

of Mr. Keynes' *Scope and Method of Political Economy* to the classical writings on that subject is much the same as the relation of his *Formal Logic* to the treatises of Aristotle and Boole—not equally original, but perhaps better adapted to the purposes of education.

We trust that Mr. Keynes' later logical treatise may also resemble his earlier one in its popularity. We could wish for it indeed a monopoly of favour, and such finality as in political economy is attainable. For we cannot conceal a certain impatience at the continual reopening of a question on which authorities appear to be substantially, if not in phrase, agreed. As it is forcibly said by one of Mr. Keynes' predecessors, Mr. Edward C. Lunt, in his brilliant study on *The Present Condition of Economic Science*, "sensible men long ago dropped the controversy and went about their business, careless as to whether their methods were called 'historical' or 'orthodox.'"

Principles of Economics. BY PROFESSOR ALFRED MARSHALL.
Vol. I. Second Edition. (Macmillan & Co.), 1891.

IN the preface to the second edition of this volume its author tells us :—"To myself personally, the chief interest of the volume centres in Book V. : it contains more of my life's work than any other part; and it is there more than anywhere else that I have tried to deal with unsettled questions of the science." The import of this confession will be understood when it is observed that the book thus referred to consists partly of the mathematical theory of Supply-and-Demand, and partly of the almost equally severe reasoning applied specially to Supply, which in the first edition formed the subject of a separate book, entitled *Cost of Production*. The rearrangement according to which an extra book is no longer devoted to production appears conformable to the "symmetry of the relations in which demand and supply stand to value." This symmetry is justly regarded by Professor Marshall as "fundamental." While others have been disputing whether it is cost-of-production or final-utility which determines value, he has discerned that it is both. His predecessors have tilted against each other from opposite sides of the shield of truth : he alone has surveyed with equal eye both the gold side, which most attracted Ricardo, and the silver side, on which Jevons fixed too exclusive attention. An able champion of that one-sided theory which is at present most in vogue has compared the point at issue to the question—a question,

it is implied, admitting of only one answer—whether it is the sun which revolves round the planets or the planets round the sun. To a mind of a mathematical cast like Professor Marshall's, it is quite intelligible that of two bodies one does not revolve round the other more than the other round the one.

"Just as the motion of every body in the solar system affects and is affected by the motion of every other, so it is with the elements of the problem of political economy."

These words were written by Professor Marshall nearly twenty years ago;¹ but their spirit still pervades his most recent utterances.

The want of the appropriate mathematical conceptions is not the only cause of the too common reluctance to accept the doctrine of the double nature of value. A difficulty also is presented by that which, according to Professor Marshall, is "the centre of the chief difficulty of every economic problem"—the element of time. The forces of utility and disutility do not always act simultaneously, as in the simple case "where a person satisfies one of his wants by his own direct action, as, for instance, when he picks blackberries," up to the point when "the task of picking begins to cause weariness, which at last counterbalances the desire of eating, and equilibrium is reached." Very generally the correspondence between value and efforts-and-sacrifices is the result of motives whose object is distant—such as the net advantages of an occupation for which a parent educates his son. Accordingly, the sect of economists who subordinate the principle of cost to that of utility are right so long as they confine attention to single markets and short periods. The critics of Ricardo, and the more damaging caricaturists who represent themselves as his followers, are mistaken if they expect that value should follow cost into each particular transaction with the precision of a Labour-Exchange, such as half-taught enthusiasts have imagined. Not only a "long period," but a stationary state would be required for the complete establishment of equilibrium between cost and value. But the state of industry is never stationary, "the economic conditions of the country are constantly changing, and the point of adjustment of normal demand to normal supply is constantly shifting its position. There are, indeed, constant tendencies towards that point as surely as, to use an old simile, there is a constant tendency of the surface of the sea towards a position of rest; but the moon and the sun are always shifting their places, always therefore

¹ In a review of Jevons' *Theory* in the *Academy*, April, 1872.

changing the conditions by which the equilibrium of the sea is governed; and meanwhile there are ceaseless currents of the raging winds; the surface is always tending towards a position of normal equilibrium, but never attains it." We regret that the author has omitted this splendid passage from the second edition. He was perhaps deterred by the difficulty of conveying through any physical analogy the distinction between the "long" and "short periods" in which the effects of economic forces may be worked out. We should have indeed to suppose the attraction of the "moon and the sun," in contrast to the terrene forces, to occupy a considerable time in being propagated to the surface of the sea!

