evidence of the right, and not the right itself. These paper documents are termed Instruments of Credit, and are of two

kinds: first, Promises to pay, and second, Orders to pay. We will first look at these principal forms of Credit, and then at its advantages and disadvantages.

(1.) Book Accounts. A charge in a trader's books is both a current and a legal evidence that the person charged has received a certain service, and has virtually promised to render the sum charged as a return service. This is the most common of the forms of credit; and if the person charged fails of his own accord to complete the exchange thus commenced, the law, in the absence of any proof to make the charge suspicious, collects it, if possible, and forcibly completes the exchange. The convenience of this form of credit is so great that it is not likely ever to be disused; and as between people who deal much with each other is very useful, inasmuch as their respective book accounts are set against each other in settlement, and only balances are required to be cancelled in money. It is for the benefit of both creditor and debtor, however, that such credits should be short in time, and such settlements frequent, since thus only does the creditor realize the gains of the exchange, and the debtor keep fair his mercantile name. If it be difficult or impossible to follow strictly the excellent financial maxim, "Pay as you go," the next best thing to that is, "Go and pay." The gains of an exchange are lessened, or its terms become more onerous, just in proportion as delay in its completion is experienced or expected. Book accounts are subject also to this disadvantage as compared with other forms of credit, that their number and amount as against any person are less likely to become publicly known,

and therefore he is more likely to be trusted in this form by others beyond the point of his solvency and their safety.

(2.) Promissory notes. These are issued by individuals, corporations, and nations. They are usually on interest; and in this case, if the principal be considered secure, and the interest be promptly paid, the element of time is comparatively a matter of indifference, because the interest is compensation for delay, and is frequently the motive on the part of the holder of the note for rendering that service of which the note is evidence. When such promissory note, or other form of credit, is payable to bearer, it may run a devious round, may play a part in many a transaction; but it is in reality nothing but a general warrant entitling the holder, in view of some original service of the claim for the return of which he has become in some manner possessed, to take his satisfaction for that service whenever he will. It is like the land warrants, given by the United States, entitling the holder, in return for military service rendered, to locate his acres on any unoccupied national land within the national boundaries. As a warrant, its function ceases so soon as the acres have been chosen. Credit passes into payment. The private notes of individuals and corporations are payable in money, and if in credit-money, this itself ends in something that is not credit, and thus the circuit of exchange is completed.

When the United States borrows money, it gives the lender a promissory note on interest at a certain rate, interest and usually principal being payable at certain specified times. These notes are called indif-

ferently bonds, stocks, or funds. The government issued in 1862–1865, both inclusive, about $2,500,000,000 worth of them, in return for money loaned to it by the people, and they bore interest at rates varying from 5 to $7\frac{3}{10}$ per cent., and were payable at periods varying from three to forty years. The bonds designated as "five-twenties," bear gold interest at six per cent., and the government reserves the right to pay the principal in five years, and pledges itself to pay it twenty years from date. So of the "ten-forties." The "seven-thirties" were so named, not from the time of payment, but from the rate of interest, which was $7\frac{30}{100}$ per cent., payable in legal tenders for three years, when the principal was payable in the same, or fundable in six per cent. gold-bearing bonds, at the option of the holders. So ready have the American people been to loan money to their government for the past few years, and take these bonds as security, that the treasury has experienced very little embarrassment from the want of money, although the expenditures have been at times over $3,000,000 a day. In the course of one week in the spring of 1865, ninety and odd millions of dollars were subscribed to a national loan. It is believed that the history of national borrowing presents no parallel with the late success of the United States in realizing money in the way of loans. The largest English loans ever made were made in 1812 and 1813, during the wars with Napoleon and the United States. In these two years the British exchequer borrowed $534,000,000, being an average of $22,250,000 a month, and pronounced that a wonderful financial achievement, as it was; but, from an ag-

gregate of national wealth not larger than England's then was, though from a larger population, the United States realized in four years from loans three times as much at least in gold value, and at an average rate of interest but little higher than England then paid, which was five per cent. and a fraction.[1] If the rate of interest at which a nation can borrow money be a gauge of its credit, then does the credit of the United States stand high at present. The government is selling four per centum bonds at par in gold.

(3.) Bank-bills. Bank-bills are a form of promissory notes not on interest, and thus differ from the notes of ordinary corporations; but the bank offers, as a sort of compensation for the privilege of circulating notes not on interest, to convert them into coin on demand of any holder. It is this proffered convertibility into coin that enables the promissory notes of a bank to circulate as money, while the notes of other corporations and individuals equally solid and solvent do not circulate as money. It must be borne in mind, however, that the offer to convert them into cash does not essentially alter the nature of bank-notes; they are a form of credit; and although they are commonly issued against another form of credit, namely, against the interest-bearing notes of individuals who resort to the bank for discount, this only complicates the exchange without changing its nature. It is an instance of exchanging one form of credit for another which happens to have a greater currency or validity than the first, and for this superiority of the bank credit the individual credit pays

[1] Appleton's *Annual Cyclopædia*, 1863, article "Finances."

an interest, in other words, is discounted; and such exchanges of one form of paper credit for another, with or without a premium, may go on indefinitely; as credit money, such paper may serve as a medium in many exchanges; but ultimately, and before the entire series of transactions is closed, such paper is to be redeemed in coin, or taken in by the banker in payment of some debt due to him, in both which cases it is extinguished as an instrument of credit. Credit-paper of all kinds is very open to settlement by set-off.

(4.) Bank Deposits. Here we must go carefully. We must understand clearly what a *bank* is, who a *banker* is, and hence just what is *banking*. The word "bank" meant originally a mass, an accumulation, — as we still say, a *sand-bank*, and the *banks* of a river. When first applied to commercial transactions, the word had a somewhat different meaning from what it has at present, although the idea of *credit* has inhered in it from the first. In 1171, the Republic of Venice, being at war, ordered a forced loan from its citizens, and agreed to pay interest on it at five per centum. Certificates were issued for the sums paid in, and public commissioners were appointed to manage the payment of the interest and the transfers of the certificates, which were made salable. The Italian word applied to such a public loan is *monte*, but as the Germans were then strong in Italy, the Teutonic equivalent *bank* came to be used alongside of it and instead of it It meant this common contribution to the wants of the state, represented by the mass of certificates, and came to be applied also to the *place* where the

commissioners paid the interest and transferred the shares. Two other such loans were contracted afterwards, and an English writer in 1646, quoted by Macleod, speaks of the "three bankes of Venice," meaning these three public debts, including the evidences of them and the place where they were managed.

We have already seen, that the Bank of England was an incorporation of those persons willing to subscribe to a public loan. In ten days the list of subscribers was full. £1,200,000 were advanced by them to the government, and they received, besides the interest on their loan, certain privileges as a Company, on which they and their successors have been operating ever since. This was the beginning of the national debt of England; and a new source of power revealed itself in the discovery of the resources of the national credit; from that day to this all public loans are negotiated and managed through the Bank of England; and the legal name of the British Funds is, "Bank Annuities." In one word, the Bank of England is a DEBT, with certain other functions connected with its management; and secondarily, as before, the building or place where its operations are conducted. Just so, the first Bank of the United States was really an incorporation of persons who held the then new government stock. Three fourths of the subscription of individuals to the bank stock must be in government stocks. Our Funding system and our Banking system started together: Hamilton was the author of both. Thus the word "bank" had originally no connection with paper money, but only with the evidences of a public debt;

the Bank of England had and has to do with both these forms of credit; before the Revolutionary war, the word meant in this country a batch of paper money issued by a government or a corporation; since Hamilton's time, it has meant both other operations in credit and the issuing of paper money; while the present tendency of language in this and other countries is to confine the word "bank" to the buying and selling of credits other than paper money. The whole history of the word connects it with *credits*, but not necessarily with *credit-money*. We are now ready for definitions.

A bank is an institution for the creation, management, and extinction of Credits. Money of any kind plays a very subordinate role in bank operations: banks live and move and have their being in credits. Consequently, *a banker is a dealer in credits.* As a merchant is a buyer and seller of goods, so a banker is a buyer and seller of credits, buying some credits with other credits, some credits with money, and money also with credits. A bank is an institution to which money and credits belonging to other people are brought, as well as the banker's own; and hence we speak of banks of *deposit:* it is an institution in which one form of credit is exchanged against another form; and hence we speak of banks of *discount:* it is sometimes an institution from which promissory notes, designed to circulate as money, are issued; and hence we speak of banks of *issue.* These three are the main functions of banks. Of these, the two former are, while the third is not, essential to banking. *Banking is exchanging one kind of credit against another, and these against money.*

The central idea in banking is for the banker to receive his customer's money and credits becoming due, and to render in return for these a credit, that is, a right to demand from him an equal sum at a future time. The evidence of this right is entered on the banker's books, and thus becomes a DEPOSIT. The ownership of the money and of the credits deposited passes over completely from the customer to the banker. The latter has the right to do just what he pleases with them; only his entry of the transaction in his books is a virtual promise to pay that amount on demand to the customer, and he must be ready to respond to his customer's call, whenever the latter demands, not his own money, but so much of his banker's money. A deposit, therefore, is not the thing deposited, but a credit. It is the depositor's property and the banker's promise. It is in this way that a banker buys money with credit. The motive that leads the customer to intrust his money to the banker is the desire, not to have that specific money kept safely, but to have the right to call on the banker for such sums (not to exceed the deposit in the aggregate) and at such times as may suit his own convenience. He has such confidence in the integrity and solvency of the banker, and finds it so practically convenient to have dealings with him, that he prefers a credit on him for the amount to the possession of the money itself. The motive of the banker to receive his customers' funds on these terms is the fact that he can safely use a large portion of these funds in other operations in credit profitable to himself, and at the same time be sure of being able to meet his customers' calls for

money. He finds by experience that many of his customers wish always to have a balance in his hands; that while some of them are constantly drawing on him for cash, others of them are as constantly depositing with him in cash, and that consequently he can use with safety a part of the money he has purchased with his credit to purchase other credits with. The gain for the whole community is, that a *new capital* has been thereby created, a new purchasing-power, something in the world of value additional to what existed before. This addition is not indeed unlimited, but it is actual; not unlimited, because all credit is the right to demand something in future, and the value of the credit is the prospective value of that something, and if that something fails to come, the value of course is gone; but actual, because the right to a future product, authenticated in credit, has a present value. The true limits of credit can be learned only by experience; dangers in credit arise from the uncertainties of the future; but the property in credit and the propriety of credit and the potency of credit are certain. Value has its sphere of operations in the Past through commodities already completed, in the Present through personal services ready to be rendered, and in the Future through credits awaiting further production.

It is but frank to state that many able economists deny that any new capital is created through credit. They claim that the banker is a mere broker, — a medium merely between the buyers and sellers of *commodities*. Let Bonamy Price speak for these: "Omitting the capital which a joint-stock company

puts into a bank, the banker possesses no capital, except his premises and any coin that may be in them, however much commercial and monetary literature may ascribe capital to banks. Lines and names in ledgers, checks at the Clearing House, debts due to depositors, debts due upon bills by borrowers, are neither wealth nor capital. They are words and nothing more. Incorporeal property, under which these kinds of written words have been summed up, is not wealth; it is merely a collection of title-deeds, but from which the reality is absent. The *corpus* is not in those deeds, but the right to acquire that property, even before possession is obtained, is itself a property. If a title-deed or a mortgage is declared to be actual wealth by Political Economy, then the sooner it is consigned to the waste-basket the better."[1] This passage shows how the word "wealth" tangles men up who would without it be clear thinkers. With great good sense, Professor Price himself despairs of building up a *science* on that word, and so calls his new book "*Practical Political Economy*." Still, this passage concedes the whole matter in dispute, — "the *right* to acquire that property, even before possession is obtained, *is itself a property*," — that is all we claim, *that rights are property, and that new rights, new property, a new capital*, are created by banking. Our genial friend is far too well informed to claim, that a check is "the right to acquire possession" of any *specific* property whatever. It is a general claim on the *banker*, and not on any specific fund in

[1] *Practical Political Economy*, 1877, p. 452.

his possession. Therefore, the excess of the banker's average deposits over his average reserves to secure them, is *a new creation* of Credit, *a new resource* of Production, *a purchasing-power now available to the banker not previously and practically available to anybody.* Were there no deposit-bank, every man now a customer of it would keep his own reserves by himself for contingencies: now these reserves are all aggregated in the bank, and the banker finds that he can use, say two-thirds of the whole, and still answer every customer's call. It is abstractly possible that a banker might be called upon to pay all his deposit-liabilities at once, which would break him of course; so it is abstractly possible that all the lives insured in a Life Insurance Company might terminate in one day, in which case no company in the world could meet its obligations; and so it is abstractly possible that all the houses insured in a Fire Insurance Company might be burned up in a single night, which would cause the collapse of the soundest company; but in all these cases of possibility, there is a *certainty* that the possibility will not become a fact. The Future has within it comparative certainties; it is proper to build on these; and the name of that structure is Credit. If a banker misjudges for his locality the ratio of reserves to deposits, he must sell some of the securities bought with the excess, or borrow money on them.

(5.) Bank Discounts. The paper that is discounted by bankers may be either the promissory notes already characterized, or the bills of exchange

soon to be characterized, but the function of discount is so peculiar that the paper subjected to it must be separately enumerated in a classification of the instruments of credit. The discounting of paper is the second essential function of banking; and it is more in accordance with genuine *banking* to pass the price of the paper to the seller's credit in the form of a deposit, that is, to buy one credit by creating another, than to pay the money over at once. Those who do the latter are called in England bill-discounters rather than bankers, but most of our bankers do both, though there is a strong tendency towards the separation of the two in this country also. Manufacturers and wholesale merchants usually sell goods *on time*, as it is called, say three months. A debt is thus created. The manufacturer or wholesaler is creditor and the jobber or retailer is debtor. But a debt is property; and the creditor in this case wishes to avail himself of his property at once for further production; so he either takes a note from his debtor, or draws a bill upon him, and this piece of property is ready for sale. The banker buys it, that is to say, the creditor passes over to him the right to demand payment of the debtor at the end of three months, and receives from the banker either money or so much of the banker's credit, that is, a deposit in the creditor's favor on the banker's books. For furnishing this creditor either with ready money or a more available credit in lieu of his mercantile paper, the banker charges a percentage. This is DISCOUNT. Discount is the difference between the face and the price of the paper. This is the chief source of profit in

ordinary banking. When the paper matures, the banker realizes from the debtor its full face. The following is the form of a bankable note: —

$1000. NORTH ADAMS, Mass., *Nov.* 10, 1871.

Three months after date I promise to pay to the order of Joshua Swan, one thousand dollars, payable at the Adams National Bank, value received.

Due Feb. $^{10}/_{13}$. LEANDER ALLEN.

Joshua Swan's name on the back of this paper, and the requisite government stamp, make it, if the parties are "good," a legal and acceptable note for discount. Two names are usually, not always, requisite; but paper is discounted on the strength of all the names that are upon it.

It is thus in part through the purchase of discountable notes for money that banks derive their character as money-lenders. Also, such reserve sums as they do not wish to invest in negotiable paper, on account of the time involved before such paper matures, banks frequently loan on call to those who have salable collateral securities to pledge. So far forth they become direct money-lenders. The following is the form of such pledge: —

$5000. TROY, N. Y., *Nov.* 10, 1871.

On demand we promise to pay to the Bank of Troy, or order, five thousand dollars, for value received, with interest at the rate of six per cent. per annum, having deposited with said bank, as collateral security, with authority to sell the same, at the Brokers' Board, or at public or private sale, or otherwise at said bank's option, on the non-performance of this promise, and without notice, —

10 shares N. Y. Central,
55 do. Mich. Southern. JOHN SMITH & Co.

The form of the paper to be discounted makes but little difference to the banker; a note is as good as a bill and a bill is as good as a note; his chief concern is with the genuineness and financial solidity of the names; but he is not always in condition to discount all the paper that is offered, in which case he accommodates regular customers and depositors first.

We now come to three other forms of credit, which are virtually *orders* to pay.

(6.) Bills of exchange. A bill of exchange is a written instrument designed to secure the payment of a distant debt without the transmission of money, being in effect a setting off or exchange of one debt against another. Thus, suppose A in Boston owes B in New York $1000, and another party, C in New York, owes A in Boston a like sum; it is not necessary that A should send the money to B to cancel his debt, and C send the money to A for a like purpose; the two debts, by means of a bill of exchange, are set off against each other, and both transactions are closed without sending any money from one city to the other. A draws a bill upon C, direct-

ing him to pay B $1000, and sends this bill to B, who, if the bill be drawn on sight, presents it to C for payment; if on time, presents it to C for acceptance, who then pays it at maturity. An acceptance is written upon the face of a bill, as an endorsement is upon its back. A is called the drawer of the bill, C the drawee until he has accepted, and then the acceptor, and B is the payee. It is not often that the same person, as A, happens to owe another person in a distant place, as B, exactly the same sum as is owed him in that place by a third person as C; but by two bills of exchange, one drawn by each creditor on his own debtor, and then set off against the other, substantially the same advantage is reached as if it always happened so. Nearly all these bills come into banks in the way of ordinary business, either for discount or collection, and are adjusted through bank balances. The following is the form of an inland bill of exchange: —

$3000. PITTSFIELD, Mass., *Oct.* 1, 1871.

Four months after date pay to the order of John Kent three thousand dollars, value received, and charge the same to account of DAN STORRS & Co.

To ELI TRIPP, Boston, Mass.

Kent endorses, Tripp accepts, the stamp is affixed, and the bill is negotiable. Sometimes bills are drawn to the order of "ourselves," in which case the drawers also endorse. Not infrequently a bill passes through several hands, which may either be by succes-

sive endorsements, specifying to whom payment is to be made, or by what is called an endorsement in blank, by which is meant that the payee or subsequent holder, to whom the bill has been endorsed, merely writes his own name upon the bill, which is equivalent to making it payable to bearer. The remarkable convenience of bills of exchange in adjusting debts between distant places has already brought them into very general use wherever the necessary basis for them in commercial integrity is supposed to exist; and every year is witnessing an extension of their use in all commercial countries. Bills of exchange are either payable at sight, or after an interval fixed in the bill itself; and are either inland or foreign bills. Bills which have some time to run before maturity are frequently discounted by bankers or other money-lenders, that is to say, the payee transfers the bill to them, receiving the amount, minus interest for the time it has still to run; and the bill thus serves the important function of enabling a debt due from one person to be made available for obtaining credit from another. It is a principal part of the business of banks to buy in this manner bills of exchange, either real bills, or accommodation bills, so called, which only differ from the others in that there is no real debt between the drawer and drawee, and collect them at maturity, thus securing bank interest on all money paid in purchasing such bills. The bills are discounted on the joint credit of the drawer and acceptor. It is evident that the use of bills of exchange, especially those which pass from hand to hand by endorsement, dispenses with the use and transmission of large amounts of money, and, as

between distant places especially, is one of those economizing expedients of credit which are the birth of modern civilization and a sound mercantile honor.

Very similar are foreign bills of exchange in their functions and usefulness. Commercial relations between two countries, say for example, France and England, always give rise to a mutual indebtedness of their merchants, and if these debts were all to be paid by the actual sending of money to and from, there would have to be a constant and expensive outward and inward flow of the precious metals in respect to each country, which necessity is neatly obviated by the use of bills of exchange, and coin is only transmitted to settle the balances on whichever side there is an excess of debt. French dealers are always sending goods to England, and English dealers goods to France; and for what they send to England the French merchants draw bills on the parties to whom the goods are consigned, and the English merchants draw similar bills on their debtors in France; these bills are bought up by bankers or brokers in either country, and exposed again for sale to any parties who may have debts to pay in the other country. Thus bills on London, in other words, on English debtors, are always for sale in France; and bills on France, that is, on French debtors, are always for sale in London; the mutua debtors of the two countries, therefore, instead of sending coin to cancel their debts, buy and transmit these bills. As I wish to make the course and par of international exchange very plain to my readers, I will give a particular illustration.

Suppose Pierre & Co., of Paris, send a cargo of wine to Barclay & Co., of London, worth £5,000; the London firm thereby becomes indebted to the Paris firm to that amount, and Pierre & Co. draw a bill on Barclay & Co. for £5,000; if they themselves have no debt to pay in London, they sell this bill to a Paris broker (if the exchange be then at par) for its face, minus interest for the time it has to run; and this broker is now ready to sell the bill again to anybody in Paris who has a debt to pay in London; and the person in London who receives it in liquidation of a French debt to him, presents it at maturity to Barclay & Co. for payment. A bill drawn in London for a cargo of hardware sent to Paris, is similarly negotiated with a London broker, and finds its way similarly to France, in payment of some English debt, and ends its career when it reaches the French firm on which it was originally drawn. We are now in position to understand clearly what is meant by the par of exchange. The merchants in Paris, who have debts due to them in London, draw bills of exchange for the amount of these debts, and, through the agency of middlemen or brokers, go into the market to sell these bills to other Paris merchants who have debts to pay in London. If the former set have a larger amount to sell than the latter have occasion to buy, in other words, if there be a larger amount of debts due from London to Paris, than from Paris to London, then the competition of the sellers of bills on London will lower their price somewhat in the market, in order, as usual, that the supply and demand may be equalized. In this case the par of exchange is disturbed,

a bill on London for £100 may not sell for over £99, and the exchange is then said to be one per cent. against London, or, which is the same thing, one per cent. in favor of Paris.

The par of exchange, therefore, between two countries, depends upon the substantial equality of their mutual debts; and if an exchange unfavorable to either continues long, and especially if the discount on its bills be sufficient to cover the charges of the transmission of specie, gold will begin to flow from the country against which the exchange has turned, and the equilibrium of payments, and hence the par of exchange, will be restored. Also, the par tends to restore itself, without the sending of specie, in this way: if bills on London are at a discount in Paris, for the same reason that they are so will bills on Paris be at a premium in London, and therefore there will be a direct encouragement to the extent of the premium for exportations from England to France, because on every cargo sent bills can be drawn and sold in London for a premium; but the more bills on Paris thus offered, the more the premium disappears, and the par of exchange is restored so soon as the debts thus contracted by France are equal to the debts due her from England. At the same time, and so long as the discount on London bills continues, there is a discouragement to further exportations from France to England, because the bills drawn in virtue of such cargoes can only be sold below par. Here is another instance of a magnificently comprehensive law by which Nature vindicates her right to reign in the domain of exchange. It is through this law, stimulating exportations or

the one side, and slackening them on the other, that most of the casual disturbances of the par of exchange are rectified; but if, notwithstanding this, the disturbance continues obstinate, it indicates one of two things as true of the country against which the exchange has turned: it has either made overpurchases of the other country beyond the power of its ordinary exports to cancel, or the money in which the bills drawn on it are liable to be paid is an inferior money. In the first case, the only proper remedy is an export of gold to pay off the old scores, and a more prudent method of purchasing in the future; in the second case, which is well exemplified in the instance of Amsterdam, cited in a preceding chapter, the remedy is to raise the currency to a good specie standard.

The term "par of exchange" is also used in another sense, namely, as denoting the relative value of the coin of one nation in the coin of another nation. Thus, our present dollar contains 23.22 grains of pure gold; the English pound contains 113.001 grains; consequently, there are $4.8665 to the £, and this is the "par of exchange," so far as money is concerned, between the United States and Great Britain. For the same reason, the "par of exchange" between the United States and France is $1 to 5 francs and 18 centimes (very nearly). The franc is a little more than 19⅓ cents. Now, if a commercial bill drawn on London sells in New York for $4.86 to the pound sterling, minus interest for the time it has to run, exchange is said to be at par; if it sells for more than that, exchange is said to be *against* us; and if it sells for less than that, exchange is said to be in our *favor*.

Favorable exchanges in this sense, which is the commercial and credit sense, are overrated in many men's minds, as implying a favorable "balance of trade." This fallacy has come down from the old Mercantile System. "If exchanges are favorable," it is argued, "we are selling more than we are buying and the balance will come back to us in gold." No one has ever been able to show why gold is any better as a balance than other commodity, and besides, favorable exchanges do not always cause an influx of gold. They always indicate that the present export of goods is larger than the present import of goods; but then, the excess may be applied otherwise than in buying gold. For example, the exchanges are now favorable to the United States, and have been nearly all the time for four years; in 1877, there was an apparent trade balance of $164,000,000 in our favor, a still larger one in 1876, and a considerable one in the two preceding years; but then, the import of specie was comparatively small in all those years, averaging about $25,000,000 a year; and the rest of the excess of exports went to pay the interest on our foreign indebtedness of all kinds, freights to foreigners, and so on. London is our chief settling place. When the net price of sterling exchange is above $4.86, our exporters profit by the high price; when it is below that, our importers profit by the low price. It is no national advantage on the whole to have the exchanges rule in our favor: they are apt so to rule in the case of debtor nations. If for any reason the difference in the exchanges be sufficient to cover the cost of the transmission of gold, gold will go freely from the country against which the exchanges

have turned, and bills will be drawn upon that, as upon common merchandise, and sold at a premium. Also, a decidedly higher rate of discount in neighboring countries will sometimes carry gold out of a country, because the lenders there will wish to realize the higher rate of interest. This drain can always be stopped, when desired, by raising the rate of discount at home.

Bills drawn by and upon well-known bankers have naturally a better credit than commercial bills, the names upon which are less widely known. Accordingly, this business of foreign exchange is falling more and more into the hands of *bankers* in this way: Persons sending cargoes of cotton, say, to Liverpool, arrange with their bankers in New York to have the proceeds put to their bankers' credit in London, and then the bankers draw bills on London bankers, which will bring a higher price in New York than a mere commercial bill will bring. The remitter or the traveller prefers a banker's bill, though it cost him more, because he can buy better with it abroad. Commercial bills are still bought and sold in every commercial town, but bankers' bills are more and more taking their place; and the quotations usually give the current price of each. London is so prominent as the settling-place of the world's transactions by means of bills drawn on and by London bankers, partly on account of the commercial prominence of England, partly from excellent banking customs there, and mainly because an immense mass of cheap loanable capital exists there, which even foreigners may borrow at London rates, provided only that they can get credit

there, that is, leave to draw on a London banker, to whom of course remittances must be made as fast as he accepts their bills.

The Bank of England, as the principal bank in Great Britain, and as closely connected with the government, acts as a bank of support to the public and private credit of that country. It does a regular business as a bank of deposits and discounts, but it means to keep its rate of discount above the rate demanded by other bankers in London, so as not to come into competition with them much in their ordinary business, and be able to act as a bank of support to them and all others in times of pressure. All banks have about so much credit to sell, and no more; most banks sell in ordinary times about all the credit they have; but if the Bank of England did this, it would be useless in times of panic. In fact, it begins to sell its reserve credit, when the credit of the bankers below is exhausted. When they are at the *end* of their rope, there is generally an abundance of slack rope still in the great institution above. Now, as gold can be drawn out of the Bank of England by the checks of depositors as well as by the presentation of notes for redemption, the rate of discount becomes a matter of prime importance in the practical management of the Bank. The whole line of deposits is a line of liabilities to pay out gold, if the depositors demand it; and, as deposits come largely through discounts, whenever there is a strong tendency to draw out gold so as to weaken the reserves of the bank, the directors have an effectual remedy in raising the rate of discount. The higher the *price* the bank charges for its credit,

the fewer, so far forth, will be its customers, and the smaller its line of deposits, and the less likely a continuous drain of gold from its vaults. The Bank of England is managed throughout by so simple a matter as the turning back and forth of this magic screw of discount. There are in England two hundred and twenty-six private banks, and one hundred and eighteen joint-stock. One-half of the former, and fifty-four of the latter issue notes, but none under £5. Thirty-two London and one hundred and thirty-five country banks, issue notes.

