

## NASSAU W. SENIOR, BRITISH ECONOMIST, IN THE LIGHT OF RECENT RESEARCHES. II

In the preceding article<sup>1</sup> a brief description was given of the personal traits and public activities of Nassau W. Senior. The reader's attention was also directed to the unsatisfactory form of the author's works; and it was pointed out that the underlying causes of the low estimate of Senior as an economist could be traced to the fragmentary and anonymous character of his contributions. It is the purpose of this paper to appraise the importance of Senior's labors in the light of the recently discovered manuscripts. There are certain broad questions which the reader may expect us to face squarely: Do the materials contained in the Senior manuscripts constitute a distinct contribution to economic theory? What would have been the effect upon the stream of economic thought had they been published by the author himself? What light, if any, do they throw upon questions pertaining to Senior's published material?

### I. SENIOR'S EARLY VIEWS ON POLITICAL ECONOMY

It has already been observed in the preceding paper that Senior's treatise on political economy embodied only "certain portions" of the lectures which he had delivered during his first professorship at Oxford. Economists,<sup>2</sup> however, have generally

<sup>1</sup> *Journal of Political Economy*, XXVI (April, 1918), 347.

<sup>2</sup> As Professor Taussig puts it in his masterly review of the wages-fund doctrine: "Senior . . . the most acute critic of his day . . . began his contributions to economic literature with a burst of promising activity; lecturing at Oxford on value, on wages, on population, on international trade. . . . The matter of these lectures . . . was later incorporated in the general essay on political economy . . . which Senior prepared in 1836, in the form of an article for *Encyclopedia Metropolitana*. With this article . . . his contributions to economic theory unfortunately came to an end. . . . His work was thus *never* carried beyond its first stage of promise, and his results were never maturely developed."—*Wages and Capital* (1896), pp. 197-98.

regarded this work as containing the quintessence of the author's economic contributions. In view of the great rôle that this little book has played in the evolution of economic theory, one scarcely need apologize for attempting to trace the first workings of the mind that originated it. The following is a complete list, with explanatory comments, of Senior's first series of lectures on political economy, delivered in the University of Oxford in 1826-30.

FIRST COURSE (1826-27)

*Lecture 1.* Introductory

In this lecture the author points out the scope, object, and method of political economy.

*Lecture 2.* On the Nature of Wealth

*Lecture 3.* On the Nature of Value

In the Lectures 2 and 3 Senior gives his peculiar views on wealth in its relation to value:

If Political Economy were a study perfectly new, or if it had advanced to that point at which its principal terms were accurately defined and generally recognized, I should have terminated here the discussion of the nature of wealth. But it is a subject on which there is so much prejudice among those who have not studied it systematically, and so much difference of opinion and language among those who have, that I can scarcely expect my opinions and nomenclature to be acquiesced in unless I can show, not only that they are accurate and convenient, but that there are objections to those which they would supplant.

The most popular of all prejudices respecting wealth is that which supposes it to be identical with money,<sup>2</sup> and I thought that the best preliminary to an exposition of the falsehood of this opinion would be to show what money really is.

Senior made this remark two years after having delivered the following lectures on the theory of money. It shows why he was forced to consider money at this stage of his lectures.

*Lecture 4.* On the Nature of Exchange and Money

*Lecture 5.* On the Nature of Money

<sup>2</sup> *The Mercantile Theory of Wealth.* "A theory which has long been, and continues to be, the principal obstacle to the wealth and happiness of this country."

*Lectures 6, 7, and 8.* On the Transmission of the Precious Metals from Country to Country and the Mercantile Theory of Wealth

*Lecture 9.* On the Various Scientific Definitions of Wealth Differing from That in the Second Lecture

SECOND COURSE (1827-28)

*Lecture 1.* On Production and Consumption

*Lecture 2.* On Abstinence

*Lecture 3.* On Capital and Machinery

*Lecture 4.* On Division of Labor

*Lecture 5.* On Application of Capital to Land

*Lecture 6.* On the Corn Laws and the Poor Laws

In the fifth lecture Senior discusses the law of diminishing returns as applied to agricultural production. The sixth lecture dwells upon only one of the consequences of this law, viz., "the tendency of an increasing population, entitled under the poor laws to a fixed amount of bread, confined by the corn laws to the product of the British Islands, and consequently fed at a constantly increasing proportionate expense, gradually to absorb the whole rental of the country."

*Lectures 7 and 8.* On Population

*Lecture 9.* On the General Desire for Wealth

With the ninth lecture Senior concluded what he called the "Grammar of Political Economy." He pointed out in what wealth consists and by what instruments it is produced. He showed that those instruments were divisible into three: natural agents, labor, and abstinence. This division occasioned a corresponding distribution of society into three classes: proprietors of natural agents, laborers, and capitalists; and a corresponding distribution of wealth into rent, wages, and profit.

The next two courses are devoted to the subject of distribution. In the third course Senior lays down the laws regulating the exchanges of all things. The circumstances which govern the division of the products of industry among the three great classes of producers form the subject of the fourth and last course of this series of lectures.

## THIRD COURSE (1828-29)

- Lecture 1.* On the Cost of Production  
*Lecture 2.* On Price where Competition Is Unequal  
*Lecture 3.* General Laws of Price (Continued)  
*Lecture 4.* Some Effects of Corn Laws  
*Lectures 5, 6, 7, 8, 9, 10, and 11.* On Money

Having considered in the first part of this course the cost of production of commodities in general, Senior was then led to consider the cost of production of money. In resuming the subject of money Senior felt called upon to offer the following apology:

One of the principal difficulties in the science of Political Economy arises from the mutual dependence of the propositions of which it is formed—a dependence which renders it impossible fully to understand any one without a general acquaintance with the others. The consequence is that it is impossible, or at least has been found by me impossible, to subject the science to any arrangement free from objections. The plan which I have adopted has been to take seriatim those topics which appeared to me most important, and to pursue each separately only until I found that any further exposition would involve the use of words and the assumption of facts not previously explained. This has given to my lectures what in painting would be called a “*spotted*” appearance, and has filled them with references and recapitulations not easily followed by those who do not recollect the previous statements, and often I fear tedious to those who do. My only excuse is that I have not been able to contrive any better arrangement.

Some acquaintance with the nature of money is necessary before the prejudices can be removed and the ambiguities pointed out which at first obscure and confuse the mind of almost every student. At the same time a perfect acquaintance with it would imply, not merely a knowledge of all that is now known in Political Economy, but of all that can be hoped to be known. I was forced, therefore, to treat of money at some length even in the first and most elementary course of these lectures, that in which I endeavored to explain the nature of wealth.

