

THE
QUARTERLY JOURNAL
OF
ECONOMICS

FEBRUARY, 1908

PROFESSOR CLARK'S ECONOMICS.

SUMMARY.

Professor Clark's commanding position, 147-150.—Harmless misinformation as to primitive man, 151-154.—Significance of the accumulated experience of mankind overlooked, 155-157.—The classical school and Clark are alike hedonistic, utilitarian, taxonomic, 158-160.—His doctrine as to capital and capital-goods, 161-167.—Natural distribution, final productivity, and effective utility, 168-172.—The supposition of consumer's surplus vitiates that of reward according to productivity, 173-176.—Consistently, monopolists also must be admitted to get rewards based on effective utility and so on "natural" law, 177-183.—The legislation proposed by Clark as to monopoly not related to his theoretic principles, 183-185.—How far any surplus of utility over disutility can be consistently reasoned out, 186-189.—Consumer's surplus and producer's surplus vanish on close examination, 190-193.—Conclusion, 194-195.

For some time past economists have been looking with lively anticipation for such a comprehensive statement of Mr. Clark's doctrines as is now offered. The leading purpose of the present volume¹ is "to offer a brief and pro-

¹ *The Essentials of Economic Theory, as Applied to Modern Problems of Industry and Public Policy.* By John Bates Clark. New York: The Macmillan Company. 1907.

visional statement of the more general laws of progress"; altho it also comprises a more abridged restatement of the laws of "Economic Statics" already set forth in fuller form in his *Distribution of Wealth*. Tho brief, this treatise is to be taken as systematically complete, as including in due correlation all the "essentials" of Mr. Clark's theoretical system. As such, its publication is an event of unusual interest and consequence.

Mr. Clark's position among this generation of economists is a notable and commanding one. No serious student of economic theory will, or can afford to, forego a pretty full acquaintance with his development of doctrines. Nor will any such student avoid being greatly influenced by the position which Mr. Clark takes on any point of theory on which he may speak, and many look confidently to him for guidance where it is most needed. Very few of those interested in modern theory are under no obligations to him. He has, at the same time, in a singular degree the gift of engaging the affections as well as the attention of students in his field. Yet the critic is required to speak impersonally of Mr. Clark's work as a phase of current economic theory.

In more than one respect Mr. Clark's position among economists recalls the great figures in the science a hundred years ago. There is the same rigid grasp of the principles, the "essentials," out of which the broad theorems of the system follow in due sequence and correlation; and like the leaders of the classical era, while Mr. Clark is always a theoretician, never to be diverted into an inconsistent makeshift, he is moved by an alert and sympathetic interest in current practical problems. While his aim is a theoretical one, it is always with a view to the theory of current affairs; and his speculations are animated with a large human sympathy and an aggressive interest in the amelioration of the lot of man.

His relation to the ancient adepts of the science, however, is something more substantial than a resemblance only. He is, by spiritual consanguinity, a representative of that classical school of thought that dominated the science through the better part of the nineteenth century. This is peculiarly true of Mr. Clark, as contrasted with many of those contemporaries who have fought for the marginal-utility doctrines. Unlike these spokesmen of the Austrian wing, he has had the insight and courage to see the continuity between the classical position and his own, even where he advocates drastic changes in the classical body of doctrines. And altho his system of theory embodies substantially all that the consensus of theorists approves in the Austrian contributions to the science, yet he has arrived at his position on these heads not under the guidance of the Austrian school, but, avowedly, by an unbroken development out of the position given by the older generation of economists.¹ Again, in the matter of the psychological postulates of the science, he accepts a hedonism as simple, unaffected, and uncritical as that of Jevons or of James Mill. In this respect his work is as true to the canons of the classical school as the best work of the theoreticians of the Austrian observance. There is the like unhesitating appeal to the calculus of pleasure and pain as the indefeasible ground of action and solvent of perplexities, and there is the like readiness to reduce all phenomena to terms of a "normal," or "natural," scheme of life constructed on the basis of this hedonistic calculus. Even in the ready recourse to "conjectural history," to use Steuart's phrase, Mr. Clark's work is at one with both the early classical and the late (Jevons-Austrian) marginal-utility school. It has the virtues of both, coupled with the graver shortcomings of both. But, as his view exceeds theirs in breadth and gen-

¹ Cf., e.g., *Distribution of Wealth*, p. 376, note.

erosity, so his system of theory is a more competent expression of current economic science than what is offered by the spokesmen of the Jevons-Austrian wing. It is as such, as a competent and consistent system of current economic theory, that it is here intended to discuss Mr. Clark's work, not as a body of doctrines peculiar to Mr. Clark or divergent from the main current.

Since hedonism came to rule economic science, the science has been in the main a theory of distribution,—distribution of ownership and of income. This is true both of the classical school and of those theorists who have taken an attitude of ostensible antagonism to the classical school. The exceptions to the rule are late and comparatively few, and they are not found among the economists who accept the hedonistic postulate as their point of departure. And, consistently with the spirit of hedonism, this theory of distribution has centered about a doctrine of exchange value (or price) and has worked out its scheme of (normal) distribution in terms of (normal) price. The normal economic community, upon which theoretical interest has converged, is a business community, which centers about the market, and whose scheme of life is a scheme of profit and loss. Even when some considerable attention is ostensibly devoted to theories of consumption and production, in these systems of doctrine the theories are constructed in terms of ownership, price, and acquisition, and so reduce themselves in substance to doctrines of distributive acquisition.¹ In this respect Mr. Clark's work is true to the received canons. The "Essentials of Economic Theory" are the essentials of the hedonistic theory of distribution, with sundry reflections on related topics. The scope of Mr. Clark's economics, indeed, is

¹ See, *e.g.*, J. S. Mill, *Political Economy*, Book I.; Marshall, *Principles of Economics*, vol. i., Books II.-V.

even more closely limited by concepts of distribution than many others, since he persistently analyzes production in terms of value, and value is a concept of distribution.

As Mr. Clark justly observes (p. 4), "The primitive and general facts concerning industry . . . need to be known before the social facts can profitably be studied." In these early pages of the treatise, as in other works of its class, there is repeated reference to that more primitive and simple scheme of economic life out of which the modern complex scheme has developed, and it is repeatedly indicated that in order to an understanding of the play of forces in the more advanced stages of economic development and complication, it is necessary to apprehend these forces in their unsophisticated form as they work out in the simple scheme prevalent on the plane of primitive life. Indeed, to a reader not well acquainted with Mr. Clark's scope and method of economic theorizing, these early pages would suggest that he is preparing for something in the way of a genetic study,—a study of economic institutions approached from the side of their origins. It looks as if the intended line of approach to the modern situation might be such as an evolutionist would choose, who would set out with showing what forces are at work in the primitive economic community, and then trace the cumulative growth and complication of these factors as they presently take form in the institutions of a later phase of the development. Such, however, is not Mr. Clark's intention. The effect of his recourse to "primitive life" is simply to throw into the foreground, in a highly unreal perspective, those features which lend themselves to interpretation in terms of the normalized competitive system. The best excuse that can be offered for these excursions into "primitive life" is that they have substantially nothing to do with the main argument

of the book, being of the nature of harmless and graceful misinformation.

