

*METHODS OF INVESTIGATION IN POLITICAL
ECONOMY.*

“DURING the last thirty years,” says Sidgwick in his ‘Principles of political economy,’ “political economy has risen from the state of controversy on fundamental principles and method into that of an apparently established science, and again relapsed into the state of controversy.” This statement is borne out by an examination of the literature of political economy during these years. It is full of controversy. Not only do writers fail to agree on practical economic questions, such as free trade and protection, mono- or bi-metallism, direct or indirect taxation, but they quarrel over the fundamental principles which are to be taken as the basis for the solution of these problems. We have the doctrine of *laissez-faire* on the one side, and of social expediency on the other. To some, economics is merely a science of wealth ; to others, it is eminently social ; and to still others, it is, in addition, ethical. Some stick to the principle of self-interest as the only one worth regarding ; others take into account all the motives which influence economic action. Some seek for principles which shall be strictly true of an abstract ‘economic man,’ and then push all practical problems into an ‘art’ of political economy ; while others desire principles that can be directly and usefully applied to existing human society, taking into consideration time, place, and circumstance.

It would be too much to say that this controversy over

principles is at all ended. The conception of pure *laissez-faire* has, indeed, lost its position, and will probably never be reinstated; but the advocates of new and more liberal principles have not been able to agree among themselves. Some of them are nationalist, some socialist, some ethical; while they differ infinitely in the degree to which they still cling to the old ideas and the old formulæ.

In regard to method as distinct from principles, on the other hand, we are beginning to see some light through the darkness. Men can acknowledge a change in method without giving up the validity of principles which they wish to maintain. Here the triumph of the new over the old has been complete; or rather there has been a vindication of the method of the master-minds over those disciples who by too close and dogmatic imitation had obscured the work of the fathers. Some of the keenest minds among students of political economy have worked at this topic; and owing to the efforts of such men as Knies, Wagner, Leslie, Jevons, and Ingram, we are reaching a substantial unanimity on the question of method.

How important this change is, and how fruitful of result it is going to be, will appear if we consider for a moment the difference between the old method and the new. Without going into the finer questions, and without being too exact in our definition, we may call the old method the deductive, and the new method the inductive. These terms will cover the other designations, such as '*a priori*,' 'abstract,' 'philosophical,' sometimes applied to the old method; and similar terms, such as 'realistic,' 'historical,' and 'practical,' applied to the new.

The old method is essentially deductive. It finds certain premises which are true, and reasons from these premises to the solution of specific problems. These premises, as laid down by Cairnes, the most brilliant expounder of this

view, and summarized by Cossa ('Guide to political economy,' p. 38), are as follows:—

"1. In the economic order of things the principal motive of human actions is *individual self-interest*. This induces man (a) to avoid pain (fatigue, work); (b) to desire pleasure (wealth); (c) hence to aim at obtaining the greatest amount of wealth with the least amount of labor, or, in more general terms, the greatest result with the least effort, which is, as it is now expressed, the law of least resistance.

"2. The earth, indispensable to man as a place in which to live and work, and as the source whence he may extract food and raw materials, is naturally limited (a) in the products which it contains; (b) in its actual extent; (c) in its relative fertility (different qualities of soil); (d) in its successive fertility (decreasing productiveness at a certain point, with every new application of capital and labor).

"3. The physical and psychological tendencies of man lead him to multiply his own species with a rapidity which, if it met with no obstacles, would bring about an unlimited increase of population."

From these premises are deduced the three great theories of *value*, *rent*, and *population*; and by means of these theories concrete problems, such as free trade and protection, are solved.

It is not necessary here to describe how this deductive method of political economy has been overthrown. These assumed premises, although containing an element of truth, were in themselves incomplete and sometimes inapplicable. For instance, it is a matter of experience that men are actuated by other motives than self-interest, such as patriotism, charity, and custom. Again, common sense revolted against the assumption that these theories were universal and perpetual; that is, true everywhere and at all times. Experience showed that at different epochs in civilization, and among differently situated nations at the present time, the premises would require very great modifications.