## FOURTH COURSE (1829-30)

- Lectures 1 and 2.* Rent, Profit, and Wages  
*Lecture 3.* Variations in Wages and Profits in Various Employments  
*Lecture 4.* Effects of Uncertainty on Profits  
*Lecture 5.* Meaning of High and Low Wages, and High and Low Price of Labor

*Lectures 6 and 7.* Popular Errors Respecting the Causes Which Influence the Rate of Wages

*Lecture 8.* Causes Which Influence the Rate of Wages: (a) Productiveness of Labor, (b) Proportion of Laborers Not Employed for the Benefit of Laborers

*Lecture 9.* Effect on Wages of Rate of Profit

With an outline of Senior's courses before us it is now possible to make certain definite conclusions as to the origin of his treatise on *Political Economy*. A thorough comparison of this work with the manuscript lectures that have just been outlined will elicit the following facts:

In the first place, though published in 1836, Senior's *Political Economy* was written almost entirely before the year 1830. Of the 225 octavo pages comprising this book, at least 200 are copied almost verbatim from the original lectures.

Secondly, contrary to the prevailing opinion, not more than 50 per cent of the subject-matter dealt with in those lectures is included in the treatise—the important subject of money, for instance, being left out entirely.

Thirdly, aside from the fact that Senior's early views on economics are only partially included in this treatise, the work is marred by defects incidental to the editing and rearranging of the lectures in order to meet the requirements of a succinctly written article for an encyclopedia. As we shall have occasion to point out presently,<sup>1</sup> some of the apparent inconsistencies in this work are directly traceable to the peculiar mode of its composition; and remembering how exceptionally busy Senior was during the period immediately preceding its publication we are surprised to find it more systematic than the circumstances of the occasion would seem to warrant. As already stated, the book is largely copied from the lectures. This, however, does not mean that its arrangement is exactly in accordance with the plan followed in the lectures. Although the limits of this article will not permit a detailed account as to the manner in which the lectures were incorporated in the book, the

<sup>1</sup> Cf. *infra*, p. 519.

following is a "cross-section" of a detailed analysis which has been made:

PAGES IN SENIOR'S *POLITICAL ECONOMY* CORRESPONDING TO THOSE IN THE ORIGINAL MANUSCRIPTS

"POLITICAL ECONOMY" Pages	MANUSCRIPTS	
	Volume	Pages
83-84 (statistical figures slightly revised) . . . . .	II	218-21
84-86 . . . . .	II	222-34
87 . . . . .	IV	1-3
87-88 . . . . .	IV	7-10
88 (middle paragraph, first sentence) . . . . .	V	1 (first two sentences)
88-95 . . . . .	VII	1-42
95-97 . . . . .	IV	10-16
97 (middle paragraph) . . . . .	Not found	.....
97 (last paragraph) . . . . .	IV	21

With regard to the lectures that are excluded from the treatise, the ten<sup>1</sup> following were published at different periods with omissions:

- a) Introductory Lecture
- b) Three Lectures on the Transmission of the Precious Metals from Country to Country and the Mercantile Theory of Wealth
- c) Three Lectures on the Cost of Obtaining Money
- d) Three Lectures on the Value of Money

The last three lectures were published five years *after* the publication of the *Political Economy*.

Aside from all these lectures there remain more than three hundred manuscript pages of first-class matter that have never been printed. This would be equivalent to about sixty pages of the *Political Economy* text (counting about five hundred words to a page). There is, therefore, comparatively little of the first series of lectures that has remained unpublished.

## II. SENIOR'S MATURED VIEWS ON POLITICAL ECONOMY

Turning now to a consideration of the second series of Senior's lectures, delivered in the University of Oxford between 1847 and

<sup>1</sup> Five other lectures that were published separately, viz., two on "Population" and three on the "Rate of Wages," were incorporated in the *Political Economy* text.

1852, we find that, with the exception of the four introductory lectures, the public has been entirely unaware even of their existence. The following is a list of them:

FIRST COURSE (1847)

- Lecture 1.* Causes That Have Retarded the Progress of Political Economy
- Lecture 2.* Political Economy a Mental Study
- Lecture 3.* Reasons for Treating Political Economy as a Science
- Lecture 4.* Political Economy a Positive, Not an Hypothetical Science—  
Definition of Wealth
- Lecture 5.* Universal Desire of Wealth
- Lectures 6 and 7.* Power of Government to Alter the Degree in Which  
Wealth Is Desirable
- Lecture 8.* Production of Wealth
- Lecture 9.* Direct and Indirect Production

SECOND COURSE (1848)

- Lecture 1.* Instruments of Production: Definitions
- Lecture 2.* Classification of the Instruments of Production
- Lecture 3.* Definitions of Capital (Commenced)
- Lecture 4.* Definitions of Capital (Concluded)
- Lecture 5.* National Capital (Commenced)
- Lecture 6.* National Capital (Concluded)
- Lecture 7.* Division of Labor
- Lecture 8.* Abstinence (Commenced)
- Lecture 9.* Abstinence (Concluded)

THIRD COURSE (1849)

- Lecture 1.* Efficiency of Capital Applied to Agriculture (Commenced)
- Lecture 2.* Efficiency of Capital Applied to Agriculture (Continued)
- Lecture 3.* Efficiency of Capital Applied to Agriculture (Concluded)
- Lecture 4.* Population: Preventive Checks (Commenced)
- Lecture 5.* Population: Preventive Checks (Missing!)
- Lecture 6.* Population: Preventive Checks (Concluded)
- Lecture 7.* Population: Destructive Checks Commenced)
- Lecture 8.* Population: Destructive Checks (Concluded)
- Lecture 9.* Population: Remedial Checks (Commenced)

FOURTH COURSE (1850)

- Lecture 1.* Population: Remedial Checks (Concluded)
- Lecture 2.* Colonization
- Lecture 3.* Recapitulation (Begun)—Production
- Lecture 4.* Recapitulation (Continued)—Production
- Lecture 5.* Recapitulation (Concluded)—Efficiency of Capital Applied  
to Agriculture
- Lecture 6.* Exchange—Value—Cost of Production
- Lecture 7.* Monopolies

## FIFTH COURSE (1851)

The manuscripts contain only the sixth lecture of this course entitled "Cost of Gold." This is in connection with Senior's views on the question of wages. There is also a fragment of what he called: "Beginning of a Lecture on the Retardation of Capital by Unwise Legislation." The first fifty pages, however, of this "Beginning" are missing.

