

interest as practised by the Germans. But there still remains the difficulty of proving that in any given case the more dangerous kind of dumping is present to a serious extent. For example, with respect to Italy before the war it is not enough to say: "The importation of machines represents for Italy an annual tribute of more than 200 millions [of francs] due to a foreign industry." Professor Arias, indeed, says more than this, but he does not in our judgment adequately counteract the presumption that to obtain a large addition to the means of production is advantageous. Before accepting him as a guide we should require more information about particulars. Consider, for instance, the following contention (p. 795): "A nation is an *historical* category. National interest (*convenienza*) has necessarily an historical character, is not immutable, but continually changeable, is complex and inseparably compounded of multiple elements," and so forth. With respect to such propositions one may sympathise with that cautious student of whom it is told that he would not assent to the axioms of Euclid until he knew what use was to be made of the admission.

Theoretische Sozialökonomie. Von GUSTAV CASSEL. (Leipzig: Winter. 1919. Pp. 582.)

"A SORT of scientific poem"—in these words the *Mécanique Analytique* of Lagrange was described by one who was a poet as well as a mathematician, William Rowan Hamilton. The words serve to introduce an essay in which Hamilton, by a singularly beautiful and original conception, enlarged the powers of dynamical science.¹ In the view of that soaring genius astronomy and mathematical physics generally require the exercise of a faculty akin to the artistic imagination. There is produced "an imitation, not a copy, of Nature. It is a creation of the mind so framed as to resemble in an immense number of particulars what we know of the external universe."² To some men of science this view may appear visionary; too much in the spirit of Plato, too little in the manner of Bacon. There appears, indeed, to be some disagreement among "the first of those who know" as to the rôle of the highest generalisations even in natural philosophy. How much more difficult to find must be the path to a science of human action! In this obscurer region we are disposed to

¹ *On a General Method in Dynamics*, Transactions of the Royal Society, 1834.

² Transactions of the Royal Irish Academy, 1837-8.

follow one who, accredited by the successful treatment of several special economic questions in former writings, now delivers his mature judgment about the science as a whole. Professor Cassel appears to us to have remarkably well defined the province and limits of abstract general reasoning in economics. "We proceed like the astronomers who first determine the motion of a planet as if it were not influenced by the other planets . . . afterwards take into consideration the disturbances caused by the other planets. . . . In order to be able to pursue this method one must be assured that the motion first described represents the essential portion of the phenomenon" (*dass die erste Bewegung auch die wesentliche darstellt*) (93).¹ So Ricardo is not to be condemned merely because a theory of his does not perfectly correspond with the observed facts. "Every theoretical investigation must begin with certain abstractions" (263). A good instance of appropriate abstraction is afforded by the conception of production as a continuous flow. "New iron ore and new coal are daily and hourly requisitioned from the store-houses (*Fundstätten*) of Nature, while simultaneously crude iron is furnished in a steady stream and converted into steel, and the various products of steel and iron are passing through all the stages which lead up to the finished article" (21). This description is *prima facie* inappropriate to agriculture. Certainly we do not find in modern Europe, as in the Homeric Phæacia, every fruit in season all the year round, "pear ripening after pear . . . and fig after fig." Yet "the European demand for wheat is (or rather was when this was written, before the war) satisfied by a practically continuous stream of imported wheat throughout the whole year with considerable regularity." Corrections of this conception are to be introduced where required by the facts. But in order to obtain a first general view of essentials "it can hardly be doubted but that the continuous process of production . . . is *the right abstraction*" (22). The italics mark our approbation. But we do not commit ourselves to acceptance of every proposition which has "right abstraction" for predicate. Thus with regard to the alleged unequal pay to women for equal work and the question on which the author pertinently puts his finger, Why, then, does not the entrepreneur more extensively substitute female for male labour? we are not quite satisfied with his answer. He puts forward as the dominant circumstance the real, or at least believed, inferior efficiency of female work. He will not accept the "risky hypothesis" that in general female labour is underpaid (294). Again, we question whether his conception of

¹ The bracketed numerals refer to pages of the work reviewed.

the rôle of money, or at least what is novel in his conception, deserves all that he claims for it. "By studying prices rather than value" (*eine Preislehre anstatt einer Wertlehre*) "we shall banish completely from economic science the whole of the so-called theory of value. We shall altogether get rid of a great mass of logomachies on which now much useless labour is spent" (41). We shall here diverge from his treatment of money so far at least as to think it permissible to discuss his first two "books," entitled respectively *A General View of Economics* and *The Determination of the Prices of the Factors of Production*, apart from the third and fourth books on *Money* and *Crises* (*Konjunkturbewegungen*) respectively. The work having been already reviewed as a whole in the *ECONOMIC JOURNAL* (1919), we take leave to concentrate attention on the parts to which the reviewer pointed as "of special interest for English economists."