The new method in political economy is inductive; that is, it proceeds from observation of facts to general rules

and principles. It carefully observes the limits of time and place, and abstains from asserting its principles to be either universal or perpetual. It makes use of what knowledge we have of man and nature ; but it uses this knowledge for the purpose of guiding and helping its investigations, not as *a priori* premises. It studies history for the purpose of discovering what blunders men and nations have made in their economic experience, and how those blunders may be avoided in the future. The inductive method is also comparative ; that is, it compares economic institutions performing the same function among different nations of the same degree of civilization, in order to discover which is the best. The method is, finally, statistical ; that is, it collects statistical data as a basis for its knowledge, in order to measure economic forces and gauge the results of economic action. The present method of political economy as recognized by the greatest modern economists, such as Wagner, Schmoller, Leslie, Jevons, Marshall, etc., is historical, comparative, and statistical.

I do not propose to defend this new method against the old, much less to vindicate it. Neither do I deny that the old method has had able representatives, and that in its time it has done good service. All I assert is, that it is now practically abandoned as a method by itself, and that the future of political economy depends upon the scientific application of the new method to the complex phenomena of modern civilization.

It will be useful, however, to describe more fully how the new method is actually applied, what sort of results it is able to give us, and some of the advantages which flow from its use. I propose, therefore, to discuss, 1°, how to investigate particular economic problems ; 2°, how to reach general principles of economic life ; 3°, what are the collateral advantages of this method ; and, 4°, how to make

method and results useful in the study of other social sciences and in guiding state action in economic affairs.

How to investigate particular economic problems.

Every reader of John Stuart Mill will remember the opening paragraph of his 'Principles of political economy:' "In every department of human affairs, practice long precedes science; systematic inquiry into the modes of action of the powers of nature is the tardy product of a long course of efforts to use those powers for practical ends. The conception, accordingly, of political economy as a branch of science, is extremely modern; but the subject with which its inquiries are conversant has in all ages necessarily constituted one of the chief practical interests of mankind, and, in some, a most unduly engrossing one."

In the same way it might be said that the solution of economic problems precedes the formulation of an economic science. Mankind has always had its economic problems, and philosophic heads have ever busied themselves trying to solve them. The method of doing this is both of very great importance in itself, and indicative of the character of the science which will by and by be formulated on the basis of this method. It will be of interest, therefore, to show how the inductive method of political economy attacks practical economic problems, and to see what sort of a science results from this method. In choosing my illustrations, I have purposely selected modern economic questions, and American and English authors, in order to escape the common slur that this method is fitted only for the antiquarian, and used only by learned but unpractical and idealistic German professors.

Mr. Sidgwick has remarked, that, in that portion of political economy dealing with the production of wealth, the inductive and analytical method has been much more

used than in those portions dealing with exchange and distribution. Take, for instance, the question of land-tenure,—one which has interested political economy for a long time, and which is to-day one of the burning political questions in England. It is apparent at a glance that the method of holding land must have a great influence on its productiveness. We can even reason *a priori* that where there is absolute proprietorship on the part of the cultivator, or at least a long leasehold which will secure to him the reward of his labor, he will be apt to work harder, and that the gross produce will thereby be increased. But the English economists, even Mill, Thornton, and Fawcett, have approached the subject in a different way. They have studied the condition of the French and Belgian peasants where absolute ownership exists, and have pointed out the prosperous condition of these countries as the proof that peasant proprietorship is the best system. This is the pure comparative method in political economy.

Let us take a more specific question. The issue of bank-notes is a useful and at the same time dangerous function to intrust to a bank. Shall the issue of bank-notes be free, or shall it be regulated by government? How shall we answer such a question? If we examine the history of banking in the United States, as President Walker does in his book on money, or as Comptroller Knox did in his report for 1876, we shall find that freedom of issue has always been abused, and has always led to disaster, and that the only good bank money we have ever had in this country has been the national bank-notes secured by United States bonds. Study of the experience of England, Germany, and France will show that the liberty to issue bank-notes has everywhere been restricted, and is now exercised only by institutions under the direct or indirect control of the state. It can therefore be accepted as a rule that the

privilege of issuing bank-notes should be carefully regulated by the state. This is the pure historical method in political economy.