In the primitive economic situation—that is to say, in savagery and the lower barbarism—there is, of course, no “solitary hunter,” living either in a cave or otherwise, and there is no man who “makes by his own labor all the goods that he uses,” etc. It is, in effect, a highly meretricious misrepresentation to speak in this connection of “the economy of a man who works only for himself,” and say that “the inherent productive power of labor and capital is of vital concern to him,” because such a presentation of the matter overlooks the main facts in the case in order to put the emphasis on a feature which is of negligible consequence. There is no reasonable doubt but that, at least since mankind reached the human plane, the economic unit has been not a “solitary hunter,” but a community of some kind; in which, by the way, women seem in the early stages to have been the most consequential factor in stead of the man who works for himself. The “capital” possessed by such a community—as, *e.g.*, a band of California “Digger” Indians—was a negligible quantity, more valuable to a collector of curios than to any one else, and the loss of which to the “Digger” squaws would mean very little. What was of “vital concern” to them, indeed, what the life of the group depended on absolutely, was the accumulated wisdom of the squaws, the technology of their economic situation.¹ The loss of the basket, digging-stick, and mortar, simply as physical objects, would have signified little, but the conceivable loss of the squaw’s knowledge of the soil and seasons, of food and fibre plants, and of mechanical expedients, would have meant the present dispersal and starvation of the community.

This may seem like taking Mr. Clark to task for an

¹ Cf., *e.g.*, such an account as Barrows, *Ethno-botany of the Coahuila Indians*.

inconsequential gap in his general information on Digger Indians, Eskimos, and paleolithic society at large. But the point raised is not of negligible consequence for economic theory, particularly not for any theory of "economic dynamics" that turns in great part about questions of capital and its uses at different stages of economic development. In the primitive culture the quantity and the value of mechanical appliances is relatively slight; and whether the group is actually possessed of more or less of such appliances at a given time is not a question of first-rate importance. The loss of these objects—tangible assets—would entail a transient inconvenience. But the accumulated, habitual knowledge of the ways and means involved in the production and use of these appliances is the outcome of long experience and experimentation; and, given this body of commonplace technological information, the acquisition and employment of the suitable apparatus is easily arranged. The great body of commonplace knowledge made use of in industry is the product and heritage of the group. In its essentials it is known by common notoriety, and the "capital goods" needed for putting this commonplace technological knowledge to use are a slight matter,—practically within the reach of every one. Under these circumstances the ownership of "capital-goods" has no great significance, and, as a practical fact, interest and wages are unknown, and the "earning power of capital" is not seen to be "governed by a specific power of productivity which resides in capital-goods." But the situation changes, presently, by what is called an advance "in the industrial arts." The "capital" required to put the commonplace knowledge to effect grows larger, and so its acquisition becomes an increasingly difficult matter. Through "difficulty of attainment" in adequate quantities the apparatus and its ownership become a matter of consequence; increasingly so, until

presently the equipment required for an effective pursuit of industry comes to be greater than the common man can hope to acquire in a lifetime. The commonplace knowledge of ways and means, the accumulated experience of mankind, is still transmitted in and by the body of the community at large; but, for practical purposes, the advanced "state of the industrial arts" has enabled the owners of goods to corner the wisdom of the ancients and the accumulated experience of the race. Hence "capital," as it stands at that phase of the institution's growth contemplated by Mr. Clark.

The "natural" system of free competition, or, as it was once called, "the simple and obvious system of natural liberty," is accordingly a phase of the development of the institution of capital; and its claim to immutable dominion is evidently as good as the like claim of any other phase of cultural growth. The equity, or "natural justice," claimed for it is evidently just and equitable only in so far as the conventions of ownership on which it rests continue to be a secure integral part of the institutional furniture of the community; that is to say, so long as these conventions are part and parcel of the habits of thought of the community; that is to say, so long as these things are currently held to be just and equitable. This normalized present, or "natural," state of Mr. Clark, is, as near as may be, Senior's "Natural State of Man,"—the hypothetically perfect competitive system; and economic theory consists in the definition and classification of the phenomena of economic life in terms of this hypothetical competitive system.

Taken by itself, Mr. Clark's dealing with the past development might be passed over with slight comment, except for its negative significance, since it has no theoretical connection with the present, or even with the "natural" state in which the phenomena of economic life

are assumed to arrange themselves in a stable, normal scheme. But his dealings with the future, and with the present in so far as the present situation is conceived to comprise "dynamic" factors, is of substantially the same kind. With Senior's "natural state of man" as the base-line of normality in things economic, questions of present and future development are treated as questions of departure from the normal, aberrations and excesses which the theory does not aim even to account for. What is offered in place of theoretical inquiry when these "positive perversions of the natural forces themselves" are taken up (*e.g.*, in chapters xxii.-xxix.) is an exposition of the corrections that must be made to bring the situation back to the normal static state, and solicitous advice as to what measures are to be taken with a view to this beneficent end. The problem presented to Mr. Clark by the current phenomena of economic development is: how can it be stopped? or, failing that, how can it be guided and minimized? Nowhere is there a sustained inquiry into the dynamic character of the changes that have brought the present (deplorable) situation to pass, nor into the nature and trend of the forces at work in the development that is going forward in this situation. None of this is covered by Mr. Clark's use of the word "dynamic." All that it covers in the way of theory (chapters xii.-xxi.) is a speculative inquiry as to how the equilibrium re-established itself when one or more of the quantities involved increases or decreases. Other than quantitative changes are not noticed, except as provocations to homiletic discourse. Not even the causes and the scope of the quantitative changes that may take place in the variables are allowed to fall within the scope of the theory of economic dynamics.

So much of the volume, then, and of the system of doctrines of which the volume is an exposition, as is

comprised in the later eight chapters (pp. 372-554), is an exposition of grievances and remedies, with only sporadic intrusions of theoretical matter, and does not properly constitute a part of the theory, whether static or dynamic. There is no intention here to take exception to Mr. Clark's outspoken attitude of disapproval toward certain features of the current business situation or to quarrel with the remedial measures which he thinks proper and necessary. This phase of his work is spoken of here rather to call attention to the temperate but uncompromising tone of Mr. Clark's writings as a spokesman for the competitive system, considered as an element in the Order of Nature, and to note the fact that this is not economic theory.¹

The theoretical section specifically scheduled as Economic Dynamics (chapters xii.-xxi.), on the other hand, is properly to be included under the caption of Statics. As already remarked above, it presents a theory of equilibrium between variables. Mr. Clark is, indeed, barred out by his premises from any but a statical development of theory. To realize the substantially statical character of his Dynamics, it is only necessary to turn to his chapter xii. (Economic Dynamics). "A highly dynamic condition, then, is one in which the economic organism changes rapidly and yet, at any time in the course of its changes, is relatively near to a certain static model" (p. 196). "The actual shape of society at any one time is not the static model of that time; but it tends to conform to it; and in a very dynamic society is more nearly like it

¹ What would be the scientific rating of the work of a botanist who should spend his energy in devising ways and means to neutralize the ecological variability of plants, or of a physiologist who conceived it the end of his scientific endeavors to rehabilitate the vermiform appendix or the pineal eye, or to denounce and penalize the imitative coloring of the Viceroy butterfly? What scientific interest would attach to the matter if Mr. Loeb, *e.g.*, should devote a few score pages to canvassing the moral responsibilities incurred by him in his parental relation to his parthenogenetically developed sea-urchin eggs?