The lectures that we have just enumerated were written a generation after Senior delivered his first course of lectures on political economy in the University of Oxford. By this time the Classical system of political economy had already reached its zenith with the publication of John Stuart Mill's memorable *Principles of Political Economy* in 1848, and the reaction against the extreme tendencies of the Orthodox school had begun to assume a definite shape. Our author was now at the parting of the ways, so to speak, standing under the influence of those two counteracting forces. We should consequently expect his work to partake of the new as well as of the old spirit of thought.

The first series of lectures was written shortly after the termination of the Napoleonic Wars, when British commerce and industry began once more to extend their tentacles in search of foreign markets and found their progress impeded by time-worn customs and laws. During the following generation tremendous changes took place in the social, industrial, and political life of the people—changes which could not but produce a deep impression upon the active mind with which Senior was endowed. By the time the second series of lectures was being prepared the rotten borough system had become a thing of the past, religious disabilities had been removed from Catholics and other dissenters, and the suffrage rights extended to a larger number of people of the lower classes. The Elizabethan Poor Laws that gave rise to such mischievous abuses had now likewise been amended; the burdensome Corn Laws had been repealed; and the nation, more prosperous than ever before, was approaching an era of free trade. While the wheels of industry were thus moving at an accelerated speed, safety devices had to be applied in the form of factory enactments, housing legislation, etc., in order to prevent the human



element from being crushed under the weight of the capitalistic machine.

In spite of all these reforms, or rather emboldened by all these transformations, the social vitality once so comparatively dormant now grew more and more restless. Trade unionism assumed a more offensive attitude toward its old foes; Chartism demanded more power of control on the part of the masses; and so-called "scientific socialism," born of the spirit of the times, like a naughty child began to display its favorite pranks.

These and other phenomena of the period under consideration are all reflected in the second series of lectures on political economy that Senior delivered at Oxford. In a preliminary account of this nature it is hardly feasible to enter upon a detailed analysis of the author's economic contributions. All that we propose to do is to present a few remarks on certain topics relative to the unpublished materials.

### III. THE SCOPE AND METHOD OF POLITICAL ECONOMY

One of the greatest controversies in the history of economics was centered upon the question as to the scope and method of political economy. On this as well as on many other inquiries Senior was obliged to do pioneer work. It was in 1826, upon the occasion of delivering his introductory lecture on political economy at Oxford, that this subject first attracted his attention. From that time on until the year 1860<sup>1</sup> he never tired of emphasizing his views respecting the proper limits of economic science and the mode of conducting its inquiries.

The scope of political economy may be considered from two points of view, viz., the subject-matter of the study and the practical application of its conclusions.

Concerning the subject-matter of economics there are two divergent opinions depending upon whether our studies are confined to the subject of wealth or are extended to the broad realm of human welfare. Many economists consider the steady increase of national happiness as the ultimate object of political economy. Thus,

<sup>1</sup> See *Report of the Thirtieth Meeting of the British Association for the Advancement of Science*, Oxford, June and July, 1860. Opening address by Nassau W. Senior, president, Section F, Economic Science and Statistics.

according to Jevons, "the object of Economics is to maximise happiness by purchasing pleasure, as it were, at the lowest cost of pain."<sup>1</sup> Adam Smith, the father of political economy, limited his inquiries to the wealth of nations; but according to him only *material* objects were regarded as wealth. Senior vigorously attacked this narrow conception of the term and, following the leadership of the French economist, Jean Baptiste Say, included immaterial products in the category of wealth. Not unlike most followers of new doctrines he was at first led, perhaps unconsciously, into the opposite extreme so far as he regarded all personal qualities as articles of wealth. Thus in his lecture on the "Nature of Wealth," which was delivered in 1826, Senior tried to explain why "health, strength, and knowledge, and the other natural and acquired powers of body and mind" appeared to him to be articles of wealth.

A year later, however, while lecturing on production, the author found occasion to state his position on this matter in unmistakable terms. He found that Storch had substituted the expression *biens internes*<sup>2</sup> instead of immaterial products. According to that author internal goods consist of eight distinct varieties: health, skill, learning, taste, morality, religion, security, and leisure. According to Senior:

The incorrectness of this language appears obvious the instant it is formally stated. If taste, morality, and religion were really the objects of purchase, wealth would be a better thing than any political economist, however prejudiced in favor of his own science, ever ventured to suppose. What we buy is not health, learning, or piety. All that the physician, the tutor, or the divine, however excellent in his department, can produce is the *means* by which these ulterior results may more or less certainly and more or less imperfectly be effected. The disease may be incurable, or the pupil inattentive, or the seed may be sown on the rock, or by the wayside; but if, in each case, the best means which the nature of the case admitted have been adopted, the producer of those means is entitled to his remuneration, though they have failed, wholly or partially, in producing the intended result. The exchange was complete the instant the advice or the lecture was given and the fee received. . . . If a servant is the producer of an immaterial product . . . every other producer belongs to the same class, and leisure is the only ultimate product. If a

<sup>1</sup> *Theory of Political Economy* (2d ed., 1879), p. 25.

<sup>2</sup> See *Cours d'économie politique* (St. Petersburg, 1815), Tome V.

servant is to be considered as the producer, not of the polish on a pair of boots, but of a certain portion of leisure, so must the bootmaker, and so must all the previous producers by whose united exertions the wearer of the boots is saved the trouble of making them.

Thus the author draws a sharp distinction between services and the ultimate results of those services. It is therefore clear that when Senior referred to knowledge and skill as articles of wealth he meant to imply, not that the personal faculties per se, but that the outer aspects and effects of those personal characteristics were included under that category.

In the absence of this explanation Senior's *Political Economy* appears to be inconsistent<sup>1</sup> in this respect. In his discussion concerning the nature of wealth he "places talents and accomplishments among the articles of wealth";<sup>2</sup> whereas in his treatment of production he distinguishes between services and commodities and considers the *immaterial products* of what Adam Smith called unproductive labor as *service*.<sup>3</sup>

Political economy then, according to Senior, does not deal with our ultimate wants. It is not concerned with pleasure or happiness per se. Its province is confined to those immediate objects of our pursuits by means of which the ultimate desires and aspirations of mankind are satisfied. In short, political economy deals only with wealth.