Let us take a question which has not yet been solved, or where, at any rate, no practical solution has been reached by the legislature. Let us take, for example, the present silver question in the United States. Should the United States try to re-establish the silver dollar as a standard? There are two questions here. One is the question of the single or the double standard; the other is whether we can dispense with either one of the precious metals as money. The first, which is commonly known as bimetallism, although it is more properly the question of the single or the double standard, is already settled in the opinion of the best economists. One has only to read Professor Laughlin's book on the history of bimetallism to see that the double standard has been thoroughly tried in the United States from 1790 to 1873, and that it has signally failed. It always results in the presence of one metal and the absence of the other. At first, with a ratio of one to fifteen, we could keep no gold in the country: afterwards, with the ratio of one to sixteen, we could keep no silver. The history of France proves exactly the same thing, so that even professed bimetallists acknowledge that the double standard cannot be maintained except by international agreement. This, again, is the historical method.

The second part of the problem — viz., is there sufficient gold in the world to supply the demand for money, so that it is safe to demonetize silver? — is much more difficult to answer, and is, I venture to say, as yet unanswered. It can be solved only by the statistical method; viz., by showing that prices are declining, while at the same time the supply of gold is decreasing, and that the latter is the only adequate cause discoverable for the former phenom-

enon. As an example of an attempt to prove this connection, I may cite Mr. Giffen's well-known 'Essays in finance.' An even more noted example of the same style of applying the statistical method to economic problems may be found in the essay of Jevons, and also those of Cliffe Leslie on the effect of the gold discoveries in California and Australia on prices in Europe.

Finally, we may ask, what can the inductive method do when it faces some great economic problem which affects the whole community and civilization itself? Such a problem is the labor-problem. What is the condition of the laboring class? Has that condition deteriorated or improved? The inductive method has not shrunk from attempting to find an answer to even such questions as these. Thorold Rogers has laboriously traced the condition of the English laborer during the last six centuries, for the purpose of answering this question historically. Giffen has attempted, by statistics, to show that the condition of the laboring class has materially improved during the last fifty years.

These are examples of the historical, comparative, and statistical method applied to modern economic problems. In some cases the method has only confirmed what was known or at least surmised before; in most cases it has added directly to our knowledge; in a few cases it has given us results which could have been obtained in no other way. Such is the value of the method in these isolated cases. Can it be so utilized as to enable us to formulate a body of truth worthy to be called a science? This brings us to our second point, —

How to reach principles of economic life.

It is often said, that, although the inductive method may aid us in solving economic problems, it falls far short of

what is required by a true science, because it does not enable us to formulate a body of principles which shall at the same time embody the highest truth, serve as a guide in future economic action, and be an explanation of all economic life. Nothing was more characteristic of the old school than the perfect confidence that they had the key to all knowledge on this subject. They were accustomed to speak of 'immutable laws' and 'eternal principles.' Self-interest, demand and supply, the law of diminishing returns from land, Malthus' law of population, Gresham's law, the wage-fund, equality of profits, — these were the touch-stones the application of which settled every problem. Is it a question whether strikes are able to raise wages? According to the wage-fund theory, there can be no increase of wages except by increase of capital or diminution of the number of laborers ; and as, according to the Malthusian theory, population tends to increase to the limits of food-supply, there will be no diminution of population ; and hence no increase of wages is possible. Can any solution of the labor-problem be easier? Do we ask if a country should protect its home industries? Self-interest, it is said, leads each man to make the best bargain for himself, therefore free trade should be the universal rule. This answers the question for Germany as well as for the United States ; for India as well as for England. Do we demand that the state control the charges of corporations? It is answered, profits tend to an equality in all employments ; therefore, if in any one business profits are abnormally high, capital will rush into that business, and the charges will be brought down, and the public will be best served. Behold, the solution of the railroad question !