This half of the work may indeed be regarded as a whole complete in itself. The relation of its parts to this whole is artistic. The refined pleasure of contemplating the Many in One is afforded by the spectacle of the economic system—the prices of all commodities and all factors of production—deduced from one single simple principle, that which underlies the action of supply and demand. May not the mechanism of industry so presented deserve the character of a "scientific poem" which has been attributed to celestial mechanics? We might at least compare our author to a first-rate astronomer who should compose a treatise at once summary and comprehensive presenting in lucid order and due perspective the main results obtained by his predecessors and by himself. In such a work it is inevitable that those who are conversant with the science should find much which has not the charm of novelty. Now we are treated to a mathematical analysis of market in the manner of Walras, with "technical coefficients" which correspond to the coefficients of production proper to the Lausanne school (110–116). Now we come upon the doctrine of Dr. Marshall that "the farmer will lay out capital and labour on land for which a fixed rent (per unit of land) is payable up to the point at which it is indifferent whether a specified sum of money should be employed to procure the use of more land or more capital and labour" (242). The maturer student would be assisted in finding his way to matter of fresh interest by a fuller table of contents and by a logically constructed index. We may also recommend, with a view to a translation into English, which we hope is in contemplation, the useful device of marginal headings. As for beginners, the matter as

well as the form will prove acceptable to them. The half-volume under consideration, with the omission of certain passages which we shall indicate, may be recommended as perhaps the best introduction to what may be called the modern higher economics.

The perfection of form which we admire, the conception of the economic system held together by a single simple principle, like the solar system by gravitation, would seem to us even more admirable if the author had employed a more conventional terminology in his enunciation of that first principle. The continual use of the term "scarcity" (*Knappheit*), where supply-and-demand might have been expected, jars (3, 120, 289, *et passim*). Of course, scarcity is a condition of value-in-exchange. We all know that air and water, if not scarce, have not that kind of value. Moreover, a sort of scarcity is implied in the condition of economic equilibrium that the yield of any factor at the margin of production should increase at a decreasing rate. But our author has not much use for margins. He is so afraid of their abuse (118). Marginal productivity is not to be adduced as an *explanation* (*Erklärungsgrund*) of price (272). For it is as much an "unknown" as price. But *quis negavit*? At least, what mathematical economist ever denied this relation of margin to price? What competent economist of any school can deny it after the repeated and explicit explanations given by Dr. Marshall that "marginal uses indicate but do not govern value" (Contents, and corresponding passage at p. 410, *Principles*, 5th ed., p. 517, note, *et passim*)? The usefulness of this index, in our judgment, outweighs the danger of its abuse. The fear of making the weak brother to offend should not deter us from using the principle which Professor Pigou has laid down as the corner-stone of *Wealth and Welfare*. Professor Cassel's scruples and our criticisms apply equally to marginal utility (118). There is here in his view the additional objection that we are overstepping the boundary between economic science and psychology (67). But we do not accept his ruling as to the limits of the subjective in economics (41). Taxation is an integral part of economics; and psychology enters largely into modern taxation. We are not prepared to rule out all talk about justice as the "expression of confused hyperbolic conceptions which have no place in a scientific exposition" (150).

Some further criticisms of Professor Cassel's doctrines will transpire in the course of the following remarks respecting criticisms which he has passed on several eminent economists. We

cannot defend Ricardo against the charge of "dualismus" (263). We agree that the existence of rent-free land at the margin of cultivation is not essential to the theory of ground rent (248). We also agree as to the distortion of Ricardo's doctrine by Marx; and as to "the ridiculously exaggerated importance which has been attached to this Socialist theory of value," not only by the apostles of Socialism, but by its opponents (261). A science which makes concessions to scholastic like that of Marx does not know what is due to itself (157). Two English Socialists who have not bowed the knee to Marx, "*das Ehepaar Webb*," are treated more respectfully (277). But their ideal theory can hardly be fulfilled perfectly in real life (278). Against Socialists in general it is argued with force that interest and wages will persist in a Socialist regime (217, 316). The writer appears to think that price determined by the play of demand and supply affords the only satisfactory principle for the distribution of capital and labour (61, 185, 109). Consistently he rules out rationing and maximum prices as not applicable in peace time (Appendix, 561). His ideal seems to be that which Professor Carver lately described¹ as one of four possible labour programmes, namely, "balancing up," securing less inequality between marginal utilities, *e.g.*, of labour and capital. We fear that the many will not be persuaded to confine themselves to this method. They may not accept the economist's opinion that permanently favourable results can only be attained by political economy when it works in harmony with the principles of supply and demand (*tauschwirtschaftlichen Principien*) (151). The working of those principles, however "normal," may not seem to them "desirable" (*wünschenswert*) (105). In this connection (221) and generally the subtle criticisms concerning capital and interest deserve attention. Some important remarks upon Jevons's and Böhm-Bawerk's theories are repeated from the author's earlier work on the *Nature and Necessity of Interest* (160). We cannot dispute the final verdict on Böhm-Bawerk. "He never was able to adopt in its entirety the modern scientific conception of price-determination as one and the same process which simultaneously determines *all* prices, both those of the finished goods and those of the factors of production" (162).