Those phenomena which Mr. Clark characterizes as "positive perversions" may be distasteful and troublesome, perhaps, but "the economic necessity of doing what is legally difficult" is not of the "essentials of theory."

than it would be in one in which the forces of change are less active" (p. 197). The more "dynamic" the society, the nearer it is to the static model; until in an ideally dynamic society, with a frictionless competitive system, to use Mr. Clark's figure, the static state would be attained, except for an increase in size,—that is to say, the ideally perfect "dynamic" state would coincide with the "static" state. Mr. Clark's conception of a dynamic state reduces itself to a conception of an imperfectly static state, but in such a sense that the more highly and truly "dynamic" condition is thereby the nearer to a static condition. Neither the static nor the dynamic state, in Mr. Clark's view, it should be remarked, is a state of quiescence. Both are states of more or less intense activity, the essential difference being that in the static state the activity goes on in perfection, without lag, leak, or friction; the movement of parts being so perfect as not to disturb the equilibrium. The static state is the more "dynamic" of the two. The "dynamic" condition is essentially a deranged static condition: whereas the static state is the absolute perfect, "natural" taxonomic norm of competitive life. This dynamic-static state may vary in respect of the magnitude of the several factors which hold one another in equilibrium, but these are none other than quantitative variations. The changes which Mr. Clark discusses under the head of dynamics are all of this character,—changes in absolute or relative magnitude of the several factors comprised in the equation.

But, not to quarrel with Mr. Clark's use of the terms "static" and "dynamic," it is in place to inquire into the merits of this class of economic science apart from any adventitious shortcomings. For such an inquiry Mr. Clark's work offers peculiar advantages. It is lucid, concise, and unequivocal, with no temporizing euphemisms

and no politic affectations of sentiment. Mr. Clark's premises, and therewith the aim of his inquiry, are the standard ones of the classical English school (including the Jevons-Austrian wing). This school of economics stands on the pre-evolutionary ground of normality and "natural law," which the great body of theoretical science occupied in the early nineteenth century. It is like the other theoretical sciences that grew out of the rationalistic and humanitarian conceptions of the eighteenth century in that its theoretical aim is taxonomy—definition and classification—with the purpose of subsuming its data under a rational scheme of categories which are presumed to make up the Order of Nature. This Order of Nature, or realm of Natural Law, is not the actual run of material facts, but the facts so interpreted as to meet the needs of the taxonomist in point of taste, logical consistency, and sense of justice. The question of the truth and adequacy of the categories is a question as to the consensus of taste and predilection among the taxonomists; *i.e.*, they are an expression of trained human nature touching the matter of what ought to be. The facts so interpreted make up the "normal," or "natural," scheme of things, with which the theorist has to do. His task is to bring facts within the framework of this scheme of "natural" categories. Coupled with this scientific purpose of the taxonomic economist is the pragmatic purpose of finding and advocating the expedient course of policy. On this latter head, again, Mr. Clark is true to the animus of the school.

The classical school, including Mr. Clark and his contemporary associates in the science, is hedonistic and utilitarian,—hedonistic in its theory and utilitarian in its pragmatic ideals and endeavors. The hedonistic postulates on which this line of economic theory is built up are of a statical scope and character, and nothing but

stistical theory (taxonomy) comes out of their development.¹ These postulates, and the theorems drawn from them, take account of none but quantitative variations, and quantitative variation alone does not give rise to cumulative change, which proceeds on changes in kind.

Economics of the line represented at its best by Mr. Clark has never entered this field of cumulative change. It does not approach questions of the class which occupy the modern sciences,—that is to say, questions of genesis, growth, variation, process (in short, questions of a dynamic import),—but confines its interest to the definition and classification of a mechanically limited range of phenomena. Like other taxonomic sciences, hedonistic economics does not, and cannot, deal with phenomena of growth except so far as growth is taken in the quantitative sense of a variation in magnitude, bulk, mass, number, frequency. In its work of taxonomy this economics has consistently bound itself, as Mr. Clark does, by distinctions of a mechanical, statistical nature, and has drawn its categories of classification on those grounds. Concretely, it is confined, in substance, to the determination of and refinements upon the concepts of land, labor, and capital, as handed down by the great economists of the classical era, and the correlate concepts of rent, wages, interest and profits. Solicitously, with a painfully meticulous circumspection, the normal, mechanical metes and bounds of these several concepts are worked out, the touchstone of the absolute truth aimed at being the hedonistic calculus. The facts of use and wont are not of the essence of this mechanical refinement. These several categories

¹ It is a notable fact that even the genius of Herbert Spencer could extract nothing but taxonomy from his hedonistic postulates; *e.g.*, his *Social Statics*. Spencer is both evolutionist and hedonist, but it is only by recourse to other factors, alien to the rational hedonistic scheme, such as habit, delusions, use and disuse, sporadic variation, environmental forces, that he is able to achieve anything in the way of genetic science, since it is only by this recourse that he is enabled to enter the field of cumulative change within which the modern post-Darwinian sciences live and move and have their being.

are mutually exclusive categories, mechanically speaking. The circumstance that the phenomena covered by them are not mechanical facts is not allowed to disturb the pursuit of mechanical distinctions among them. They nowhere overlap, and at the same time between them they cover all the facts with which this economic taxonomy is concerned. Indeed, they are in logical consistency, required to cover them. They are hedonistically "natural" categories of such taxonomic force that their elemental lines of cleavage run through the facts of any given economic situation, regardless of use and wont, even where the situation does not permit these lines of cleavage to be seen by men and recognized by use and wont; so that, *e.g.*, a gang of Aleutian Islanders slushing about in the wrack and surf with rakes and magical incantations for the capture of shell-fish are held, in point of taxonomic reality, to be engaged on a feat of hedonistic equilibration in rent, wages, and interest. And that is all there is to it. Indeed, for economic theory of this kind, that is all there is to any economic situation. The hedonistic magnitudes vary from one situation to another, but, except for variations in the arithmetical details of the hedonistic balance, all situations are, in point of economic theory, substantially alike.¹

Taking this unfaltering taxonomy on its own recognizances, let us follow the trail somewhat more into the arithmetical details, as it leads along the narrow ridge of rational calculation, above the tree-tops, on the levels of clear sunlight and moonshine. For the purpose in

¹ "The capital-goods have to be taken unit by unit if their value for productive purposes is to be rightly gauged. A part of a supply of potatoes is traceable to the hoes that dig them. . . . We endeavor simply to ascertain how badly the loss of one hoe would affect us or how much good the restoration of it would do us. This truth, like the foregoing ones, has a universal application in economics; for primitive men as well as civilized ones must estimate the specific productivity of the tools that they use," etc. Page 43.

hand—to bring out the character of this current economic science as a working theory of current facts, and more particularly “as applied to modern problems of industry and public policy” (title-page)—the sequence to be observed in questioning the several sections into which the theoretical structure falls is not essential. The structure of classical theory is familiar to all students, and Mr. Clark’s redaction offers no serious departure from the conventional lines. Such divergence from conventional lines as may occur is a matter of details, commonly of improvements in detail; and the revisions of detail do not stand in such an organic relation to one another, nor do they support and strengthen one another in such a manner, as to suggest anything like a revolutionary trend or a breaking away from the conventional lines.

So as regards Mr. Clark’s doctrine of Capital. It does not differ substantially from the doctrines which are gaining currency at the hands of such writers as Mr. Fisher or Mr. Fetter; altho there are certain formal distinctions peculiar to Mr. Clark’s exposition of the “Capital Concept.” But these peculiarities are peculiarities of the method of arriving at the concept rather than peculiarities substantial to the concept itself. The main discussion of the nature of capital is contained in chapter ii. (Varieties of Economic Goods). The conception of capital here set forth is of fundamental consequence to the system, partly because of the important place assigned capital in this system of theory, partly because of the importance which the conception of capital must have in any theory that is to deal with problems of the current (capitalistic) situation. Several classes of capital-goods are enumerated, but it appears that in Mr. Clark’s apprehension—at variance with Mr. Fisher’s view—persons are not to be included among the items of capital. It is also clear from the run of the argument,

tho not explicitly stated, that only material, tangible, mechanically definable articles of wealth go to make up capital. In current usage, in the business community, "capital" is a pecuniary concept, of course, and is not definable in mechanical terms; but Mr. Clark, true to the hedonistic taxonomy, sticks by the test of mechanical demarcation and draws the lines of his category on physical grounds; whereby it happens that any pecuniary conception of capital is out of the question. Intangible assets, or immaterial wealth, have no place in the theory; and Mr. Clark is exceptionally subtle and consistent in avoiding such modern notions. One gets the impression that such a notion as intangible assets is conceived to be too chimerical to merit attention, even by way of protest or refutation.