It is true that the new method does not give us principles which, like these (to use the expression of Ingram), are unchangeable, perpetual, and cosmopolitan. Neither does it

lay down laws which can be applied by the rule of thumb to every new economic and social problem, wherever occurring, or under whatever circumstances. Such a science is, on the face of it, absurd. It is like introducing steam-engines where there is no fuel, or machinery where there is already an excess of hand-labor. It is like that pseudo-political science that desires to see representative institutions established in Egypt, or the trial by jury adopted by the Zulus. Such universal principles, like the *contrat social* and the theory of natural rights, have long gone by the board in social science. All we seek now are certain empirical generalizations which will guide our judgment in approaching practical problems. Such generalizations are not immutable laws; but they are extremely valuable to philosopher and statesman, just as the knowledge of markets and business methods is of value to a business man.

The statement, however, that the inductive method does not enable us to formulate any general principles of economic life is not true, for two reasons: 1°, There is absolutely nothing in the new method to prevent our accepting and using any facts of the human mind or of nature which will aid us in determining how men act in economic affairs. No economist would venture on the solution of an economic problem without taking into consideration the fact that men are ordinarily moved by self-interest, any more than a general would manoeuvre for a battle without taking into account whether his men were fresh or tired, well fed or half starved, in good spirits or depressed. The economist is supposed to know what the leading characteristics of the human mind are, and to calculate their probable influence. The chief merit of the new school is that it studies carefully to give due weight to all of these forces, such as degree of civilization, custom, law, etc., which the older economists neglected. 2°, The new method has not the

slightest objection to reaching general conclusions from its inductions, any more than the natural philosopher hesitates to reason from the fall of an apple to the law of gravitation. On the contrary, the very object of political economy according to this method, is to reach such general conclusions as will be of aid in directing social activity in economic affairs. From the experience of different nations in tenure of land, we reason to the general desirability of peasant proprietorship, or some fixity of tenure. From the history of the double standard, we reach Gresham's law, that, where two currencies exist side by side, the baser will drive the good out. From the history of English poor-laws, we can reason to the general desirability of self-help; and from the prosperity of England, to the principle of free trade, at least for industrially developed nations. This is what Ingram calls reflective analysis, and is no more shut out from inductive political economy than it is from the natural sciences. To assert that the inductive method gives us merely sketches of economic history, or descriptions of economic institutions, or masses of economic statistics, is as wide of the mark as to call chemistry a mere collection of analyses of organic and inorganic substances. Science is systematized knowledge; and political economy seeks to systematize its knowledge gained through history, comparative study of institutions, and statistics, as rapidly as possible, so as to reach general principles of economic life. Only, by this method we escape the sterility which comes from following supposed immutable principles; for every fresh induction very probably modifies or corrects our previous rule. The principles we reach are, as said before, empirical at the best. Like the rising of the sun, they may be of a very high degree of certainty; or, like the predictions of meteorology, they may be of comparatively little value. We take them for what they are

worth, and try by further observation to make them more exact.

The advantages of the inductive method.

It will strengthen our appreciation of the new method of political economy if we consider for a moment the collateral advantages which accompany it. In the first place, we acquire a great mass of economic information. The mind of the student is soaked with knowledge of the past experience of mankind, with descriptions of present institutions, and with statistical details of economic life. No one can teach a class of students without being amazed at the eagerness with which they absorb the details of economic history, such as the finances of the civil war, or the silver legislation of the United States; or the interest with which they listen to the discussion of economic problems now in course of solution, like the Irish land question; or the curiosity with which they regard even statistical data of the movements of population and the course of trade. This is not to be wondered at. Every active intellect has a natural curiosity as to the history of the race and the institutions and customs of other nations. The inductive method satisfies this legitimate curiosity in a systematic and scientific way. Whether we are able or not to solve the particular problem which we have set before us, we at least get an intelligent knowledge of its difficulties. Whether or not we arrive at general principles, we gain information which in itself will be of value. This is a great advantage over the old method, which, when it was wrong, was altogether wrong and misleading. The new method is at least fruitful, and we get some result from our labor, even if we do not attain all that we sought for.