(7.) Checks. Formerly, in England, and in other countries as well, every considerable dealer kept his strong box, and when he had occasion to make payments, told down the solid cash upon his own counter. Afterwards, the goldsmiths of London solicited the honor of keeping in their vaults the spare cash of the merchants, who in their payments among one another came to employ checks drawn on the goldsmiths, and at the shops of the latter the principal payments in coin were effected. The later introduction of banks brought along with it the custom, now continually widening in commercial countries among all classes of people, of keeping one's funds with a banker, and making payments by orders, or checks, upon him. When the person making the payment and the person receiving it keep their money with the same banker, there is no need of any money passing at all in the premises, the sum being merely transferred in the banker's books from the credit of the payer to that of the receiver. The banker is quite willing to do this business for nothing, and even to allow the depos-

itors a low rate of interest on all balances remaining in his hands, in consideration of the privilege he enjoys of loaning such proportion of the sums as he deems safe to other parties at a higher rate of interest. In the large cities, by an arrangement called "the clearing-house," substantially the same benefits are secured as if all the people of the city kept their cash at the same bank; inasmuch as all the checks drawn on each of the different banks, and passing in the course of the business day into other banks, are assorted before evening at the clearing-house, and set off as far as possible against each other, leaving only balances to be adjusted in money.

The London Bankers' Clearing-house was established in 1775; in 1864, the Bank of England was admitted to it; and since then, the clearing-house itself, and all the bankers and firms using it, keep accounts with the Bank of England, and the balances formerly settled by money, are now settled by simple transfers of account on the books of that great bank. The average daily clearings in London are about £20,000,000, which if paid in gold coin, would weigh about one hundred and fifty-seven tons, and require about eighty horses to carry it, and if paid in silver would weigh more than 2,500 tons.[1] There are besides many other clearing-houses in Great Britain.

I will describe the New York Clearing-house, established in 1853, premising, that the principle is the same, though the details may be different in all other clearing-houses.[2] Business men in New York usu-

[1] Professor Jevons.

[2] I witnessed a clearing in May, 1876, and describe the process partly from observation.

ally pass in to their bankers as a deposit all the checks they have received in the course of a business day. It is the custom for each man to draw his own check *on* his banker to make payments with, and to pass in the checks he receives *to* his banker. There are fifty-nine clearing-banks in New York city. Each of these banks sorts out every day the checks it has received drawn on each of the other banks into separate parcels ready for the clearing. Each bank has, therefore, *to deliver* fifty-eight parcels, which represent the property of that bank, and are a *claim* upon the other banks, and *to receive* fifty-eight parcels, which represent the property of other banks, and are a claim upon *it*. Before ten o'clock in the morning fifty-nine messengers, having each fifty-eight parcels to deliver, appear at the clearing-house, each reporting at once to the manager for record the amount of exchange he has brought, which is entered of course *as credit* to his bank, and then all take their positions in order in front of the fifty-nine desks, behind which sit fifty-nine clerks, each representing one of the banks. Each messenger stands opposite the desk of his own bank, with his parcels already arranged in the exact order of the bank-desks before him. Each clerk inside his desk has a sheet containing the names of all the banks arranged in the same order, with the amounts carried out which his messenger has just brought. These are entered in his credit column. Each messenger carries also a slip ready to be delivered with each parcel to each clerk, on which is entered the amount of exchange he now brings to each bank. The amount brought to each bank is *debit* to that bank, just as the amount brought by each bank

is *credit* to that bank. A signal from the manager, and each messenger steps forward to the next desk, delivers his parcel and also the slip that goes with it, which latter the clerk signs with his initials and hands back to the messenger as his voucher for the delivery; and then each messenger advances to the next desk, — the whole *cue* moving in order, — at which precisely the same things take place as before, and so on, until the circuit of the room is made, and each comes opposite again the desk of his own bank, having passed to each its exchange and taken a receipt for each delivery. This process takes about ten minutes; when each clerk, who had on his sheet to start with the *credit* due his bank, has now the data to calculate the *debit* of his bank. The difference between the total amount *received* and the total amount *brought* by his bank is the balance due to or from the clearing-house as to that bank. All the clerks report to the manager the amounts received, and as his proof-sheet holds already the amounts brought, if the two columns add up alike, no mistake has been made, and the general clearing is over. Thirty-five minutes are allowed the clerks to enter, report, and prove their work. Fines are imposed for errors discovered after that time. The clearing-house gives tickets of debit or credit to all the banks, and the debit ones must pay in lawful money before half-past one, and the credit ones will get their due from the manager immediately after. The largest sum ever cleared in New York in one day was November 17, 1868, $206,034,920.51, and the smallest sum October 30, of the panic year 1857, $8,357,394.82.

There has lately been instituted in England what is called the check-bank, which is designed to bring the benefits of the check-system more easily to all classes of the people.[1] It is a stock company in London, which has entered into relations with nearly all the banks and bankers of the United Kingdom, and with many colonial and foreign banks, by which check-books are furnished for sale by the check-bank, through these associated banks, which also agree to cash the checks, every check in which books indicates by printed and indelible perforated notices upon the forms what the utmost sum is against which that check can be drawn, and the aggregate of these sums is the price of the book less 1 1-5 penny for each check in it, of which the penny is for the government stamp and the one fifth for the profits of the check-bank. It is a security against fraud that each check bears on its face the utmost sum for which it can be drawn; and as it is drawn to order and *crossed*, that is, only made payable to a *banker*, it is dangerous to meddle with in a fraudulent intent. If the checks be actually drawn for less than the perforated sums, the bank will give additional checks for the balance; or the persons to whom they are paid out, if drawn for the full sum, may give back the change if the debt thus paid be less than the full sum. Though drawn by and payable to bankers, and thus to be settled ultimately through the clearing-house, and not to be *paid* in money though they have been *paid for* in money, any banker or other person will give money for them because their ulti-

[1] See Jevons' *Money and the Mechanism of Exchange*, and Macleod's *Econ. Phil.*, vol. 2, p. 511, *et seq.*

mate payment is *sure*. As all money received for check-books is left in the hands of the bankers who sell them, or transferred to other bankers that they may meet the checks as presented, an interest is paid to the check-bank on the balance of deposits thus held, and this, together with the one fifth of a penny for each check, is the only source of profit to the check-bank. These checks have a more *generalized* character than ordinary bank-checks, they are safer than so much money would be, they might, in some circumstances, become *money* as much as bank-bills are, and there is no difficulty in shopping or in paying wages by means of them. The associated banks keep an account with the check-bank, but are not obliged to keep a separate account with the purchasers of check-books, which is a great relief. The check-bank thus extends the use of checks to a multitude of small transactions, and relieves the other banks from what would otherwise be a great deal of troublesome accounting. The longer these checks remain out before presentation the more profitable to the check-bank, and their average life has been heretofore about ten days. Checks are bills of exchange with some differing legal incidents. A bill drawn by one banker on another has usually in this country been termed a *draft*.

(8.) Circular Letters of Credit. These are issued by bankers to their foreign correspondents, ordering them to pay to the person named in the letter such sums of money as may suit his convenience, not to exceed in the aggregate the limit mentioned in the letter itself. To travellers in foreign countries such a letter of credit is much more convenient than to

carry the money; because, in the first place, they can obtain money on it in all the principal cities of the world in just such sums as they need; in the second place, they have to pay for no more credit than they actually use; in the third place, the letter is available for no one else, and so is not liable to be stolen, though it may be lost; and in the fourth place, the money need not be deposited with the banker at home any faster than it is actually called for abroad.

(9.) Cash Credits. The Scotch banks have long practised on a system that has proved extremely beneficial to Scotland, namely, to create a drawing account in favor of a deserving customer, who has no deposits in the bank, but who draws out and pays in from time to time just as if he had, and instead of receiving interest on the daily balance at his credit, he pays interest on the daily balance at his debit. These are called Cash Credits. Of course, only banks can furnish them which have a superfluity of credit to sell, and they are safe and useful only in communities in which men are well known to each other. Some friends of the parties thus accommodated always guarantee the bank against loss; but the losses have proved to be insignificant, the gains to be marvellous, and this form of credit issued on the basis of no previous transaction illustrates better than any other the principle that credit is capital.

These nine are the principal forms of instruments of credit; and we must now observe that credits are extinguished in four different ways: first, by a payment in money, which puts a commodity in place of the credit, and annihilates the latter; sec-

ond, by a release of the debtor from the obligation to pay by the free act of the creditor, which of course extinguishes his right to demand; third, by renewal, either to the creditor, or to some other person with his consent, as becomes the case with persons receiving checks or bills of exchange; and fourth, but principally, by set-off, as in book-accounts and at the clearing house, since a mutual release from debts becomes a mutual payment of debts.[1] Thus we see that most credits extinguish each other, and balances only remain. Credits are like a circle, which returns perpetually into itself. Some of the advantages of credit have been already anticipated in the discussion of its principal forms; but we will now instance more specifically a few of these advantages.

1. There are some men, and particularly young men, who have integrity and industry and skill, but no capital; and when such men are enabled to borrow money to start themselves in business, or to enlarge a business already in successful operation, the general interests of production, as well as their personal interests, are subserved by such credit, because in all probability capital thus passes from hands which are less to hands which are more able to use it productively. Those who are best able to make capital tell are generally those who are most desirous to obtain it, and frequently those who can offer the best security for its replacement. Nothing is to be said against, but everything in favor, of such a loaning of capital as shall bring it, under safe conditions, from the hands of the idle, the aged, those indisposed, or those in-

[1] See Macleod's *Economics*, pp. 517, 518.

competent to use it productively, into hands at once competent and honest. Such credit is a benefit, and only a benefit, to all the parties concerned, and to society at large. The operators retain something of profit after replacing the capital with interest; the lenders receive more than if their capital remained idle, or they employed it themselves; and society is benefited by a more complete development and rapid circulation of services. Despite all the instances of broken faith, it is still an honor to human nature that men do so gain by good character the confidence of their fellows that they are, and ought to be, trusted with capital on their simple word or note; and it is the glory of free political institutions, that under their influence, more than elsewhere, young men with no other dower than integrity and purpose do rise, by the help of so slight a stepping-stone as this, in crowds, to the high places of opulence. In the point of view, that thus all the available capital of the community is brought out into productive activity, too much can scarcely be said in favor of joint-stock companies, whose managers are known to be men of probity, which gather up the driblets of unoccupied capital here and there, and, combining them, enter upon paths of profitable production, which individual enterprise cannot tread. Too much cannot be said in favor of savings-banks, which take the surplus earnings of the poor, and not only keep them safely, but pay a fair interest on each deposit, and loan the aggregate at a higher rate on choice securities, thus stimulating frugality in a wide circle of depositors, and at the same time aiding production by opportune loans to the best class of borrowers.

Here too come in life-insurance companies, which illustrate the advantages of credit in a most gratifying light, and whose action I hope to see extended to larger and larger classes of men, since it tends to transmute low and selfish cares into a noble care for those who are to come after, who might otherwise be left penniless dependants, and by elevating and enlarging the views of men, to make them better producers and better citizens. In this category of the advantages of credit come also the ordinary bank discounts, made for short periods only, holding the debtor to the strictest rules of payment, only professing and only enabled to help customers over the transient hard places in their business, and not to furnish the funds on which the business is mainly conducted. Sums drawn from the banks on credit should only form a part of the circulating capital of a business, and never be put into the form of fixed capital. The passing necessities of a business having an independent basis of its own can be safely and conveniently met by bank discounts. So far as the capital stock of a bank is made up of small subscriptions, it has the advantage just spoken of, of calling otherwise idle sums into activity; and so far as no undue privileges are accorded to if by law, there is no branch of industry more legitimate and beneficial than banking. It is no essential part of the functions of a bank, that it manufacture and issue money; the money it loans should be the national money; and if that, unfortunately, be credit money, the element of credit in the money should be sharply discriminated in the public mind from that element of credit by which the bank loans it to its customers.

2. There is another class of advantages in credit, which do not depend so much on the transfer of capital from less to more productive hands, as on the facilities which credit affords in economizing the general operations of exchange. Here the advantages are derived from the convenience of settling accounts arising out of exchanges, rather than from the character of the exchanges themselves. Look, for example, at bills of exchange. They serve to settle up the accounts arising from the commerce of two continents, with but little transmission of money from either, and with but little loss of time. Bills drawn in New York on London are usually payable at sixty days' sight; and the merchant dispatching a ship is able to realize at once the value of her cargo, minus interest for the time his bill has to run; he is indeed still liable in part to see that his bill is ultimately paid by his drawee; but the commercial integrity of the leading houses in all countries is with justice so firmly believed in and acted on, that on the whole but little anxiety springs from this source. It is one of the noble things in international commerce that men trust each other across the oceans, and lay millions of value on the faith of a single firm. Inland bills of exchange equally facilitate settlements within the country itself; and checks contribute to the same end even more simply, passing readily in payments wherever the parties are known, and, though credit, doing the work of money more conveniently, and within certain limits as safely as money itself could do it. The face of a check drawn to the amount of his deposit in favor of another depositor is transferred in the banker's books from the credit of the

drawer to that of the payee. The banker is released from one debt by creating another of equal amount. The drawer is released from a debt by causing another debt to be transferred to the payee. The payee is paid by the drawer by the receipt of another debt.

3. It is not strange that some thinkers and writers, seeing these unquestionable benefits of credit even within the peculiar sphere of money itself, have come, like Herbert Spencer and many others, to think and teach that credit might answer all the purposes of money. It is certain that it answers some of the purposes of money. Suppose A has bought of B $100 worth of goods, and B has bought of A $125 worth of another kind of goods. Three ways are open to close up these transactions. A may pay B and B may pay A in money. This would take $225. A may pay B in money, and B may send it back with $25 more. This would take $125. Or A and B may mutually balance books, and B pay the difference in account. This would take $25. It is clear, that, as one or other of these methods prevails in practice, the quantity of money required to do the business of a country is very different. So in international trade. Foreign bills of exchange lessen enormously the quantity of money that would otherwise have to be transported. Credit *does* take the place of money in part. Can it take the place of money entirely? I think not.

We have defined credit as a right not yet realized. The denominations of money are certainly needful in order to *measure* this right; and I do not see how the denominations of money can be maintained at all separately from the use of money itself as a me-

dium. Moreover, great as is the undoubted power of credit, it waits for something beyond itself; it waits for realization. I do not see how realization can come without the use of money, at least to settle balances. Further, there always have been hitherto in all commercial countries longer or shorter periods during which there was a general reluctance to accept the ordinary instruments of credit in exchange. Money, and much of it, was then found to be indispensable. The very advantages of credit itself, which have now been explained, are dependent on this, that there be underneath it, to support and limit it, a solid basis of value-money, in whose denominations value can be reckoned, in whose coins the balances of credit can be struck, and whose presence secured everywhere by natural laws alone can enable fulfillment to join hand in hand with promise If ever credit should usurp the whole domain of money, a tolerable standard of value would be no longer possible, credit itself would lose its foothold, and the vast balloon of promise, sailing for a while through the blue, the joy of projectors and the wonder of credulous spectators, would descend on a sudden collapsed and ruined to the earth.

4. Besides the two essential functions of banks, receiving deposits and discounting bills, they perform a variety of other legitimate operations in credit. They buy and sell debts of all sorts. They sell their own drafts on distant places. Our own new national banks have done an immense business in the national bonds. They have been instrumental in diffusing these bonds among the people. They collect for their customers the coupons at maturity. They

are the factors of the government in exchanging, for those who desire it, one species of bond for another. For the most part, all these dealings of bankers in debts, — and their aggregate amount is enormous, — must be enumerated among the advantages of credit.

There are some natural disadvantages in credit The first is, that when it is much given by dealers to consumers, the reverse results take place from those already characterized, and capital passes out from the hands of productive operators and becomes temporarily unavailable as capital. When an industrious artisan or merchant has trusted out $1000 to dilatory customers for six months or a year, it is so much withdrawn for so long from his active capital, and to make up the consequent loss of profit there must be an addition to the prices of his wares, and besides some bad debts belong to such a system, and there must be an additional price to compensate this, and thus the customers who pay promptly bear a part of the proper burden of the delinquents, who at least do not wholly escape, inasmuch as they ultimately (if they pay at all) pay a price enhanced by their own delay. If the current profit of capital be ten per cent., and the merchant sells and gets returns five times a year, something less than two per cent. profit may be charged to each article, but if he only gets returns at the end of the year, ten per cent. must be put upon everything. Hence the excellent maxim, " Quick sales and small profits."

In the second place there is a greater inherent uncertainty in values connected with credits than in those connected with commodities, or than in those

connected with personal services. We have already seen that value has its sphere of operations in the past, in the present, and in the future. There is uncertainty connected with what *has been done* in reference to value, as the market may prove to have been miscalculated, and the commodities to have become unsuitable; there is uncertainty connected with what *is now being done* in reference to value, as the service bargained and being paid for may be less skillful than is supposed; but from the nature of the case there is greater uncertainty connected with what *is to be done* in reference to value, because in the first two cases some of the conditions are already fixed, while in the last all of them are at least open to hazard. There is sufficient certainty in all three to justify, and probably to reward operations in reference to value, but credits are naturally more sensitive in the law of their value than either commodities or services.

In the third place, and largely in consequence of what has just been expressed, credit-exchanges are more likely than others to be unduly multiplied and to fail of ultimate realization in full. No more bales of cotton can be actually bought than are actually produced, and no more men can be hired than are willing to work; but there may easily be, and often are, more transactions on the strength of a prospective cotton crop than the crop itself can possibly realize; and hence credits, whose sphere is the future, though legitimate and potent, lie in a field that adjoins the field of gambling. Gambling occupies the field of chance. Credits occupy the field of probabilities. Is speculation proper? That depends

on the meaning of the word "speculation." If "to speculate" means to buy anything with an expectation based on rational probabilities of being able to sell it again under different conditions at a higher price, speculation is proper and beneficial to the public — values of things thus bought and sold neither fall so low nor rise so high as they otherwise would do, which is a public gain. But if to "speculate" means to buy and sell on chances merely, it is gambling, and what one gambler makes another loses. Under a sound money, healthful public opinion, and good law, gambling never can become formidable; and it is very plain, that the limits and conditions of legitimate credit are the limits and conditions of rational probability.

In the fourth place, the principal disadvantage of credit is seen in its action on prices through increased demand, and in its consequent tendency to produce commercial crises. A man's whole purchasing-power is made up of three things: first, the property in his possession; secondly, the value that is owed to him; thirdly, his credit. He can buy value with these three things; and his power to buy is exactly measured by the sum of these three things. But while the first two are limited and ascertainable, the third, credit, is in a certain sense unlimited. Being based upon confidence, which is itself a variable quantity, a man's credit at one time may be vastly greater than at another, compared with his other property; and if he have the reputation of doing a safe and regular business, and is favored by circumstances, he will find himself able sometimes to buy on credit to an extent out of all

proper proportion to his other capital. When, therefore, credit is offered and received for commodities, it has the same influence upon prices as when money is offered and received for them. It follows that there is likely to be a rise of prices whenever there is an extension of credit for the purpose of purchasing; indeed, when *money* only is used to buy with, there cannot be a *general* rise of prices, because while more money may be spent on *some* things, and they rise in price, there would be less money for other things, and *they* would rather fall in price; but when credit is used freely in addition to money, and increased purchases go on in all departments at once, there is a rise of prices as to all commodities and a universal spirit of speculation. At such times, and while prices are still rising, men *seem* to be making great gains; everybody wishes to extend his operations by means of all his money and all his credit; and forms of indebtedness are multiplied on every hand. By and by it begins to be perceived in certain quarters that the thing has been overdone; speculative purchases cease; banks become particular what paper they discount; men find it difficult to sell their debts in order to provide for their own obligations; they fall back on the sale of their commodities, but when holders are anxious to sell, prices always fall; a panic now sets in, more irrational, if possible, than the previous over-confidence; their inflated credits and commodities collapse in the hands of their holders; sales at great sacrifices are inadequate to meet the mass of maturing debts contracted when confidence was high; men fail, and must fail; the banks cannot help them, or think they cannot; and so wide-spread commercial disaster comes in.

Such crises swept over this country in 1837, 1857, and 1873, and will doubtless recur in the time to come. They always arise from disordered credits, and though not necessarily connected with credit-money, are more likely to come in connection with that. The more strong and conservative the banks maintain their ordinary condition, the more powerfully can they operate to prevent or abate a panic. They ought always to be on the shore and never in the stream. They ought to be able to offer credit on approved securities on all occasions whatever; for it is not money so much that is needed to allay a panic, nor even credit actually given, as it is a knowledge that abundant credit can and will be given. As a panic becomes imminent, banks ought to be able to extend their discounts freely; and the permission to do this, contrary to the Bank Act of 1844, given by the government to the Bank of England, has on three several occasions acted like a charm to still the ragings of a commercial storm. Of course banks must raise their rates of discount under these circumstances. On the occasions referred to, the Bank of England was forbidden to discount at less than ten per centum. Slow is the recovery from a commercial crisis. Not even yet has business revived in this country from the crash of 1873.

It only remains in this chapter on Credit to say a few words about *a national debt.* A national debt is a mortgage upon the national property and income. It is sometimes considered as a blessing, but is more generally and truthfully regarded as a burden. It is not denied that incidental advantages

may spring up in connection with it. The bonds, which are the evidences of the debt, open a convenient form of investment for presently inactive capital and for trust funds of all kinds. There can be no doubt, I think, that certain classes of persons holding these national obligations are won to a stronger loyalty and become firmer friends to stability in government; but this consideration applies mainly to new governments, and to those temporarily endangered. Both England and the United States now make a portion of their public debt the basis of a national system of banking; but it is very questionable whether this can be mentioned among the incidental benefits of the debt. Again, "a moderate debt adds to the credit of a nation, and its ability to raise money in an emergency, for bankers and capitalists are more ready to take such securities as they are in the habit of dealing in."[1]

The burdens of a national debt are very apparent. During the fiscal year closing June 30, 1867, the United States paid out in interest $143,781,592; and between the 1st of March, 1869, and the 1st of August, 1873, it paid towards the principal of the debt $378,015,065. These vast sums came out of the industry and income of individuals. They came through taxation of individual proprietors of value; and taxation to any such degree as this is a great disturbance to industry, and gives rise to an army of officials who consume a considerable percentage of all they collect. The collection of the internal revenue for the fiscal year 1867 cost $7,712,089 Moreover, the various expedients of taxation,

[1] Communication from Sidney Homer.

which are always practically unequal in their operation, give rise to irritation and political agitation, and even sometimes to threats of repudiation, especially when the occasion has gone by under which the debt was contracted, and a generation is called upon to liquidate a debt which it had no agency in creating.

And here the vexed question arises, how far one generation has a right to throw upon succeeding ones the burdens of a national debt? I answer, that it has a very limited right indeed. The opposite doctrine tacitly implies that succeeding generations will have no occasion for extraordinary expenses of their own, and therefore may rightfully be made to contribute to the extraordinary expenses of this generation. But it is pure assumption to take for granted that the next generations will not have, of some kind or other, as much occasion for an extraordinary effort in the way of defence or of improvement as the present generation has had. It is an illusion to estimate what has now to be done as of much more importance than what will have to be done. Therefore to throw our burden forward on another generation that may have its own peculiar effort to make, just as great and just as imperatively called for, is an unwarrantable procedure. The view that has prevailed in practice, that a great war-debt, for example, might be cast with facility upon posterity, has given rise to needless and expensive wars; and *they* have been called upon to pay who perceive the utter inutility of the expenditure. Thus bitterness has been added to burden. Besides, the men to fight the battles, and the capital by means of which to feed, clothe, and furnish them the muni

tions of war, *must come from that generation;* and there is always great injustice in the manipulations of a debt ostensibly incurred to obtain this capital, and the debt itself is usually in large part rather a memorial of the war than the means by which its expenses were actually defrayed. The present generation of American citizens was called on to do an important thing in suppressing a civil war, and in eradicating a social institution that was thoroughly bad; the expense of doing this was many fold enhanced by timid counsels in the field, by class legislation in Congress, and by wretched financiering in the Cabinet; but the debt, vast as it is, and unnecessarily incurred as a portion of it was, can all be paid off, must all be paid off, by the generation that incurred it.

The debt is now but little over $2,000,000,000, and the six per centum portion of it is being gradually funded into bonds bearing a less rate of interest. The English debt is somewhat less than $4,000,000,000, much of it in the form of Consols, whose peculiarity is, that they never fall due, so as to be a claim for the principal against the government; but are, after a day fixed, always redeemable at the will of government at par. The ordinary price of Consols, which bear three per cent. interest, is about 94. The advantages, to a government, of a debt always redeemable, but never payable, are obvious at first sight. All our funded debt issued before 1865 is made payable on a day certain. The so called Consols of 1865, 1867, and 1868, are payable not more than forty years from date; while the new bonds of 1870 are Consols proper, redeemable,

the five per cents after ten, the four and a half per cents after fifteen, and the four per cents after thirty years. That they may be paid in gold will require an economical administration of government; an avoidance of intervention in the affairs of our neighbors, and of entangling alliances with foreigners; a free commercial system, under which duties shall be adjusted only for the most productive revenue; and a constant and onerous home taxation.

We may perhaps throw into the following propositions, the substance of the discussions in this chapter: —

1. *Credits are rights bought and sold like commodities, and therefore find an important place in economics.*

2. *They are specially related to future time, and thus share the uncertainties of the future.*

3. *Nevertheless they are legitimate and potent, and round out the wondrous world of values.*

4. *The economic and moral worlds touch each other in credits, which have their foundation in human character.*

5. *Credits gather up the driblets, economize exchanges, spare the use of money, and put even the Future under contribution.*

6. *Good bankers are great benefactors.*

7. *Credits are liable to abuse, as always involving some losses, as often bringing on crises, and as sometimes piling up national debts.*

CHAPTER XIII.

ON FOREIGN TRADE.

The Constitution of the United States expressly forbids that any taxes should be levied upon articles exported from them to foreign countries. Another clause of that instrument forbids any taxation of articles carried from one State into another. Knowing that exchanges are good, that they are designed by God for the welfare of mankind, that Plenty is better the world over than Scarcity, the wisdom of our fathers shut off all chance of meddling by posterity with one half of the elements of foreign trade, — exports, — and secured the entire freedom of interstate commerce forever. If the fathers had taken one step more, and forbidden all taxes upon imports, for which there exists no reason not equally applicable to exports, they would have conferred a great boon upon their country. It would indeed have been but a negative boon, — an *opportunity* merely to exchange products with all nations as each generation should deem them profitable, — but the boon would have made the nation rich, and spared it some of the worst chapters of its history. It would still have been needful in each generation to unfold, as we have already tried to do in these pages, the vast benefits to men of free exchanges, but it would

not have been needful to apply the principles specially to *foreign* trade.

It is only because their application to the wider field of international exchanges has been contested by some persons, who have conceded their validity within the boundaries of the individual nations, that it is now needful to bestow upon the subject a separate treatment, to demonstrate that the laws of exchange are universal and not partial, that the accident of a different nationality has nothing to do with the motives or the gains of the two parties to an exchange, and also to attempt to answer with thoroughness and candor the objections that have been raised against the freedom of international exchanges.

Here, as everywhere else within the science of political economy, the safe appeal lies to the common sense of men. The scientific mind sees the absurdity at once of attempting to apply one set of principles to domestic exchanges and an opposite set to international exchanges, since a science is of necessity general, and its principles, if sound, must apply to every possible case of the whole class; and the common mind as well can be made to see with entire clearness that artificial obstacles put in the way of the freedom of exchanges invariably involve both injustice and loss. It is only necessary to take the simplest cases first, display familiarly the principles applicable to them, and then with the clew well in hand, to pass on through the more intricate portions of the subject. A writer, whose simple purpose is to reach the truth, who has no personal interest in either defending or overthrowing a dogma, will not

confuse the understanding of his readers, and his own, by leaping at once into the thick complications of this large subject. Happily, there is no need of any such procedure. Man is man, motive is motive, and exchange is exchange; and the apparent chaos of commerce can be resolved through these alone into harmony and order.