Here, as elsewhere in Mr. Clark's writings, much is made of the doctrine that the two facts of "capital" and "capital-goods" are conceptually distinct, tho substantially identical. The two terms cover virtually the same facts as would be covered by the terms "pecuniary capital" and "industrial equipment." They are for all ordinary purposes coincident with Mr. Fisher's terms, "capital value" and "capital," altho Mr. Clark might enter a technical protest against identifying his categories with those employed by Mr. Fisher.¹ "Capital is this permanent fund of productive goods, the identity of whose component elements is forever changing. Capital-goods are the shifting component parts of this permanent aggregate" (p. 29). Mr. Clark admits (pp. 29-33) that capital is colloquially spoken and thought of in terms of value, but he insists that in point of substantial fact the working concept of capital is (should be) that of "a fund of productive goods," considered as an "abiding entity." The phrase itself, "a fund of productive goods," is a

¹ Cf. a criticism of Mr. Fisher's conception in the *Political Science Quarterly* for February, 1908.

curiously confusing mixture of pecuniary and mechanical terms, tho the pecuniary expression, "a fund," is probably to be taken in this connection as a permissible metaphor.

This conception of capital, as a physically "abiding entity" constituted by the succession of productive goods that make up the industrial equipment, breaks down in Mr. Clark's own use of it when he comes (pp. 37-38) to speak of the mobility of capital; that is to say, so soon as he makes use of it. A single illustration of this will have to suffice, tho there are several points in his argument where the frailty of the conception is patent enough. "The transfer of capital from one industry to another is a dynamic phenomena which is later to be considered. What is here important is the fact that it is in the main accomplished without entailing transfers of capital-goods. An instrument wears itself out in one industry, and instead of being succeeded by a like instrument in the same industry, it is succeeded by one of a different kind which is used in a different branch of production" (p. 38),—illustrated on the preceding page by a shifting of investment from a whaling-ship to a cotton-mill. In all this it is plain that the "transfer of capital" contemplated is a shifting of investment, and that it is, as indeed Mr. Clark indicates, not a matter of the mechanical shifting of physical bodies from one industry to the other. To speak of a transfer of "capital" which does not involve a transfer of "capital-goods" is a contradiction of the main position, that "capital" is made up of "capital-goods." The continuum in which the "abiding entity" of capital resides is a continuity of ownership, not of physical fact. The continuity, in fact, is of an immaterial nature, a matter of legal rights, of contract, of purchase and sale. Just why this patent state of the case is overlooked, as it somewhat elaborately is, is not easily seen. But it is plain that, if the concept

of capital were elaborated from observation of current business practice, it would be found that "capital" is a pecuniary fact, not a mechanical one; that it is an outcome of a valuation, depending immediately on the state of mind of the valuers; and that the specific marks of capital, by which it is distinguishable from other facts, are of an immaterial character. This would, of course, lead, directly, to the admission of intangible assets; and this, in turn, would upset the law of the "natural" remuneration of labor and capital to which Mr. Clark's argument looks forward from the start. It would also bring in the "unnatural" phenomena of monopoly as a normal outgrowth of business enterprise.

There is a further logical discrepancy avoided by resorting to the alleged facts of primitive industry, when there was no capital, for the elements out of which to construct a capital concept, instead of going to the current business situation. In a hedonistic-utilitarian scheme of economic doctrine, such as Mr. Clark's, only physically productive agencies can be admitted as efficient factors in production or as legitimate claimants to a share in distribution. Hence capital, one of the prime factors in production and the central claimant in the current scheme of distribution, must be defined in physical terms and delimited by mechanical distinctions. This is necessary for reasons which appear in the succeeding chapter, on *The Measure of Consumers' Wealth*.

On the same page (38), and elsewhere, it is remarked that "business disasters" destroy capital in part. The destruction in question is a question of value; that is to say, a lowering of valuation, not in any appreciable degree a destruction of material goods. Taken as a physical aggregate, capital does not appreciably decrease through business disasters, but, taken as a fact of ownership and counted in standard units of value, it decreases: there is

a destruction of values and a shifting of ownership, a loss of ownership perhaps; but these are pecuniary phenomena, of an immaterial character, and so do not directly affect the material aggregate of the industrial equipment. Similarly, the discussion (pp. 301-314) of how changes of method, as, *e.g.*, labor-saving devices, "liberate capital," and at times "destroy" capital, is intelligible only on the admission that "capital" here is a matter of values owned by investors and is not employed as a synonym for industrial appliances. The appliances in question are neither liberated nor destroyed in the changes contemplated. And it will not do to say that the aggregate of "productive goods" suffers a diminution by a substitution of devices which increases its aggregate productivity, as is implied, *e.g.*, by the passage on page 307,¹ if Mr. Clark's definition of capital is strictly adhered to. This very singular passage (pp. 306-311, under the captions *Hardships entailed on Capitalists by Progress and the Offset for Capital destroyed by Changes of Method*) implies that the aggregate of appliances of production is decreased by a change which increases the aggregate of these articles in that respect (productivity) by virtue of which they are counted in the aggregate. The argument will hold good if "productive goods" are rated by bulk, weight, number, or some such irrelevant test, instead of by their productivity or by their consequent capitalized value. On such a showing it should be proper to say that the polishing of plowshares before they are sent out from the factory diminishes the amount of capital embodied in plowshares by as much as the weight of bulk

¹ "The machine itself is often a hopeless specialist. It can do one minute thing and that only, and when a new and better device appears for doing that one thing, the machine has to go, and not to some new employment, but to the junk heap. There is thus taking place a considerable waste of capital in consequence of mechanical and other progress." "Indeed, a quick throwing away of instruments which have barely begun to do their work is often the secret of the success of an enterprising manager, but it entails a destruction of capital."

of the waste material removed from the shares in polishing them.

Several things may be said of the facts discussed in this passage. There is, presumably, a decrease, in bulk, weight, or number, of the appliances that make up the industrial equipment at the time when such a technological change as is contemplated takes place. This change, presumably, increases the productive efficiency of the equipment as a whole, and so may be said without hesitation to increase the equipment as a factor of production, while it may decrease it, considered as a mechanical magnitude. The owners of the obsolete or obsolescent appliances presumably suffer a diminution of their capital, whether they discard the obsolete appliances or not. The owners of the new appliances, or rather those who own and are able to capitalize the new technological expedients, presumably gain a corresponding advantage, which may take the form of an increase of the effective capitalization of their outfit, as would then be shown by an increased market value of their plant. The largest theoretical outcome of the supposed changes, for an economist not bound by Mr. Clark's conception of capital, should be the generalization that industrial capital—capital considered as a productive agent—is substantially a capitalization of technological expedients, and that a given capital invested in industrial equipment is measured by the portion of technological expedients whose usufruct the investment appropriates. It would accordingly appear that the substantial core of all capital is immaterial wealth, and that the material objects which are formally the subject of the capitalist's ownership are, by comparison, a transient and adventitious matter. But if such a view were accepted, even with extreme reservations, Mr. Clark's scheme of the "natural" distribution of incomes between capital and labor would "go up in the air," as the collo-

quial phrase has it. It would be extremely difficult to determine what share of the value of the joint product of capital and labor should, under a rule of "natural" equity, go to the capitalist as an equitable return for his monopolization of a given portion of the intangible assets of the community at large.¹ The returns actually accruing to him under competitive conditions would be a measure of the differential advantage held by him by virtue of his having become legally seized of the material contrivances by which the technological achievements of the community are put into effect.