Again, the use of the inductive method tends to broaden our views of the relations of society. It familiarizes us with

economic problems as they have come up in history, and shows us how they have been solved at different times and by different nations. It teaches us to view them from all sides, — in the light of past experience ; in connection with the present state of civilization ; from the stand-point of different nations, classes, and individuals. The new method is radical, inasmuch as it shows that economic arrangements are founded partly on the nature of things, but are also due in great part to the present state of civilization, and, to a certain extent, to accident and chance. It makes us ready to acquiesce in the possibility of changes in the future even in some institutions hitherto regarded as fundamental : in other words, it makes us believers in evolution and progress. But the new method is even more conservative : for it teaches us that social institutions and arrangements are the result of long growth and evolution ; that they are intimately connected with civilization, and, when once established, are not to be lightly overthrown. History shows this : for it reveals how slow a growth real civilization is, and by what hard struggles we have attained to our present state. Comparison of institutions shows it : for it proves how universal are the human wants which the present institutions satisfy. Statistics shows it : for it discloses how complicated and delicate the social organization is, and the danger of laying violent hands on it. Socialists and revolutionists are generally men of one idea, followers of one-sided abstract theories. The true conservatism comes, as Burke long ago pointed out, from that reverence for the wonderful machinery of social organization which study by the inductive method gives.

Another advantage of the inductive method is that it prevents the science from degenerating into a mere collection of stereotyped formulae, and the practice of the science into the mechanical application of these formulae to

the facts of human life. The danger which besets political economy in this respect has been abundantly illustrated above. Nothing in literature is sadder than the fatalistic pessimism which John Stuart Mill finds forced upon him after considering the possibility of an improvement in the condition of the laboring-class, on the basis of the wage-fund theory and the Malthusian law of population. Nothing was more destructive to the influence of political economy than the positive condemnation of factory laws and national education, which its teachers drew from the principle of self-interest and free competition. It is desirable, of course, to reach principles which are stable and always applicable; but we must not close the doors too soon against further evidence, and treat our science as a final revelation instead of a body of empirical laws gathered from the experience of mankind up to the present time, and with our present means of knowledge. It is true that the law of gravitation never changes; but the laws of political economy are not of that kind. As Bagehot has clearly shown, even the law of self-interest has absolutely no existence, or is entirely in abeyance in many communities and under certain circumstances. The laws of political economy are secondary laws, and it is not to be supposed that we have formulated them exactly and finally. It is as if a hundred years ago physicists had laid it down as an absolute immutable law that persons could not be transported faster than twelve miles an hour, because horses could not drag stage-coaches over turnpike roads at a greater speed. The old political economy is full of such mistaken assumptions that the generalization from a narrow range of experience is a highest principle. The inductive method teaches us at least modesty and caution.

A final advantage of the new method, closely connected with the one just mentioned, is that scientific truths are

not so easily used for selfish purposes when stated less absolutely. One great cause of the revolt against the old political economy was that it apparently taught the necessary misery of the greater part of the community. The socialists gladly seized on the 'iron' law of wages, and told the workmen that either the political economy which taught it must be false, or that the civilization to which such political economy was applicable deserved only to be overthrown. A science which teaches that a great portion of mankind is destined to be miserable may not, for that reason, be unscientific; but it certainly ought to be very sure of its premises, and it cannot expect to be eagerly accepted. It may be a comfortable doctrine for capitalists, that strikes can, under no circumstances, permanently raise the rate of wages, and that factory-laws are destructive to the prosperity of industry; and they may utilize such doctrines to carry out their own selfish purposes. But it is a mistake to formulate scientific principles so absolutely that they can be used in this way. Under the old political economy, this was constantly being done. English factory-owners appealed to the principles of political economy against that legislation which is now universally admitted to be for the interests of the community. Free trade as much as protection has been the struggle of selfish interests. Even the skilful pen of Morley is not able to make of Richard Cobden any thing more than a 'Philistine' hero. We have at the present time editors of influential papers who see with ill-concealed satisfaction ignorant workmen dash themselves against the stone wall of economic axioms. It is true, again, in physics, that, if you dash your head against a stone wall, you will get hurt. But the question is, Cannot the stone wall be removed? Is it necessarily and forever there? The absolute formulation of principles prevents even the asking such questions. It is for this

reason that the inductive method appears much more reasonable. Political economy is neither a religious creed to be used to excommunicate all heretics, nor a legal code by which to condemn malefactors, but a body of experience to guide us in the conduct of social economic life. The inductive method prevents its being used for the private purposes of the priesthood or the judges, for new experience may teach us new solutions and new expedients.