In our fourth chapter it was put, I believe, beyond the reach of controversy or cavil, that the only reason why men ever exchange services at all, is on the ground of a relative superiority at different points. This relative superiority at different points was shown to depend in individuals partly on natural gifts, partly on concentration of mind, or muscle, or both, on a single class of efforts, and partly on the use and familiarity in the use of the gratuitous helps of Nature aiding that class of efforts. The tailor makes the blacksmith's coat, and the blacksmith shoes the tailor's horse, for no other reason in the world, except that each has a relative advantage of the other in his own work, and therefore there is a mutual gain in their exchanging works. To pretend that there would be any exchange between them, in case the blacksmith could make coats as well as the tailor, and the tailor shoe horses as well as the blacksmith, would be to assert that man acts without a motive, and that exchanges take place without a gain. It was also shown in the same connection, that the greater the difference of relative advantage, the greater the gain of an exchange, because each purchases the service of the other at the rate of his own highest efficiency. To recur to the same example, while the efficiency of the tailor and the

blacksmith each in his own trade remained at 6, the efficiency of each in the trade of the other being at 5, there was only a gain of 2 to be divided between them; but when by concentration and application the efficiency of each in his own trade rose to 15, his efficiency in the other remaining at 5, there was a gain of 20 to be divided between them. When the relative superiority of each over the other in his own trade was low, the gain, though sufficient to justify the exchange, was small; but when the difference of relative advantage increased, just in that ratio did the exchange become more profitable to both. The obvious inference from this, then drawn, and now repeated, is, that every person who exchanges with others is directly interested in the highest efficiency and success of their efforts as well as his own. The diversity of relative advantage at different points exhibited by different nations, and consequently the gains of international exchange, were expressly reserved at that point to a later stage of our inquiry That stage is now reached.

The various countries of the earth have received from the hands of God a diversity of original gifts, in climate, soil, natural productions, position, and opportunity. This diversity exists for a good design, and can never be substantially reduced by man, even if there were, as there is not, any good reason for desiring to reduce it. Besides original diversity in these respects, there has been developed in the history of the inhabitants of these countries, a diversity of tastes, aptitudes, habits, strength, intelligence, and skill to avail themselves of the forces of Nature around them. These differences are somewhat less

inherent and more flexible than the others, but they exist, and always have existed, and in a greater or less degree always will exist; and it is on these diversities, original, traditional, and acquired, that international commerce depends; it never would have come into existence without them, and it would cease instantly and completely were they to fade out. Men do not engage in foreign trade for the pleasure of it; they engage in it for the sake of the mutual gain derivable to both parties; they desist from it so soon as that mutual gain disappears; and there is no mutual gain in any series of exchanges, unless each party has a superior power in producing that which is rendered, compared with his power in producing that which is received.

We will suppose a trade between England and France in cottons and silks, England sending cottons to France, and France sending silks in return. When and how long will this be a profitable trade? Then, when efforts bestowed in France upon silks will procure, through exchange with England, more of cottons than the same amount of efforts bestowed in France upon cottons will produce of cottons directly; and then, when efforts bestowed upon cottons in England will procure more of silks, through exchange with France, than the same amount of efforts bestowed in England upon silks will produce of silks directly. So long as there is a difference of relative efficiency in the production of the two commodities in the two countries, so long, setting cost of carriage aside, may there be a profitable exchange of the two. To make such an exchange profitable to both parties, it is not at all needful

that the cottons exchanged for the silks shall have cost the English as many days' labor as the silks may have cost the French; or that the silks shall cost the French as much as the cottons cost the English; it is not a question of the absolute cost of either commodity to the parties producing it; but a question of the relative cost of that produced in either country compared with what would be the cost of the other commodity were it to be produced in that country. The question for the Frenchman is, Can I get more cottons by working on silks for a month, and then trading with England, than I can get by a month's work on cottons at home? And the question for the Englishman is, Can I get more silks by making cottons, and then trading with France, than I can get by trying to make silks at home? As this point is fundamental, and determines the whole matter of foreign trade, it shall be illustrated arithmetically. Suppose that cottons costing $100 in England exchange for silks costing $80 in France: is that a losing trade for England? Not necessarily. Is it a remunerative trade for France? Not necessarily. It depends simply upon this: whether $100 expended in England in the manufacture of silks will produce as many and as good silks as can be obtained for $100 by exchange with France? If it will, depend on it, that $100 will never go to France to buy silks. If it will not, and silks are in demand in England, then, clearly, the trade is advantageous to the Englishman. If the cottons costing $100 in England, and obtained in exchange for silks which cost but $80 in France, can there and then be made for $75, France makes a

losing trade (but only by supposition), though she gets what cost $100 for what cost but $80. My readers will perceive, that it is not the absolute cost of commodities to the countries producing them that determines their value in foreign trade, but that cost relatively to what would be the cost of the return commodities were they to be grown or manufactured there. A demand in each country for the product of the other is of course presupposed in the illustration.

If this general representation be just, and I think every thoughtful person will concede it, then it follows, that, setting aside a greater cost of carriage, foreign trade presents no elements peculiar to itself, but only the same elements which domestic trade presents; and consequently, that the same laws and limitations applicable to domestic exchanges are applicable also to foreign exchanges. As in every other exchange, so here, there are two efforts, represented in this case by the cost of the respective commodities, — the cottons $100, and the silks $80; there are two desires, — the desire of the Englishman for silks, and of the Frenchman for cottons; there are two estimations, — the estimation of the Frenchman of the effort in silks required to obtain the cottons by exchange compared with the effort required to obtain them directly, and the Englishman's estimation of his effort in cottons necessary to procure the silks in exchange, compared with what would be the effort needed to manufacture the silks in England; and, finally, as always, two satisfactions.

Now let us further suppose that while the cottons cost $100 in England, it would cost $120 to manu-

facture there as good silks as can be made in France for $80; and that while the silks cost but $80 in France, it would cost $96 to make cottons there as good as the English can make for $100. On this supposition, France can make both silks and cottons at a cheaper absolute cost than England can. But does that destroy the motive and the gain of an exchange between the countries in these two articles? Let us see. By exchange with England, France gets for $80 in silks, cottons which would otherwise cost her $96, — a handsome gain of 20 per cent.; England gets for cottons costing her $100 silks which would otherwise have cost her $120,— another handsome gain of 20 per cent. Though France can make each commodity for less absolute money than England can make either, there is a diversity of relative advantage, and therefore there might be in this case, as there is actually in many such cases, a profitable trade. The efficiency of France in making silks, relatively to that of England in making silks, is in the ratio of 80 to 120,— a difference of 50 per cent.; while the efficiency of France in making cottons, relatively to that of England in making the same, is only in the ratio of 96 to 100, — a difference of $4\frac{1}{6}$ per cent. In the majority of cases, doubtless, foreign trade takes place in articles, in the production of one of which each of the respective countries has an absolute advantage over the other, but an every way advantageous trade may be carried on in articles in the production of both of which one nation shall have an absolute superiority over the other, provided only that this superiority be relatively diverse in the two articles, as has just been shown. This is an

effectual answer, as I take it, to the clamor of some, who object to importing articles which might be made at home for the same sum of money as foreigners expend in making them; admitted, that they might be so made; does it follow that the country importing them would get them as cheaply by making them itself? By no means does that follow. By the supposition, the importing country has an efficiency in making those articles equal to that of the foreign country; but it may also have a superiority absolute or relative over that country in the production of other articles which that country wants in exchange; if so, the exchange complained of may go on to the manifest profit of both parties. Our general supposition a little changed will put this case in its true light: France can make cottons for $100 which it costs England also $100 to make; shall she give up her trade with England in silks and cottons, because she can make cottons as cheap as England can? She had better not. Let the exchange go on; for $80 in silks she gets cottons which would otherwise cost her $100, — a gain of 25 per cent.; England gets silks for $100 which would otherwise cost her $120, — a gain of 20 per cent. as before. Let no nation be in haste then to drop a trade, because it thinks it can make the article received in exchange as cheaply as the other nation makes it, so long as it has an advantage over the other, absolute or relative, in making the article rendered in exchange; and when that advantage ceases, the trade will drop of itself.

What will be the extreme limits of the value of cottons and silks in a trade between England and France under the conditions supposed? And when

will a third nation be able to undersell either in the ports of the other? The extreme value of French silks in English cottons, will be 80 and 96; they cannot fall below 80, because they cost the French that to produce them; they cannot rise above 96, because at that rate the French can make cottons, and there would be no gain in exchanging. Nations, no more than individuals, will get themselves served at a greater effort than that at which they can serve themselves. If a given effort does not realize more through exchange than it would directly, then the exchange ceases of necessity, as fire goes out for lack of fuel. The extreme limits of the value of English cottons in French silks, will be 100 and 120, for reasons precisely similar. Therefore the highest profits possible to both nations, under the conditions of the trade, are 20 per cent. each. France would be glad to take the cottons at a return of 80, at which rate her gain would be 20 per cent.; and she cannot under any circumstances offer quite 96, at which rate her gain would disappear No third nation, therefore, in a trade of silks for cottons, can expel the French from the English ports, until it is prepared to offer nearly 96, or more, in silks in return for English cottons; that is to say, until its efficiency in making silks relatively to that of England in making them, presents a greater difference than the difference of efficiency between France and England in making silks, which is a difference of 50 per cent. A greater difference of relative advantage, and nothing else, will enable a third nation to undersell France in such a trade. England would be glad to take the silks at a return

of 100, at which rate her gain is 20 per cent.; and she cannot possibly offer quite 120, because at that rate her gain would wholly vanish. She could be undersold in the French ports, under similar conditions, and not otherwise, as the French in her own ports, as just now indicated. We have seen that the diversity of relative advantage in the production of the two articles in the two countries is in the ratio of 50 to $4\frac{1}{6}$; France has an absolute advantage in the production of both commodities; the trade proceeds simply on the basis of this relative diversity; and no nation can take away the silks of France from England, or the cottons of England from the French, either with other cottons and silks, or any other commodity, except on the basis of a diversity, absolute or relative, greater than this Here is the whole doctrine of one nation's underselling another in the ports of a third. It can do so under conditions of greater relative efficiency, and not otherwise.

So far we have considered only their relative cost of production as determining the value of articles in foreign trade. But we know that the element of desires also helps to determine all value. We come now to illustrate what is sometimes and properly called "the Equation of International Demand."

If the demand for French silks in England just answers to the demand for English cottons in France, so that the silks offered by France just pay for the cottons offered by England, then, cost of carriage aside, the gains of the trade will be equally divided between the two nations, each will realize 20 per cent. profit, because neither will have any motive to lower the value of its commodity below its highest

value; France, from its point of view, will offer 80 in silks and get 96 in cottons; England, from her point, will offer 100 in cottons and get 120 in silks. Demand and supply are equalized at a point of value most favorable to both parties, and really determined by the relative cost of production. This case of equalization, though possible, is likely rarely to occur in practice. On any terms of exchange first offered, there is likely to be a stronger demand in one country for the product of the other than in this country for the product of that. This will lead to a change of value, and a new division of profits. The product for which the demand is less will find its market sluggish, and in order to tempt further and brisker exchanges, will be compelled to offer more favorable conditions. He who enters a market in quest of what is more in demand with a service in return which is less in demand, will have to lower his terms, or not trade. The equalization of supply and demand will only be reached in this case, by quickening the demand for the commodity now less in demand, through an offer of better terms in trade. Thus, if the demand for French silks in the English ports be slack, in comparison with the demand for English cottons in France, at the rate of exchange first established — 80 for 96, the French merchant has no resource, if he wishes to continue the trade, but to offer more silks for the same amount of cottons, say, 85 for 96. If this reduction prove sufficient to cancel the account in cottons with the account in silks, then the trade will go on on this new basis for a while, the equalization of supply and demand has been reached through a new valuation of the com

modities, and there is now a different division of the profits. France gains less than 13 per cent. by her trade with England, while England gains 27 + per cent. in her trade with France. Under these new terms of exchange, it is possible that silks may again become heavy in reference to cottons, and a new decline take place in their relative value. If the French are obliged to offer 90 for 96, in order to obtain the cottons they want, their profits will sink to 6 + per cent., while the English profits will rise to 35 per cent. If, in any contingency, the French were compelled to offer in the neighborhood of 96 in silks for 96 in cottons, the trade would cease of course, just as every other transaction ceases when the motive for it ceases. Of course, the cottons are just as likely to become dull in reference to silks, as the silks to cottons, and in this case England must lower her demands, and thus surrender a larger share of the profits to France. By the play of supply and demand, within the outermost limits drawn by the relative cost of production, is the value of articles determined in foreign trade; and no degree of complication in the variety of articles, or in circuitous exchanges, affects, for substance, these fundamental principles. For example, if, instead of one article, as cottons, England sends two articles, or ten, to France in payment for silks, she will send in preference that article in which her labor is relatively most efficient, so long as the French demand will receive it; then, when obliged to lower on that down to the point at which her next most available article stands, she will send that in quantities regulated by the demand for it; and so on to the end. No matter

whether the articles be one or many; no matter whether the trade be a direct, or an indirect, trade; the profits in all cases will depend, first upon the ratio of the cost of what is rendered to what would otherwise be the cost of that received; and secondly, upon the relative intensity of the two demands. The greater the relative efficiency of any nation in producing an article of export, and the stronger the demand for that article in foreign ports, the more profitable does the trade become to that nation. The precious metals, whether produced at home, or obtained from other nations by another series of exchanges, stand here in the same relations as other commodities, and are frequently the most profitable articles that a nation can export. The terms of international exchanges, then, between any two nations, are so adjusted, as to equalize the demand for their respective products, and cancel the debts mutually incurred.

It follows from all this by a necessary inference, that what a nation purchases by its exports, it purchases by its most efficient labor, and consequently at the cheapest possible rate to itself. Only those things, for the procuring of which a nation possesses decided advantages relatively to other nations, and relatively to its own advantages in producing directly what is received in return, are ever exported; and hence, the return cargoes, no matter what they have cost their original producers, are purchased by this nation as cheaply as if they had been produced by its own most advantageous labor. This is a wholly impregnable position, and the advocates of restricting foreign trade are challenged to try their hand a little at its defences.

We see also, at this point, what to think of those people who deem it needful that each nation should be able to "compete" with other nations in everything. Why are not these people consistent enough to apply their favorite doctrine of "competing" to domestic exchanges also, and demand that the clergyman shall have facilities for "competing" with the lawyer, the tailor with the blacksmith, the farmer with the manufacturer, the publisher with the author? Will these people never learn that all exchanges, domestic as well as foreign, depend on relative superiority at different points, and that a nation which should try to make its success in production equal at all points, would be as foolish as an artisan trying to learn and practise all trades at once? Suppose the nation to succeed, what then? It would supply its wants at a certain average efficiency of effort; whereas, by a thorough development of all its own peculiar resources, it could command by exchange the products of the world at a cost not exceeding that of its own most productive and efficient exertion. In one word, whatever justifies individuals in selecting diverse paths of production according to their capacities and opportunity, the same justifies the nations in fully drawing out their own best capabilities under the conditions in which God has placed them, and then, exchanging what costs them little for what would otherwise cost them much, in enjoying all that the world offers at the least expenditure of irksome effort. Such action promotes the common good of all the nations, and makes the best of all accessible to all, and arms each with the power of all; while the opposite action, by lessening the diversities of

relative advantage, so far forth incapacitates all for exchanges which are at once profitable and stimulating.

Closely connected with the one just cited, is another narrow and superficial notion, happily less prevalent now than formerly, namely, that new improvements in machinery, or other enhanced facilities of production, realized in any nation, are a disadvantage to other nations in their trade with that nation. Let us examine this point. Suppose France, by new methods of silk culture, to become able to make the silk which before cost $80 for $50, cottons in France, and silk and cottons in England, remaining in natural cost as before, does France alone gain the entire advantage of the increased cheapness of silk? We will see. The production of silk in France is greatly quickened by the cheaper methods, more is produced, more is carried to England to buy cottons with, but at the old rate of 80 for 96 the English will not take any more silks, and the French, who can now abundantly afford it, since their nominal 80 is really 50, will offer more silks for 96 in cottons, in order to tempt a brisker and broader sale. They offer, say, 96 in silks for 96 in cottons, and if that reduction of value of silks in cottons be enough for the equalization of the respective demands, the trade will go on on that basis, at least for a time; and as there is now a larger difference of relative advantage than before, there will be, as always in such cases, larger profits to be divided between the two parties. The 96 now offered in silks to the English is really only 60 in cost to the French, so that the French gain in the

trade is largely increased; they now get for what costs them 60 what would otherwise cost them 96, a clear gain of 60 per cent. Before the new methods of silk culture were introduced they gained only 20 per cent. But the English have also gained largely by the ingenuity and diligence of their neighbors. Before, they gained only 20 per cent. in the trade at best; now they get for what costs them $100 that which otherwise would cost them $144, a clear gain of 44 per cent. Indeed, it might easily happen, through the changes in international demand, that even a larger share of the benefit of the French improvements should accrue to the English than to the French themselves; the share of the French all the while being large, and much larger, than if, greedily endeavoring to keep all the benefit, they refused to trade at all. Thus we reach again, from another outlook, a grand doctrine of exchange, that each party is benefited by the progress and prosperity of the other. The only way in which all nations can share in the benefits of the thrift and enterprise of each other, is through mutual international exchanges; and when each nation sees to it that it has a few commodities at least for which there is a strong demand among foreigners, and in the production of which themselves have a strong superiority, it may rest assured that it buys all it buys from abroad, gold included, at the cheapest rate to itself, and shares a part of the prosperity of every nation with which it trades.

It is now time to look at the cost of carriage, thus far allowed to sink out of sight for the sake of greater simplicity of view. This is an important element in

international exchanges, and one which must not be neglected, although Mr. Carey unduly enlarges upon it with a view to prejudice a free exchange. Certainly, it costs something to carry any goods abroad, and to bring back a return, and we may be assured that if such return goods could be procured as cheaply without incurring such expense, the expense would never be incurred. The fact that all expenses connected with carriage are gladly borne by the merchants who carry on the trade, shows that the gains of the trade are so great as not only to pay freights and insurance, but also to leave a good margin for profits. Mr. Carey does not get around this stubborn fact. What use is it to pile up calculations to show that the expenses incurred in carriage, if applied to production at home, would secure as good goods and more of them? If they would, why do they not? Have not men common sense? Is not self interest a tolerably strong motive-power? Is it needful to invoke the mighty arm of law to compel men to act in accordance with their pecuniary interests? Mr. Carey would restrict foreign trade, because it costs so much to carry it on. Is that wise, in case the gains after all largely overbalance the cost? If they did not overbalance it, would the trade go forward? If the cost be large, as it is, that is a good reason to desire its reduction, if possible; to labor for increased facilities of transportation, for cheaper freights, and better rates of insurance; but to argue for forcibly stopping a trade by legal enactment, because it costs those so much who freely undertake to carry it on does not strike me, and, I believe, will not strike my readers, as a sound argument.

Which nation, a party in foreign trade, pays the costs of carriage? Or does each pay them in equal proportion? The aggregate cost of transportation to the foreign market is so much added to the cost of production, and is a deduction of so much from what would otherwise be the whole gain of the exchange; but it is not true that each party necessarily pays the whole of his own freights, and therefore, that the party carrying bulky articles is at a disadvantage compared with the other. He may or may not be at a disadvantage. That will depend on the effect of the new expense, however divided, on the demand in the respective countries. Suppose, that in the outset England pays the whole cost of carrying cottons to France, and France the whole cost of sending the silks to England; but as cottons are many times more bulky than silks proportionably to value, a larger bill of freights would fall to England; and cottons would therefore fall relatively to silks; but cottons and silks both have risen absolutely, that is, with reference to a given effort, or with reference to a money standard. Suppose that France, instead of 80 for 96, now has to give 82 for 96, and England, instead of 100 for 120 now has to give 105 for 120. The French gain in the trade is reduced by cost of carriage from 20 per cent. to nearly 17, and the English gain from 20 per cent. to nearly 14; but it is by no means certain that the trade would go on on these terms; the enhanced price of silks might well deaden the demand for them in England, more than the relatively less enhanced price of cottons in France would affect the demand for them. Silks have risen in England 5 per cent.,

but cottons have risen in France only 2½ per cent.: it is therefore every way likely that thereafter the demand for cottons will be stronger than the demand for silks, and if so, the French will have to offer better terms, or, what is the same thing, be obliged to pay a part of the English freights; so that there is nothing in the true state of the case to justify the conclusion jumped at by some people that they who carry heavy goods are at a disadvantage compared with those who carry light goods. That will depend on the equation of international demand. Nothing in the nature of things hinders, that each party shall in effect pay the freights of the other, or one even really pay the freights of both.

These, then, are the essential principles of foreign trade, brought out, it is hoped, as clearly and consecutively as the relative and complicated nature of the transactions will allow; and in the light of these principles it is very clear that foreign trade is just as legitimate as domestic trade; that it rests on the same ultimate principles in the constitution of man and in the providential arrangements of Nature; that the profit of it is mutual to both parties, or it would never come into being, or, coming into being, would cease of itself; that to prohibit it, or restrict it, otherwise than in the interest of morals, health, or revenue, must find a justification, if at all, outside the pale of Political Economy; that to say to any body of men who wish to render purely commercial services to foreigners, to receive back similar services in return, that such services shall neither be rendered nor received, is not only to destroy a certain gain

but also to interfere with a natural and inalienable right.

Unfortunately, the old mercantile system, which was so wise as to believe that gold and silver were the only objects of real value, taught also, in coincidence with its fundamental belief, that foreign trade ought to be so regulated and restricted as to bring in the largest possible quantity of the precious metals; that each nation ought to sell much and buy little in order to grow rich; that bounties ought to be given to exporters to encourage them to sell, and prohibitions laid upon importers to prevent their buying; and that the introduction, through exchange with foreigners, of articles which might be produced at home, should be by all means prevented by law, no matter what advantages for producing them foreigners might have, or what advantages the nation itself might have in producing that which the foreigners would be glad to take in exchange. The mercantile system as such, is long ago dead and buried, but it has left one of its progeny behind it, of no better birth than its parent, which has not yet found its predestined death and burial. This is the doctrine that goes under the name of "Protection to Domestic Industry," a designation, however, very little indicative of its real nature. This so-called "Protection" has been sought through a system of duties or taxes laid upon the introduction of certain goods from foreign countries, with a view of thereby raising the price of the corresponding goods of domestic production. This doctrine, clearly an outgrowth of the mercantile system, is now something more than two hundred years old, and is everywhere

in its decrepitude. An incurable wound was inflicted on it by the publication of Adam Smith's "Wealth of Nations" in 1776; the centennial of that event and of American Independence has already witnessed very little practical vitality in it anywhere in the world; it has died out utterly in Great Britain, where it once had a vigorous life; it colors scarcely at all the revenue systems of the German and Austrian empires; it still lingers feebly in Russia; it has had a recent temporary revivification in France; and though steadily and rapidly declining in the United States, it has been strong enough here to control the national legislation of the past decade.

As Protection is supposed to be secured through an instrument called a tariff, let us first see precisely what a tariff is. The origin of the word will throw light upon the thing. The southernmost point of the Peninsula of Spain, which juts down into the narrowest part of the Straits of Gibraltar, holds a town named Tarifa. Here, during the Moorish domination, a castle was built, and all vessels passing through the Straits were stopped and compelled to pay duties at fixed rates: whence the word *tariff* in English and other languages. It will be perceived at a glance that a tariff is only another name for a tax. It is the special form of tax which governments levy on goods brought in from other countries. It may be legitimately imposed for the sake of a revenue to support government; it may be a species of robbery, or black-mail, as in the historical instance just cited; or it may be levied for the sake of Protection, so called; but for whatever purpose imposed, it is always and simply *a tax on the*

exchange of goods. How anybody can intelligently suppose that a system of *taxes* can be so cunningly adjusted as to become a positive productive agent, a spur to the progress of society, they must explain who suppose so. I myself once supposed so; but it was when I was in ignorance of the real nature and operation of such taxes. A careful study of the principles of this science, with a noting of the records of experience in this matter, has convinced me, as it has thousands of others, that Protective duties, so called, are nothing in the world but burdensome taxes laid upon industry; that they always have been, and always will be, deeply detrimental to the true interests of society. The word "Protective," as applied to a tariff, is full of deception. A tariff in its very nature is restrictive, obstructive, prohibitive.

The first main distinction to which I call attention, is that between a protective tariff and a revenue tariff. Upon this point a great confusion exists in the common mind. *A revenue tariff is a schedule of taxes levied on imported goods with an eye to equitable taxation only.* If such taxes are to be productive, they must not interfere essentially with the bringing in of the goods, that is to say, they must be levied at a low rate, so as not much to discourage importations, or encourage smuggling at all. Also, experience has shown that it is not needful, in order to derive a large revenue, to lay even low rates upon all goods imported, but only on certain classes of them, so as to burden at as few points as possible the ongoing of international exchanges. The prosperity induced by commercial freedom enables a

country to import vast quantities of the articles subjected to the tax, so that large revenues come from low rates levied at few points. Also, these taxes ought to be laid on articles, if possible wholly, at any rate mainly, procured from abroad and which are not produced also at home; otherwise, the incidence of the tax on the portion imported will raise the price also of the portion produced at home, and the people will pay more in consequence of the tax, than the government gets in revenue. A proper revenue tariff, then, lays low duties on comparatively few articles, which are wholly or mainly procured from abroad. The most advanced nations of Europe now lay their tariff-taxes in accordance with these three principles.

But the purpose of a protective tariff is totally distinct from this. *A protective tariff is a schedule of taxes levied on imported goods with a design to raise the price of certain home commodities.* To reach this end, the duties are laid by preference on goods which are both imported and also produced at home, thus violating one of the fundamental principles of a revenue tariff. Also, to be protective, the duties must either be so high as to exclude the foreign goods altogether, and thus give the domestic manufacturer the complete monopoly of the home market, which is the perfection of Protection, or at least high enough to raise the price of the foreign goods to the point at which the home manufacturer is desirous of selling his own. These high duties, certainly for a time, discourage importations, and thus violate another of the fundamental principles of a revenue tariff. But the effect on revenue is not the worst

effect. The main effect designed, and that actually follows, is to raise the price to all consumers, in order that a factitious advantage may accrue to certain home manufacturers. When most successful, the effect is to transfer money from the pockets of the many to the pockets of a few. I do not stop at this point to demonstrate the economical folly of this, my object being now to show the idea that always underlies protective duties. Also, since if one home producer receives an artificial advantage under the tariff, many others may lay an equal claim to it, tariff-taxes for Protection come to be levied upon a great many articles, thus violating the third fundamental principle of a revenue tariff, by interfering with exchanges at many points instead of a few.

Now, can these two systems of revenue and protection, which are so distinct and apparently incompatible, be combined together? Can there be a revenue tariff with incidental protection? I answer, No; because Protection fully carried out would annihilate all revenue from foreign goods the like of which could possibly be produced at home, since such goods would then be all prohibited; and, on the other hand, a system looking only to revenue, making the people pay only what the government is to get, would have, for a reason already given, no particle of Protection in it. If this be so, is there any reason to suppose that less degrees of protection would not be only less hostile to revenue? Is it not of necessity, looking at the *nature* of the two systems, that the point at which protection begins is also the point at which revenue begins to diminish? It is not denied that a tariff with

protective features in it may be made to yield much revenue; but can it do this without making the people pay much more than the revenue? It is the interest of revenue that government shall get all that the people are made to pay in consequence of a tariff-tax. It is the interest of protection that the people shall pay much more in consequence of a tariff-tax than the government gets. Revenue is only received on the foreign goods that come in. Protection is only secured as the foreign goods are kept out; or are so raised in price as also to raise in price the corresponding domestic goods; which last makes the people pay more, while the Treasury receives less. Therefore the conclusion is unavoidable, that a revenue tariff with incidental protection is, if not a contradiction in terms, an attempted combination of things incompatible with each other. If Protection be good, it is good in and of itself; if it be bad, it has no business to be begging to lean on something so respectable as revenue.