The attraction of distant objects playing so large a part in the mechanics of industry, it concerns us to study the law of that attraction. The formula, precise as that of gravitation, is the inverse, or rather negative exponential. "If h be the future amount of a pleasure of which the probability is p , and which will occur, if at all, at time t ; and if $R=1+r$ [where r is "the rate of interest per annum, which must be added to a present pleasure in order to make it just balance a future pleasure"], then the present value of the pleasure is phR^t " (Mathematical Appendix, Note V., Second Edition). Some additional paragraphs in the new edition render this theorem more easy of reception. The same conclusion as before is reached, but less abruptly. The guide now smooths a winding path, where before the ascent was made by a few footholes, difficult for inexperienced climbers. We confess to having been among those who slipped. There is now a more explicit statement of the assumptions which we make in order to "get an artificial measure of the rate at which he [a person] discounts future pleasures." The first is: "that he expects to be about as rich at the future date as he is now" (Second Edition, p. 179). Attention also is called to the "importance of drawing a clear distinction between discounting a future pleasure and discounting the pleasure derived from the future enjoyment of a certain amount of a commodity" (*ibid.*). Again, it is to be noted that the theorem "is so worded as to be applicable to all pleasures, and not merely to marginal pleasures, to which some writers have proposed to limit its application" (*ibid.*, p. 617). These points being borne in mind, together with some reservations introduced in the mathematical note referring to the subject (Appendix, Note V.), it will be found on consideration that the exponential law of hedonic perspective is justified—with respect to those pleasures

at least of which the external sources are exchangeable. We do not understand that the law is predicated of those pleasures which are derived from non-transferable objects; or out of relation to a money-market. As we interpret, the "man who builds a house for himself," in an important passage of the fifth book (chap. iv. page 1), is not a Robinson Crusoe. That "the motive force tending to deter him from building the house would be his estimate of the aggregate of these efforts [the efforts required for building on any proposed plan], the evil or discommodity of each being increased in geometrical proportion (a sort of compound interest), according to the corresponding interval of waiting," is theoretically true of an economic regime, but not in what may be called unconditioned psychology or pure hedonics.

The consideration of motives acting at different distances of time leads to the discrimination between Rent and Quasi-rent—a distinction which perhaps will prove as important as the discovery of the principle of rent itself. It is now perceived that there is a portion of truth in the contention of the Socialist that the profits of the capitalist have a certain analogy to the rent of the landlord. But he is stopped when he proceeds to draw the corollary that the unearned increment may in both cases with like justice and expediency be appropriated by the community. "The sudden appropriation of Rents and Quasi-rents by the State would indeed have very similar effects in destroying security and shaking the foundations of society; but, if from the first the State had retained true Rents in its own hands, the vigour of industry and accumulation need not have been impaired; and nothing at all like this can be said of Quasi-rents." The eternal verity of the Ricardian theory is enhanced by Professor Marshall's re-statement—like the "original and indestructible powers" of a soil upon which a new and splendid edifice has been erected. Indeed upon this topic and others the *Principles of Economics* may be regarded as a second approximation to truths with respect to which a first approximation was sufficient for Ricardo. The work before us is a signal example of "the abandonment of dogma, the development of analysis," which the author, in a striking passage added to the chapter on the growth of economic science, attributes to contemporary, in contrast to the older, economists. "The change may perhaps be regarded as a passing onward from that early stage in the development of scientific method in which the operations of Nature are represented as conventionally simplified

for the purpose of enabling them to be described in short and easy sentences to that higher stage in which they are studied more carefully and represented more nearly as they are, even at the expense of some loss of simplicity and definiteness." We may couple this reflection with the new remarks in the following chapter on the difference between Comte and Mill as to the utility of an independent science of economics. "What is wanted is a general principle which shall determine the point in the widening of the scope of economics at which the growing loss of scientific precision would begin to outweigh the gain of increasing reality and philosophic completeness." We submit that our author has hit this point of maximum advantage better than if he had loaded his already weighty pages with all the details of law and industry, the absence of which an eminent German critic, otherwise favourable, has regretted.