Political economy and social science.

It has long been recognized that political economy is only one branch of social science, and it is an important question what its exact relation to the other branches of social science is. Social science as a whole may be defined as treating of human life in all its manifestations in society. It has numerous subdivisions (or, if you choose, you may say there are numerous social sciences), the principal of which are political science, jurisprudence, and political economy. The first treats of the governmental organization; the second, of the definition of rights and the conflict of wills; the third, of the satisfaction of material wants. The basis of the social organization is the economic; for man can reach no high development, either in state or law, until the material wants are satisfied. But the three sciences are intimately connected. The particular form of a state, nomadic chieftainship, monarchy, republic, etc., is commonly determined by the economic condition of the people; and law is often only the expression of such economic condition. Slavery is at the same time a political, a legal, and an economic institution. We cannot, therefore, cultivate political economy without at the same time cultivating the other branches of social science, especially political science and jurisprudence.

Such being the close connection between political econo-

my and social science, it is an important question whether our method in political economy aids or hinders this correlation. The abstract method desires to put aside all this connection, and isolate the science of political economy. It expresses this desire in various ways. Commonly it formulates its theory as pure theory, and regards all other influences — political, legal, or social — as hinderances. The common analogy is taken from mechanics, the law of dynamics, which teaches that a body once set in motion will continue on in a straight line forever. But in practical life this is never realized, because there are always opposing forces, friction, etc. So the abstract 'economic man' would follow such and such a course of conduct, were it not for political, legal, and social influences. The artificiality of a scheme which treats the most powerful influences of human society — viz., those which hold men together in a state, and subject them to law, not to speak of family and social influences — as 'friction' is at once evident. Another device is to say that there is a pure 'science' of political economy which treats only of the economic man, and that it belongs to the 'art' of political economy to consider these other influences. The trouble here, again, is, that, in the separation of the art from the science, the latter is almost sure to lose its vitality. Especially is it fatal when we try to connect political economy with politics and law, which have no sympathy with pure abstractions.

The inductive method avoids this artificial separation and distinction, this rupture between the theoretical and the real. It studies the facts of economic life as they actually exist, blended with the political, legal, and social life. It has no such abstraction as the 'economic man,' but thinks only of man living in state relations, under the bond of law, and surrounded by the influences of family, custom,

and social habits. Political economy is thus not isolated from the other branches of social science, but finds a thousand points of contact with them. It adds to their knowledge, and in return receives from them the explanation of many of its phenomena. In fact, we may say that each set of phenomena is inexplicable without some knowledge of the others, and to isolate them is to make each incomplete in itself.

The value of this method of investigation is strikingly seen in the function which political economy performs in the study of political science. That function is a double one. In the first place, political history can never be understood without a knowledge of the economic condition of the community which we are studying. The feudal system was possible only at a time when land was the principal kind of wealth. Aristocratic city republics could exist only where the growth of industry and commerce enabled the burghers to make themselves independent of the feudal nobility. Absolute monarchy rested on a class sufficiently rich to pay taxes, and sufficiently interested in the preservation of law and order to be willing to pay them. Representative institutions arose only when at last the industrial and commercial class was strong enough to assert itself against both kingship and land-holding aristocracy. The first function of political economy is purely historical. It investigates economic life in past ages for the purpose of explaining political history. When it gets down to the present time, it is purely descriptive, for the political institutions of different nations at the present time are conditioned by varying economic circumstances.

But political economy has a second function in connection with the study of political science. Every state action, every law that is passed, or ordinance enforced, or treaty negotiated, has economic consequences sometimes of the

highest importance. Political economy must here direct state action, must say what will be the consequences of such action, and whether it will be for good or evil. It can do this only by appeal to history, by comparison of the experience of other nations, and by the use of statistics. In other words, we find that the most faithful ally of political science is the use of the historical, comparative, and statistical method of investigation in political economy.

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