The fundamental reason why low duties on imports produce a larger aggregate revenue than high duties is found in the condition of society, which is like a pyramid standing on its broadest base, each of whose horizontal sections is more extended than the one above it. Those persons able to purchase an article at five dollars are more than twice as numerous as those able to purchase it at ten dollars; and those able to buy it at one dollar are probably ten times as many as those who would buy it at five dollars. An official list of taxable incomes in the Tenth District of Massachusetts lies before me, and selecting one town at random, I find one income

over $40,000, three over $30,000, seven over $20,000, nine over $10,000, thirteen over $5,000, twenty-nine over 2,000, and seventy-eight over $1,000. A lower duty, therefore, on any article is likely to bring it within the reach of a wider circle of consumers; and for many to pay a low duty is better for the revenue than for a few to pay a high duty. Of course the exact limitations must be found out by experience. Alexander Hamilton long ago, in one of the papers of the Federalist, called attention to the fact that high duties will not make large revenues, any more than a large multiplier will make a large product. The multiplicand is an important factor in both cases. A subordinate reason why low duties are favorable to revenue is, that they destroy smuggling.

Free Trade is the opposite of Protection so called, and not of Customs duties properly levied for revenue. All taxes are paid out of the gains of exchanges; and there is no objection, on principle, to international exchanges paying their share of the taxes. Provided it be economical for the government to collect, and equitable for the people to pay, taxes in this form, it is just as legitimate to tax foreign as domestic exchanges. The considerations that go to determine the best methods of taxation will be given fully in the chapter under that title; but the question between Free Trade and Protection is very distinct from the question between Customs' Duties and Internal Taxation. Some free-traders think it would be wise to abolish custom-houses altogether and tax domestic exchanges only; other free-traders see no objection in tariff-taxes levied at low rates on a few articles of general consumption wholly or

mainly procured from abroad; but that point, in whichever way decided, has little or nothing to do with the distinctive question of Free Trade. The words are indeed open to a charge of ambiguity, but the animated debates of a century have sufficiently settled their meaning. Free Trade is the opposite of Protection, and is completely realized in any country whenever every tariff-tax is laid solely for the sake of the revenue to be derived from it. From their nature and purpose, protective tariff-taxes prevent revenue; and, therefore, taxes levied with a single eye to revenue leave no opening for protection. When used in its legitimate sense the word "protection" is an honest and needful word; when used in reference to tariff-taxes it is full of deceit, and, being a good word, is made to cover up an evil thing. *Protection is a rise of price on domestic goods caused by the imposition of tariff-taxes on corresponding foreign goods.*

Since Political Economy is the science of exchanges, and since protection is an obstacle thrown by legislation across the pathway of exchanges, political economists generally have been much averse to protection, and have endeavored to vindicate the freedom of exchanges. Indeed, it is difficult to see how there can be any *science* of exchanges, if any sound *economical* reason can be given for hindering exchanges. If there be exchanges injurious to morals, health, or revenue, they may, of course, be prohibited on those grounds. Objections, nevertheless, are still urged against the freedom of exchanges, as if men could not yet be trusted to buy and sell for their own advantage. I shall now answer the

principal of these objections. Some of them are popular, and will be subjected to a popular refutation; while such as profess to be scientific will be met, it is hoped, by a scientific method at least equal to their own.

1. One of the most common of these objections has been, *that Free Trade is a theory.* Men say, "It is all very well in theory, but it will not work well in practice." Can there be a good theory that works ill in practice? That is necessarily a bad theory that does not work well in practice; and the only way to tell whether a theory is good or bad is to test it by practice. Everything that is done at all, unless by mere chance, is done on some underlying theory; and it is certainly better that things should be done on a good theory than on a bad one. To concede the theory to be good is to concede the whole matter, since a theory is good for no other reason than that it is good in practice. There have been so many unfounded theories broached on all subjects, that the term has fallen into some reproach, and it is for this reason that the charge of being a theory is brought against Free Trade, but there is nothing in the world more respectable than a good theory proved by solid arguments and verified by facts. Newton's theory of gravitation, for example, is a very respectable theory. So, and for the same reasons, is the theory of Free Trade, which simply postulates, that two parties wishing to exchange services for their mutual benefit should be allowed to do so, provided no other men's rights are infringed thereby. Free Trade does not compel anybody to trade, it merely allows those to trade who think it

for their advantage. The only theory in the premises is, that men are their own best judges in the matter of their own exchanges, and that governments have not the right and still less the wisdom to restrict this advantageous interchange.

The theory of Protection, on the other hand, besides being complicated, is contrary to the natural impulses of men, denies the fundamental fact on which Political Economy is based, namely, that exchanges are mutually beneficial, assumes that somebody else rather than the parties concerned are best judges of their advantage, bears so obvious an aspect of greed on the part of those who get the protective duties put on, and has invariably caused such dissatisfaction and loss in every country that has put it into practice, that I have no hesitation in calling Protection a very bad theory with nothing good about it. The burden of proof, at any rate, lies upon the man who brings in a theory interrupting the play of natural laws. Let him bring forward and prove his theory of restriction. Let us hear the arguments and see the grounds that justify the prohibition of an advantageous trade. If the benefits of the trade were not considerable and reciprocal, it would not exist; when, then, such a trade is going forward, who is he that takes upon him to curtail and prohibit it? Who is he that thinks himself competent to manipulate the natural laws of trade?

It is conceded by everybody that a free exchange of commodities within the same country is highly beneficial: what makes it suddenly cease to be beneficial as between foreign countries? Does the mu

tual benefit of an exchange depend upon the accident that the parties to it are citizens or subjects of the same government? The south end of Vermont trades freely and advantageously with its neighbors across the line in Massachusetts; is there any good reason why the north end of Vermont should not trade just as freely and advantageously with its neighbors across the line in Canada? These are questions which the theory of protection, in my opinion, cannot satisfactorily answer.

(2.) A second objection has been, *that foreign goods admitted freely tend to diminish the wages of our own laborers.* Let us see if this is so. Foreign articles are certainly wrought by foreign labor; do we, then, by buying them employ foreign labor, to the prejudice of our own laborers? We are obliged to pay for everything we buy, — are we not? In what do we pay? Clearly, in the products of our own labor. We employ our own laborers to produce the articles which we exchange for foreign articles. We pay for our imports by our exports. Our exports are created by home labor, and the only possible way for us to obtain the results of foreign toil, is to offer in exchange the results of domestic toil. A commercial nation, therefore, not only does not, but it cannot employ foreign labor. The more it buys of foreigners, the more home labor it must employ to create the articles with which it pays for what it buys. We must remember that the exports, taking the years together, must and do balance the imports. Free Trade, therefore, can by no possibility discourage home labor, or diminish the wages of laborers; and, as a

matter of fact, labor is best rewarded, other things being equal, in the freest commercial countries.

I deem it important thoroughly to demolish this objection, for it has been considered the stronghold of the advocates of Protection. I admit that a protective tariff may stimulate a certain branch of manufacture, may concentrate capital in it, may call laborers into it, and even for a time increase the wages of those laborers. But competition will very speedily reduce wages in that department to the average level in other departments, and unless it can be shown that restriction increases the general wages-fund of a country, — I use that term in the sense already clearly defined, — it is in vain to claim that it can increase the general wages of labor. Capital and laborers may indeed be withdrawn from one employment to another by artificial stimulus, but is there any general gain in that? While the one is stimulated, is not the other depressed? I have seen upon the ocean the wind blow up a wave, but I always noticed a depression behind it. The general level of the ocean is not raised, however high the waves rise.

The tendency of Free Trade is directly the reverse of that alleged in the objection; because the varied objects of use and elegance offered to our desires by international commerce stimulate labor to create that with which to buy them. Just so far as tariff-taxes keep foreign products out, they deprive domestic products of their best market, and thus discourage domestic labor. How can the free interchange of commodities lessen the demand for labor, or the rewards of labor, while it opens the whole world for

the sale of the products of labor? Is not a world market better than a one country market? Domestic products are never sent abroad to buy foreign products except when the foreign products thus purchased are worth more at home than the domestic products are which purchased them; and it would be an odd encouragement of domestic labor to prohibit its products from going where they can obtain the most in return. As a matter of sound reason, it may be said, that every foreign purchase necessitates the employment of domestic labor to create that with which the purchase is made, thereby enlarging the demand for laborers, and tending to increase their wages; while as a matter of actual experience, it may be said, that a general rise of wages never failed to accompany the adoption of a free commercial policy by a nation whose trade was previously restricted. English wages have gone up on the whole average more than one quarter, and in some departments fully one half, since the adoption of Free Trade by Great Britain.

(3.) A third objection against Free Trade has been, *that many great men have believed in, and many great nations have acted on, the doctrine of Protection.* The name of Daniel Webster has been often mentioned in this connection. To estimate the force of this objection rightly, two things must be remembered: first, that the doctrine of protection is an inheritance from more than two centuries ago, an outgrowth from a confessedly false dogma, which, being then universally received and acted on by the nations, has given this, one of its corollaries, whatever validity custom and prescription can give;

and, secondly, that there has always been a rich and influential class of men in the commercial countries who have supposed that their interests were subserved by the practical application of the doctrine. In respect to Daniel Webster, the first great speeches which he made in Congress, speeches that foreshadowed his great fame, were delivered in 1814. These indicate, as any one may read in Benton's Debates, Vol. V., a strong hostility to commercial restrictions of all kinds. He opposed, and New England with him, the protective tariff of 1816. His speech of 1824, in opposition to the higher rates proposed in the tariff of that year, is in reality one of the best free-trade arguments ever made. If he left, four years afterwards, this high ground of truth and principle, to occupy the lower ground of what he deemed expedient, it was owing to political stress of weather, to a change of policy on the part of Mr. Calhoun and other southern statesmen, to a supposed necessity of fostering manufactures on which New England under factitious inducements had embarked on a large scale. Mr. Webster never justified restriction as a principle; his commercial instincts were too strong for that; he always attempted to justify his course by peculiar and factitious circumstances; almost half of his congressional life had passed away, before he could be brought to vote for levying high duties; and although he afterwards brought forward, in defence of the position thus assumed, arguments which Political Economy pronounces unsound, and although there doubtless mingled in with his motives a desire to gratify powerful constituents and friends who were directly interested in high duties, there is abun-

dant reason to believe that his defection from sound principles was never so radical as has been commonly supposed.

The true answer to this objection is, *that many more great men have believed in, and many more great nations have acted on, the doctrine of Free Trade.* Antiquity knew nothing of Protection. Neither did the Middle Ages. England, which was the first nation to develop it, was the first also to abandon it, acknowledging, through every organ of her public opinion, that she had maintained it from the first at a constant loss to herself as well as to the rest of the world. The United States, late to adopt, has only maintained it in the midst of an unyielding opposition, which has been able always to modify, and sometimes to reverse, the national policy. The most enlightened public opinion in all the world is hostile to Protection. Nearly all of the great economists of the past century have denounced it. It still lingers on, partly because some of the arguments for it are superficially plausible, but mainly because many enterprising and prosperous men have considered it as essential to their pecuniary interests; and when such men demand a champion, eloquence and arguments are never long wanting. As a matter of fact, the legislation of the world has been largely controlled by such men, and that, too, not always in the interest of the masses. It is more than doubtful whether manufacturers as a whole class have ever been permanently benefited by protective duties, or rather, it is certain that they have not been; but they have supposed that they were, and some of them have been, prodig-

iously benefited; and they have acted, and are acting, on that supposition, and the power of such men over public opinion is very considerable. As a class, they are intelligent and rich, and can easily combine to influence opinion and legislation. But even if they were benefited, as a whole, by protective duties, what sort of justice is it to take money out of my pocket and put it into theirs? I object to that. My mickle, and your mickle, and our neighbor's mickle will make a very pretty muckle, — a small tax on all consumers of protected goods will reach a very handsome sum; but what valid claim can the manufacturers lay to it? They are a very deserving class, and consequently prosperous; but it may be respectfully submitted that they do not need unequal legislation in their behalf. They are not a needy generation, but are well to do. The list of incomes on which a United States tax was paid, late annually published throughout the country, puts this fact beyond the shadow of question. In most sections of New England, they are the only men of large incomes. Now, it is no objection to these excellent men that they have been accumulating riches; they are rather deserving of all honor for their enterprise and vigor and success; but it is conclusive on this point, that they no longer need, even if they ever needed, any special protection from the government. Let them stand on the same level of advantage with other men, let them enjoy no unequal privileges, and everybody will rejoice in their prosperity. At present they occupy a false position, fatal to their own genuine self-respect, and to the hearty congratulations of their fellow-citizens. By the census of 1870

over forty-seven per centum of all our toilers work in agriculture, which, as we shall see, cannot be helped by the "Protection" to which it is forced to pay tribute; only twenty-two per centum of all are described as engaged in "manufacturing, mechanical, and mining industries." Even of these, the largest part work in branches which have never been "protected," and only suffer from the "protection" accorded to others. The census gives 12,505,923 laborers over ten years of age; not over 888,000 of these, or seven per centum, can be reckoned to "protected" branches of industry. How paltry the proportion to the whole people! Since 1873, most of the protected manufactures have been at a very low ebb, and failures among them have been more common than in the other branches of industry.

(4.) This brings us to a fourth objection, namely, *that, were it not for protective duties, other nations would take all our manufacturing away from us.* The first thing to be said about this is, that we do not manufacture for the sake of manufacturing, but for the sake of the product, — it is not the process that we care about, but the product; and even if it could be shown, as it cannot, that free trade would lessen the manufacturing, that would not be so deplorable, provided we obtained by it for the satisfaction of our wants as many or more manufactured products. Satisfactions, and not efforts, are ultimate in the field of exchange. In the second place, it is needful to look at the meaning of the word, manufactures. So far, I have used it in the loose popular way by which it has come to mean practically in this country the processes by which

cotton, wool, and iron, are rendered available for various human uses. These more prominent interests are currently meant under the terms manufactures and manufacturers; but of course the terms properly include a wide range of efforts beyond these, indeed almost all forms of industry not agricultural, and not primarily mental. Now to say, in the broad sense, that protective duties are necessary in order that manufactures may succeed, is to make a statement which can be shown to be false. The only magic of a protective duty is to raise the price of certain domestic goods, either by keeping out the foreign goods on which the tariff-taxes are laid, or by raising the price of them by means of the taxes so that the domestic goods may sell for the same. It is an attempt to lessen natural competition by means of legislation. If the first effect follows, and the foreign goods are kept out, people console themselves by thinking, if foreigners are not allowed to bring those goods, somebody will make them at home for us. But this is only half of it. Those branches of manufacture, or of agriculture, as the case may be, which were furnishing the goods wherewith to pay for those commodities about to be imported but now prohibited, lose their market. If we will not buy, of course we cannot sell. If we prohibit importations, we thereby necessarily prevent exportations; that is to say, we take away their market from those who manufacture or grow the goods which would be exported. We depress a profitable branch of manufacture by taking away its market, for the sake of introducing or fostering a branch which is by supposition and confession unprofitable.

The advocates of protection do not claim that branches of business which would otherwise be profitable and self-supporting should be protected, but only the weak and less profitable kinds; and so to bolster up these, protective duties virtually destroy other branches of industry, which only ask that their natural market shall be let alone, to maintain an independent and profitable existence. It is impossible to characterize in terms of respect so short-sighted and miserable a policy. How can a free commerce depress manufactures, when every nation must manufacture or grow a dollar's worth at home for every dollar's worth imported from abroad? How can high duties foster manufactures as a whole, when their very first effect is to cut off from their market all those manufactures which would otherwise have gone abroad with a profit, and their second effect merely to stimulate up to the general level of profit those which it is claimed will not otherwise yield a profit?

If the second general effect follows, and the foreign goods still come in though enhanced in price by the tax, and the corresponding domestic goods are in consequence enhanced in price because the foreign having paid the tax can no longer undersell them, then all consumers of both goods pay an artificial and unnecessary price, and manufacturers themselves cannot long avoid paying this price on some things. If they could get their own product protected alone, that would be one thing, — a very unjust thing, certainly, but profitable to them, — but under a protective system *many* things must be protected, and manufacturers have a need to pray to be delivered from the fruits of their own device.

Some of them soon become sufferers under the system. So it is in this country now. Manufactures are burdened by the unnatural prices of many of their materials. It is as the friends and not the enemies of manufactures that we demand the abrogation of restrictive duties; for manufactures can never reach their point of just expansion and proper strength, until this really repressing system shall be abolished. It was the manufacturers of England who contributed to inaugurate free trade in that country, and they have found it profitable; the French manufacturers were afraid that if the barriers of restriction were thrown down, as proposed in the Cobden-Chevalier treaty of 1860, their business would suffer from English competition, but the result showed how futile were their fears; and some of the most penetrating and prosperous of our own manufacturers are now demanding industrial freedom for themselves and for others.

(5.) A fifth objection allied to the last has been much urged by Mr. Carey, namely, *that, without protection, our country will have no diversity of employments, and will be confined to agriculture.* But the truth is, diversity of employments is rooted in human nature, and in the circumstances amid which God has placed men, and so far is it from law being necessary to foster this diversity, that law is powerless to prevent it! While we were colonies of Great Britain, the laws were very strict against domestic manufacturing of almost all kinds, and yet long before the Revolution, the various branches of manufacture were introduced and prosecuted in spite of the laws: clothiers' mills went up along

the mountain streams; wool and woollens were exported; in 1721 "New England had already six furnaces and nineteen forges. The product of iron was still more active in Pennsylvania, whence a supply was furnished to the other colonies."[1] The manufacture of steel was also attempted. Parliament felt itself called on to pass laws again and again prohibiting under severe penalties these incipient manufactures, sometimes making them liable to summary destruction as "nuisances." As soon as a branch of industry becomes profitable, and suitable to the conditions in which a community is placed, nothing but extreme vigilance can prevent its springing into being. Men naturally, spontaneously, under the pressure of necessity render to each other such services as are in demand, and as are possible to be rendered in the state in which they are placed. Foster manufactures artificially? They will come in naturally and inevitably just so fast and so far as they ought to come in. They are as natural to men as agriculture. They require capital indeed, and on a large scale, a large capital. So does agriculture. Capital is the growth of time and of frugality. No new society can come at once into all the forms of industry which adorn an old established State; there must be a gradual growth of capital and of skill, and as these increase, one branch of industry after another comes in, and finds a stable foothold; and as capital further increases, and the rate per cent. of capital goes down, it becomes profitable to do many things which it would be sheer folly to do at an earlier period. When every dollar of the capital of a coun-

[1] Hildreth's *United States*, vol. ii., p. 297.

try can realize a clear gain of ten per cent., is there any sense or reason in withdrawing a part of it into occupations which can only yield six per cent.? "But we must have diversity," says Mr. Carey. Certainly, we want diversity, but only a natural diversity, in which each branch can stand on its own legs, and not find it necessary to tax all its neighbors in order that its own profits may equal the average of theirs. The theory of a protective tariff is this: that certain unprofitable branches of business shall be cared for by the State, that is to say, the citizens shall be taxed to bring up the profits of these to the general standard of profits. Is a diversity, thus secured, a profitable diversity? Would it not be better for all concerned not to enter at present upon forms of industry that by confession do not pay? "But," urges the advocate of protection, "if they do not now pay, they will pay by-and-by." How do you know that they will? The fact that they do not now pay, is not of itself good proof that they ever will; and at any rate, it strikes a good many people that it would be better to wait till that time comes, and to enter upon branches of industry just as fast as they become profitable, and no faster.

It seems strange to me, that Mr. Carey, whose general confidence in man and in nature is so justly strong, should find his confidence desert him just at this point; should show so much impatience with a natural progress of diversity and association; and should vehemently invoke the assistance of law to help on diversity within a sphere for whose general freedom he is a distinguished champion. He is less consistent than the famous old lady, who, when the

horses ran away down the hill, trusted in Providence until the breeching broke, and then gave all up for lost. Mr. Carey trusts in Providence, and does well; but all at once, when to other passengers as clear-sighted as himself there are no signs of anything giving way, he shrieks out that the breeching is breaking, Providence is inadequate, we must have recourse to Protection.

The idea that the United States, with a greater variety and abundance of natural resources than any other country on the globe; with an industrious, and enterprising, and skilful people; with mountain streams which leap to the wheels of industry with a song; with forests and coal-fields, and mines; with marts and markets, and navigable lakes and rivers; with a genius for traffic, and a keen eye to profit, — the idea that the United States is to be reduced to a mere farming country, unless government can be coaxed to tax foreigners and citizens in behalf of some branches of manufacture which are asserted to be otherwise unprofitable, — is too ridiculous for serious refutation. Why, no nation of the earth has such facilities for manufacturing: the raw materials are here; the food is here in abounding measure; the instruments are here in water, wood, and coal; cattle and horses and pastures are here; everything is here which a nation can ask for with which to produce either directly that which is wanted, or directly that with which to purchase at the cheapest rates what is wanted from abroad: and if God shall give us grace to mind our own business, to avoid entangling alliances and wars, to get and keep a sound money, and to rise above the silly jealousies which

have hitherto restricted trade, we shall yet be the beehive of the nations, the chosen home of the industrial and civilizing arts.

(6.) Mr. Carey finds an objection to Free Trade *in the success of the policy of Colbert, the famous finance minister of Louis XIV.* Colbert certainly did much for the prosperity of France, and well deserves the fame which posterity is so ready to accord. But to refer the immense industrial impulse which France received at that time in any considerable degree to the restrictive duties laid by Colbert on foreign trade, is an instance, by no means single in Mr. Carey's books, of a fallacy called by the logicians *post hoc ergo propter hoc.* It is most unsatisfactory and illogical to be told that one thing came after another and therefore was caused by it. Colbert did many things much better worth the doing than to lay prohibitory duties. He swept away, so far as lay in his power, all the obstacles to the freest interchange of commodities within the realm of France. He abolished the interminable internal tolls and duties. He simplified and reduced the taxes. Says Henri Martin, — "We are struck with admiration to see Colbert begin by reducing an impost thirty-three per cent., on the increased product of which he founded in great part his hopes. Trampling on the routine of the exchequer, he had comprehended that consumption increases in equal or even greater proportion to the abasement of duties that weigh on consumable objects, and that the public treasury does not lose what the well-being of the people gains."[1] He abolished superfluous offices, and

[1] *History of France.*

introduced economy, and, as far as possible, honesty into every department of the State. He emancipated the Communes from their old burdens, and forbade their incurring new debts. He renovated the whole industrial and financial system; and France began mightily to prosper. But he was also in part, unfortunately, a disciple of the mercantile system. He laid heavy duties on foreign goods, which of course provoked foreigners to lay similar duties on the products of French industry. Martin himself, with whom Colbert is a hero, acknowledges this consequence. It has never been proved, and never can be, that the high duties contributed to the then prosperity of the French; the weight of bare authority is about evenly balanced on the question; but he who follows reason and science in the premises will not hesitate in his decision.

(7.) A seventh objection much urged against a free commerce has been, *that other nations have a more abundant capital, and consequently lower rates of interest and profits, than we have, and therefore a restrictive tariff becomes needful.* It is fair to presume that they who say so know that foreign trade depends only very remotely on the absolute cost of the articles exchanged. If they do not know this, they are ignorant of the one fundamental proposition of commerce, and their reasonings as a matter of course cannot reach correct conclusions. If familiar with this proposition, they should see that any reference either to lower interest of money or to lower wages is, in this connection, entirely irrelevant. It is a matter of indifference to us what the goods we buy from abroad cost their producers, whether they

paid high wages or low wages, high interest or low interest; we do not care about the absolute cost of production of anything we buy; the question of interest for us is how much of the home commodity must we give for it, and what does the home commodity cost us. The simple question that determines foreign trade is this,—would the commodity, if produced here, cost more than that commodity with which we buy it? If it would, then we profitably import it; and this, without any reference to its cost to the foreign producer. Whether he pays high wages or low wages, high interest or low interest, whether capital is abundant there or scarce, has little to do with this question of a profitable exchange of commodities, and justifies, in no conceivable manner, the restrictive system. California has much higher wages and a much higher interest than New England; does she need, therefore, to prohibit New-England ships from entering the Golden Gate? Is it for her interest to put restrictions on New-England goods? Does New England, because wages are lower here, get more than her share of advantage in the California trade? If not, no more would England or India in a trade with us. We trade with all the world: some parts have a higher rate of wages and interest than we; some parts have a lower rate; so far as that matter is concerned our trade may be equally advantageous with them all.

To this law of foreign trade there is, however, a single not unimportant exception. When two nations go into the market of the world with the same commodity, to buy gold and silver, then the absolute money-cost of that commodity is, as

between the two, an important question. That one of the two nations whose wages are lower, and whose rate of interest is less, in the manufacture of the common commodity will, in a trade for gold, under-sell the other — that is, can afford to give more of its commodity for an ounce of gold, because its commodity has cost less in gold. This is clear, and it is the only case where foreign trade is determined by the absolute cost of production. But our objectors get no crumb of comfort here; for in the first place, the commerce of the world is not a commerce for gold and silver, but a commerce of commodities, in the exchange of which relative cost is the only principle. And in the second place, when two nations go into the market of the world for gold, they rarely carry the same commodity, but carry, each its own peculiar commodities, in the production of which it has the greatest advantage. They have a strong motive to do this always, for that which they have the greatest advantage in producing will buy all other commodities, gold included, at the cheapest rate. Here too the relative cost decides. And in the third place, if two nations do carry the same commodity into the same market to buy the same gold, and the nation whose wages and profits are higher is thereby at a disadvantage in the trade, how is a restrictive tariff at home to help that matter? The true remedy is to cultivate our own peculiar advantages to the highest point, and carry those commodities abroad to buy our gold, and not endeavor to compete with our neighbor in the same commodity. High wages and high profits are a vast national advantage; restrictive systems tend certainly to reduce them; but

shall we throw away a great advantage enjoyed by all laborers and all capital in all departments, in order to compete with less fortunate nations in a single trade with a single commodity? The folly of this is patent; especially as the United States is a gold-producing country, and not only supplies herself with gold, but half the world besides. The United States produced in the twenty years from 1848 to 1868, $1,255,000,000 of the precious metals.[1] Besides, is it not a little strange to hear the doctrine seriously propounded that we are put at a disadvantage in foreign trade, and that restrictions are made necessary, because on the whole we are making so much money? If the current rate of interest and profits is so high with us, it shows that we are doing well on every hundred invested! One would suppose that capitalists might be content with such high profits! At any rate, one would think that the disadvantage in trade would rest with those who get the less returns on their investments, rather than with those who get the larger returns!

Skill in manufacturing is most likely to be developed in any country under the freest competition, under circumstances which make everything depend on relative skill, rather than under circumstances which make very little depend on it; and capital is most likely to be acquired, other things being equal in that country in which each man enjoys the right of selling his product in the best market wherever that market is to be found. The sharp spur of emulation, added to the keen impulse of interest, carries skill to its highest point, and the opportunity to buy

[1] J. Ross Browne's Report, 1868.

in the cheapest market and sell in the dearest, carries capital to its highest point, and a restrictive tariff is only an impediment to both. Skill and capital will create commodities, either those directly wanted, or those indirectly wanted with which to buy the others. If these others can really be obtained by us at a less expense of effort through exchange than directly, is there a decent reason why we should prefer to get them by a harder when an easier way is open? We shall not get them without being obliged to pay for them, and to pay for them will require a full expenditure of effort and skill. If foreigners have the advantage over us in some things we have the advantage over them in many things; and all exchange and all the profits of it depend on relative superiority at different points.