Another aspect concerning the scope of political economy relates to the application of its principles. Some economists, notably Colonel Torrens and von Thünen, have devoted much space to arguing about imaginary states of society where there are supposed to be no exchanges with the outside world. The marginal-utility theory of value is usually illustrated in modern textbooks on economics by references to the supposed thoughts and activities of Robinson Crusoe.

Now, according to Senior, economic laws have no reference at all to the transactions of such isolated individuals or communities:

To suppose an attempt by Robinson Crusoe to regulate the distribution of commodities according to the laws of Political Economy would resemble the

<sup>1</sup> Cf. *supra*, p. 513.    <sup>2</sup> Cf. *Political Economy*, pp. 9-10, quoted from 1826 lectures.

<sup>3</sup> Cf. *ibid.*, pp. 51-53, quoted from 1827 lectures.

celebrated soliloquy of an Amphisbaena, or the cabinet council held *Julio et Caesare consulibus*. . . . Political economy considers men in that more advanced state, which may fairly be called their natural state, since it is the state to which they are impelled by all their natural propensities, in which each individual relies on his companions for the greater part, in many cases for the whole, of what he consumes, and supplies his own wants principally or wholly by the exchanges<sup>1</sup> in which he contributes to theirs.

One of the principal differences between the Historical school and the Classical economists relates to the question as to whether economic doctrines are universally or only relatively true. The older economists, Senior especially, are severely criticized for what Knies termed their "absolutism of theory." It is asserted that those economists regarded political economy "as a system of doctrines possessing universal validity. The science was declared to belong to no one nation and to no one country; wages, profits, and other economic phenomena were held to be governed by immutable laws comparable to the laws of gravitation."<sup>2</sup> It was in opposition to this view that Marshall was led to state emphatically that "every age and every country has its own problems; and that every change in social conditions is likely to require a new development of economic doctrines."<sup>3</sup>

As a matter of fact, in anticipation of such views as have been imputed to him, Senior makes the following sarcastic remarks:

If there are any who believe wealth to be rather an evil than a good, or its *production and distribution* not to *depend on human institutions*, even to such persons the study of wealth would still be a subject of great interest. To the first class, in order to frame, as Lycurgus is said to have framed, laws to prevent its increase; to the second, on the same grounds as those on which we study the planetary motions, though they depend on causes not within our control. Those only are justified in blaming political economists for considering everything with reference to wealth who either deny that human knowledge is best extended by confining the attention at one time to one set of phenomena, or who believe the influence of wealth on the moral and intellectual improvement of man to be so trifling; who believe that a people, under the constant terror of want, and subject to unremitting toil in the attempt, sometimes the vain

<sup>1</sup> It will be recollected that under the term "exchanges" Senior includes also taxes.

<sup>2</sup> Cf. John Neville Keynes, *The Scope and Method of Political Economy*, p. 281.

<sup>3</sup> Cf. Alfred Marshall, *Principles of Economics* (1890), p. 90.

attempt, to avert it, differ so little in virtue and in happiness from a population whose subsistence is ample and secure, that the whole subject is unworthy of scientific investigation.

Another aspect of the supposed absolutism of the Classical English economists relates to their ideas of non-interference with international commerce. It is assumed that the Free Traders have regarded their *laissez-faire* doctrines as valid for all times and all countries. In opposition to this cosmopolitanism and absolutism attributed to the free-trade theory there arose a class of thinkers, headed by List and Carey, who emphasized the existence of national boundaries. As might have been expected, these Nationalists, though avowed apostles of the comparative and historical method, were no less dogmatic than their opponents in advocating the régime of protection "at all cost."

Those<sup>1</sup> who have made an intensive study of this subject have arrived at the conclusion that *laissez faire* forms no part of the structure of classical economic thought. As far as Senior's views on free trade are concerned the following quotation shows that, far from being idealistic and dogmatic, his doctrines are founded upon the undeniable fact of England's supremacy as a manufacturing nation.

Many economists have maintained that no country can be injured by the improvement of her neighbors. If the continent, they say, should manufacture cottons with half the labor which they now require in England, the consequence would be that we should be able to import our supply of cottons from Germany or France at a less expense than it costs us to manufacture them, and might employ a portion of our industry now devoted to the manufacture of cottons, in procuring an additional supply of some other commodities. These opinions have such an appearance of liberality that I am sorry to dissent from them. But it must be remembered that England and the continent are competitors in the general market of the world. Such an alteration would diminish the cost of obtaining the precious metals in the continent and increase it in England. The value of continental labor would rise and the value of English labor would sink. They would ask more money for all those articles in the production of which no improvement had taken place, and we should have less to offer for them. We might find it easier to obtain cottons, but we should find it more difficult to obtain everything else.

<sup>1</sup> Cf. C. F. Dunbar, "The Reaction in Political Economy," *Quarterly Journal of Economics*, October, 1886; J. N. Keynes, *The Scope and Method of Political Economy*, pp. 65 ff.

The reader's attention has already been called to the fact that Senior regarded political economy as a purely theoretical study,<sup>1</sup> though as a social reformer he was keenly interested in all matters affecting the general welfare of the community.<sup>2</sup> The author furthermore insisted that economics be treated as a distinct *science* rather than as a subsidiary branch of the general *art* of government.

The political economist, *as such*, has nothing to do with any of the other physical or moral sciences, or with any of the physical or moral arts, excepting so far as they affect the production or distribution of wealth. Whether wealth be a good or an evil, whether it be conducive to human morality or to human happiness, that it be hoarded or that it be consumed, that it be accumulated in masses, or that it be generally diffused, are questions beyond his science. His business is to state what are the effects on the production and distribution of wealth, or, to use a shorter expression, the economic effects of accumulation and of expenditure, of the different kinds of consumption, and of the aggregation in a few hands, or the division among many, of the things of which wealth consists. Whenever he gives a precept, whenever he advises his reader to do anything, or to abstain from doing anything, he wanders from science into art,<sup>3</sup> generally into the art of morality, or that of government.

The economist then, according to Senior, should make it his business to *teach* the facts of economic life as they *are* rather than to *preach* what they *ought* to be. It must not be assumed, however,

<sup>1</sup> See the *Journal of Political Economy*, XXVI (April, 1918), p. 356.

<sup>2</sup> Lecturing in 1826, Senior spoke of the "thousands and tens of thousands of families of hand-weavers, in Lancashire and Yorkshire, who are working fourteen hours a day for what will scarcely support animal existence. And those are perhaps still more numerous who cannot obtain regular employment even on such terms as these, but are eking out the deficiency of their wages by the gradual sale of their little stock of clothes and furniture. Unless we are prepared to maintain that there can be no measures by which the number of persons so situated can be increased or diminished, we are, at least, bound to inquire into the pretensions of the science which professes to point out those measures."