Yet, if in this way capital were apprehended as "an historical category," as Rodbertus would say, there is at least the comfort in it all that it should leave a free field for Mr. Clark's measures of repression as applied to the discretionary management of capital by the makers of trusts. And yet, again, this comforting reflection is coupled with the ugly accompaniment that by the same move the field would be left equally free of moral obstructions to the extreme proposals of the socialists. A safe and sane course for the quietist in these premises should apparently be to discard the equivocal doctrines of the passage (pp. 306-311) from which this train of questions arises, and hold fast to the received dogma, however unworkable, that "capital" is a congeries of physical objects with no ramifications or complications of an immaterial kind, and to avoid all recourse to the concept of value, or price, in discussing matters of modern business.

The center of interest and of theoretical force and validity in Mr. Clark's work is his law of "natural" distribution. Upon this law hangs very much of the rest, if not substan-

¹ The position of the laborer and his wages, in this light, would not be substantially different from that of the capitalist and his interest. Labor is no more possible, as a fact of industry, without the community's accumulated technological knowledge than is the use of "productive goods."

tially the whole structure of theory. To this law of distribution the earlier portions of the theoretical development look forward, and this the succeeding portions of the treatise take as their point of departure. The law of "natural" distribution says that any productive agent "naturally" gets what it produces. Under ideally free competitive conditions—such as prevail in the "static" state, and to which the current situation approximates—each unit of each productive factor unavoidably gets the amount of wealth which it creates,—its "virtual product," as it is sometimes expressed. This law rests, for its theoretical validity, on the doctrine of "final productivity," set forth in full in the *Distribution of Wealth*, and more concisely in the *Essentials*,¹—"one of those universal principles which govern economic life in all its stages of evolution."²

In combination with a given amount of capital, it is held, each succeeding unit of added labor adds a less than proportionate increment to the product. The total product created by the labor so engaged is at the same time the distributive share received by such labor as wages; and it equals the increment of product added by the "final" unit of labor, multiplied by the number of such units engaged. The law of "natural" interest is the same as this law of wages, with a change of terms. The product of each unit of labor or capital being measured by the product of the "final" unit, each gets the amount of its own product.

In all of this the argument runs in terms of value; but it is Mr. Clark's view, backed by an elaborate exposition of the grounds of his contention,³ that the use of these terms of value is merely a matter of convenience for the argument, and that the conclusions so reached—the equality so established between productivity and remun-

¹ Cf. *Distribution of Wealth*, chaps. xii., xiii., vii., viii.; *Essentials*, chaps. v.-x.

² *Essentials*, p. 148.

³ *Distribution*, chap. xxiv.

eration—may be converted to terms of goods, or “effective utility,” without abating their validity.

Without recourse to some such common denominator as value the outcome of the argument would, as Mr. Clark indicates, be something resembling the Ricardian law of differential rent instead of a law drawn in homogeneous terms of “final productivity”; and the law of “natural” distribution would then, at the best, fall short of a general formula. But the recourse to terms of value does not, as Mr. Clark recognizes, dispose of the question without more ado. It smooths the way for the argument, but, unaided, it leaves it nugatory. According to Hudibras, “The value of a thing Is just as much as it will bring,” and the later refinements on the theory of value have not set aside this dictum of the ancient authority. It answers no pertinent question of equity to say that the wages paid for labor are as much as it will bring. And Mr. Clark’s chapter (xxiv.) on “The Unit for Measuring Industrial Agents and their Products” is designed to show how this tautological statement in terms of market value converts itself, under competitive conditions, into a competent formula of distributive justice. It does not conduce to intelligibility to say that the wages of labor are just and fair because they are all that is paid to labor as wages. What further value Mr. Clark’s extended discussion of this matter may have will lie in his exposition of how competition converts the proposition that “the value of a thing is just as much as it will bring” into the proposition that “the market rate of wages (or interest) gives to labor (or capital) the full product of labor (or capital).”

In following up the theory at this critical point, it is necessary to resort to the fuller statement of the Distribution of Wealth,¹ the point being not so adequately covered in the Essentials. Consistently hedonistic, Mr. Clark recognizes that his law of natural justice must be reduced

¹ Chap. xxiv.

to elementary hedonistic terms, if it is to make good its claim to stand as a fundamental principle of theory. In hedonistic theory, production of course means the production of utilities, and utility is of course utility to the consumer.¹ A product is such by virtue of and to the amount of the utility which it has for a consumer. This utility of the goods is measured, as value, by the sacrifice (disutility) which the consumer is willing to undergo in order to get the utility which the consumption of the goods yields him. The unit and measure of productive labor is in the last analysis also a unit of disutility; but it is disutility to the productive laborer, not to the consumer. The balance which establishes itself under competitive conditions is a compound balance, being a balance between the utility of the goods to the consumer and the disutility (cost) which he is willing to undergo for it, on the one hand, and, on the other hand, a balance between the disutility of the unit of labor and the utility for which the laborer is willing to undergo this disutility. It is evident, and admitted, that there can be no balance, and no commensurability, between the laborer's disutility (pain) in producing the goods and the consumer's utility (pleasure) in consuming them, inasmuch as these two hedonistic phenomena lie each within the consciousness of a distinct person. There is, in fact, no continuity of nervous tissue over the interval between consumer and producer, and a direct comparison, equilibrium, equality, or discrepancy in respect of pleasure and pain can, of course, not be sought except within each self-balanced individual complex of nervous tissue.² The wages of

¹ *Essentials*, p. 40.

² Among modern economic hedonists, including Mr. Clark, there stands over from the better days of the order of nature a presumption, disavowed, but often decisive, that the sensational response to the like mechanical impact of the stimulating body is the same in different individuals. But, while this presumption stands ever in the background, and helps to many important conclusions, as in the case under discussion, few modern hedonists would question the statement in the text.

labor (*i.e.*, the utility of the goods received by the laborer) is not equal to the disutility undergone by him, except in the sense that he is competitively willing to accept it; nor are these wages equal to the utility got by the consumer of the goods, except in the sense that he is competitively willing to pay them. This point is covered by the current diagrammatic arguments of marginal-utility theory as to the determination of competitive prices.

But, while the wages are not equal to or directly comparable with the disutility of the productive labor engaged, they are, in Mr. Clark's view, equal to the "productive efficiency" of that labor.¹ "Efficiency in a worker is, in reality, power to draw out labor on the part of society. It is capacity to offer that for which society will work in return." By the mediation of market price, under competitive conditions, it is held, the laborer gets, in his wages, a valid claim on the labor of other men (society) as large as they are competitively willing to allow him for the services for which he is paid his wages. The equitable balance between work and pay contemplated by the "natural" law is a balance between wages and "efficiency," as above defined; that is to say, between the wages of labor and the capacity of labor to get wages. So far, the whole matter might evidently have been left as Bastiat left it. It amounts to saying that the laborer gets what he is willing to accept and the consumers give what they are willing to pay. And this is true, of course, whether competition prevails or not.

What makes this arrangement just and right under competitive conditions, in Mr. Clark's view, lies in his further doctrine that under such conditions of unobstructed competition the prices of goods, and therefore the wages of labor, are determined, within the scope of the given market, by a quasi-consensus of all the parties in interest.