(8.) An eighth objection to free trade has been plausibly and pertinaciously urged, namely, *that each nation ought to be independent of others in all the more essential articles of life; and therefore protective duties ought to be laid in order to compel the nations to make or grow all articles of prime necessity for themselves.* The objection divides itself into two parts, the postulate and the inference, and it shall be considered in that order and relation. First, every nation ought to be independent of others in respect to the supply of its more necessary wants, such as food, clothing, means of defence and offence, and so on. But what is it to be independent? I suppose it means, in this connection, to be sure of getting what is wanted under all contingencies. But is an individual man to be regarded as "dependent," and as likely to

lose his bread, unless he devote himself to the growing of food directly? If he only has wherewithal to buy food, I take it that he is just as "independent," just as likely to get it, as if he produced it himself; and so a nation which has products to offer which are in demand in the world without, is very sure of getting whatever it wants, provided it is anywhere to be bought, and is, in my apprehension of it, in a very "independent" position. Protectionists have degraded language and degraded exchange by trying to make it appear that a man and a nation are reduced to conditions of dependence whenever they find it for their interest to buy; but the truth is that there is nothing dependent in buying and selling; the parties stand on a footing of perfect equality towards each other; each is at the same moment buyer and seller; one is as independent as the other, and nobody can be more so than either, except the savage and the hermit, who live in a state of isolation. Moreover, every nation does of course devote itself directly to the supply of its principal wants, and always continues to do so, unless it appears that it can supply those wants more cheaply through exchange. If it can supply them more cheaply through exchange, it becomes, in my judgment, more "independent" by doing so; more independent of irksome effort, and more sure of getting its wants supplied, since now it draws its supplies from a wider surface, from any point in the wide world where such supplies are to be had and where its own products are in demand. So far as food is concerned, this objection sounds but poorly in the mouths of protectionists, who are the men

perpetually bemoaning the prospect that every nation, unless it follow their advice and lay protective duties, will be exclusively agricultural.

But the inference is even less defensible than the postulate. Let it be admitted, for argument's sake, that to buy is to be dependent, and that every nation loses a part of its independence by every act of foreign exchange by which it obtains its necessary supplies; does it follow that protective duties are the true remedy? No. Prohibition is the barrier to hold up before the waning independence of the nation. Why allow a thing to go forward under more onerous conditions, which under less onerous was proving fatal to independence? If for the citizens to import freely be so disadvantageous to their independence, how disastrous must it be to have the importations still go forward under a tax in addition, which the citizens must pay!

(9.) Another objection to a free commerce that will be noticed here is, *that the higher paid labor of this country makes it impossible for us to trade freely with those nations in which a lower rate of wages prevails.* This objection has been more than once impliedly answered in these pages; but it requires, and can be given, a specific refutation. There is a subtle but complete fallacy in it. It is one of the many fallacies that have their lurking-place around the word "*wages.*" It is admitted that the rate of wages rules higher in this country than in European countries, and all good citizens, I believe, rejoice that the reward of laborers is high here, and desire it to become higher rather than lower in the time to come. But a high rate of wages does not necessarily im-

port *a high cost of labor.* This was demonstrated at length in our chapter on Cost of Production. The cost of labor to the capitalist is made up of three elements: first, the nominal rate of wages; second, the efficiency of the labor; and third, the dearness of the commodity in which the laborer is paid. It would seem to be a patent fallacy to confound one component with a resultant of three components; and yet our present objector invariably proceeds in his discussions as if a high rate of wages means a high cost of labor. He uses the former term as if it were synonymous with the latter. The arguments proceed, and the conclusions are reached, on the assumption that the cost of labor is higher in this country than in Europe, while all that is asserted in the premise, and all that is true, is, that the nominal rate of wages is higher. The logical force of the process and the security of the conclusion are destroyed the moment it is perceived that rate of wages and cost of labor are two very distinct things. It is fortunate for the United States that the two things are distinct; for while the rate of general wages is higher here than in Europe, the cost of general labor is lower here than in Europe. The unmixed evils of a depreciated money have been disguising this truth for several years past, but it is a truth nevertheless that cannot be questioned when the light of the following considerations is cast upon it. (1.) The cost of labor must be lower in this country than in Europe because the rate per cent. of capital is higher. Labor and capital alone conspire in production. *Profits are the leavings of the cost of labor.* If, therefore, on every hundred invested the rate of profit is

higher, the conclusion is unavoidable that the cost of labor is lower. (2.) To account for this lower cost of labor, we have (*a*) The fact of the greater efficiency of labor. The greater the efficiency of labor, other elements as before, the less its cost to the employer. Labor is more efficient here, because the motives to labor are stronger and higher, because the general tone of things is more energetic, and because labor, all departments being considered, is more *generally* armed with labor-saving appliances. We have (*b*) The usually cheaper cost of that in which labor is paid. Abroad the laborer is paid in gold and silver. Here he has long been paid in a depreciated money. Besides this, the price of general commodities even on a gold standard is usually higher here than abroad. Therefore the cost of even gold to pay his men is less to the employer here. We have (*c*) The fact that fewer persons are employed, in establishments that do equal work, here than there. There there are more supernumeraries, more persons more or less pensioned by the establishment, more gradations in authority, more wages of superintendence. Here, the fewest possible number of persons is employed, there is comparatively little superintendence, and each person is put upon his or her full power of work. We have (*d*) The fact that our laborers are usually temperate, and are ready to begin their work on Monday morning; while most of the common laborers, in Great Britain certainly, are more or less intemperate, and come late and enfeebled to their work from their Sunday's debauch. We have (*e*) The fact that British hours are 54 per week; ours are 60 to 66. We have, so far as cottons

are concerned, (*f*) The fact that American cotton costs the Manchester spinner about one cent per pound more than the Lowell or Fall River spinner; which is an American advantage equal to 20 per cent. on the *labor* employed in manufacturing it. We have (*g*) The fact that freight and charges on the goods back to this continent are not less than 4 per cent. on the whole value more than the freight — to Canada, for example — from Lawrence or Lowell; which is equal to about 20 per cent. advantage on the *labor*. Our average wages of 14 classes of operatives in woollen mills, is, in gold, according to our Bureau of Statistics, but a trifle over 20 per cent. higher than in England.

The figures of our last census scatter a good many illusions, and among others the illusion that *wages* are the great element in the cost of manufacturing. They are, in fact, 19.40 per cent. of the value of the product in the manufacturing, mechanical, mining, and fishing industries of the United States. The value of the *materials* used is 57.19 per cent. of the value of the product. The remaining 23.41 per cent. of value of product is due to buildings, machinery, profit, and so on. Wages in the cotton and woollen industries taken alone constitute still less an element of cost than the average in all the similar industries given above, 19.40 per cent. If we call wages in round numbers 20 per cent. of the value of the product, and if American wages in woollens are 20 per cent. higher than English wages in woollens, then England's advantage over us in woollen wages, *conceding to her laborers equal efficiency*, is only 20 per cent. of 20 per cent.,

or 4 per cent. of the whole value. So throughout. The advantage that Great Britain has over us in *free materials* outweighs manyfold any possible advantage she can have in lower-priced labor. Materials are an element nearly three times larger in cost of manufacturing than wages are. Besides, low-priced labor is apt to be very poor labor. It is one of our grand advantages that our labor is *not* pauper-labor, but the opposite of it. Low-wages countries are always afraid of the competition of high-wages countries, and justly so. It is the competition of *England* that is most feared on the Continent of Europe, though English wages are the highest in Europe. With our still higher wages we have wrested many an industrial triumph from England herself; at the Vienna Exposition in 1873, American woollen cloths were exhibited whose absolute cost per yard was less than that of any corresponding European cloth exhibited. What could we not do with a good money and a free commerce!

(10.) The commonest objection to free trade is the shallowest of all. Yet it was presented with a sober face by a distinguished congressman as the consideration most likely to defeat the Wood tariff bill in the spring of 1878. Undoubtedly it contributed as unworthy means towards that unworthy end. It is this: *Free Trade would flood our markets with cheap goods.* When every other word fails, this leaps into the mouth of our protectionist. From his horror of being "flooded," one would think that every protectionist in the land was personally present at, and had a vivid recollection of, the Noachian deluge! Other things indeed may be bad, but to be "flooded with

cheap goods" is an indignity to which your protectionist will never submit! Does it betray a secret consciousness that he has "built his house upon the sand," that he has such mortal fear of the time when the "floods" will come? Two things are to be said about this objection. (1.) It has no force as an *argument.* The only way in which this country can be "flooded" by the cheap goods of foreigners, is by our "flooding" foreigners with our own cheap goods. Foreigners may not be fully enlightened, but they have never shown any very alarming tendency *to give away* the products of their toil. If they were so foolish as to do this, I, for one, should think it wise for us gladly to receive all that they would give! Undoubtedly, they are ready for a *trade;* and if we were up to our opportunities, we should meet them more than half way! We are complaining of *over-production:* would it not be a good thing to find a market for all our surplus? Our people are feeling very poor since the crisis of 1873: would not these "cheap goods" — the cheaper the better — legitimately *bought* by our own cheap goods now idle in stock, be a great relief and blessing all around?

(2.) It has great force as a *confession.* It confesses that Protection is a barrier to trade. It confesses that a tariff makes goods dear. It confesses a fondness for scarcity. It confesses a terror in view of abundance. It confesses that free trade would make things cheap — very cheap. In short, it confesses that Providence and Natural Law and Good Neighborhood as between nations must be thwarted, if possible, by artificial, misanthropic, nationalistic barriers.

I have now answered, with what success the reader must judge, every considerable argument that I am aware of as urged in this country against the policy of a free commerce. I have a few brief objections to add to the opposite doctrine of Protection.

(1.) It is no part of the proper province of government to undertake to redistribute the rewards of industry. Government has a right to take a part of the fruits of every man's industry for its own maintenance; but when it goes beyond this, and forcibly takes a portion of the fruits of one man's industry to reward another man's industry, it steps out of its true sphere. Every man has a right to all the rewards of his own industry, except as to that part which government takes in legitimate taxation. No government is wise enough, or ever will be, to say how much of the results of my labor I shall contribute to my neighbor to remunerate his labor. Congress has nothing to say about that. Congress is bound to give us both the benefit of equal laws, and then to leave us both to take care of ourselves. It is no part of the duty of Congress to see that any set of men whatever are making money. When, therefore, any branch of industry, in the exigencies of business, is depressed, for the leading men in it to go to Congress with their tale of woe, to induce that body to lay a tax for their relief on their neighbors, to empower them to pass round the hat in the community, like mendicants, and compel other men to drop their contributions into it, is as pitiful on the one side as it is extra-governmental on the other. The American people are patient, but they have borne with this sort of thing about as long as they will bear with it.

(2.) It is a second objection allied to the first, that the protective scheme is wholly a matter of finesse. If *all* interests were "protected" and "protected" alike, the issue of all the distributions and redistributions would be that all would stand relatively as before, but worse off by the losses of the process. Therefore it becomes a struggle of interests; and each interest, or combination of interests, endeavors both to get itself "protected" and that the rest shall not get "protected." The woollen men, for example, are anxious for high duties on foreign woollens, but are much less anxious for high duties on foreign wools. The wool-growers, however, do not see why they are not as much entitled to "protection," that is to say, to rob the public, as the woollen manufacturers. It would be difficult for anybody to see why they are not as much entitled to it. Which, then, shall get the better of the Committee of Ways and Means? That is the question. It is a question of lobbies, of influence, of indirect or direct bribery. So of other interests The fact is, that the leading interests protected have been obliged to yield so much to the pressure of other interests with equal claims to protection, that, with a few exceptions, no classes would be benefited so much by the abolition of all protection as would they. They have purchased the right to pluck the community at one point by conceding to other parties the right to pluck them at a dozen different points. The woollen manufacturers, for example, have to pay a considerable duty on foreign wools, a high duty on foreign machinery, and an enormous tax for protection on every pound of iron

they use. If now the principle of protection were abandoned, they would be relieved of all the contributions levied on them by others, and the public would be relieved of the contribution levied on it by them. It would be a relief all round. The interests of the manufacturers are coincident with the interests of the public. The product cheapened by the abolition of all these high duties, as well those which the manufacturers have *to pay* as those which specially protect *them*, would find a vastly extended market, not at home only, but also abroad; and such depressions in business as the woollen men are now suffering from would become rare indeed. Those branches of business, and they are numerous and important, which have never had a syllable of protection in the United States, have been the most prosperous and are now the strongest. They have to send no delegations to Washington. They expend the ingenuity and the money which protected interests spend in artifices, in the development of their business; and they have found, what the others at no distant day will find, that honest industry and skill are better in the long run than the highest strategy of the lobby.

(3.) Protection is a wasteful way to reach the end ostensibly proposed by it. It is claimed to be needful to encourage weak branches of business. Let us suppose for argument's sake, what would be folly to concede in reality, that it is desirable for the public to encourage a presently unprofitable business. How can it most cheaply and most certainly do this? Clearly enough, by offering a direct bounty on all that is actually produced. Let the public know

what it gets for what it gives. Suppose the article wanted be hats. It is unprofitable at present to manufacture hats, but the public thinks it desirable to introduce the manufacture at the expense of the people. Very well. Let the government offer to pay outright from the public chest, say $2, for all hats of a certain quality made in the country. The bounty would be paid only so far as the manufacture was actually carried on. This stimulus would be explicit. All would be open and above-board. Everybody could see what was done, and what it was done for. This would be demonstrably the cheapest and most certain way to encourage hat-making. For suppose, on the other hand, the protective method be adopted, and a duty of $2 apiece be laid on foreign hats to encourage the home manufacture. Every consumer now pays an extra $2 for his hat, but there is no assurance that anybody will go into hat-making. Nobody is pledged to do it. It will depend upon the comparative prospect of making money in that, or other business, whether that business is continued and developed under the duty. Suppose, however, that the home market is one half supplied by the home production, and one half by the foreign article enhanced $2 in price by the duty. Suppose the market takes 2,000,000 hats. Then $4,000,000 are paid by consumers to encourage hat-making, when $2,000,000 in bounties would encourage it to the same extent. Unless the duty be so high as to keep out the foreign article altogether, there is a good deal of money paid by the people for hats that does not encourage hat-making. The system is wasteful. Why then is it preferred? It is

preferred for the same reason that the fisherman prefers water a little muddy to fish in. The destined prey cannot see the operation of things so well! Protection is a cover under which the people are cheated. Is it strange, then, that the people grow indignant?

(4.) Protection makes a promise at the outset which it rarely fulfils. Special interests ask for protection to enable them to "start," holding out the promise that they will soon be able to walk off alone. Unluckily, the facts all show that that time, in their judgment, never comes. The interests which are the most highly protected in the United States at this moment, "started" in Massachusetts more than two centuries ago! The manufacture of linen, woollen, and cotton cloth was begun in Massachusetts in 1638, in Rowley, by some families from Yorkshire; and became so remunerative in less than three years that several acts of the General Court designed to stimulate it were repealed.[1] Every point in the protectionist argument implies that industries cannot start without artificial help. The facts are all against this. Ship-building, commenced in 1631, was firmly established as an industry by the first generation of civilized men inhabiting New England shores.[2] Brick-making, glass works, and the manufacture of salt, were all begun in Massachusetts before 1640. Tannery and shoe-making commenced about the same time, and within twenty years boots and shoes became articles of export; and their manufacture, which has never had a particle of "protection," is to-day

[1] Palfrey's *History of New England*, vol. ii., p. 53.

[2] See *Ninth Annual Report Mass. Bureau of Statistics and Labor*, 1878.

the leading industry in the State, and distances cotton goods, which is a highly "protected" product, about $12,000,000 a year. Iron works were thoroughly established during the first thirty years of Plymouth and Massachusetts Bay Colonies, and now produce $310,000,000 worth of products a year. These all and many more started without help, and in spite of governmental hostility. The weak industries in this country to-day are the protected industries, and the weakest are those which have been most protected. The promise has not been fulfilled. "Give us a little more protection, and we shall soon be able to go alone." Yes; *but when?* Young men, sometimes with but little capital, have started in this country in all branches of business, by the side of old firms in settled business, and have succeeded by dint of tact, skill, and industry: the industries of the United States will succeed by dint of the same, *and never otherwise.*

(5.) Protection always gives birth to smuggling, and other frauds upon the revenue. Secretary McCulloch, in his Report for 1866, estimates these for that year at $92,000,000. The country will do well to ponder over this instructive official commentary on the principle of high duties. "Gentlemen," said Sir Robert Peel to the House of Commons in 1842, "what is the use of fixing our rates so high as to allow the smuggler to underbid us?" Smuggling has always accompanied high protective duties, and always will. Laws and vigilance have been unable to prevent it. Laws and vigilance are unable to prevent it now. To evade honest taxation is a high crime against society. To evade laws passed, not

for revenue, but to foster class interests at the expense of the many, is a much less crime. It is a rude attempt to right a wrong. Government is the first and main offender. Let it yield to all men their just rights, including the right of free exchange subject only to fair taxation, and it will have no occasion to harry smugglers, and spend millions of the people's money in useless vigilance. To levy such high duties as either to prevent importations or to encourage the smuggler is a gross mistake. The country loses its revenue, the honest importer his business, the public morality becomes corrupted, and the manufacturer is not ultimately protected.

(6.) Protection defeats itself. Tariff-taxes, like other taxes, reappear in higher prices of commodities. If these taxes be high, and many, as they must under a system of protection, nothing can hinder high ranges of those prices in which the tariff-taxes directly or indirectly appear. The protected goods are raised in price, not simply by the action of the duties put for that purpose on corresponding foreign goods, but frequently also by the action of duties put on other foreign goods for the purpose of protecting somebody else, which goods have entered in as materials or machinery to further domestic production. It is the high prices of these classes of goods that invite foreign importations. Such is a good market to sell in. As soon, therefore, as high tariff-taxes have had time to work out in high prices, foreigners can pay the high duties and still sell and undersell in such an artificial market. With this principle all facts agree. It accounts for the constant clamor for *more* protection. It accounts

for this, that importations are never permanently stopped by high duties. Such duties make prices artificial, business precarious, losses inevitable, and "protection" self-destructive.

(7.) Protection cannot raise *all* prices. It can raise the prices of *some* things, but in so doing it necessarily depresses the prices of *other* things. Restraints on a profitable commerce must lessen the incomes of the people at large; if therefore, under protection, some things are raised in price, there must be less money or other valuables to go to other things, and *they*, consequently, must sink in price. If protected goods, and goods into which dutied goods have entered, are now higher than before, then non-protected goods must be lower than before. Here the greatest loss falls on the *exportables* of a country. Exportables cannot be protected. Their value is determined by the conditions of the foreign market. In effect, the imports constitute the market for the exports. If tariff-taxes lessen the imports, the value of exportables declines of course. If the exportables be manufactures, the protective duties, if at all general, will enhance the cost of their production, and thus be likely to exclude them thereafter from the foreign market. For example, in 1860, the United States exported $11,000,000 worth of coarse cottons; the next year a protective tariff was imposed, and has been kept up ever since; the export fell off to less than $3,000,000, and the extraordinary efforts of late years to regain the foreign market thus lost have not been successful. If the exportables be agricultural products, as is mainly the case with us, the loss in price consequent upon protection falls

heavily upon the farmers. What they have to buy is enhanced in price by the tariff, and what they have to sell is depressed in price by the tariff. They are the ass that bears most of the burden and eats least of the hay. What reason would thus expect, the price-lists actually show. As manufactured products have risen in price, so raw produce has declined in price, under our successive protective tariffs.[1] Not augmentation, but an unjust distribution, is the art of protection. Free Trade alone can maximize the utilities and values of the world.

(8.) Protection is to be condemned when judged of by its own fruits. According to the census of 1870, there were in the United States one hundred and thirty-five fewer establishments making cottons, those remaining worked up 25,000,000 pounds less of raw cotton, and the gold value of the product was but little more in 1870 than in 1860. Woollen manufactures have been for several years in an unsatisfactory condition. Even the coal, iron, and steel trades are depressed and unsettled. We have thirty-seven times as much coal in this country as Great Britain has, and this is the principal factor in both manufacturing and maritime success, and yet our protected manufactures are in a low state, and ship-building has nearly ceased. In 1826, when the volume of our foreign trade was $162,000,000, 92.5 per centum of it was carried in American vessels; after *perfectly* protecting ship-building for half a century, in 1877, when the volume of our foreign trade was $1,176,000,000, *only* 26.9 *per centum of it was borne in our own bottoms.*

[1] See Colonel Grosvenor's *Does Protection Protect?* p. 264.

(9.) This country is at one and the same time *too small and too large* for Protection. It is too small, because the home market will not take up all we can make and grow. Mr. J. S. Moore has calculated that our manufacturing product has risen from $57.25 *per capita* in 1860, to $111 in 1870. We cannot sell at home all we can make: the country is too small. In an economic view, the one thing needful for this land at this moment is MARKETS, and the one obstacle to getting them is tariff-taxes and the navigation-law. On the other hand, the country is too large for the petty, piddling processes of "protection." There is too much capital, too much labor, too much skill, too large a progress already made, too great resources, too endless opportunities, to be frittered away under a paltry scheme, that makes no appeal to any disinterested impulse of mankind.[1]

It is pleasant to be able to confirm one's reasonings with facts, to clench the nail driven home by a logical process, with a blow or two from the hammer of actual experience. It is fortunately possible to do this in regard to free trade. The Greeks and Romans, though the latter at times stopped the exportation of specie, never dreamed of putting obstacles in the path of ordinary traffic. At Athens, all exports and imports were subject to a duty of *two per centum*. In the ports of her subject allies, Athens laid a duty of *five per centum*, in lieu of tribute. When, in a few exceptional cases, she laid *ten per centum*, it was denounced as downright extortion.

[1] Compare Horace White's admirable monograph, "The Tariff Question," in *Galaxy*, October, 1877.

The ports of Rome and Italy sometimes enjoyed a perfectly free trade; but generally, in them, and in the ports of the provinces, a revenue tax of *five per centum* was levied under the Republic, and *two and a half per centum* under the Empire.

England, which only commenced customs' duties as a regular thing in the first quarter of the seventeenth century,[1] and only commenced the protective system in the last half of it, abandoned the latter for substance in 1842–49. The English tariffs are adjusted with a view to revenue merely; and in the late special commercial treaties with France, the English have persuaded the French to lower their own duties more than they would otherwise have been inclined to do. England claims, through the mouth of her responsible ministers and statesmen, to set before the nations an honest example of free trade; and invites them, as I believe, in good faith, to follow her in the path which she has opened up for herself. The force of this example is frequently sought to be parried by alleging that England reached through protection a point of prosperity at which she was well able to dispense with protection. This is neither ingenuous nor true; since the men who have persuaded the English government to abandon the principle of protection, are the men who have demonstrated the economical folly of the principle under all circumstances; and have shown that England maintained the policy so long at a loss to herself as well as her neighbors. Other nations can say, if they please, "We will maintain protection as long as England did, and

[1] See Green's *Short History of England*, p. 470.

then follow her example in giving it up." But if they do this, they will do it at a loss, as England did, and too late bemoan their folly, as England does. Said Mr. Gladstone, Chancellor of the English Exchequer, in 1856, — "There is one domestic feature which I wish it were in our power effectually to exhibit to the governments and inhabitants of foreign countries. They know by statistics, which are open to the world, the immense extension which our commerce has attained under and by virtue of freedom of trade, and the great advancement that has happily been achieved in the condition of the people; but they do not know what it has cost us to achieve this beneficial, nay, blessed change; what time, what struggles, what interruptions to the general work of legislation; what animosities and divisions among the great classes which make up the nation; what shocks to our established mode of conducting the government of the country; what fears and risk, at some periods, of public convulsion. *These were the fine and penalty we paid for long adherence to folly* We paid this fine and penalty upon returning to the path of wisdom, which too late we wished we had never left. It is not easy to calculate its amount, but if it could be exactly reckoned, and fully exposed to the eyes of other nations, our juniors in trade, it might supply them with a timely warning against imitating our former errors, and with the best encouragement to the adoption, before they become entangled in the creation of artificial interests, of our recent and better example."

But it is said, as if that were sufficient to condemn free trade, that England adopted it out of

pure self-interest. Of course she did; and other nations will also adopt it from the same motive. No other motive is appropriate in the premises. The idea, disseminated by protectionists, that it requires a millennium for free trade to work in, is wholly fallacious; it requires an enlightened self-interest, and nothing more; and it is one of the grand wonders of Providence, that the elements of society are so wisely prearranged, that, within the sphere of exchange, the welfare of all is promoted through the enlightened self-interest of each. Trade is always selfish, just as much so under freedom as under protection; it is a sphere all whose operations are subject to the legitimate control of conscience, but it is not, and never was designed to be, a sphere of sympathy and benevolence: these have a sphere of their own, above and beyond the sphere of exchange. When a man gives, let him give, and enjoy the luxury of doing good; when a man buys and sells, let him honestly, but with an eye to self-interest only, buy and sell and get gain.

Since 1842, England has thrown off tariff taxes, which produced when they were on £26,000,000 of revenue, and yet the revenue has kept very steady under these successive remissions, and was in 1877 just about what it was in 1842, namely £20,000,000 a year. The number of tariff-taxes then was 1150: the number now is practically seven, namely those on sugar, tea, coffee, fruits, tobacco, wines, and liquors. Under this remission of tariff-taxes and repeal of the navigation-laws, the exports and imports of Great Britain, which in 1842 were little in excess of their average of the previous forty years,

went up in 1877 to the enormous aggregate of £595,671,000, two and one half times our aggregate, although our population is one third larger. Wages have increased at least twenty-five *per centum* in all skilled employments; hours of labor have been abridged; staple articles of food much reduced in price; and paupers decreasing in number all the time.

The year 1860 is memorable in the history of England for the negotiation and ratification of the French Commercial Treaty, and also as the year in which the remaining duties, avowedly of a protective character, were repealed. The results to France of the relaxation of her own duties are only less brilliant than those to England, as she has less fully embraced the system of freedom. French manufacturers were afraid of the competition of England, which they professed to be unable to withstand. The result has shown, however, that, in the eight years, France has sent to England four francs in manufactures to one franc received from England in manufactures. The explanation of this is partly due to the fact that the French have learned better than any other people the money value of elegance. They have learned that Beauty is a source of Wealth, and so they not only adorn their capital, and have made it by far the finest city in Europe, attractive as a resort to all the world, but also they contrive to make all their handiwork beautiful, and thus control in many things the markets, as they do also the fashions of the world.[1]

[1] This thought was suggested to me by my late lamented friend, Sidney Homer, of Boston.

The Zoll-Verein, or Revenue-Union of the German States, presents a splendid example of the prosperity which follows in the train of free exchange. The rate of imposts on foreign goods is varied from time to time by the Zoll-Verein Congress, but ten per cent. is the maximum, and the interests of the revenue are consulted in adjusting the rates below that: since 1851 the raw materials coming from abroad are admitted free, or nearly so. The proceeds of these duties go into a common treasury, and are then distributed among the various members of the Union on the basis of their population. Every member without exception now receives a larger revenue than it did before it joined the Zoll-Verein. The city of Hamburg, a chief distributing point for the imports, is a sort of bonded warehouse under the system. The dutiable articles are arranged in thirty-four [1] classes; and the simplicity of the rates, the lowness of the rates, and the fewness of the articles charged with rates, stand in striking contrast to these points in the present tariff of the United States.