But we protest against the injustice of imputing a similar defect to the *doyen* of English economists. Why, most of us have learnt the "modern scientific conception" from Professor Marshall. There is no other original authority, except Walras. We read, therefore, with amazement that "the whole of Marshall's

¹ Referred to *ECONOMIC JOURNAL*, Vol. XXIX. p. 257.

system is an attempt to evade (*umgehen*) the principle of scarcity " (*Knappheit*,) to eliminate (*auszuschalten*) scarcity " as a determining moment of price-formation " (139). Which signifies, presumably, that the English author does not recognise the essential unity of the process that determines all prices. Thus, instead of making the price of a factor-of-production dependent on *Knappheit* only, " in Marshall's conception 'costs' ('real costs') represent a personal service, an effort, a sacrifice " (*eine persönliche Leistung, eine Anstrengung, eine Aufopferung*) (75). It may be noticed, however, that even Professor Cassel admits a certain differentiation of the generic conception in the case of the offer of factors-of-production not absolutely limited in quantity; the scarcity appears in the sluggishness (*Trägheit*) with which the increase of the factor follows a rise of price (134). Would he be satisfied with Dr. Marshall's explanation that the "discommodity of labour may arise " "from its occupying time that is wanted for pastime, or for social or intellectual pursuits " (*Principles*, 3rd ed., p. 216)? Or is the real cost considered too psychological? That is certainly part of the objection to "consumer's surplus " (70). We have already replied to this objection. We must pass over others which seem to turn largely on the definition of terms. We go on to the culminating charge (243), that Marshall follows Ricardo in distinguishing rent from the price of other factors of production as not forming an element in the cost of production or the price of a product. Perhaps the critic has not made sufficient allowance for the English writer's unwillingness to break with the phraseology of his classical predecessors. Professor Cassel is the last man to appreciate this reverence for the past; he who tells us that "in the course of his economic studies he soon became convinced that the whole of the so-called theory of value, with its endless logomachies and its unfruitful scholastic, should be thrown into the waste-paper basket of theoretical economics " ¹ (Preface, v, *cp.* 41). The Swedish sage would no doubt refuse to phrases the permanence which Burke in eulogy of the English character claims even for prejudices. "Instead of casting away all our old prejudices," says Burke, "we (English) cherish them to a very considerable degree. . . . Many of our men of speculation, instead of exploding general prejudices, employ their sagacity to discover the latent wisdom which prevails in them." ² We could wish that Professor Cassel had employed his sagacity in discovering the wisdom which is latent in the practice of the classical economists

¹ Zu der auszumusternden Ballast der theoretischen Ökonomie gehört.

² *Reflections on the French Revolution*.

and patent in Dr. Marshall's repeated explanations respecting the peculiarities of land as compared with other agents of production. But we are dispensed from the disagreeable task of refuting objections founded on misinterpretation by recalling that answers have already been given in the *ECONOMIC JOURNAL* to substantially identical objections made a quarter of a century ago by writers of great intelligence, but somewhat deficient in intellectual sympathy. We may refer in particular to the review of Wicksteed's *Laws of Distribution*, 1894. In the judgment of the reviewer, Mr. Flux, "to show that the payment for land may be expressed in the form of the marginal productivity of land does not destroy the value of the conception of it as a surplus." There is an "essential feature which distinguishes the treatment of land and some other agents." In the *ECONOMIC JOURNAL* for 1891 the reviewer of Professor Marshall's second edition did not, like our author, find a want "of clearness in Marshall's conception of mutual dependence."¹ Rather, it is recalled that as far back as the year 1872 the principle had been clearly enounced in these words—quite as clear as any which Professor Cassel employs half a century later: "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." The reviewer of the third edition of the *Principles* in the *Journal* of 1895 quotes at length passages embodying the truth which Professor Cassel supposes to be ignored. "The question whether he (the cultivator) has carried his cultivation of a particular piece of land as far as he possibly can, and whether he should try to force more from it or to take on another piece of land, is of the same kind as the question whether he should buy a new plough or try to get a little more work out of his present stock of ploughs" (*Principles*, Book II. chap. ii. § 5, 3rd. ed.). After this explicit explanation it becomes a mere question of words, adds the reviewer, whether we should retain the old formula: "Rent does not enter into cost of production." The critics who complain of Dr. Marshall's differential treatment of land forget that he, by his doctrine of the "margin of building" and that of cultivation, has done more than any other economist to exhibit that truth on which they insist. Their criticisms attest the correctness of their own views rather than their ability to appreciate the views of others.²

¹ "Die Unklarheit der Marshallschen Idee der gegenseitigen Abhängigkeit tritt hier hervor" (245).

² Some of these expressions are borrowed from the present writer's article on the "Theory of Distribution," in the *Quarterly Journal of Economics* for 1904, where references to anticipations of Prof. Cassel's objections may be found.