Referring to the prevailing conditions of pauperism, he said: "I confidently hope that we shall not long have to contend with them; but my hope is founded solely on the expectation that the diffusion of sound principles of political economy will aid enlightened ministers, with the whole strength of public opinion, to enable them to conquer the ignorance, prejudice, and individual interest which have always been opposed to every improvement."

<sup>3</sup> In harmony with the latest conceptions of aesthetic ideals preaching is ostracized even from the realm of art. Speaking on the subject of "Theatre Going" some years ago, Professor Brander Matthews remarked that the object of art is, not to preach, but to present the truth of actual life. If it have an ulterior purpose it is generally immoral.

that Senior himself always acted in accordance with this precept. In actual practice he seldom hesitated to recommend measures the salutary effects of which he thought quite certain. This, however, he did, not as an economist, but as a social reformer. As a scientist he deemed it expedient to separate the discussion of general principles from the practical problems which they subserved.

One of the leading characteristics of the Classical political economy, its unduly abstract and deductive method, is generally considered to have been brought into prominence by Senior. Thus, according to Ingram, the author's method of reasoning is "purely deductive." He allows "no room for any other '*facts*' than the four fundamental propositions from which he undertakes to deduce all economic truth. . . . His postulates and his inferences are alike conceived as corresponding to actual phenomena."<sup>1</sup>

In their recent publication Professors Gide and Rist make even more sweeping characterizations in this connection. They speak of Senior as—

the best representative of the Classical school, showing its good and bad points better than any other writer. He removed from political economy every trace of system, every suggestion of social reform, every connection with a moral or conscious order, reducing it to a small number of essential, unchangeable principles. Four propositions seemed sufficient for this new Euclid, all necessary corollaries being easily deducible from the one or other of these.<sup>2</sup>

Such are the solemn opinions of economic historians whose admiration of the historical method *par excellence* is supposed to be no greater than their aversion toward dogmatic assertions and unwarranted generalizations. It is not our object to present a brief in defense of Senior's position. Nor do we propose to waste our lachrymal resources in bemoaning the general misunderstanding that has arisen with regard to what some may call the "hero" of our story. Fetishism forms no part of the creed of the scientific inquirer after truth. What then are the essential facts in the matter?

<sup>1</sup> Cf. J. K. Ingram, *A History of Political Economy* (1888), p. 140.

<sup>2</sup> See Gide and Rist, *A History of Economic Doctrines* (1915), p. 350. Translated from the French edition of 1913 by R. Richards.

In the first place, the author himself was very much in sympathy with the concrete method of study. That he looked down with contempt upon those who indulged in abstract and a priori theories is shown by the following remarks made in connection with his elaborate critique of the labor theory of value:

It is this determination to refer all value to labor that has led Mr. McCulloch and Mr. Mill to consider the improvement of wine in a cellar the result of human labor. *Attempts like these to bend facts and language into an accordance with hasty generalizations have thrown on political economy the ridicule which now impedes the diffusion and progress of the science, and consequently the improvement of mankind.*

Far from being abstract and vague, Senior emphasizes the importance of selecting proper terms and defining them accurately.<sup>1</sup> His predecessors, as is generally known, were very lax in this respect. Ricardo, for instance, seldom explains his technical terms and sometimes attaches different connotations to the same words. It is on this account that Senior characterized that economist as "the most incorrect writer who ever attained philosophical eminence."

As regards the author's postulates it is important to know *why* he formally stated them and *how* he used them. If the followers of the strictly Historical school had applied their chosen method of investigation in this connection, they would undoubtedly have perceived the peculiar circumstances that occasioned the use of formal propositions such as Senior employed in his early lectures on political economy. Senior's critics, however, seem to have ignored the fact that the author was lecturing at a time when so much prejudice prevailed against what Carlyle was pleased to call the "dismal science." They fail to realize that in those pioneer days it was an absolute necessity for an author who had a deep interest in his subject to start his course of lectures with simple, convincing propositions in order to popularize his science. "*The whole subject of political economy,*" Senior observes, "*has been so much obscured by error and prejudice that those who attempt to explain it are constantly obliged to state formally propositions too obvious to require proof or admit illustration, and to refute doctrines so palpably absurd as to be unsusceptible of being plausibly stated.*"

<sup>1</sup> In his second professorship at the University of Oxford the author devoted nearly a whole lecture to an exposition of the principles governing definitions, nomenclature, and classification.



Senior found it convenient to use his elementary propositions with the object of simplifying matters. It is of course quite true that nature's action is complex,<sup>1</sup> and that in the long run very little is gained by pretending that it is simple. But the fact that the author commenced his course of lectures on economics with a formal statement of general propositions must not lead us to the conclusion that his method of reasoning was inherently abstract and a priori. These fundamental propositions were meant to serve the purpose of a general résumé to his introductory course,<sup>2</sup> where he treated of the rudiments of political economy. Such a method of procedure is used even by the most "inductive" of modern economists. Thus Professor Ely's *Outlines of Economics* contains a chapter on "Elementary Concepts"; Professor Seligman introduces his *Principles of Economics* with a chapter on "Fundamental Concepts"; and Professor Marshall, in his *Principles of Economics*, devoted a whole "Book" to a discussion of "Some Fundamental Notions." Votaries of the inductive method would have done well to pursue an inductive method of investigation with reference to Senior's contributions before making their sweeping generalizations that Senior's *Political Economy* contained "no other facts than the four fundamental propositions." As a matter of fact many other principles are discussed at length in this treatise, with a firm grasp of the comparative and historical method and without any further reference to the author's elementary propositions. Finally it must be noted that in the second series of lectures which the author delivered in the University of Oxford there is no *formal* statement of economic postulates.

Another question to be considered is whether economic science is based on hypothetical assumptions or on positive facts. John Stuart Mill conceived political economy to be an abstract science founded on arbitrary assumptions. According to that author mankind, from an economic viewpoint, is supposed to be dominated by a single motive—the desire to accumulate more and more wealth

<sup>1</sup> Cf. Marshall's *Principles of Economics* (1891), p. xiv.