The "fundamental symmetry" between the action of supply and demand, to which we have referred as a conspicuous feature of the *Principles of Economics*, is brought out by the author with additional clearness through some alterations in the last book, of which we are told in the preface that "they aim at emphasising and defining more fully the distinguishing characteristics of the broad problem of Distribution, as contrasted with questions relating to the values of particular things; and at showing more clearly how, though the causes that govern demand and those that govern supply can be studied separately in the case of any single commodity, yet this cannot be done for the Agents of production as a whole." Rehandling the complexities of Distribution, the author practises, while he explains, the "law of Substitution"; combining the apparatus of symbols with the more familiar media of exposition in such proportions as may give the best result. What he says of material production is true also of the art of exposition. "No two persons pursuing the same aims will adopt exactly the same routes." There are those who would prefer to employ more copiously the terminology of the calculus, the conception of a function and its variations, in stating the theorem that "the limit or margin at which the use of any one of these agents of production terminates, and the aid of another is substituted for it in any branch of production is found where the relative efficiency of these two agents are proportionate to their relative costs"; or the proposition still more liable to misunderstanding, that free competition tends in the direction of making each man's wages equal to the *net product* of his own labour." We should observe,

however, that the mathematical version of these theories has been made fuller. The principle on which we proceed in order to "find the marginal investments of each kind of labour for each kind of use" is stated more explicitly. In Note XIV. (Second Edition), from which we have just quoted, there is added the pregnant clause, "they may all [all the equations employed to find the marginal investments] be regarded as mathematically contained in the statement that $H-V$ [the net advantages] is to be made a maximum." In the light of the general theory of economic equilibrium which is thus indicated, how trivial appears the dispute whether it is utility or cost which determines normal value! You might as well ask, given a system of simultaneous equations involving two unknown quantities x and y (or two sets of unknown x_1, x_2, x_3 , etc., y_1, y_2 , etc.), whether x or y contributed more to the solution.

There is a "fundamental symmetry" between the forces of supply and demand; but there are superficial contrasts. "The normal value of everything . . . rests like the keystone of an arch, balanced in equilibrium between the contending pressures on its two opposing sides. The forces of demand press on the one side, those of supply on the other; and the older economists seem to have been rightly guided by their intuitions when they silently determined that the forces of supply were those the study of which was the more urgent, and involved the greater difficulty." The partiality of the older economists has produced a reaction which it is to be feared "may cause the importance of wants to be over-estimated relatively to activities" (Preface to the Second Edition). There is therefore inserted a new chapter, "Wants in Relation to Activities," directed against Jevons' position that the "theory of consumption is the scientific basis of economics."

Another peculiarity distinguishing Supply is the special difficulty which the Law of Increasing Returns presents. This difficulty is stated more prominently in a new paragraph at the beginning of the chapter treating of "Business Management as a part of Industrial Organisation" (Book IV. chap. xii. § 1), and removed more completely in a re-written chapter treating of the "Modes of Action of the Law of Increasing Return," and cognate topics (Book V. chap. xi.). Much additional light is thrown upon these subjects by a new note (p. 483) distinguishing more explicitly than in the first edition the "true supply curve," which relates only to "long periods" from another construction proper to short periods. The latter "has attractions, and may

perhaps ultimately be of service; but it requires careful handling, for the assumptions on which it rests are very slippery." The question now recurs in the case of a commodity obeying the Law of Increasing Return, why should not the large manufacturer drive out his rivals? Why should not the producer by "doubling his production" increase very much his economies, and marketing his outputs on nearly the same terms as before more than double his profits? The reason is that there are not many industries obeying the Law of Increasing Return in which the producer has equally good access to the whole of a large market. "When we are considering an individual producer we must couple his supply curve—not with the general demand curve for his commodity in a wide market—but with the particular demand curve of his own special market." In the case of industries to which this limitation does not apply it often happens that the tendency of large firms to drive out small ones has already gone so far as to exhaust most of the strength of those forces by which it was originally promoted. There remain, however, a few industries to which neither of these explanations applies. Such industries are "in so transitional a state that for the time there is nothing to be gained by trying to apply the static theory of equilibrium of normal demand and supply to them." In fact, the mathematical method, which has so long been our guide, appears to break down at this stage, and we are left to the hope of such future improvement in our analytical methods as may enable us to cope with the complex phenomena of "organic growth" (p. 496).