¹ Distribution, p. 394

There is of course no formal consensus, but what there is of the kind is implied in the fact that bargains are made, and this is taken as an appraisalment by "society" at large. The (quasi-) consensus of buyers is held to embody the righteous (quasi-) appraisalment of society in the premises, and the resulting rate of wages is therefore a (quasi-) just return to the laborer.¹ "Each man accordingly is paid an amount that equals the total product that he personally 'creates.'"² If competitive conditions are in any degree disturbed, the equitable balance of prices and wages is disturbed by that much. All this holds true for the interest of capital, with a change of terms.

The equity and binding force of this finding is evidently bound up with that common-sense presumption on which it rests; namely, that it is right and good that all men should get what they can without force or fraud and without disturbing existing property relations. It springs from this presumption, and, whether in point of equity or of expediency, it rises no higher than its source. It does not touch questions of equity beyond this, nor does it touch questions of the expediency or probable advent of any contemplated change in the existing conventions as to rights of ownership and initiative. It affords a basis for those who believe in the old order—without which belief this whole structure of opinions collapses—to argue questions of wages and profits in a manner convincing to themselves, and to confirm in the faith those who already believe in the old order. But it is not easy to see that some hundreds of pages of apparatus should be required to find one's way back to these time-worn commonplaces of Manchester.

¹ In Mr. Clark's discussion, elsewhere, the "quasi"-character of the productive share of the laborer is indicated by saying that it is the product "imputed" or "imputable" to him.

² Essentials, p. 92. "Et si sensus deficit, ad firmandum cor sincerum sola fides sufficit."

In effect, this law of "natural" distribution says that whatever men acquire without force or fraud under competitive conditions is their equitable due, no more and no less, assuming that the competitive system, with its underlying institution of ownership, is equitable and "natural." In point of economic theory the law appears on examination to be of slight consequence, but it merits further attention for the gravity of its purport. It is offered as a definitive law of equitable distribution comprised in a system of hedonistic economics which is in the main a theory of distributive acquisition only. It is worth while to compare the law with its setting, with a view to seeing how its broad declaration of economic justice shows up in contrast with the elements out of which it is constructed and among which it lies.

Among the notable chapters of the *Essentials* is one (vi.) on Value and its Relation to Different Incomes, which is not only a very substantial section of Mr. Clark's economic theory, but at the same time a type of the achievements of the latter-day hedonistic school. Certain features of this chapter alone can be taken up here. The rest may be equally worthy the student's attention, but it is the intention here not to go into the general substance of the theory of marginal utility and value, to which the chapter is devoted, but to confine attention to such elements of it as bear somewhat directly on the question of equitable distribution already spoken of. Among these latter is the doctrine of the "consumer's surplus,"—virtually the same as what is spoken of by other writers as "consumer's rent."¹ "Consumer's surplus" is the surplus of utility (pleasure) derived by the consumer of goods above the (pain) cost of the goods to him. This is held to be a very generally prevalent phenomenon. Indeed, it is held to be all but universally present in the

¹ See pp. 102-113; also p. 172, note.

field of consumption. It might, in fact, be effectively argued that even Mr. Clark's admitted exception¹ is very doubtfully to be allowed, on his own showing. Correlated with this element of utility on the consumer's side is a similar volume of disutility on the producer's side, which may be called "producer's abatement," or "producer's rent": it is the amount of disutility by which the disutility-cost of a given article to any given producer (laborer) falls short of (or conceivably exceeds) the disutility incurred by the marginal producer. Marginal buyers or consumers and marginal sellers or producers are relatively few: the great body on both sides come in for something in the way of a "surplus" of utility or disutility.

All this bears on the law of "natural" wages and interest as follows, taking that law of just remuneration at Mr. Clark's rating of it. The law works out through the mediation of price. Price is determined, competitively, by marginal producers or sellers and marginal consumers or purchasers: the latter alone on the one side get the precise price-equivalent of the disutility incurred by them, and the latter alone on the other side pay the full price-equivalent of the utilities derived by them from the goods purchased.² Hence the competitive price—covering competitive wages and interest—does not reflect the consensus of all parties concerned as to the "effective utility" of the goods, on the one hand, or as to their effective (disutility) cost, on the other hand. It reflects instead, if anything of this kind, the valuations which the marginal unfortunates on each side concede under stress of competition; and it leaves on each side of the bargain relation an uncovered "surplus," which marks the (variable) interval by which price fails to cover "ef-

¹ "The cheapest and poorest grades of articles." Page 113.

² See p. 113.

fective utility." The excess utility—and the conceivable excess cost—does not appear in the market transactions that mediate between consumer and producer.¹ In the balance, therefore, which establishes itself in terms of value between the social utility of the product and the remuneration of the producer's "efficiency," the margin of utility represented by the aggregate "consumer's surplus" and like elements is not accounted for. It follows, when the argument is in this way reduced to its hedonistic elements, that no man "is paid an amount that equals the amount of the total product that he personally creates."

Supposing the marginal-utility (final-utility) theories of objective value to be true, there is no consensus, actual or constructive, as to the "effective utility" of the goods produced: there is no "social" decision in the case beyond what may be implied in the readiness of buyers to profit as much as may be by the necessities of the marginal buyer and seller. It appears that there is warrant, within these premises, for the formula: Remuneration $\begin{matrix} > \\ < \end{matrix}$ than Product. Only by an infinitesimal chance would it hold true in any given case that, hedonistically, Remuneration = Product; and, if it should ever happen to be true, there would be no finding it out.

The (hedonistic) discrepancy which so appears between remuneration and product affects both wages and interest in the same manner, but there is some (hedonistic) ground in Mr. Clark's doctrines for holding that the discrepancy does not strike both in the same degree. There is indeed no warrant for holding that there is anything like an equable distribution of this discrepancy among the several industries or the several industrial

¹The disappearance, and the method of disappearance, of such elements of differential utility and disutility occupies a very important place in all marginal-utility ("final-utility") theories of market value, or "objective value."

concerns; but there appears to be some warrant, on Mr. Clark's argument, for thinking that the discrepancy is perhaps slighter in those branches of industry which produce the prime necessities of life.¹ This point of doctrine throws also a faint (metaphysical) light on a, possibly generic, discrepancy between the remuneration of capitalists and that of laborers: the latter are, relatively, more addicted to consuming the necessities of life, and it may be that they thereby gain less in the way of a consumer's surplus.

All the analysis and reasoning here set forth has an air of undue tenuity; but in extenuation of this fault it should be noted that this reasoning is made up of such matter as goes to make up the theory under review, and the fault, therefore, is not to be charged to the critic. The manner of argument required to meet this theory of the "natural law of final productivity" on its own ground is itself a sufficiently tedious proof of the futility of the whole matter in dispute. Yet it seems necessary to beg further indulgence for more of the same kind. As a needed excuse, it may be added that what immediately follows bears on Mr. Clark's application of the law of "natural distribution" to modern problems of industry and public policy, in the matter of curbing monopolies.

Accepting, again, Mr. Clark's general postulates—the postulates of current hedonistic economics—and applying the fundamental concepts, instead of their corollaries, to his scheme of final productivity, it can be shown to fail on grounds even more tenuous and hedonistically more fundamental than those already passed in review. In all final-utility (marginal-utility) theory it is of the essence of the scheme of things that successive increments

¹ "Only the simplest and cheapest things that are sold in the market at all bring just what they are worth to the buyers." Page 113.

of a "good" have progressively less than proportionate utility. In fact, the coefficient of decrease of utility is greater than the coefficient of increase of the stock of goods. The solitary "first loaf" is exorbitantly useful. As more loaves are successively added to the stock, the utility of each grows small by degrees and incontinently less, until, in the end, the state of the "marginal" or "final" loaf is, in respect of utility, shameful to relate. So, with a change of phrase, it fares with successive increments of a given productive factor—labor or capital—in Mr. Clark's scheme of final productivity. And so, of course, it also fares with the utility of successive increments of product created by successively adding unit after unit to the complement of a given productive factor engaged in the case. If we attend to this matter of final productivity in consistently hedonistic terms, a curious result appears.