[1] Zolltarif vom 1 October, 1873 an.

CHAPTER XIV.

ON THE MERCANTILE SYSTEM.

THERE have been three epochs in the progress of the science of Exchange. Each of these has been marked by a theory of its own, of which the two earlier were radically incorrect, yet prepared the way for the third and true system. We have already sufficiently considered the first of these theories, which assumed that gold and silver are the real values, and, consequently, that the only way for a nation to grow rich was to foster the importation and prohibit the exportation of the precious metals. The second commercial theory was more refined and complicated; we have already spoken of it as the Mercantile System, and partially explained its fundamental principle. The principle was to preserve the balance of trade, to make the exports greater than the imports, so that the balance should come back in gold and silver. The whole system is based on the absurd supposition that a merchant will carry abroad goods worth at home a certain sum, merely that he may bring back goods and money worth as much. Why, on that principle, should he carry forth goods at all?

The nature of trade, as mutually advantageous, was not understood. After every fair mercantile transaction, both parties are richer than before. The

more genuine exchanges there are between two countries the better, because the motive for an exchange is always and everywhere the mutual interest of the parties. The benefit of the exchange is shared by both, otherwise there would be no exchange.

But the Mercantile System led each nation to suppose, that, by manœuvre and finesse, it could obtain more than its natural share of advantage. England, for example, in her trade with France, found that, by natural tendency, she bought as much of French wines and silks as she sold France of hardware and woollens. Instead of being satisfied with a legitimate and mutually advantageous trade, the English, under the promptings of the Mercantile System, say, "This will never do. This will never do. There is no balance in our favor. We must sell to France more than we buy of her, or else we get no balance of trade." Accordingly restrictions are laid on some French goods. Their introduction is either prohibited, or heavy duties are levied on them, in order to lessen the quantity imported. This is done in the hope of selling to the French as much as before, but of buying less, this is, less French goods; so that the difference must be paid in gold and silver.

All that was mighty well! But unfortunately the gold and silver, even if they should get it, was no whit better than the French goods, and would probably go right back to France in the purchase of such goods. And unfortunately also the French were adepts in the Mercantile System; they wanted a favorable balance too. They must sell more than

they buy. Their exports must exceed their imports. Why not? And accordingly they prohibit some species of English goods, or burden them with a heavy duty; the English retaliate by new restrictions on the products of French industry, and are again in turn retaliated upon. Thus they go on tinkering and tormenting trade in the vain hope of some imaginary balance!

Because England and France are adjacent, and because their natural productions and acquired industry are so very diverse, they are naturally to an immense extent mutual buyers and sellers. France is gifted, perhaps as much as any country upon earth, in point of soil, climate, and natural productions. She produces with the greatest facility, and in the greatest abundance, wines and the cereal grains; and has unusual advantages also for the culture of the mulberry and the manufacture of silk.

England is not thus blessed by Nature; but she has freedom, and industry, and energy, and skill; these have made her for centuries the greatest manufacturing and commercial country in the world. She has always had those things to sell which France wanted to buy, and has always wanted to buy those things which France has had to sell. Exchanges between two such countries are natural and inevitable. If the governments undertake to forbid them, then the business will be done by smugglers, though with hazard and loss.

Now, the Mercantile System disturbed and well-nigh destroyed this natural and profitable trade. To be sure England could buy her wines of France

much cheaper and of better quality than of Portugal; but then it was thought that the balance of trade with Portugal could be made more favorable than that with France; and accordingly, in 1703, the wines of Portugal were admitted upon the payment of a duty $33\frac{1}{3}$ per cent. less than the duty paid upon French wines; and the woollen cloths of England, which had been prohibited in Portugal for twenty years, were to be admitted upon terms of proportionate advantage. Up to that time the light claret of France had been the beverage of the wine-drinkers of England. Thereafter the more intoxicating port became what Daniel Defoe calls "our general draught." It was a point of patriotism for the Englishman to hold firm to his port.[1] An economic blunder was followed, as usual, by moral disadvantage. Five generations of English gentry — for the preferential duty was not abolished till 1831 — paid tribute in increased drunkenness to the balance of trade. The habit of taking strong stimulants was established; coarser tastes became the fashion; and even now sherry must be mixed with brandy to be acceptable to English palates. To drink worse wines at a higher price, to incur a habit which is a national disgrace, were not the only consequences; for the French, to retaliate and to restore the balance, prohibited English woollens. Thus the French lost the best market for their wines, and the English the best market for their woollen goods, which the French must now purchase elsewhere at an enhanced cost. It was a dead loss all round, — a gratuitous loss without any compensation whatever.

[1] Knight's *History of England*, v. 267.

Some very instructive laws — instructive in their folly — were passed in England to foster the woollen trade, with an eye to an ultimate balance. A law of 1666 required all *shrouds* to be made of wool.[1] Another law to the same effect but more stringent issued in 1677. This was amended three years later by an enactment, that all corpses, except those of persons dying of the plague, should be buried in shrouds made of *pure* wool, under a penalty of £5. This law was repealed in 1814.

To encourage wool involved discouragement to flax and cotton. A table-linen, called huckaback, began to be extensively made in England about 1700. It encountered great opposition. It was held, that Providence had appointed the woollen manufacture as the special employment of the island, and that the most acceptable sacrifice was that of the flock. Ireland might grow flax and make linen, as some compensation for the injustice that had been committed towards her in absolutely prohibiting the importation of her cattle. Cotton was also coming in. As early as 1719, printed calicoes of English production had become not only fashionable but common. Clamor alleged that the manufacture of light woollen stuffs would be ruined, and so an Act was passed in 1721, to preserve and encourage the woollen and silk manufactures, by prohibiting the use and wear of all printed, painted, stained, or dyed calicoes, in apparel, household stuff, or furniture. Of course such legislation was nugatory; but here is the evidence, among many other proofs, of the supreme ignorance and folly of law-makers, who,

[1] 18th Charles II. chap. 4.

from the earliest days of the loom and the plough in England, have struggled to regiment all industry — to encourage or to prohibit — to determine what wages laborers should be paid, and what should be the profit of capitalists — to crush rising industries by taxation — to compel the people to eat dear food for the supposed benefit of the landowner — and, finally, to find out that the nation was never so universally prosperous as when its industry was wholly left to the care of itself, under the guidance of God's natural laws.[1]

So far was this regulating mania carried at times that almost all legitimate commerce ceased between England and France. So reluctant was the one to buy of the other, so fully were the statesmen of each under the influence of the prejudice that the prosperity of their neighbors was incompatible with their own, that Parliament, in William and Mary's reign, decreed that the French trade was a nuisance; and Adam Smith tells us that, in his time, that is, just over a hundred years ago, smugglers were the principal importers of British goods into France and of French goods into Britain.

(1.) The laying extraordinary restraints on the importation of goods from those countries with which the balance was supposed to be unfavorable, was one device of the Mercantile System to increase the quantity of gold and silver in that country. It was unfortunately not the only nor the worst one.

(2.) An obvious second expedient was to prohibit altogether, or to burden with very high duties, the introduction of all such goods as could be produced at

[1] Knight's *England*, v. 26.

home. If we can produce the articles at home, then we shall not have to import them, and that will help the balance. Under the influence of this feeling, England, damp and cold, in the very teeth of Nature's protests, undertook to rival France in the culture of silk. Heavy restraints were laid on foreign silks, and the monopoly of supplying the home market was given to her own manufacturers. Certainly, silk can be made in England, of a somewhat inferior quality and at a somewhat greater cost than in sunnier climes. To overcome these disadvantages, what was needed was the healthy stimulus of competition. If things had been left to take their natural course, and foreign silks had been admitted freely, the home manufacturers would have been put upon their mettle to discover improved processes, to invent machinery, to make up the disadvantages of Nature by expedients of Art. The plant never becomes hardy and strong that does not root itself amid the breezes of heaven; so neither does a branch of business grow up into self-sustaining and vigorous life without the stimulating breezes of competition. Of this the case in hand affords an excellent illustration. For more than a century the silk manufacture of England, fenced round and protected, as it was called, by these restrictive and prohibitory duties, languished, pined, and at times almost expired; for the simple reason that the manufacturers, instead of relying upon their own invention, skill, and energy, looked to the government for support, and to an artificial monopoly; and it would have remained till this day inferior in design and in every other good quality, had not a great statesman

Mr. Huskisson, who was denounced as "a hard-hearted political economist," made a partial beginning, in 1826, of that system of free trade which has raised this particular manufacture, as so many others, to an eminence which utterly disregards every danger of foreign competition. The duty on foreign thrown silk was then reduced from nearly fifteen to five shillings per pound; and on raw silk from nearly six shillings to three pence per pound. The consequence was that then first the English silk culture began to thrive; it has thriven from that day to this; the duties have been successively lowered, until, in 1860, the duties on foreign silks of every kind were abolished by Mr. Gladstone; and that England, which was to be ruined in 1826 by the importation of foreign silks, has been exporting for years silk of native manufacture sometimes to the extent of £2,000,000 worth annually.[1]

As an illustration of the mischiefs which the Mercantile System everywhere introduced into the realm of industry, let us look at this instance a little more closely. During the continuance of the monopoly, the English consumers of silk were obliged to pay a very high price for an inferior article. To whose benefit did this high price accrue? It was designed to accrue to the benefit of the home manufacturer. The sole object in laying the prohibitory duties was to prevent importations, and to leave the home market entire to the home manufacturer. Precisely at this point we see how the whole doctrine of Protection grew out of the Mercantile System. The Mercantile System wished to repress importations for the sake of the balance of trade; but if needful

[1] McCulloch's *Dictionary*, ed. 1869; Knight, v. 21.

articles cannot be imported, they must be made or grown at home; and in order to be made or grown at home, the makers or growers must be encouraged. The monopoly of the home market was precisely this encouragement; and it is owing to this single circumstance that influential classes in every mercantile community have supposed themselves benefited by this monopoly, that the doctrine of Protection has lingered so long in the general mind. It is easy, however, to see that this benefit is in most cases wholly imaginary; and that the high prices paid by the consumers do not, on the whole, strengthen the manufacture, as has been supposed. If the government had gone further, and given those who had already commenced the culture of silk the monopoly against their own countrymen as well as against foreigners, so that nobody could engage in the manufacture except those already engaged in it, then, indeed, these would grow rich at the expense of their countrymen. Government would take money out of the pocket of every consumer of silk, and put it into their pocket, and the whole benefit of the high prices would accrue to the manufacturers alone. But governments have rarely gone so far as this. They have excluded foreign competition, but not prohibited home competition; and the result has been, that the high duties which excluded the foreign goods, and the consequent high prices of the domestic product, have drawn many men and much capital into that business, in the hope of an extraordinary profit. The business has been artificially stimulated, and capital has been thrust into it which would not have gone

of its own accord. The thing has been overdone; and the feverish home competition, in its anxiety to reap monopoly prices, has brought down prices far below the paying figure. The business has collapsed from its very inflation; and thus alternate chills and fever have shaken the life out of it.

But the Mercantile System, and the restrictive policy that sprung from it, obtained universal currency. The statute-books of every nation in Europe are defaced by the absurdest laws and regulations respecting manufactures and commerce. Also, the artisans in the cities and towns were formed into guilds, that is, incorporated societies, and to each guild was given the monopoly of the market, in its branch of industry. No man could practise the art of a shoemaker in Antwerp or London without the consent of the guild of St. Crispin; and the guild itself determined the number of apprentices to each artisan, the years he should serve, the conditions under which he might become a master; in short, determined everything respecting the trade by constitution and bye-laws. The governments, justly regarding these artisans as the most industrious and deserving of their subjects, granted them many privileges, which, however, were no less contrary to sound principles than the rest of the system. That they might obtain cheap provisions, the export of corn was forbidden; and thus agriculture was prevented from selling its products in the best market, wherever that market might be found. That they might obtain the raw materials of their manufactures cheap, the export of these was strictly forbidden. The tanner and currier, for example, must

sell his product to the "gentle Craft of Leather," and had no other market.

The general doctrine of fostering exportation was infringed on in these instances, because it was thought that there would be a greater ultimate export of manufactured products, if the raw materials of these were forbidden to be exported, and cheap provisions were secured to the artisans.

In order to encourage agriculture, most European countries, in accordance with the doctrines of the Mercantile System, passed corn-laws forbidding the importation of foreign grain, each nation wishing to raise its own subsistence from its own soil. The consequence of this was that the landholders secured the monopoly of supplying the home market with food; which of course greatly enhanced the price to all consumers, especially in times of scarcity. The increased price of bread, which rich and poor must pay alike, was but a part of the evil consequences. No nation is so sure of its subsistence, when it endeavors to raise the whole of that subsistence at home, as when it leaves the channels of importation open for foreign supplies. When the trade in corn is free, the dearth in one country is instantly supplied by the superabundance of another, and that by natural laws as beautiful and invariable in their operation as the laws that govern the heavenly bodies. Interference with natural law in no direction is so mischievous and culpable as in this. Is it not plain to common sense that that nation is most likely to obtain its food with regularity and in plenty which draws its supplies from the widest surface? Massachusetts, for example, does not begin to feed

her own population; but does any one suppose her people are any more likely to starve on that account? She can buy food with the products of her industry. Her calicoes and cassimeres, her hardware and cutlery, her nick-nacks and notions, will buy wheat not only in the marts of the West, but in Poland and Russia as well. She is sure to be fed, because she has wherewithal to buy food; more sure to be fed than if she compelled the industry of her people to abandon the more profitable mill-stream and factory, shop, and foundry, to extort from these rocky hill-sides the reluctant grains.

England, too, in 1849, removed the last vestige of corn-laws from her statute-book, and now imports flour freely from the Black Sea and from the Baltic, from France and from the United States. Who supposes that, if England did not raise a kernel of wheat, she would not be as certain of her daily bread as the people of Poland or of Michigan? But one may say, in case of war, she had better raise her food at home. But it is absurd to suppose that any nation would be at war with all the world at once; and we may be assured that the portion not belligerent would be eager to furnish the supplies. And besides, plenty of wheat would enter England if the English only wanted it, though all the navies of the world should blockade the fast-anchored isle. Every creek and headland would be alive with the silent and secret but busy agents of a clandestine trade.

The simple consideration that condemns this second expedient of the Mercantile System, namely, the prohibiting the importation of such commod-

ities as can be produced at home, and the Protective policy inseparably connected with it, is, that it involves a dead loss to the productive powers of the world. There is in the world a certain amount of capital and a certain amount of industry. These, if left to their own keen sense of interest, will make the aggregate amount of production in the world as great as that amount of capital and industry can make it. If, then, a free commerce distribute this aggregate production over the earth in accordance with the simple law of supply and demand, we shall have not only the greatest production, but the most perfect distribution.

But if now government steps in, and withdraws capital and industry from their freely chosen posts of activity, prohibits exchanges that would otherwise be made, and commands commodities to be manufactured or grown in localities where they would not naturally be manufactured or grown, then certainly the aggregate production of the world is lessened, and its distribution is less perfect.

(3.) The Mercantile System had two other expedients which were frequently employed to subserve the ends of its grand principle. For the sake of increasing the exports, and thus improving the balance of trade, bounties were given to encourage the export and sale of native fabrics in foreign markets. A bounty, we understand, is a sum of money paid outright by the government to the exporters of native fabrics, in order to enable them to sell their goods as cheap or cheaper than their rivals in the foreign market. England, for example was so anxious to sell her goods to foreigners, that

she regularly paid her merchants for selling the goods at a loss. "The price of these goods in that market," says the merchant, "will not reward my capital with the ordinary profit." "Never mind," says England, "sell away, and I will make up your loss by a bounty!" Was not that a rare and brilliant way of enriching the country? By natural laws, a branch of industry ceases as soon as it becomes unprofitable; but by the system of bounties a trade was perpetuated of which the expense was greater than the returns, of which every operation destroyed a portion of the capital employed in it. The loss was made up to the operators by government; in other words, the people were taxed to pay it.

(4.) The fourth and last expedient of the Mercantile System was to help the balance of trade by founding colonies, that the mother country might enjoy the monopoly of their trade, and force them to resort exclusively to her markets. All the English colonies on this continent were bound by the rigid fetters of this colonial system. Up to the date of American Independence, Virginia and Massachusetts must buy most they wished to buy in English markets, and carry most they had to sell to English ports. Spain and France extended the same colonial monopoly, with even more of inflexibility, over their American and West India settlements; and it was considerations growing out of this colonial policy which gave birth to the American Revolution; and that war was waged not more for the interests of humanity than for the freedom of trade

CHAPTER XV.

ON AMERICAN TARIFFS.

So long as the United States were colonies of Great Britain, their commerce was bound in the rigid fetters of the Mercantile System. We have already seen in the last chapter that colonies were one of the devices of the Mercantile System to secure a favorable "balance of trade." If the maxim be to sell as much as possible and buy as little as possible, then colonies, which could be compelled to receive the goods of the mother country, must be commercially valuable. Sometimes, so far as England and her colonies were concerned, there were slight relaxations of the system. For instance, in 1641, the famous Hugh Peters was sent from Massachusetts to England for that purpose, and secured an act of Parliament two years later relieving all commodities carried to and from New England from the payment of "any custom, subsidy, taxation, imposition, or other duty," till the further order of the House of Commons. In general, the colonists were compelled to sell all they had to sell to the mother country, and to buy all they had to buy of the mother country; even though the articles thus bought were not the produce of the mother country, but must first be imported there and then exported thence to the colo-

nies. Until the Revolution, a Boston ship, for example, could not sail directly to China for teas, but the teas must first be brought to England in British ships, must pay a duty there, and then be reëxported to the colonies.

In 1651, Cromwell having failed in what Hume calls "his chimerical scheme of a coalition with the United Provinces — a total conjunction of government, privilege, interests, and counsels," his Republican Parliament to spite the refusing Dutch passed the famous Act of Navigation. This act had a twofold object, — first, to strike a decisive blow at the then vast carrying trade of the Dutch, and second, to promote by monopoly the interests of the commercial marine of the English. The Act prohibited all nations from importing into England in their bottoms any commodity that was not the growth and manufacture of their own country. In the first year of the restoration of Charles II. (1660), a memorable statute reënacted this prohibition with additional clauses, which substantially excluded non-English ships from American harbors, and sacrificed to English monopoly the natural rights of the colonists. The American Revolution grew directly out of this statute and its subsequent amplifications. Mr. Bancroft says: "American Independence, like the great rivers of the country, had many sources; but the head spring which colored all the stream was the navigation act." It was again enacted in 1672 that certain articles, which included all the principal productions of the colonies, could not be exported directly to any foreign country, but must first be sent to Great Britain, and there unladen, before they

could be forwarded to their final destination. It amounted to the same thing as prohibiting all exports except to the mother country. The chief products of their industry the colonists could not export to any place but Great Britain, not even to Ireland; neither sugar, nor tobacco, nor cotton, nor wool, nor indigo, nor ginger, nor dye-woods, nor molasses, nor rice, nor peltry, nor ore, nor pitch, nor tar, nor turpentine, nor masts, nor yards, nor bowsprits, nor coffee, nor cocoa-nuts, nor whale-fins, nor hides, nor ashes.

Nor was this all. England constituted herself not only the sole market for American products, but also the sole storehouse for American supplies. The colonies must not only sell exclusively in British markets, but they must also buy exclusively in British markets. It was enacted, that "no commodity of the growth, production, or manufacture of Europe, shall be imported into the British plantations, but such as are laden and put on board in England, Wales, or Berwick-upon-Tweed, and in English-built shipping, whereof the master and three fourths of the crew are English." The principle of all these restrictions was stated to be, that "the monopoly of the colonial trade, the long voyage trade, and the indirect European trade," should be made secure to the merchants and shipping of Great Britain." So far as the Dutch were concerned, it shows the partial futility of all such selfish schemes as these, that, just forty years after the first navigation act, Sir William Petty in his "Political Arithmetic" estimated that the Dutch had still 900,000 tons of shipping and the English but 500,000 tons. The preamble of the act of 1672 is curious as assigning false and true motives

for it all in a jumble, namely, "the maintaining a greater correspondence and kindness between the subjects at home and those in the plantations; keeping the colonies in a firmer dependence on the mother country; making them yet more beneficial to it in the further employment and increase of English shipping and in the vent of English manufactures and commodities; rendering the navigation to them more safe and cheap; and making this kingdom a staple, not only of the commodities of the plantations, but also of the commodities of other countries and places for their supply; it being the usage of other nations to keep their plantation-trade exclusively to themselves."

In connection with these restrictions, it became in 1698 a point in the colonial policy to discourage all attempts of the colonists to manufacture for themselves. "That the country which was the home of the beaver might not manufacture its own hats, no man in the colonies could be a hatter or a journeyman at that trade, unless he had served an apprenticeship of seven years. No hatter might employ more than two apprentices. No American hat might be sent from one plantation to another. America abounded in iron ores of the best quality, as well as in wood and coal; slitting-mills, steel-furnaces, and plating-forges, to work with a tilt-hammer, were prohibited in the colonies as nuisances." Similar restrictions existed in respect to wool and weaving; no wool, or any manufacture of it, could be carried across the line of one province to another; and a British sailor, wanting clothes in a colonial harbor, was forbidden to buy there more

than forty shillings' worth. The liberty of free traffic between the northern and southern colonies was grudged to the colonists; and any of the enumerated articles exported from one colony to another, were subjected to a duty equivalent to the duty on the consumption of the commodities in England.

So fully were British statesmen trammelled by the ideas of this colonial system, that Lord Chatham himself, the best friend the colonies had in England, did not hesitate to say from his place in Parliament, that in a certain probable contingency, he would prohibit the colonists from manufacturing even a hobnail or a horseshoe. And Lord Sheffield, at a later period, said, "The only use of American colonies is the monopoly of their consumption, and the carriage of their produce."

From this degrading commercial vassalage the Revolution set us free. One will have observed that the economical consideration that condemns the colonial policy is, that it violates this sound commercial doctrine, namely, that men should buy in the cheapest market and sell in the dearest, wherever those markets are to be found. If the mother country finds it necessary to employ prohibitions to draw the colony-trade to herself, it proves that that trade, if left to itself, would have found other and more profitable channels. If Great Britain could have furnished us with all commodities as cheaply as we could procure them elsewhere, then there was no need of prohibitions and penalties — we should have gone to her of our own accord, as unerringly as the needle points to the pole. If she could not furnish us as cheaply as others, we were wronged — it was a

tribute and a tax. She made us buy in a dearer market, when a cheaper one was open.

So, if she could pay as much for our commodities as we could get for them elsewhere, there was no need of compelling us to sell to her; we should, in that case, sell to her inevitably. If she would not give what we could get elsewhere, then we were wronged; she made us sell in a cheaper market, when a dearer one was open. Her prohibitions then were either needless, or they were pernicious.

But it may be said that our loss was her gain, that what we paid extra as consumers, was to them extra profit as manufacturers and merchants. But where is the justice of taxing one set of subjects or citizens for the benefit of another set of subjects or citizens? And how is the wealth of the whole to be promoted by a transfer of gains from one part to another part?

A deeper consideration condemns the colonial policy. Every country has certain advantages, which, if properly improved, enable that country to defy the competition of the world in certain branches of industry. If England could not sell as cheaply as others in the colonial ports, then she was employing her capital and labor at home less profitably than she might have employed them; for if she had employed them upon those branches of production for which she had natural and acquired advantages, no nation could have undersold her; and therefore, if a forced market in the colonies encouraged her to continue branches of industry that would otherwise have been abandoned, it was a permanent loss to her own productive power.

I do not believe that colonial monopolies ever enriched a mother country, on the whole. So perfect and compensating are economic laws, that the losses of one country can never contribute to the permanent gains of another. The highest commercial prosperity of one country implies and demands a corresponding prosperity in other countries. Commerce is exchange. The richer your neighbors are in all products, the richer you will become by your dealings with them. England's hereditary jealousy of the prosperity of France has been as economically foolish as it has been bitter and persistent. It is true of the family of Commerce, as it is of the family of Christ, "If one member suffer, all the members suffer with it."

A good commercial system was not one of the immediate fruits of the American Revolution. While the war was still going on, in February, 1778, a treaty of commerce was signed between France and the United States. The principles of this treaty were excellent. It speaks of "founding the advantage of commerce solely upon reciprocal utility and the just rules of free intercourse;" it agrees to avoid "all those burdensome prejudices which are usually sources of debate, embarassment, and discontent;" and it professes as the "basis of their agreement the most perfect equality and reciprocity." It is impossible not to see in these liberal terms the influence of Physiocrats. Our envoys did not have equal success with England: the treaty of Peace was not accompanied with any treaty of Commerce. The English, though expecting great losses in their separation from the colonies, found that they easily controlled

the trade: in 1785, the import here of goods from England was two and one half times the exports to England — a beautiful balance! Besides, the first government established in this country, the government of the Confederation, which lasted from 1781 to 1789, was not gifted by the people with the power "to regulate commerce." This was one of the reserved rights of the States, which immediately began to use it in accordance with their own views of their own interests. Each State laid its own tariff, and undertook to regulate its own trade. The results were most disastrous. Great Britain, seeing that, as a nation, we were helpless commercially, not only refused to negotiate a commercial treaty with us, but by an Order in Council, peremptorily excluded our ships from her West India possessions, between which and the United States there had grown up, partly through some relaxations in the Act of Navigation, and partly in violation of that Act, a large and most profitable trade. We were in no position to retaliate. As a nation, we had no power to exclude her ships, and thus force her to a position of reciprocity. The States passed various and conflicting laws. If Massachusetts, for example, laid a duty on certain goods, and Rhode Island did not, very little revenue would Massachusetts draw from that source; the goods were imported into Rhode Island, and then smuggled across the border. Thirteen independent States regulating the commerce of our seaboard, induced endless confusion, and there was no power to remedy it. Our commerce, such as it was, was in a very bad way.

To consult upon a remedy for this state of things

was the specific purpose of the meeting at Annapolis, in 1786. Alexander Hamilton was there as a delegate from New York. He persuaded the delegates to decline entering upon the subject of commerce, inasmuch as it was connected with other great defects of the Confederation, to which their powers did not reach; and drew up an Address to Congress to call another Convention, with ample powers to go over the whole ground, and to devise a system adequate to the exigences of the country.

Thus was summoned the Federal Convention of 1787, which framed the Constitution under which we live, and which gave to Congress, that is, the nation, the needful power "to regulate commerce."

The new House of Representatives, under the Constitution, commenced at once to discuss and frame a uniform national tariff. In the debate, James Madison said: "I own myself the friend of a very free system of commerce. If industry and labor are left to take their own course they will generally be directed to those objects which are most productive, and that in a manner more certain and direct than the wisdom of the most enlightened legislature could point out. Nor do I believe that the national interest is more promoted by such legislative directions than the interest of the individuals concerned. Yet I concede that exceptions exist to this general rule, important in themselves, and claiming the particular attention of this committee. If America were to leave her ports perfectly free, and to make no discrimination between vessels owned by citizens and those owned by foreigners, while other nations make such discrimination, such a policy would go to ex-

clude American shipping from foreign ports, and we should be materially affected in one of our most important interests."