<sup>2</sup> Referring to the proposition concerning the general desire for wealth Senior announces at the end of his early lectures on population: "In my next lecture I shall consider the second of my five elementary propositions . . . and *this discussion will terminate my introductory course.*" This introductory course he regarded as the "Grammar of Political Economy."

with the least sacrifice. Senior, however, discards this hypothesis.<sup>1</sup> The principles of economics, according to him, are based, not upon assumed premises existing only in the imagination, but on the positive facts of actual life. Instead of dealing with such an abstract creature as the "economic man," he considers human beings as endowed with many motives and desires, of which the desire for wealth alone is universal and insatiable.

#### IV. SENIOR AND THE PSYCHOLOGICAL SCHOOL: THE PASSION FOR RICHES

Among Senior's papers there is an interesting letter, dated December 9, 1814, which contains the following observation: "I have not seen much of life, but that *money is the sinews of happiness* every year's, every month's, and every week's, and every day's, and every hour's experience convinces me—at least to those who are capable of enjoying it."

This deep impression produced by bitter personal experience seems to have been the germ of the idea which ultimately became the central thought of the author's economic system. *Money is the sinews of happiness!* But as everyone likes to be happy, and happiness consists in the gratification of our wants, it follows that the possession of the means whereby this goal may be attained must be an object the desire for which is *universal*.<sup>2</sup> To quote the author's matured views on the subject:

Money seems to be the only object for which the desire is *universal*; and it is so because money is abstract wealth. Its possessor may satisfy at will his ambition, or vanity, or indolence, his public spirit or his private benevolence, multiply his means of obtaining bodily pleasure or of avoiding bodily discomfort, or the still more expensive amusements of the mind. Any one of these pursuits would exhaust the largest income, and as all men would engage in some of them, and many in all, the desire for wealth must be *insatiable*.

<sup>1</sup> See Senior's *Four Introductory Lectures on Political Economy*, p. 62.

<sup>2</sup> Lecturing in 1827 on the general desire for wealth Senior remarks: "I feel that there is no amount of wealth, within the possible limits of individual acquisition, which I should not desire to obtain, if it could be obtained without any sacrifice. And I feel, what is indeed an identical proposition, that I wish to make my acquisitions at as little inconvenience as is possible. And I cannot doubt that these are the feelings of all around me."

Later on the author modified this view: "In stating that *every man desires to obtain additional wealth with the least possible exertion of labor or of abstinence from*

This doctrine, which Senior regards as the cornerstone of the science of wealth, has been the target of attack from all quarters. Time there was when economists of repute, such as Malthus and Sismondi, entertained serious doubts as to whether the wants of mankind could keep pace with the steady increase in the production of commodities. Like mediaeval monks seeing the end of the world and preaching of kingdom-come, these false prophets shuddered at the prospects of general over-production or universal glut. In fact, Senior's formal proposition with regard to the universal desire for wealth was intended to offset the pernicious influence of the popular theory of crises and universal glut. The author tried to show that the desires of men are practically insatiable, and that the whole world may continue to improve and increase the powers of production without fear that exchanges may stagnate from general superabundance.

The popular theory respecting the limits of human requirements is intimately connected with the attitude of the poorer classes toward machinery and all improvements in general. The following is an illustration of the widespread influence of these doctrines:

While traveling in Ireland in 1858 Senior had occasion to visit certain model schools, where he took pleasure in testing the efficiency of the different systems of education. On one occasion the schoolmaster asked Senior to put some questions in political economy, and suggested "the effects of machinery."

Senior asked them, "What would be the effect on wages if every man had four pairs of hands?" The students answered,

*immediate enjoyment*, I must not be supposed to mean that everybody, or indeed anybody, wishes for an indefinite quantity of everything. What I mean to state is that no person feels his whole wants to be adequately supplied; that everyone has some unsatisfied desires which he believes that additional wealth would gratify."

The proposition with regard to the *universal desire for wealth*, although for the first time formally stated and developed by Senior, owes its origin to the founder of our science. "The principle which prompts to save," says Adam Smith, "is the *desire of bettering our condition*, a desire which, though generally calm and dispassionate, comes with us from the womb, and never leaves us till we go into the grave. In the whole interval which separates those two moments there is scarce perhaps a single instant in which any man is so perfectly and completely satisfied with his situation as to be without any wish of alteration or improvement of any kind. *An augmentation of fortune is the means by which the greater part of men propose and wish to better their condition.*"—*The Wealth of Nations* (Thorold Rogers' ed.), I, 344.

“To lower them.” “If I mean by wages,” Senior then asked, “not money, but the commodities consumed by the laborer, would your answer be the same?” “Yes,” was the reply, “because too many things would be made, things for which there would be no demand.” At this moment the master interceded. “I am afraid,” he said, “that you are beyond their depth.” To which Senior retorted: “I see that I am; but the question which you suggested, the effect of machinery, can be solved only by going down to the very bottom of political economy.”

On another occasion he asked a similar question. “What would be the consequence of every man’s being able to do four times as much as he can now?” “To make all the working people poor,” it was answered, “for there would be no demand for their work.” “Would not,” he said, “the things which they consumed be much more abundant?” “Perhaps so,” came the response, “but they could have no money to buy them.” “Why so?” “Because rich people have enough now, and would employ only one-fourth of them.”

Commenting on what the students had to say with regard to the effects of machinery on wages Senior remarked, “This must be the obvious opinion, for I have always met with it. *The poor seem to be unaware of the infinite variety and extent of men’s wants.*”

It is not, however, among the poor and ignorant masses alone that Senior’s proposition concerning the universal desire for wealth has been received with disfavor. Even economists of the most fair-minded and judicious type have found it quite unsatisfactory. Their criticism of the author’s views on the subject has generally been of a threefold nature:

1. That the general proposition, which attributes to every man a desire to obtain additional wealth with as little sacrifice as possible, is a worthless abstraction.
2. That in its origin the desire for wealth is a most complex psychological phenomenon, and not a simple matter of consciousness.
3. That human wants are limited in variety and scope, and that consequently the desire for additional wealth is not universal.