A larger complement of the productive agent, counted by weight and tale, will, it is commonly held, create a larger output of goods, counted by weight and tale;¹ but these are not hedonistic terms and should not be allowed to cloud the argument. In the hedonistic scheme the magnitude of goods, in all the dimensions to be taken account of, is measured in terms of utility, which is a different matter from weight and tale. It is by virtue of their utility that they are "goods," not by virtue of their physical dimensions, number and the like; and utility is a matter of the production of pleasure and the prevention of pain. Hedonistically speaking, the amount of the goods, the magnitude of the output, is the quantity

¹ It is, *e.g.*, open to serious question whether Mr. Clark's curves of final productivity (pp. 139, 148), showing a declining output per unit in response to an increase of one of the complementary agents of production, will fit the common run of industry in case the output be counted by weight and tale. In many cases they will, no doubt; in many other cases they will not. But this is no criticism of the curves in question, since they do not, or at least should not, purport to represent the product in such terms, but in terms of utility.

of utility derivable from their consumption; and the utility per unit decreases faster than the number of units increases.¹ It follows that in the typical or undifferentiated case an increase of the number of units beyond a certain critical point entails a decrease of the "total effective utility" of the supply.² This critical point seems ordinarily to be very near the point of departure of the curve of declining utility, perhaps it frequently coincides with the latter. On the curve of declining final utility, at any point whose tangent cuts the axis of ordinates at an angle of less than 45 degrees, an increase of the number of units entails a decrease of the "total effective utility of the supply,"³ so that a gain in physical productivity is a loss as counted in "total effective utility." Hedonistically, therefore, the productivity in such a case diminishes, not only relatively to the (physical) magnitude of the productive agents, but absolutely. This critical point, of maximum "total effective utility," is, if the practice of shrewd business men is at all significant, commonly somewhat short of the point of maximum physical productivity, at least in modern industry and in a modern community.

The "total effective utility" may commonly be increased

¹ To resort to an approximation after the manner of Malthus, if the supply of goods be supposed to increase by arithmetical progression, their final utility may be said concomitantly to decrease by geometrical progression.

² Cf. *Essentials*, chap. iii., especially pp. 40-41.

³ The current marginal-utility diagrams are not of much use in this connection, because the angle of the tangent with the axis of ordinates, at any point, is largely a matter of the draftsman's taste. The abscissa and the ordinate do not measure commensurable units. The units on the abscissa are units of frequency, while those on the ordinate are units of amplitude; and the greater or less segment of line allowed per unit on either axis is a matter of independently arbitrary choice. Yet the proposition in the text remains true,—as true as hedonistic propositions commonly are. The magnitude of the angle of the tangent with the axis of ordinates decides whether the total (hedonistic) productivity at a given point in the curve increases or decreases with a (mechanical) increase of the productive agent,—no student at all familiar with marginal-utility arguments will question that patent fact. But the angle of the tangent depends on the fancy of the draftsman,—no one possessed of the elementary mathematical notions will question that equally patent fact.

by decreasing the output of goods. The "total effective utility" of wages may often be increased by decreasing the amount (value) of the wages per man, particularly if such a decrease is accompanied by a rise in the price of articles to be bought with the wages. Hedonistically speaking, it is evident that the point of maximum net productivity is the point at which a perfectly shrewd business management of a perfect monopoly would limit the supply; and the point of maximum (hedonistic) remuneration (wages and interest) is the point which such a management would fix on in dealing with a wholly free, perfectly competitive supply of labor and capital.

Such a monopolistic state of things, it is true, would not answer to Mr. Clark's ideal. Each man would not be "paid an amount that equals the amount of the total product that he personally creates," but he would commonly be paid an amount that (hedonistically, in point of "effective utility") exceeds what he personally creates, because of the high final utility of what he receives. This is easily proven. Under the monopolistic conditions supposed, the laborers would, it is safe to assume, not be fully employed all the time; that is to say, they would be willing to work some more in order to get some more articles of consumption; that is to say, the articles of consumption which their wages offer them have so high a utility as to afford them a consumer's surplus,—the articles are worth more than they cost:¹ Q. E. D.

The initiated may fairly doubt the soundness of the chain of argument by which these heterodox theoretical results are derived from Mr. Clark's hedonistic postulates, more particularly since the adepts of the school, including Mr. Clark, are not accustomed to draw conclusions to this effect from these premises. Yet the argument proceeds according to the rules of marginal-utility permutations.

¹ A similar line of argument has been followed up by Mr. Clark for capital and interest, in a different connection. See *Essentials*, pp. 340-345, 356.

In view of this scarcely avoidable doubt, it may be permitted, even at the risk of some tedium, to show how the facts of every-day life bear out this unexpected turn of the law of natural distribution, as briefly traced above. The principle involved is well and widely accepted. The familiar practical maxim of "charging what the traffic will bear" rests on a principle of this kind, and affords one of the readiest practical illustrations of the working of the hedonistic calculus. The principle involved is that a larger aggregate return (value) may be had by raising the return per unit to such a point as to somewhat curtail the demand. In practise it is recognized, in other words, that there is a critical point at which the value obtainable per unit, multiplied by the number of units that will be taken off at that price, will give the largest net aggregate result (in value to the seller) obtainable under the given conditions. A calculus involving the same principle is, of course, the guiding consideration in all monopolistic buying and selling; but a moment's reflection will show that it is, in fact, the ruling principle in all commercial transactions and, indeed, in all business. The maxim of "charging what the traffic will bear" is only a special formulation of the generic principle of business enterprise. Business initiative, the function of the entrepreneur (business man) is comprehended under this principle taken in its most general sense.¹ In business the buyer, it is held by the theorists, bids up to the point of greatest obtainable advantage to himself under the conditions prevailing, and the seller similarly bids down to the point of greatest obtainable net aggregate gain. For the trader (business man, entrepreneur) doing business in the open (competitive) market or for the business concern with a partial or limited monopoly, the critical point above referred to is, of course, reached at a lower

¹ Cf. *Essentials*, pp. 83-90, 118-120.

point on the curve of price than would be the case under a perfect and unlimited monopoly, such as was supposed above; but the principle of charging what the traffic will bear remains intact, although the traffic will not bear the same in the one case as in the other.

Now, in the theories based on marginal (or "final") utility, value is an expression or measure of "effective utility"—or whatever equivalent term may be preferred. In operating on values, therefore, under the rule of charging what the traffic will bear, the sellers of a monopolized supply, *e.g.*, must operate through the valuations of the buyers; that is to say, they must influence the final utility of the goods or services to such effect that the "total effective utility" of the limited supply to the consumers will be greater than would be the "total effective utility" of a larger supply, which is the point in question. The emphasis falls still more strongly on this illustration of the hedonistic calculus, if it is called to mind that in the common run of such limitations of supply by a monopolistic business management the management would be able to increase the supply at a progressively declining cost beyond the critical point by virtue of the well-known principle of increasing returns from industry. It is also to be added that, since the monopolistic business gets its enhanced return from the margin by which the "total effective utility" of the limited supply exceeds that of a supply not so limited, and since there is to be deducted from this margin the costs of monopolistic management in addition to other costs, therefore the enhancement of the "total effective utility" of the goods to the consumer in the case must be appreciably larger than the resulting net gains to the monopoly.