In the same debate, Fisher Ames frankly and exactly stated what was then and has been ever since the protectionist view in and for the United States. He said: "From the different situation of the manufacturers in Europe and America, encouragement is necessary. In Europe the artisan is driven to labor for his bread. Stern necessity, with her iron rod, compels his exertion. In America, invitation and encouragement are needed. Without them the infant manufacture droops, *and those who might be employed in it seek with success a competency from our cheap and fertile soil.*" Considered as simplicity of admission, this is very amusing; considered as a condensation of the protectionist argument, it is very admirable; but considered as to the reality of wrong that has actually followed such a principle, it is very sad. High wages in this country have always been an indirect result of the "competency" which laborers have been able to "seek with success" "from our cheap and fertile soil." What is then to be done, if manufactures are to be artificially stimulated? Why depress agriculture with abominable taxes! Lessen the profits of farming, so that laborers will no longer "seek" the land! Then, bring in from "Europe" "the artisan" "who is driven to labor for his bread!" Let "stern necessity with her iron rod compel his exertion!" Here is at once the explanation and the condemnation of Protection. Not the cheapness of foreign labor, which they have always been glad to get for themselves at the cheapest

rate, but the larger returns which their men could get by the same effort "from our cheap and fertile soil," have been the "competition" which our manufacturing employers have had to contend against. So far as Protection has any rational root at all, it was thus uncovered by Fisher Ames of Massachusetts in 1789; and what our protective tariffs from that day to this have aimed to do (so far as they have not been mere greed and grab), and what they have actually done, has been to curtail the profits of agriculture.

Opposing sections and particular interests had much to do in the framing of our first tariff, which passed in 1789, and which, with many modifications and additions passed in the following years, I shall call the *Hamilton Tariff*. I name it so, because Hamilton was then Secretary of the Treasury, because he made in 1791 an elaborate Report to Congress on the whole subject, and because his principles as a moderate protectionist were actually carried out in this tariff. The Preamble of it admitted the principle of Protection, but only as subordinate to Revenue: "Whereas, it is necessary for the support of the Government, for the discharge of the debts of the United States, and the encouragement and protection of manufactures, that duties be laid," and so on. The general rate of duties laid was very low. In the original bill as passed, cotton goods were charged five, iron goods seven and one half, and woollens five *per centum*. On cotton itself, then just beginning to be grown here, a duty of three cents a pound was put. Pig iron bore no duty at all. Rum, molasses, iron, and steel nails, hemp, cordage, and

ships, had been quarreled over in the debate, and duties on them were the result of compromise. Tea was heavily and rightly taxed. The average duties under the original bill were eight and one half *per centum:* they were raised the next year to about eleven, and in 1792 to about thirteen *per centum.* Between 1789 and 1816, the period of the Hamilton tariff, various other acts were passed affecting duties, generally raising them somewhat; but in 1808 Jefferson's Embargo was laid, which interrupted commerce, and the war of 1812 followed, which much disturbed it; so that we can only use for comparison the eighteen years, 1790–1808. During these years the revenue more than quadrupled, reaching $16,000,000 in 1808; the increase was very steady; and the ratio of tariff-income to population rose from $1 to $2.50 *per capita.* A comparison of these eighteen years with any eighteen years of our after history when we have had decidedly protective tariffs will yield all that is claimed in respect to the superiority of a low revenue tariff over protective tariffs in point of steadiness of income and especially in point of a steady increase of income.

But while I praise the Hamilton tariff, in comparison with those that came after it, I do not forget its defects. Hamilton himself in his Report of 1791 already alluded to, in answer to the objection then and still current, that manufactures cannot thrive here on account of the dearness of labor and the scarcity of capital, proves the contrary by enumerating many that were then already thriving! Why, then, did this tariff look at anything else than revenue? The duties indeed were low, and a handsome

revenue was derived from them, but they were laid with one eye to secure revenue and with the other to prevent it. He wanted to let goods in so as to get revenue, and at the same time to keep goods out so as to raise home prices. That was both petty and self-contradictory. If, with the great advantage of being able to escape the costs of transportation, together with the abundance of raw material, and the endless resources of agriculture, any branch of industry could not live without artificial help, then the proof is complete that it ought not to have been entered upon, and could not be prosecuted except at a permanent loss.

Besides, this tariff borrowed from the old Navigation Acts of England. In the original bill of 1789, all foreign-built ships were excluded from registration under the American flag, and to the shame of that flag this absurd and fatal prohibition is still continued; and in the bill of 1792, all foreign-owned ships were excluded from the American coasting trade, which only less disgraceful law is also still in force. Discriminations were also made between American and foreign bottoms, in that duties were ten *per centum* higher on goods imported in foreign ships; and tonnage dues were arranged on a sliding scale, — six cents per ton on American ships, thirty cents per ton on American-built but foreign-owned ships, and fifty cents per ton on all others. All this was designed to encourage the building of American ships, and to keep the carrying trade both coastwise and oceanwise to American bottoms. If freights and goods were not thereby raised in price, these provisions were needless: if these *were* raised in

price, the provisions were harmful. Since 1873, no discriminating tonnage or other dues are levied on foreign vessels in United States ports; but the law forbids the return to registry and license under the national flag of even American-built ships once sold to foreigners.

Our second tariff, passed in 1816, I shall designate as the *Calhoun Tariff*. Then first we entered upon the protection system fairly and squarely; from this time on, however, there was a strong opposition to it; local feelings, somewhat excited before, became now considerably roused; and it is a curious instance of how times change and men change with them, that Mr. Calhoun, who afterwards became the champion of Free Trade, strenuously advocated this tariff, while Mr. Webster as strenuously opposed it. Till then the tariff question formed no element in our politics; if I may say so, nobody knew that we had any tariff unless he chanced to read the statute-book; and it was an evil day for this country when a purely scientific question became mixed up in passions and politics, and adhesion, on one side or the other, to what not one voter in a thousand ever began to comprehend, was made a test of party. From that day to this, no tariff question has ever been decided on its merits. Interests, sections, passions, have influenced every bill; and it is a part of the punishment, I believe, for prosecuting an artificial and false system in any department, that it is hard work to get out of it. New England generally opposed the Calhoun tariff, and the principle of protection embodied in it; so did a majority of the Southern members; but South Carolina, seeing the

growing value of cotton, and anxious for a home market for the raw material, united with Pennsylvania and the Middle States in securing the high duties, especially upon cottons and iron. The duties were increased, on an average, 42 per cent. above the old rates preceding the war. Imported articles were divided into three classes: 1st, Those of which a full domestic supply could be produced; 2d, Those of which only a partial domestic supply could be afforded; and 3d, Those produced at home very slightly, or not at all. On the first class, the duties were fixed substantially at 35 per cent. *ad valorem*. On the second class, including cottons and woollens, the duties were 25 per cent., to be reduced after three years to 20 per cent. On the third class the rates were mostly fixed with a view to revenue only. Pig iron was now first subjected to a tariff-tax of $9 per ton; two years later, the duty on bar iron was raised from $9 to $15 per ton, and the proposed reduction on cottons and woollens was deferred till 1826. Francis C. Lowell, who, in conjunction with his brother-in-law, Patrick T. Jackson, had invented a power-loom, and started a modern cotton-mill near Boston in 1813, went to Washington in 1816, and by personal influence with Mr. Calhoun, Mr. Lowndes, and other members of Congress, contributed largely to the introduction into this tariff of its protective features as towards cottons. He died in 1817, but Lowell, the cotton city, founded in 1821, was named from him. Similar influences deferred the reduction of the cotton duties just referred to. In the same view, the principle of the *minimum*, so called, was adopted in this tariff as

towards cotton cloth and cotton yarn, none of the former being *rated* less than 25 cents per square yard, however much less than that its cost at the place of exportation. Under an *ad valorem* duty, this matter of the *minimum* is a device to increase the protection, and the abuse of it to that end is another argument in favor of *specific* duties.

In connection with this tariff, though the law was not passed till March, 1817, we copied again from the English navigation acts, and this time more largely. *Importations by foreign ships into this country were substantially limited to the produce of their respective countries.* This tariff lasted eight years. The average duties under it were 24.5 *per centum* — more than double what they were in 1789–1808. In the last three years of its operation, the rates on dutiable goods averaged 30 per centum. A bitter feeling was already engendered towards the cotton manufacturers of New England on the ground of their *minimum* in duties and *maximum* in profits. Wool, woollens, and iron wished the same privileges.

We will call our third tariff, passed in 1824, the *Clay Tariff.* Henry Clay, though speaker of the House at that time, took an earnest part in the tariff-debate, advocated the interests of Kentucky in hemp and whiskey, and came to be regarded as the pillar of the "American system," so-called, the system of high protective duties. It was now a savage clash of selfish interests. Massachusetts wanted protection on ships, cottons, and woollens, but *not* on wool, or hemp, or iron, or molasses; Kentucky and Louisiana wanted a tariff-tax on molasses, the

raw material of rum and the rival of sugar, the first, to make rum dear and help the sale of whiskey, the second, in the interest of her sugar-planters; Ohio and the Middle States wanted a tax on raw wool; and Pennsylvania wanted higher duties on iron. The South had turned strongly against Protection, and New England had not yet come generally to favor it; in the general scramble, these were beaten by small majorities, and Middle and West won the day. Cheap raw wool was to pay 15, other wool 20 the first year, 25 the next year, and 30 thereafter, *per centum.* Bar iron was raised to $18 if forged, and was $30 if rolled, per ton. The *minimum* on cottons was raised to 30 cents, and a *minimum* for woollens was put at 33 1-3 cents under a duty of 30, to be raised next year to 33 1-3 *per centum.* All this is excellent proof that interests that are petted and "protected" do not long remain satisfied with what they receive, but are soon clamorous for more "protection." The Calhoun tariff gave most of these interests large protection: eight years run on, and they call for more: they get it: are they satisfied? Why should they be? Instead of being taught to rely on themselves, they learn to lean on government. Besides, when one gets help, others must have it too, and all these are soon taxed to help still others, "and still they come," till all are impoverished together. The average of duties under the Clay tariff was 32.5 *per centum.*

Daniel Webster opposed Mr. Clay in an elaborate speech, which lifted the debate up from its otherwise petty proceeding. He ridiculed the "American system," of which Mr. Clay claimed to be the cham-

pion. "This favorite American policy is what America has never tried." He was sarcastic on the molasses tax. He put the free trade argument in a nutshell on the proposed iron duties. "The true reason why it is not our policy to compel our citizens to manufacture our own iron is, *that they are far better employed.* It is an unproductive business, and they are not poor enough to be obliged to follow it. If we had more of poverty, more of misery, and something of servitude; if we had an ignorant, idle, starving population, we might set up for iron makers against the world." Sound as were most of his points, Webster went into this race weighted, and was beaten. He was not willing to apply his own doctrine throughout. Ships may be protected, and cottons; why not, then, iron and sugar?

We will call our fourth tariff, that of 1828, what it was called in the politics of the time, the *Abominations Tariff.* The manufacturers of course had asked for more protection; but the opposition to the system was now strong; it could not prevent the passage of the bill, but it loaded it down with all manner of objectionable features, to make it as distasteful as possible to its advocates. A political design to make the protective system unpopular appeared, and was indeed avowed; but the friends of protection, in view of the higher duties on many articles, came to the conclusion to support the bill notwithstanding its odious features. They swallowed the whole with the best grace they could. Daniel Webster, after strenuous but fruitless efforts to reduce its "abominations," for the first time in his life voted for a bill involving the principle of high protective

duties. He claimed that Massachusetts, in spite of her protests in 1824, had been forced into manufactures by the policy then adopted, and that she now protested through him that her new investments should not be sacrificed.

This tariff was all mixed up with prejudices and president-making, — with "Jackson men" and "Adams men." New England did not like it, and South Carolina attempted to nullify it. Protectionists wanted to amend it, and Southerners were brought to the brink of civil war by a well-founded hostility to it. Middle and West triumphed again. The molasses tax went up to 10 cents per gallon; wool to 4 cents per pound, and 40, to increase yearly till it was 50, *per centum*, — a combination of specific and *ad valorem* duties on the same article; bar iron forged to $22.40, rolled to $37, per ton; and hemp to $45 per ton. The duties in 1828–32 averaged 36.5 *per centum* of the value of the whole imports, and 43.33 *per centum* of the value of the dutiable goods. This tariff stirred up passions from one end of the country to the other. It stands prominent in the line of the direct causes of the late civil war.

It will be noticed that our tariffs follow pretty closely the years of the presidential election. In 1832 Mr. Clay went into the canvass against General Jackson on the avowed platform of high protective duties. He was beaten. The country seemed thus to indicate its preference for another system; South Carolina had been intensely dissatisfied with the tariff policy since 1824, and openly prepared to nullify the new tariff of 1832, which never went into operation; Mr. Verplanck, chairman of the Com-

mittee of Ways and Means, reported a new bill divesting the tariff of every lineament of protection; and under these circumstances Mr. Clay himself brought forward in the Senate a bill, which became by large majorities our fifth tariff, namely, the *Compromise Tariff* of 1833. Mr. Calhoun approved of it, and Mr. Webster opposed it. It adopted a sliding scale in reference to all duties that were over 20 per centum in the bill of 1832, providing for their gradual reduction on each alternate year till 1842, when and thereafter the rate on all these goods should be 20 per centum on the home valuation. This is what is called a "horizontal tariff," and it is a very bad kind. It implies *ad valorem* duties, and disregards equally free trade, revenue, and protection. Mr. Calhoun and his friends made no intelligent fight for free trade, and complicated their position besides with doubtful constitutional questions. However, the duties were slowly but decidedly lowered. The average duties on all imports between 1833 and 1842 were 16, and on dutiable goods 32, per centum. The country was prosperous, agriculture was extending, almost no tariff could swamp our industries, and certainly not one which largely threw off taxes.

Bank questions, inflation, internal improvements, the consequent crash of 1837, and the hard times following, occupied the public mind for nine years and brought the Whigs into power in 1840. The Whigs believed in broad functions of government. They advocated the paternal theory. As I remember very well, extravagant expectations were held out in the campaign of 1840, that, if Harrison were

elected, times would change, and the golden age would come in. In 1842, accordingly, there passed our sixth tariff, the *Whig Tariff*. It went back to protection. Public opinion, however, would not warrant the high rates of the bill of 1832. Under it, capital was seduced into manufactures, particularly of iron; and when the high duties were removed, as they were four years later, thousands of persons were pecuniarily ruined. It is impossible to speak in terms too deprecatory of an artificial system that inveigles capital and laborers into branches of industry in which they never would have embarked of their own accord. Congress has alternately inflated, and then punctured the bubble. Nature alone is stable. Let us have taxes that are *taxes*, and seen to be such, and for the rest, let alone. The average duties under the Whig Tariff on all imports were 22.75, and on dutiable goods 32.5, per centum.

Southern views prevailed in the election of 1844. Robert J. Walker became Secretary of the Treasury. There was passed under his auspices in 1846 what we will call the *Walker Tariff*. It reduced the duties down to about the standard of the "Compromise" of 1833. It discriminated, however, as the Compromise did not, between goods that could be produced at home and those that could not. It approached, in short, more nearly than any other, in its principles and details, to the Hamilton tariff, although the general rate of duties was higher. It applied the "horizontal" principle, not to imports as a whole, but within certain prescribed schedules. Mr. Walker understood the principle, that lower taxes yield higher revenue but the yield of his tariff surprised even him.

It was estimated in 1846 to produce $20,000,000 a year: it actually produced in 1856, $60,000,000. Remissions on this side, were accompanied by remissions on the other side, the ocean. The year 1846 is memorable in economic legislation: the English corn laws were repealed, which opened up a new market for our agricultural products; and the Sub-Treasury Act was passed, which removed the subjects of money and banking from our national legislation. It was then supposed that the subject of "protection" was substantially settled for this country. We were keeping at least even step with our British cousins to the music of a Free Commerce.

The Walker Tariff was too productive. The revenue rose beyond the legitimate needs of the government. The surplus in the treasury accumulated, and large sums were expended in buying up bonds not yet due at a high premium for the sake of emptying the Treasury. Under these circumstances, our eighth tariff, the "*Tariff of* 1857" was passed. It lowered the duties about one quarter, and very justly applied remissions to raw materials of manufactures. The free list was also enlarged. The West did not like the lessened duties on wool, hemp, and lead, produced there, and declaimed against the "incidental protection" accorded to Eastern manufacturers through the free list and lower duties on materials. There was indeed sharp practice in that direction, as I happen to know. So it goes. So long as there is *any* protection whatever, somebody will be roused, and justly roused, by its injustice. Though the national government had nothing now

to do with banking and paper money, the States had multiplied banks, and the banks had multiplied bills, so that the inevitable crash came in the autumn, the imports of course diminished, and the revenue fell off. It recovered somewhat the next year, and more in the following year; but political troubles began in 1860, the expenses of the government increased, and there was a deficit. Duties on the whole imports for the 15 years 1846-61 averaged 17.75, and on dutiable goods 22.75 per centum.[1]

We come now to the *Morrill Tariff* of 1861. I include under that designation, as before, all the various supplements and modifications passed in accordance with the leading idea of the original act. So reckoned, the Morrill Tariff is the ninth in order, and is still in force. There was a mildly drawn resolution in the platform of the party that triumphed in 1860 in favor of what is called "protection;" it was a bid for the political support of Pennsylvania; little or nothing was said upon that subject in the canvass; and the people pronounced in their verdict on a different set of questions from those involved in a protective tariff. Seven Southern States had seceded, when the bill passed the Senate in February; the need of more revenue was imperative; there was no intelligent agreement as to the means by which more revenue could be obtained; the existing duties were raised at first about one third; in August they were raised again, and members seized the opportunity of discriminating in favor of articles in which they were interested to the extent of dimin-

[1] These averages are all carefully calculated from Mr. Wells' Report of 1869.

ishing revenue by duties which lessened importations. In view of such a war as that then impending, the relevant questions were, How can we get the most revenue with the least interference with the industries of the people? and, How can we distribute the tariff-taxes so as to burden the whole people as equally as possible? If these questions alone had influenced the representatives of the people, the Morrill Tariff would never have been heard of. The instincts of a people, on the breaking out of a great war, are always favorable to commercial freedom. On the 6th of April, 1776, the Continental Congress opened the ports of this country to all the world not subject to the king of Great Britain. They abolished by that act British custom-houses, and established no others in their stead. "Absolute free trade took the place of hoary restrictions; the products of the world could be imported from any place in any friendly bottom, and the products of American industry in like manner exported, without a tax."[1] Many nations have acted similarly in similar circumstances; but no nation, to my knowledge, on the eve of a great war, ever did as the United States did 1861, make it of set purpose more difficult to obtain supplies from abroad, and more difficult to sell abroad the products of native industry. It was a clouded thought, hovering in many patriotic minds, that what they knew would be immediately and immensely beneficial to some of their constituents would not after all be very harmful to the country at large, that carried through the tariff of 1861. But it was harmful to the country at

[1] Bancroft, 8th vol., p. 323.

large in a high degree. Enlightened public opinion abroad turned more or less against the country in consequence; the people were obliged to pay nearly or quite double on some of the necessaries of life what the goods were worth in a free market; some of them lost also their best chance of selling a part of the products of their industry; unusual inequality of fortune soon appeared among the citizens; while the duties were put so high that nothing like the revenue was received from them that might have been received. With a much larger revenue in gold, a people obtaining their cloths and iron and similar goods at something near European or Canadian prices, and general industry going forward under its natural conditions, the credit of the government would not have sunk so low as unfortunately it did sink. The new tariff was not honestly adjusted for purposes of revenue, and while it seemed to concede something in its free list to the demand for free trade, the concession was largely delusive, since many of the articles thus admitted free of duty went into manufactures protected by higher duties than have ever before been levied in this country. To put articles on a free list is of itself no boon to free trade; it depends upon the purpose for which they are put there; whether to benefit the whole people or only a few persons at the expense of the whole people. In all our recent tariff-legislation there is many a snare for the unwary.

The original tariff of 1861 was added to at different times both in articles and in rates, until on an actual count of them, the number of distinct rates assessed on different articles was 2,317; and

until, in 1868, the following articles actually paid the following rates of duty per centum of the value of the articles: — common window glass, 49; pig iron, 55; bar iron, 66¾; cast iron pipe and stoves, 109; wood screws, 66; carpenter squares, 82; sheet lead and pipe, 54; lead pencils, 59½; plain unbleached cottons, 58¼; spool cotton, 65½; cheap gunny cloth, 81¼; white marble, 57; veined marble, 78¾; salt in bags, 80¾; salt in bulk, 108¼; rice cleaned, 82¼; rice uncleaned, 165¼; scoured wool, 94; washed wool, 121; blankets, (average all kinds) 81¾; one kind of carpets, 80; another kind, 91; another kind, 156½; Paris white, 285; white chalk, 833¼.[1] The average duty on dutiable goods in 1868 was 47.86 and in 1874 38.50 per centum.

But it is said that our present tariff is productive. Of course, if the people trade at all, such a tariff will be productive; something like half the value of the dutiable goods imported goes direct to government! To say that it is productive is only to say that it is hard work to destroy the commerce of a great people. The question is, would not a reasonable system be even more productive? At present, the government indeed gets much; but the people *pay* a great deal more; inasmuch as the ground-thought of the whole system is to raise the price of favored domestic products through the tariff-taxes on corresponding foreign products. Some of these taxes exclude the foreign product entirely: in this case, the people pay much, and government gets nothing. In other cases, the people are made to pay five, and even ten, times as much in consequence of a tariff-tax as the govern-

[1] Report U. S. Bureau Statistics, No. 29.

ment receives from it. Can such a system properly be called productive? In round millions of dollars the tariff produced in 1863 and onwards to 1878, as follows: 49, 69, 102, 85, 179, 176, 164, 180, 194, 206, 216, 188, 163, 148, 131, 130, — an average for the sixteen years of $148,000,000. This is *per capita*, calling the population 40,000,000, $3.70. The annual average of British customs revenue for the same sixteen years is about 35 cents less *per copita;* which shows that a simple revenue tariff on 7 articles, more or less, is just about as *productive* per head of population as our vexatious and cumulative tariff has been.

There have been some reductions in the Morrill Tariff as it was. The first took effect January 1, 1871, and threw off taxes, as compared with 1869, to the extent of $26,054,748; but it threw them off mainly from the revenue, and not from the protective, parts of the tariff: for example, 77 per centum of all this reduction was from tea, coffee, cocoa, sugar, and molasses; articles, all the taxes on which go to government, and directly raise the price of nothing else. Precisely those articles, therefore, are the ones to bear a heavy tax. Congress did not dare to go into the presidential election of 1872 with the tariff as it was, especially, as public opinion had been roused against some of its more iniquitous features; and accordingly, in that summer, the duties were thrown off entirely from tea and coffee, a large number of previously taxed articles were put upon the free list, the duties on salt and pig iron were reduced, and a general reduction of 10 per centum put on most other protected articles. But the last-named reduc-

tion was restored by the "little tariff bill" two years later. The purely revenue taxes on tea and coffee were thrown off under protectionist leadership, in order to give color to the claim of retaining the protective taxes *for the sake of revenue!*

I had hoped to chronicle in this place, as the tenth in order, the *Wood Tariff* of 1878. That bill, which, though open to many objections on purely economic grounds, was vastly superior to the existing law in point of simplicity, honesty, and efficiency as a means of taxation, was defeated at last by a few votes. Its opponents made capital against it on petty grounds of party. But it will not stay defeated. That bill, or such a bill as that, or a better bill than that in the sense of simpler and cleaner, is just as sure to pass in the next coming years as the sun is sure to shine. The sun has already shone in too much on the motives and methods and meaning of "Protection" to allow it length of days or lease of life in the good time coming.

In reference to our present tariff, and all such tariffs, I wish, in conclusion, to make a few general observations.

1. Such duties as these, laid for protection, are *always* laid at the instance, and under the pressure, of the special interests protected. No legislator, on general principles, and without solicitation from individuals, ever framed, or would ever have thought of framing, such a tariff as ours. This is true even of the very moderate protection accorded in the Hamilton tariff. It is overwhelmingly true, and at every point, of the immoderate protection of the Morrill tariff. Distinguished members of the Com-

mittee of Ways and Means have related to me at length the methods pursued to gain the sanction of that committee, and thus the ear and the votes of Congress. Those methods are scandalous. If they were generally understood by the people, there would be a speedy end of all such legislation.

2. A single specimen of the inequalities of which our present tariff is full, may be given here by way of illustration. *Ex uno disce omnes.* A supplemental act that went into operation on the 10th of August, 1866, provides, for the sake of increasing the duties, that the costs of transportation, shipment, commission, brokerage, and all similar charges, be added to the invoice value of imports to make up the value on which the duties shall be levied. This applies to all dutiable imports, except *to long-combing or carpet wools costing twelve cents or less per pound.* Why are they excepted? Cannot the carpet manufacturers pay duties as well as other people? They have a very high protective duty on their own completed product. They compel, through Congress, everybody to pay this duty on foreign carpets, and carry up the price of their own in proportion; and yet this tariff exempts their raw material from an increase of duty applied to all other dutiable goods whatsoever! Ten days before this clause went into effect, the Hartford Carpet Company declared a *semi-annual* dividend of 20 per cent.; and its shares were announced as worth $275 each, with the dividend off.

3. The condition of ship-building and ship-owning in this country is the best practical commentary on the influence of protection in general. The system

is here reduced to its lowest terms. The perfection of protection is prohibition. Our navigation laws prohibit the buying of foreign ships for the sole purpose of encouraging the building of domestic ships. Notwithstanding their absolute monopoly of the market under this law, such are the duties levied for protection on the materials that go into ship-building, that our ship-builders cannot build ships at a profit. It is illegal to buy them, and it is next to impossible to build them; and consequently our foreign merchant marine has fallen off about one half since 1860. In 1861 there was an excess of American over foreign tonnage entered at ports of the United States of 2,806,363 tons; in 1871, there was an excess of foreign over American tonnage at same ports of 2,523,704 tons. Of course, the civil war had to do with this great change; *but the decay of our shipping has gone on worse since the close of the civil war.* Of the whole commerce of Christendom (exports and imports) in 1870, Great Britain had almost precisely one third, and had increased her amount 91 per centum in ten years; in the same ten years, our increase was only 16 per centum. The bulk of our foreign commerce is now large, and is steadily increasing, but only about one third of it is carried on American bottoms.

4. It is foolishly claimed by some that protective duties always shortly lower the prices of protected articles. If they do, where does the *protection* come in? Or, what is the *motive* for levying such duties? Or, why did the Onondaga Salt Company keep selling salt for years in Canada at forty per cent. less than in Syracuse itself? I have myself seen the

price-lists by which that company offered to lay down salt at the stations of the Grand Trunk Railway in Canada freight paid for less money than the salt could be bought for in Syracuse. Why did the same company offer salt to the New England fishermen, who were allowed a drawback on their salt used, duty off, and only sell it to landsmen duty on? There is a simple test, that any one can try, which settles the point whether consumers pay the duties in the price of the wares they buy. Let the questioner visit any large merchant in any seaport town, and inquire the price of any sort of merchandise "in bond," and the price of the same goods "duty paid." He will find that the two prices differ by just the amount of the duty, and the merchant will be equally willing to sell him the goods in bond and let him pay the duty for himself, or to sell him the goods at the usual duty paid price. Then let him inquire whether American-made goods *of the same quality* can be bought cheaper than the duty paid foreign goods: the merchant will say no, and this for two simple reasons: first, because the American maker wants as large a price as he can get, and the foreigner cannot undersell him when he asks the duty paid price of the foreign article; and second, because if the American maker *were* willing to sell his goods more cheaply, no foreign goods of the same character could be sold except at a loss to the merchant, and therefore none could be imported. A still simpler test: Let the questioner step across the Suspension Bridge at Niagara. He will find imported goods on that side cheaper by just about the difference in the tariffs of the two countries; and if he buys over there

for his own use any considerable articles, he will find on coming back, and be satisfied, that the consumer pays the duties.