We should convey an erroneous impression of the reissued work if we dwell altogether on its abstract side. The predilection which the author, in a passage above quoted, expresses for that part is not exclusive. His interest "is centred in Book V."; but its circumference circles humanity. He frequents the highlands of the subject; but not for the mere pleasure of an intellectual chase. From the heights of abstraction unexpected views of the way of conduct are obtained; and the paths of fallacy are exposed. The readers of the first edition will remember how from aerial speculations about the Law of Increasing Returns new limits of the practical principle of *laissez-faire* were discerned. It was shown that free competition does not necessarily conduce to maximum gain.

But we are now concerned only with the additions and alterations made in the second edition. We should accordingly observe in connection with the Law of Increasing Returns that

the relation of this law to that of decreasing returns is rehanded in the last chapter of the book devoted to "Supply or Production" (Book IV. chap. xiii.). But we do not find that the author has substantially modified his cheerful doctrine, that "improved organisation tends to diminish or even override any increased resistance which Nature may offer to raising increased amounts of raw produce." The older economists used to say that population tended to press upon the means of subsistence; the more careful explaining that the verb "to tend" has a sort of reversible signification. A balloon, it has been said, tends to rise; it also tends to fall. Still it makes a difference whether you emphasise the former or the latter tendency. The statement of the compound law becomes more buoyant when Professor Marshall makes the principal sentence, "An increase of population accompanied by an equal increase in the material sources of enjoyment and aids to production, is likely to lead to a more than proportionate increase in the aggregate income of enjoyment of all kinds"; and places in a subordinate clause the condition: "provided, firstly, an adequate supply of raw produce can be obtained without great difficulty." The second proviso is not characteristic of the older economists: "and [provided], secondly, there is no such overcrowding as causes physical and moral vigour to be impaired by the want of fresh air and light, and of healthy and joyous recreation for the young."

This cheerful prospect should be compared with the view expressed in the last chapter of the volume that the new facilities of transport have much diminished for the present the influence which the Law of Diminishing Return exercises on production. Reconsidering the influence of progress, the author is led to introduce a new term, "the standard of life"—that standard of which the rise implies an "increase of intelligence, and energy, and self-respect." It is distinguished from that standard of comfort which operates only by limitation of population. A consideration of the standard of life leads on to the burning question of a limitation of the hours of labour. We commend the following carefully balanced conclusions to the dogmatists and enthusiasts on both sides of the question. "All this tends to show that a general reduction of the hours of labour is likely to cause a little net material loss and much moral good: that it is not adapted for treatment by a rigid cast-iron system, and that the conditions of each class of trades must be studied separately." "Since adults, whose habits are already formed, are not likely to adapt themselves quickly to long hours of leisure, it would

seem more conducive to the well-being of the nation as a whole to take measures for increasing the material means of a noble and refined life for all classes, and especially the poorest, than to secure a sudden and very great diminution of labour of those who are not now weighed down by their work. . . . It is the young whose faculties and activities are of the highest importance, both to the moralist and the economist." The author of the *Principles of Economics* yields to no utopian Socialist in the ardent desire that the curse of poverty should be remedied. But he is slow to adopt the nostrum in which ready writers deal. However anxious for the health of the body economic, he does not rush for the "potent medicines of the charlatan." Before adopting the violent constriction recommended by the quack bonesetter, the skilful anatomist considers what strains will be transmitted through the whole frame. He desires with the desire of an enthusiast that the opportunity of a life worthy of man should be obtained by all; he deliberates upon the means to that supreme end with the cautious sagacity of an economist whose work is probably freer from mistake than any other equally extensive investigation in the most bewildering of the sciences.

The Elements of Politics. By HENRY SIDGWICK. (Macmillan & Co.), 1891.

POLITICS and political economy have more than a name in common. Politics include what Dr. Sidgwick has called "the Art of Political Economy." There are indeed who maintain that the only action of the statesman respecting the production and distribution of wealth is to refrain from action: that the art of political economy is to suppress art. But this unqualified principle of *laissez-faire* is far from Dr. Sidgwick. Even assuming that to maximise the amount of wealth irrespectively of its distribution were the only object, he denies that the policy of let alone would be the best means of realising the end proposed. He brings up again against the position of the extreme individualist the weighty masses of argument which were marshalled in his *Political Economy*. There is first the consideration that "the individualistic argument, even if fully granted, would only justify appropriation to the labourer, and free exchange, of the utilities produced by labour; it affords no direct justification for the appropriation of natural resources." Again, individuals may not be able to remunerate themselves by the sale of utilities which it