It was Senior himself, as we have seen, who attacked J. S. Mill’s hypothetical proposition that in their economic affairs human

beings are actuated by *only* one motive, the desire to get the largest amount of wealth with the least trouble. But Cliffe Leslie went still farther and denied the existence of a distinct desire for wealth at all. He says:

The desire of wealth is a general name for a great variety of wants, desires, and sentiments, widely differing in their economical character and effect, undergoing fundamental continuity in others. . . . It includes a love of pictures, toys, jewelry, plate, furniture, clothing, opium, soap, Bibles, brandy . . . a love of eating and drinking . . . of literature and science . . . of charity, sensuality, cruelty, and power; of horses and dogs. It expresses sometimes a desire for the comforts of an old bachelor, and sometimes an inclination for matrimony; and when it takes the latter direction, it means with one *young lady* love in a cottage, and with another a palace without love; in one man it is fortune-hunting—in another, a disinterested attachment to Miss Aurora Penniless. . . . So all the needs, appetites, passions, tastes, aims, and ideas which the various things comprehended in the word “wealth” satisfy, are lumped together in political economy as a principle of human nature, which is the source of industry and the moving principle of the economic world. . . . After all the reproach cast on the Mercantile school, modern economists have themselves lapsed into the error they have imputed to it.<sup>1</sup>

This is all very ingenious and interesting, but it must be remembered that all the different things which Leslie so vividly described are, to quote his own language, “*alike in one respect—namely, that they are all to be had for money, and are not to be had without it.*”<sup>2</sup> It is this *general purchasing power of money* that stimulates the passion for riches, and that is what Senior meant by “the desire of wealth.” Pecuniary interest, the author would admit, does not explain all the phenomena of economic life. But far from being a useless abstraction it is one of the most powerful motives with which the economist has to reckon. It is doubtful indeed whether Leslie himself really meant to discard entirely the love of riches as a motive power to industry. In all probability he must have meant to say that the desire for additional wealth is not so simple a conception as he understood the older economists to have thought.

Unfortunately Cliffe Leslie’s criticism in this connection never passed beyond the mere suggestive stage. He realized the necessity of investigating, not only the motives and impulses which prompt

<sup>1</sup> *Essays in Political Economy*, pp. 3, 4, and 167.

<sup>2</sup> *Ibid.*, p. 2.

men to acquire wealth, but also those which serve as obstacles to its acquisition and accumulation.<sup>1</sup> But as far as we are aware he never attempted to make those investigations himself; and even if he did the world will probably never hear of them, as all his economic manuscripts are known to have been lost while he was touring "somewhere in France." It was left for the American economist Professor F. W. Taussig to resume the task that Leslie wished to accomplish; and to his elaborate analysis of the psychology of money-making we must now turn our attention.

After characterizing Senior as "the most scholarly and broad-minded"<sup>2</sup> among the writers of the canonical school, Professor Taussig discusses at length the origin and scope of the old proposition with regard to the desire for additional wealth. "The wish for additional wealth," says Professor Taussig, "so far as it appears at all is a most complex psychological phenomenon, the resultant of a number of instincts or dispositions, of which the possessor himself is only half-conscious."<sup>3</sup> Furthermore this universal desire of wealth which Senior regarded as a matter of common consciousness seems to Professor Taussig "both curious and uncommon."<sup>4</sup> "It is by no means obvious that all men desire to obtain additional wealth." Even "among the advanced races . . . there is a very large proportion of persons . . . whose wants are simple and limited, to whom leisure and relaxation appeal quite as much as additional wealth." It is only the capitalist business man who manifests an insatiable desire for more and more wealth; and consequently this Midasian greed of gold must be considered as "the special psychological appurtenance of the prosperous and property-owning classes."<sup>5</sup>

As regards the origin and make-up of the pecuniary motive Professor Taussig takes it for granted that Senior deemed it "a matter beyond the scope of economic inquiry, and at all events not likely to point to any conclusions of significance for the economist."<sup>6</sup> This assumption, however, is not borne out by actual facts.

<sup>1</sup> *Essays in Political Economy*, p. 172.

<sup>2</sup> See F. W. Taussig, *Inventors and Money-Makers* (1915), p. 76.

<sup>3</sup> *Ibid.*, p. 78.

<sup>5</sup> *Ibid.*, pp. 76-78 and 122.

<sup>4</sup> *Ibid.*, p. 88.

<sup>6</sup> *Ibid.*, p. 78.

On the contrary, the author's unpublished papers contain a comprehensive psychological analysis of the underlying motives that influence men in their economic undertakings, as well as of the antagonistic principles to the acquisition and preservation of wealth; and all that is treated with a grasp of the comparative and historical method that would confound the critics of this much-abused economist. To make a comparative study of the views of Senior and Professor Taussig on this matter would lead us far beyond the limits of our paper; but that the author thoroughly understood the significance of such an inquiry as that to which Professor Taussig referred is sufficiently indicated by the fact, as we have seen, that in his second professorship at Oxford he found it necessary to devote no less than three lectures to an analysis of the desire for wealth.

Professor Taussig's strictures with regard to the scope of the passion for riches also need attention. In connection with his discussion of the instinct of contrivance Professor Taussig makes the following statement, "*When a trait appears overwhelmingly and unmistakably in a few, we may infer that it is present to some degree among all.*"<sup>1</sup> Now if it be true—as Professor Taussig admits—<sup>2</sup> "that a small circle of persons . . . manifest an insatiable desire for additional wealth," then why may we not legitimately conclude that this trait "is present to some degree among all"?

Professor Taussig's singularly frank and eclectic attitude of mind appears to lead him to uncertain conclusions on this subject. On one page we get the impression that the desire for wealth is universal, and on another the author tries to convince us that human wants are generally simple and limited in extent. "*To say that there is an instinct of acquisition,*" Professor Taussig admits, "*comes to much the same thing as to assume, with our old friend Senior, that all men strive for additional wealth without limit.*"<sup>3</sup> Yet in the next breath Professor Taussig observes that "*that sustained desire for additional wealth which Senior regarded as a matter of common consciousness . . . seems to the philosophic observer both curious*

<sup>1</sup> See *Inventors and Money-Makers*, p. 13.

<sup>2</sup> *Ibid.*, p. 77.

<sup>3</sup> *Ibid.*, p. 84.

and uncommon.”<sup>1</sup> A little later, while speaking of the force of social emulation, Professor Taussig reverses himself:

The garb of the well-to-do and the rich, their dwellings, their decorations and their art, fashions and amusements; their display and what we call their extravagance—are all sought and enjoyed mainly because they give evidence of belonging to the supposedly select superior classes. And where the community is democratized as much as it is in the United States, the barriers between classes being no longer maintained by law or rigid custom, *this passion has universal scope. . . . A recognition of the universality of social emulation served to confirm the older economists in that doctrine of theirs . . . that all men desire to obtain additional wealth indefinitely.*<sup>2</sup>

Professor Taussig concludes nevertheless that the “desire for additional wealth is the special psychological appurtenance of the prosperous and property-owning classes.”<sup>3</sup>

Now if the desire for additional wealth is the special appurtenance of the rich classes, how shall we account for the first *increment* (if we are permitted to use a mathematical expression) of this striving force? How shall we account for the transitional stages between extreme poverty and extreme riches? How shall we account for spendthrifts among the rich and the misers among the poorer classes? Is it not a fact that many of our captains of industry, such as the Harrimans and the Rockefellers, were originally poor themselves? The desire to be wealthy must necessarily precede the actual acquisition of wealth. To regard the motive of acquiring wealth as the result of its previous accumulation would be a curious instance of begging the question or of putting the cart before the horse.<sup>4</sup>

<sup>1</sup> See *Inventors and Money-Makers*, p. 88.