5. The removal of duties leads at once to increased trade. For example, in 1870, our whole import and export trade with Venezuela amounted to $3,345,145. That republic sends to us nothing of consequence but coffee and hides. These were both dutied in our ports in 1870. In 1872, the duties on both were removed. In 1876, our trade with that country amounted to $9,299,993, an increase of nearly 200 per centum. The increase of the import of coffee and hides between those dates was over 320 per centum. The increase of our shipping in the Venezuela trade in the same time was from 15 to 134 vessels, from a tonnage of 2,571 to 43,459 tons, and from 109 hands to 1,255 hands. All this by freeing two articles only, one of which ought still to be taxed. Some of the indirect results of just a little freedom are seen in the increase of our exports of tanned leather from $2,864,000 in 1872 under taxed hides, to $7,940,010 in 1876 under free hides.

6. We have seen that, as a rule, protective duties have been put on in a wholesale and random way. How shall they come off? Some seem to think that, once in a tariff-bill, no matter how they came there, whether by fair means or foul, whether one by one or pell-mell, they are thereafter sacred, and are only to be touched gingerly, if at all. On the contrary, I think that the rights of the whole people are quite as sacred as any claims of these special interests. I think these duties may well go off in much the same fashion as they went on. I can see nothing sacred

in a tariff-tax, and least of all in such tariff-taxes as these are. I think the proper way to deal with them is to abolish them all at once. The abolition of a tax on industry can do no harm to industry. If every tax of every name in all the earth could be abolished to-morrow, what harm would ensue? Taxes are indeed necessary for the support of government, but even when wisely laid for that end they are a necessary evil. They take just so much out of what would otherwise be the gains of exchanges. But protective taxes are the worst possible form of taxes, and the only thing to do with them is *to abolish them.* When protective duties become numerous, as with us, they become a universal burden; and there are only a few protected interests themselves which would not be instantly relieved by their universal abolition. To taper off in protection is much like a drunkard tapering off in his cups. It would indeed be unjust to abolish a part of these duties, and leave the rest in force — to strike out, for example, the duty on woollens and leave the duty on wools, — they should all go by the board together. Science and experience alike demonstrate that this is the best way to do it. Protection cannot complain of it, for when did itself ever give previous notice to the people that its taxes were coming? Edward Harris paid $58,000 in gold duties on wool bought, paid for, and on its way to this country, when the wool tariff of 1867 came in. If, however, ignorance and prejudice hedge the way to this simultaneous abolition, let the worst duties go first: those on coal (we have more coal in this country than all the world besides), on pig-iron, on lumber, on salt, on wool, on *materials* generally.

7. The changed tone of New England on the matter of Protection is very noticeable. Many of her prominent manufacturers are earnest for free trade, and few of the rest have much zeal for the opposite. They have all found out that they have to *pay* more under Protection than they can *get* under it. Exclusive protection of one interest is a very different thing in result from general protection of many interests. New England, accordingly, is swinging back to her old and sound position. She must bear her share of the blame for getting the country into the slough, and now put to all her strength in helping to get it out. The tariff itself, and its effects, are what have mainly opened her eyes. The duty on coal was an abomination in New England, — Pictou coal is so easily imported; so were the high duties on fine wools put on in 1867, which, in connection with other duty-paid prices they must give for materials and machinery, have crippled the woollen manufacturers ever since, and so have not helped the wool-growers; and so were the tariff-taxes on lastings, webbings, and other materials to the shoemakers, — next to the farmers the largest single industry in the United States. High duties on woollens have not kept the manufacturers from general bankruptcy, because wools, dyestuffs, lumber, and every form of iron and steel, have been "protected" also! In 1876, we still imported $47.676,065 of woollens; the duty paid thereon was $27,856,382; will some quick reader figure the per centum of duty? The average duty the same year on clothing wool was 51, on combing wool 43, and on carpet wool 26, and on dyestuffs 30, per centum. Besides, there

is no outlet for the surplus production: that year the total export of woollens was $685,828, about 1-2 of 1 per centum of the production; and of carpets, $6,586 worth! Much of the present dissatisfaction of labor in New England is derivable from causes which have their seat in the tariff, and that will ultimately feel the force of their opposition. Moreover, Boston is anxious to regain its ocean traffic, and an obstacle to this is the tariff. "Go to the ocean!" thundered Webster in 1814, and the echoes of that wise word still linger along the wharves of that city.

CHAPTER XVI.

ON TAXATION.

THERE can be no *science* of Taxation in the sense in which there is unquestionably a science of Production. Production, as we have now seen, goes forward in accordance with positive natural forces, which God has appointed, and which men can ascertain and generalize and profit by. Nature bids men work and save, buy and sell, invent and transport, navigate and grow rich; but Nature has given no whisper, that I can hear, about any taxes. That is the work of Society. That is something negative, not positive. Taxation is indeed something necessary to the social order, as men are; it furnishes means of defense against greater evils than itself is; but in itself considered, it is an economic evil, because it takes away from exchangers a part of the gains of their exchanges; it is not *strictly*, therefore, a part of economic science; but its relations are, after all, so intimate with that science, that it must be treated as if it were a part of it. There are *true principles* of Taxation, as related to Exchanges, although there never can be a *true science* of Taxation, as there is of Exchanges.

Value resides in Services exchanged; but, as men are, *Government* is an essential prerequisite to any

general and satisfactory exchanges, since it contributes by direct effort to the security of person and property; and justly claims, therefore, from each citizen a compensation in return for the services thus rendered to him. I do not mean to say that government exists solely for the protection of person and property, or that all the operations of government are to be brought down within the sphere of exchange, for government exists as well for the improvement as for the protection of society, and many of its high functions are moral, to be performed under a lofty sense of responsibility to God and to future ages, nor do I mean to say that government has not also a deep ground for its existence, in virtue of which it may on extraordinary occasions demand all the property of all, and even the lives of some, of its citizens; but I do mean to say that, whatever may be conceded as the ultimate ground of government, the matter of taxation, by which government is outwardly and ordinarily supported, and by which it takes to itself a part of the gains of every man's industry, finds a ready and solid justification in the common principles of exchange. If, as far as the tax-payer is concerned, the exchange does not seem to be voluntary, on a closer analysis it is seen to be really voluntary; for in effect the people organize government for themselves, and voluntarily support it, and there is no government separate from the will of the people. The *practical rules* of taxation at any rate, whether the *fundamental reasons* for it or not, must always be found within the principles of our science; and while it is admitted that here is another point of contact with the regions beyond,

all that really belongs to it must be vindicated for Political Economy. In a very important sense accordingly, a tax paid is a reward for a service rendered. The service which government renders to production by its laws, courts, and officers, by the force which it is at all times ready to exert in behalf of any citizen or the whole society when threatened with evil in person or property, is rendered somewhat on the principle of division of labor, one set of agents devoting themselves to that work; and, notwithstanding some crying abuses of authority which no constitution or public virtue have yet been found adequate wholly to avert, is rendered on the whole economically and satisfactorily. Taxes, therefore, demanded of citizens by a lawful government which tolerably performs its functions, are legitimate and just on principles of exchange alone.

The question now arises, in what proportions ought the citizens to contribute to the fund necessary to be raised by taxation?

The usual answer has been, that a man should be taxed according to his *property*. But what is property? No word has received a greater variety of definitions, or is less settled in definite meaning in the minds of men. The lawyers make a distinction between real property and personal property; and the law of the United States formerly, and of Massachusetts now, though a man have neither real estate nor movables, yet taxes him on his income, on the rewards of his daily industry, regarding that as a species of property. And this too is just; because, as I think, the ultimate idea of property is the power and right to render services in exchange.

Robinson Crusoe, while solitary upon his island, did not and could not have property, in the true sense of that word. It is not the fact of appropriation that makes anything property; it is not the fact that a man has made it or transformed it, that makes anything property; it is not the fact that a man may rightfully give it away, that makes anything property; but it is the fact that a man has something, no matter what it is, for which something else may be obtained in exchange, that makes that something property, and gives government the right to tax it. In other words, property consists in values, in a purchasing-power, and not in possession, or in appropriation, or in the esteem in which a man holds anything he has as long as it is his own. The test of property is a sale; that which will bring something when exposed for exchange is property; that which will bring nothing, either never was, or has now ceased to be, distinctively property. This view may not seem to be as novel as it is, or it may be prejudiced by its very novelty, but at any rate it carries along with it that strongest of the criteria of truth, that it simplifies and illumines a confused section of the field of human thinking; and at the same time justifies a practice which governments have reached, as it were through instinct, the practice, namely, of taxing men who have neither real estate nor chattels, on their incomes from industry.

To the general question, then, in what proportions shall the citizens contribute in taxes to the support of government, the general answer comes, that they ought to contribute *in proportion to the gains of their exchanges*, of whatever kind they may be. No man

ever did, no man ever can, pay his taxes, gifts aside, except out of the gains of some exchanges which he has actually made; and as the gains are the only possible source, so they would seem to be the best possible measure, of his taxes. Even the man who lives on the interest of his money must make an exchange in order to get his interest, the wages of personal and professional services are the result of exchanges, and men can realize nothing from their farms or their foundries except as they sell either them or their products. The farm, the foundry, the mill, the railroad, the real estate of every name; personal property of every kind; and personal acquirements and efforts of all descriptions, best appear, for the purposes of taxation, *through the gains realized by means of them.* If, for any reason, any of these become unproductive, taxes should cease to be derived from them; indeed, must cease to be derived from them, because their owners can no longer pay by virtue of them. It may be objected, that lands, for example, presently unproductive, may be held untaxed under this principle, held for the sake of a prospective rise of price. Very well; when they are sold at a profit, let the owner be taxed on that profit: it will be time enough then, especially as men do not like to hold unproductive forms of property. It may also be objected, that, under this principle, wages, the result of personal and professional exertion, would be taxed just the same as profits and rents, the result of previously accumulated property. Very well; they ought to be so taxed. Can anybody give a solid reason why they ought not to be so taxed? One may say, that a professional man

earning a large income, on which taxes are paid the same as on a similar income of a land-proprietor, dying, leaves to his children no further means of earning, while the land-proprietor, dying, does leave such means. Granted; but the land income continues to pay taxes, while that professional income does not! Other members of the profession will do the business which the former one would have done had he lived, and they will pay taxes on the income from it. What a man transmits to his children, whether a great name or a great estate, has nothing to do, as I take it, with the amount of taxes that he ought to pay while he lives. There is an illusion about land and realized property that needs to be dissipated before men will understand clearly the whole matter of taxation. Without constant watchfulness and foresight, without constant efforts in improvements and repairs, almost every form of realized property will rapidly deteriorate and become unproductive. Land even in Great Britain, where land is scarce, is only worth about twenty-five years rent; and without the exercise of intelligence and will property ceases to be. *Property has its birth in services exchanged; services exchanged give rise to gains; taxes can only be paid out of these gains; they ought to be proportioned to the amount of these gains without any reference to the class of exchanges producing them; while the right to tax on the part of the government is connected with a service rendered by government, and both grows out of and is limited by the right to exchange on the part of the citizens.* These considerations, though they may exclude the propriety of a poll-tax, are consistent with most other forms of taxation, and give unity to them.

If, then, taxes are to be laid on services, thus subtracting a portion from the gains which accompany them, the question now arises in what way are they to be laid? They are commonly divided into two classes, direct and indirect. A direct tax is levied on the very persons who are expected themselves to pay it; an indirect tax is demanded from one person in the expectation that he will pay it provisionally, but will indemnify himself in the higher price which he will receive from the ultimate consumer. Thus an income tax is direct, while duties laid on imported goods are indirect. There has been a great amount of discussion on the point whether direct or indirect taxation be the more eligible form; but the reader of penetration will perceive that there is not at bottom any very radical difference between them; each is alike a tax on actual or possible exchanges, with this main difference, that men pay indirect taxes as a part of the price of the goods they buy, without thinking perhaps that it is a tax they are paying, and consequently without any of the repugnance that is sometimes felt towards a tax-gatherer who comes with an unwelcome demand. Thus indirect taxes are conveniently and economically collected. Especially is this true of impost duties; since one set of custom-house officers collect easily and at once the government tax which is ultimately paid by consumers all over the country. The taxes, by stamps on banks, liquors, tobacco, railroad, insurance, and gas companies, levied by the present United States internal revenue law, are indirect taxes, whereby the government gets in a lump what is afterwards distributed over many subordinate exchanges. The

countervailing disadvantage of indirect taxation, however, is, that the price of the commodity is usually enhanced to an extent much beyond the amount of the tax, partly because it is a cover under which dealers may put an unreasonable demand, and partly because the tax, having to be advanced over and over again by the intermediate dealers, profits rapidly accumulate as an element of the price.

Direct taxes are laid either on income or expenditure. An income tax, if the exact amount of income could in all cases be ascertained, would be a perfectly unexceptionable form of taxation. The only sources of income are three: wages, profits, rents. I do not think that gifts are legitimately taxable; they lie outside the field of exchange; they spring from sympathy, from benevolence, from duty; and while exchange must claim all that fairly belongs to it, it must be careful not to throw discouragements into the adjacent but distinct field of morals. Hence, it may well be questioned whether legacies, bequeathments, gifts to charitable and educational institutions, and gifts to individuals proceeding from friendship, gratitude, or other such impulse, are properly subject to taxation. The property is taxable in the hands of the donor, and may be in the hands of the recipient, but the passage from one to the other ought to be unobstructed by a tax. Gifts then excepted, and plunder, which is out of the question, the sources of income are few and simple, and there is no great difficulty in every man's ascertaining about what his annual income is. Because this income, exactly ascertained, exactly measures the gains of his exchanges for that year, a tax upon that income is the

fairest of all possible forms of taxation, and might, I think, be made with advantage, in time, to supersede all other forms. The late national income tax was new in this country, and for certain reasons not inherent in the nature of the tax became unpopular in influential quarters, and was discontinued; but the English have found their income tax to be for more than thirty years the most uniform, unfailing, expansive, and responsive to control of all their fiscal expedients. Their rate has varied from four to sixteen pence to the pound of income. In 1857, it realized $80,255,000. In 1866, our own national income tax realized $60,894,135. The Germans, too, are now applying an income tax as one of their sources of revenue.

Besides the complete harmony of an income tax with the general principles of taxation, as already unfolded, it has a grand advantage over all other forms of taxation in that it has no tendency *to disturb prices*. Were there no taxation except on incomes, and were the incomes rightly rendered, the prices of everything would be just as if there were no taxes. Taxation would then be like the atmosphere, pressing equally on all points and consciously on none. It is through *tricks wrought on prices* that the greatest injustice is done and suffered in this country at present; a depreciated paper money, for example, raises some prices and not others, and some prices before others, and thus distributes its mischiefs unequally; the "protective" tariff-taxes play fantastic tricks with prices, raising some and depressing others, thus working monstrous injustice on a great scale; and almost all forms of taxation

become unequal and unjust through their diverse action on prices. But a universal income tax, properly levied and fully responded to by the payers, would have no influence at all upon prices, could by no possibility work essential injustice, and would be certain to be very productive.

Another great advantage of an income tax in such a country as this would be, that all men would keep accounts, more orderly methods of business would prevail, men would know better where they stand themselves and whom of others to trust, failures would be less frequent, and everything would be more known and above-board.

In this country, where taxes have to be paid, first to the local municipality, then to the state, and last to the nation, income taxes, were all others abolished, would have this immense advantage, that the municipality might ascertain the incomes once for all, the state and the nation merely collecting an additional per cent. for themselves; or better still, by amicable arrangement, neither party yielding its inherent right to tax, one set of officials might ascertain and collect the tax for all three governments once for all. An objection has been raised from the *publicity* resulting from an income tax. This is no objection at all, inasmuch as every man has a *right* to know that his neighbors are contributing to support the government *pro rata* with himself. In bearing up the burden of government all citizens are copartners, and in this view each has a right to demand a look into the books of the others. Another objection has been raised, that men will not give in a true return of their income. Ah! but they can be

made to do so, as the forms are perfected, as fraudulent returns are promptly punished by additional assessment and collection, and as the memory and conscience of the payers are quickened by the action of a healthful public opinion brought to bear through the annual publication of the list of their returns. Men are not so isolated from each other as that a man's neighbors do not know pretty well the general amount of his income. There is the additional security of an oath, of the fear of punishment, and of the wish to stand well with one's class. At the worst, it may be said, that evasions and fraud accompany also all other forms of taxation. No fair experiment has yet been made in this country with an income tax; special reasons made the late law obnoxious; but if the system were permanently established in lieu of all others, the practical difficulties under it would grow less and less every year. It may be long before we shall ever come to this, but the truth remains that income taxes are the justest of taxes. It is incumbent on me, however, to give the principles and rules relating to the inferior and current methods of taxation.

Besides income taxes, other direct taxes are on expenditure of some special kinds, such as those on horses, carriages, watches, plate, and so on, kept for personal use. As the difficulty of a tax on a person's whole expenditure is much greater than one on his whole income, inasmuch as the items are more numerous and more diffused, it is only attempted to lay a few taxes on some peculiar items of expenditure, such as those above mentioned; but as these do not reach all persons with any degree of equality, they

are so far forth objectionable. A house-tax, levied on the occupier, and not on the owner unless he be at the same time the occupier, would be a direct tax on expenditure every way unobjectionable.[1] Taking society at large, the house a man lives in and its furniture are probably the most accurate index attainable of the size of his general expenditures. They are open to observation and current remark; they are that on which persons rely more perhaps than on anything else external for their consideration and station in life; the tax could be assessed with very little trouble on the part of the assessor; and it is well worthy the attention of our national legislature, whether such a tax, if more taxes should be needed, would not be more equal and more easy of collection than any others now open; or whether it might not with advantage take the place of some of the complicated and objectionable taxes now laid. Direct taxes have this general advantage over indirect, that they bring the people into more immediate contact with the government that lays the taxes, and subject it to a quicker supervision and more effectual curb, whenever its expenditures grow larger than the people think it desirable to incur; they have this general disadvantage over indirect taxes, especially over imposts, that the number of officials required to assess and collect them is much larger, thus swallowing up a part of the proceeds of the taxes, with this liability also of bringing the people into an attitude of hostility to the government and to its contemplated expenditures. But whether the taxes be direct or indirect, or whatever be their form, except it be a poll

[1] Mill, chap. III., book 5.

tax, which is questionable at best, they are laid upon exchanges, and are designed to withdraw for the use of the government a part of the gains of exchanges. From this point of view, which gives unity to the whole field of taxation, some practical hints may usefully conclude this discussion and this volume.

(1.) There is every opportunity in this country to try experiments in taxation, and to reach through experience the best modes, since the states establish their own systems independently of any national action. There is consequently great diversity of methods in different localities and under the different governments. The nation raises its revenue mainly through a tariff, subordinately through an excise, both indirect taxation. Most of the states raise their revenue by direct taxes upon land or other property, though Pennsylvania has recently tried with gratifying results the expedient of an indirect tax *on corporations* in lieu of her former direct taxes. It may possibly be, considering the complex character of our government — the wheels within the wheel — that a combination of different taxes, indirect for the nation and direct for the states, may reach a rough result of justice. But in order that it may do this even approximately, there must be more simplicity in each method, and a more studied harmony between them, than has been hitherto attempted. Taxes must be seen to be *taxes*, and viewed with a comprehensive reference to other taxes falling upon the same persons, before anything like a *system* of taxation can exist for the United States.

(2.) If direct taxes, other than an income tax, be levied, it is very clear that credits are a legiti-

mate subject of taxation. Whatever is bought and sold is properly enough taxed, if the needs of the government require it, and if such taxation would be productive and not too unequal. As values always spring from the action of individuals, so the incidence of taxes is upon persons rather than upon things; and the question is what can a man sell, or what has he already sold, on the gains of which sale the government may lay some claim? If I have a mortgage on my neighbor's farm, I can sell it at any time to a third party; it pays me interest *ad interim*, and I can collect it at maturity. Government therefore properly taxes me for that credit in my possession. It is a part of my property. The holders of the government bonds occupy an economical position exactly similar. They have a lien on the national property and income. The credits they hold are vendible commodities. They are a paper bearing interest. They can be collected at maturity. They are indeed exempted by law from municipal and State taxation. That was a legitimate inducement held out to everybody alike to invest in the bonds. But there is no reason why the nation, having withdrawn them from town and State taxation, should not itself all the more subject them to their fair share of the national burdens. The income derived from them should be taxed as soon as any other income is. It is no longer any ground of merit, even if it ever has been, for persons to buy the government debt. It is a mercantile transaction, and should be so considered in relation to taxes. So of other mercantile credits. They are taxable.

(3.) Taxes in general, in order to be most pro-

ductive in the long run, as well as discourage as little as possible the exchanges which would otherwise go forward, ought to be low relatively to the amount of values exchangeable. A high tax not infrequently stops exchanges in the taxed articles altogether, and of course the tax then realizes nothing to the government. As the only motive to an exchange is the gain of it, the exchange ceases whenever the government cuts so deeply into the gain as to leave little margin to the exchangers. The greater the gain left to the parties, after the tax is abstracted, the more numerous will the exchanges become, and the greater the number of times will the tax fall into the coffers of the government. In almost all articles, consumption increases from a lowered price in even a greater ratio than the diminution of the rate of tax; so that the interests of consumers and of the revenue are not antagonistic but harmonious. On articles of luxury and ostentation, and on those, such as liquors and tobaccos, whose moral effects are clearly questionable, very high taxes may properly enough be laid, because their incidence will hardly tend to diminish consumption, and it would scarcely be to be regretted if it did; but with this exception, duties and taxes should be levied at a low rate per cent., as well for the interest of revenue as of consumers. It is to be added, however, that the taxes even on these articles may be too high to meet either a revenue or a moral purpose. The internal tax of two dollars a gallon upon distilled spirits was of this character. Experience has demonstrated that a less tax will produce more revenue, and the drinking of whiskey, bad as that is, is less culpable than the endless frauds on the government provoked by the high tax.

(4.) Duties and taxes should be simple, and their amount easily calculable by the payer beforehand. The complication of specific with *ad valorem* duties is a decided objection to the present tariff. The latter is a duty of so much per cent. on the invoiced or appraised value of the goods: the former is a duty of so many cents or dollars on the pound, yard, gallon, or other quantity. There are too many practical difficulties connected with either form of duty to make it proper to combine the two upon the same article. To combine them thus is one of the devices of protection. On the whole, specific duties are preferable to *ad valorem* because they give less chance to frauds, and because importers, and others, can make their calculations easier on the basis of them. To be sure, this involves that high-priced grades of an article pay no higher tax than low-priced grades of the same; but this consideration is largely overbalanced by those of convenience and productiveness. So far as is possible, taxes should be levied upon commodities once for all, and then an end. The opposite principle of taxing commodities every time they change hands throws an indefinite burden on exchange, whose weight cannot well be calculated beforehand, either by the consumer or by the government, through uncertainty as to the number of transfers. Exchanges indeed are the only legitimate subject of taxation, but not every specific and subordinate exchange. An attempt to tax all sales whatever was followed in Spain, and will be followed everywhere, by a sluggish indisposition to trade at all. Let the amount of the tax be definite, and let everybody be sure that when it is once paid government will produce no further claim, and

industry will go along under heavy taxes better than under those nominally lighter to which uncertainty as to time or amount attaches. All the more advanced governments have been simplifying of late years their systems of taxation, and collecting their revenue at fewer points, and under more tangible conditions, in order to interfere as little as possible with a free industry and free exchange. England, for instance, has given up a great variety of taxes, and now collects her revenue of about £70,000,000 a year, from customs £20,000,000, from excise £25,000,000, from stamps £10,000,000, from taxes (mostly on incomes) £9,000,000, and from Post Office £6,000,000. The annual average *net* income from these few sources has been for the last ten years, 1868–77, £64,000,000.[1]

(5.) Our internal revenue system has been greatly simplified and improved by recent legislation. If the tariff could be readjusted *on the same principle*, little would be left to be desired in our tax-system. The principle is, relatively low taxes on comparatively few things. The principle is simple: the problem is difficult; but wonderfully less so, the moment all attempts are given up to foster any branch of industry whatever. Our legislators are not called upon to foster any industries. They cannot permanently do it, if they try; and they do immense harm, while they try. Their duties would be easier, and better performed, if they looked solely to the best methods of *raising money* in such a way as shall least interfere with what would otherwise be the ongoing of

[1] *Financial Reform Almanac* for 1878.

exchanges in all directions. Duties that prevent importations, and the consequent exportation of domestic products in return; and duties whose direct effect is to raise the price of other articles than those on which they are levied; are objectionable, and, for the most part, can be dispensed with. In case duties are laid on articles, as spirits, which are also produced at home, there should be an excise on the home product equivalent to the tariff-tax on the foreign, otherwise the people will pay more in consequence of the tax than government will get. This subsidiary principle is important.

(6.) Taxes and duties should be collected by the government in as economical a manner as possible, that is to say, the money should be kept out of the pockets of the people as short a time as possible, disbursement following quick upon collection. It is poor policy to gather taxes at the beginning of the year which will not be disbursed till the end of the year. Let the people use their funds till they are wanted at the treasury; and if the taxes do not then come in as fast as wanted, it is better to issue what are called in England exchequer-bills, and in the United States certificates of indebtedness, to be redeemed at the end of the year from the proceeds of the taxes, than to let the people's money lie idle in the treasury.

(7.) If the necessities of the State require it, government has the right to demand from all persons who are capable of making exchanges, and who do make them, something in the form of taxes. But it is every way better, when possible, that people of very moderate means should be exempted altogether from direct taxes; and the payment of indirect taxes

is a matter more in their own option, since they are at liberty to buy much or little of those commodities subjected to an indirect tax. In the State of Massachusetts, incomes not exceeding $2,000 are exempted by the law. If a house-tax should be levied, all houses below a certain grade of style and comfort should be exempted, and the tax pass up by easy gradations from those just taxed to the palatial residences of the rich. In the present age of the world, the well-to-do citizens of every country are able to bear without too great difficulty the burdens of the government and nothing tests better the degree of civilization which a nation has reached than the care and solicitude it displays for the welfare of its poorer citizens.

(8.) Who pays the indirect tax? Can the producer throw it wholly upon the consumer? Can the banks, for example, throw their taxes wholly upon their customers? Producers and dealers and bankers and companies add the tax demanded from them, and sometimes more than the tax under color of it, to the price of their wares. But it is not true that they can always realize the whole of this enhanced price. Generally they can, sometimes they cannot. If the article be one of necessity, or a luxury that has become equivalent to a necessity, and there be no other source of supply than the taxed one, then, as a rule, the tax falls wholly on the consumer, and is a matter of indifference to the producer or dealer. But the usual effect of an enhanced price is to lessen demand, and if the article is dispensable, or its consumption can be lessened, or it can be obtained elsewhere, the market will be sluggish under the tax, and producers or dealers will be likely to tempt it by

lowering prices, in other words, by sharing the tax with consumers, and paying that share out of profits. This is the principle. Producers and dealers would rather the tax were off. Consumers generally, but do not always, pay the whole of it.

(9.) Much has been written, and very little is known, about the tendency of taxes *to diffuse themselves*. By this is meant, that it does not make so much difference upon what or upon whom a tax is originally levied, because the tendency of things is to *diffuse it*, that is, to compel others to assist in paying the tax. The result of my own reading and reflection on this point is the conclusion that taxes do not "diffuse themselves" nearly so much as has been sometimes supposed; and that, at any rate, it is a good deal better to take the taxes from those who ought to pay them, than to lay them at random, and then to trust some unknown forces to make them afterwards just. It is certain that *some* unjust taxes cannot be diffused; for example, the protective tariff-taxes paid by the farmers upon articles of necessary consumption. These taxes have no tendency to raise the price of the farmers' produce, for *that* is determined by the foreign market, to which large parts of the produce are exported. For such taxes the farmers cannot reimburse themselves. Taxes that affect no prices are the best of all; taxes that affect prices the least are the next best; and taxes that are *designed* to affect prices are the very worst.

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