<sup>2</sup> *Ibid.*, p. 98.

<sup>3</sup> *Ibid.*, p. 122.

<sup>4</sup> Professor Taussig speaks on the one hand of “a very large proportion of persons . . . to whom *leisure* and relaxation appeal quite as much as additional wealth” (*Inventors and Money-Makers*, p. 77), and on the other hand he observes that “it is most curious that the earlier economists ignored so completely the existence of the *instinct of devotion* (*ibid.*, p. 103). It would hardly be fair to compare these remarks with Senior’s unpublished views on the subject, but the following quotation from the author’s *Political Economy* (p. 55) seems to be quite relevant in this connection:

“Among civilized nations the love of accumulation, of power, of distinction, and of occupation, and the nobler desire of being more or less extensively useful, all powerfully counteract the slothful principles of our nature. As property becomes more secure, as the avenues to influence are opened, as merit and wealth rise in public



## V. SUMMARY AND CONCLUSIONS

We must now return to our point of departure in this paper and reflect upon the questions with which we began this preliminary analysis of the author's economic views. It is hoped that the foregoing analysis will have afforded a general idea as to the historical significance of the recent discovery of Senior's manuscripts. As regards the details pertaining to the economic contributions embodied in these papers, we are of course compelled by the limits of this article to present at this time only the scantiest outline.

We have seen that the author confines the science of political economy to the study of wealth. He distinguishes between individual and social wealth. Some things, such as pensions, patents, and copyrights, generally impoverish the nation, though they may enrich the owner. As nothing can be either created or destroyed, the expression "production of wealth" must be understood to mean the occasioning of certain alterations that may be utilized in the process of exchange. Such changes may be produced either on human beings or on external things. The former are called personal changes; the latter are subdivided into (a) mechanical changes, (b) chemical changes, and (c) commercial changes or mere changes of place.

The instruments of production are divided into two genera, the mental and bodily faculties of man and capital. This may be a surprise to some economists who have always thought wealth to be produced by means of three instruments, viz., capital, labor, and land or natural agents. Senior gives his reasons for making this innovation and discusses at great length the concept of capital. He makes a comparative analysis of the definitions of that term given by more than a score of Anglo-American, German, French, and Spanish economists. He distinguishes those aspects on which

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estimation over the accidents of birth, as barbarous prejudices degrading to industry wear out, as the influence of sound religion teaches men that they were created for better purposes than selfish pleasure or useless mortification, in fact, as civilization improves, all the motives to voluntary exertion acquire force. And though the number of those who *might* live in idleness increases, the proportion of those who are unhappy enough to exercise that privilege diminishes."

all economists agree from those wherein differences of opinion occur. The author then concludes his analysis with a classification of the things which are supposed to be considered as capital and of those which are not to be so regarded. Capital being distinguished from material wealth in so far as the former is employed productively, the author finds it necessary to determine the nature of that quality of the human mind which occasions wealth to be so employed, in other words, the nature of *abstinence* as distinguished from mere labor. Senior distinguishes between individual capital and national capital, or what is generally called public domain, such as roads, bridges, and post-offices. About two and a half lectures are devoted to the subject of national capital.

Under the title "Efficiency of Capital Applied to Agriculture" Senior discusses at great length the land question—a matter which has not been fairly treated by the economists of the Ricardian school. Though the author was obliged to abandon land as a separate instrument of production, yet he found it to be a species of capital with peculiar characteristics differing in important aspects from all other kinds of capital. With regard to the prospects of agricultural production the author discards both the pessimistic views of Ricardo and the opposite theories of Carey. Senior's position is midway between the extreme doctrine of these economists.

On the subject of population the author has written enough to fill a good-sized volume. A constant struggle, according to Senior, is going on between industrial efficiency and the growth of population: on the results of that struggle more than on any other single cause depends national prosperity. The causes which retard the advance of population are divided into three classes: the preventive, the destructive, and the remedial checks. The preventive checks are subdivided into prudence, luxury, law, and private property. The destructive checks consist of famine, war, and disease. Emigration and colonization are treated under the remedial check.

We have already referred to Senior's unpublished manuscripts on money and wages. Senior utterly repudiated the minimum-of-subsistence theory and all other rigid doctrines concerning the

laborer's share in the distribution of wealth. "The anxiety of the laborer to get wages forces him to be industrious and to endeavor to become skillful. The anxiety of the employer to obtain laborers forces him to pay to them the *full value* which their labor is worth: and . . . *the higher this value the better it is for both parties.*"

Concerning the subject of value Senior is commonly regarded as the originator of the *cost-of-production* theory. This, however, is not even a half-truth. As a matter of fact the author discards both utility and cost as ultimate causes of value. Although he makes a distinct advance in his analysis of the causes of value, he does not limit himself to any single doctrine that may be used as a touchstone to the solution of all problems respecting value. He considers about half a dozen general laws of value applicable to different kinds of goods.

As regards the relation between government interference and social welfare the author discusses the broad problem with regard to the objects of government and inquires as to how far it lies within the power of government to ameliorate the evils arising from poverty. The problems of destitution, sanitation, and housing legislation, juvenile and female labor, the factory acts with regard to hours of labor, industrial education, and social recreation—these and other matters are considered from a broad point of view. Although he rejoices to note the great improvement in the general conditions of the poorer classes, he finds to his regret that the evil effects of poverty cannot be entirely eradicated through the instrumentality of government. It may be added here that many other notable contributions to economic thought, a bare reference to which is excluded by the limits of this paper, will be found in Senior's unpublished writings.

With reference to the Classical economists Mr. Sidney Webb once observed that they possessed almost a genius for saying things which they did not mean to say. It is our hope that before long the scientific world may have an opportunity to obtain an accurate idea as to what one of the leaders of that school *meant* to say, *how* and *why* he said it, and especially what he did *not* say.

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