By a bold metaphor—a metaphor sufficiently bold to take it out of the region of legitimate figures of speech—the gains that come to enterprising business concerns

by such monopolistic enhancement of the "total effective utility" of their products are spoken of as "robbery," "extortion," "plunder"; but the theoretical complexion of the case should not be overlooked by the hedonistic theorist in the heat of outraged sentiment. The monopolist is only pushing the principle of all business enterprise (free competition) to its logical conclusion; and, in point of hedonistic theory, such monopolistic gains are to be accounted the "natural" remuneration of the monopolist for his "productive" service to the community in enhancing their enjoyment per unit of consumable goods to such point as to swell their net aggregate enjoyment to a maximum.

This intricate web of hedonistic calculations might be pursued further, with the result of showing that, while the consumers of the monopolized supply of goods, are gainers by virtue of the enhanced "total effective utility" of the goods, the monopolists who bring about this result do so in great part at their own cost, counting cost in terms of a reduction of "total effective utility." By injudiciously increasing their own share of goods, they lower the marginal and effective utility of their wealth to such a point as, probably, to entail a considerable (hedonistic) privation in the shrinkage of their enjoyment per unit. But it is not the custom of economists, nor does Mr. Clark depart from this custom, to dwell on the hardships of the monopolists. This much may be added, however, that this hedonistically consistent exposition of the "natural law of final productivity" shows it to be "one of those universal principles which govern economic life in all its stages of evolution," even when that evolution enters the phase of monopolistic business enterprise,—granting always the sufficiency of the hedonistic postulates from which the law is derived. Further, the considerations reviewed above go to show that, on two counts,

Mr. Clark's crusade against monopoly in the later portion of his treatise is out of touch with the larger theoretical speculations of the earlier portions: (a) it runs counter to the hedonistic law of "natural" distribution; and (b) the monopolistic business against which Mr. Clark speaks is but the higher and more perfect development of that competitive business enterprise which he wishes to reinstate,—competitive business, so called, being incipiently monopolistic enterprise.

Apart from this theoretical bearing, the measures which Mr. Clark advocates for the repression of monopoly, under the head of applications "to modern problems of industry and public policy," may be good economic policy or they may not,—they are the expression of a sound common sense, an unvitiated solicitude for the welfare of mankind, and a wide information as to the facts of the situation. The merits of this policy of repression, as such, cannot be discussed here. On the other hand, the relation of this policy to the theoretical groundwork of the treatise needs also not be discussed here, inasmuch as it has substantially no relation to the theory. In this later portion of the volume Mr. Clark does not lean on doctrines of "final utility," "final productivity," or, indeed, on hedonistic economics at large. He speaks eloquently for the material and cultural interests of the community, and the references to his law of "natural distribution" might be cut bodily out of the discussion without lessening the cogency of his appeal or exposing any weakness in his position. Indeed, it is by no means certain that such an excision would not strengthen his appeal to men's sense of justice by eliminating irrelevant matter.

Certain points in this later portion of the volume, however, where the argument is at variance with specific articles of theory professed by Mr. Clark, may be taken up,

mainly to elucidate the weakness of his theoretical position at the points in question. He recognizes with more than the current degree of freedom that the growth and practicability of monopolies under modern conditions is chiefly due to the negotiability of securities representing capital, coupled with the joint-stock character of modern business concerns.¹ These features of the modern (capitalistic) business situation enable a sufficiently few men to control a section of the community sufficiently large to make an effective monopoly. The most effective known form of organization for purposes of monopoly, according to Mr. Clark, is that of the holding company, and the ordinary corporation follows it closely in effectiveness in this respect. The monopolistic control is effected by means of the vendible securities covering the capital engaged. To meet the specifications of Mr. Clark's theory of capital, these vendible securities—as, *e.g.*, the securities (common stock) of a holding company—should be simply the formal evidence of the ownership of certain productive goods and the like. Yet, by his own showing, the ownership of a share of productive goods proportionate to the face value, or the market value, of the securities is by no means the chief consequence of such an issue of securities.² One of the consequences, and for the purposes of Mr. Clark's argument the gravest consequence, of the employment of such securities, is the dissociation of ownership from the control of the industrial equipment, whereby the owners of certain securities, which stand in certain immaterial, technical relations to certain other securities, are enabled arbitrarily to control the use of the industrial equipment covered by the latter. These are facts of the modern organization of capital, affecting the productivity of the industrial equipment and its serviceability both to its owners and to the community.

¹ Cf. chap. xxii., especially pp. 378-392.

² Cf. p. 391.

They are facts, tho not physically tangible objects; and they have an effect on the serviceability of industry no less decisive than the effect which any group of physically tangible objects of equal market value have. They are, moreover, facts which are bought and sold in the purchase and sale of these securities, as, *e.g.*, the common stock of a holding company. They have a value, and therefore they have a "total effective utility."

In short, these facts are intangible assets, which are the most consequential element in modern capital, but which have no existence in the theory of capital by which Mr. Clark aims to deal with "modern problems of industry." Yet, when he comes to deal with these problems, it is, of necessity, these intangible assets that immediately engage his attention. These intangible assets are an outgrowth of the freedom of contract under the conditions imposed by the machine industry; yet Mr. Clark proposes to suppress this category of intangible assets without prejudice to freedom of contract or to the machine industry, apparently without having taken thought of the lesson which he rehearses (pp. 390-391) from the introduction of the holding company, with its "sinister perfection," to take the place of the (less efficient) "trust" when the latter was dealt with somewhat as it is now proposed to deal with the holding company. One is tempted to remark that a more naïve apprehension of the facts of modern capital would have afforded a more competent realization of the problems of monopoly.

It appears from what has just been said of Mr. Clark's "natural" distribution and of his dealing with the problems of modern industry that the logic of hedonism is of no avail for the theory of business affairs. Yet it is held, perhaps justly, that the hedonistic interpretation may be of great avail in analyzing the industrial functions of the

community, in their broad, generic character, even if it should not serve so well for the intricate details of the modern business situation. It may be at least a serviceable hypothesis for the outlines of economic theory, for the first approximations to the "economic laws" sought by taxonomists. To be serviceable for this purpose, the hypothesis need perhaps not be true to fact, at least not in the final details of the community's life or without material qualification;¹ but it must at least have that ghost of actuality that is implied in consistency with its own corollaries and ramifications.

As has been suggested in an earlier paragraph, it is characteristic of hedonistic economics that the large and central element in its theoretical structure is the doctrine of distribution. Consumption being taken for granted as a quantitative matter simply,—essentially a matter of an insatiable appetite,—economics becomes a theory of acquisition; production is, theoretically, a process of acquisition, and distribution a process of distributive acquisition. The theory of production is drawn in terms of the gains to be acquired by production; and under competitive conditions this means necessarily the acquisition of a distributive share of what is available. The rest of what the facts of productive industry include, as, *e.g.*, the facts of workmanship or the "state of the industrial arts," gets but a scant and perfunctory attention. Those matters are not of the theoretical essence of the scheme. Mr. Clark's general theory of production does not differ substantially from that commonly professed by the marginal-utility school. It is a theory of competitive acquisition. An inquiry into the principles of his doctrine, therefore, as they appear, *e.g.*, in the early chapters of the *Essentials*, is, in effect, an inquiry into the competence of the main theorems of modern hedonistic economics.

¹*Cf.* *Essentials*, p. 39.

“All men seek to get as much net service from material wealth as they can.” “Some of the benefit received is neutralized by the sacrifice incurred; but there is a net surplus of gains not thus cancelled by sacrifices, and the generic motive which may properly be called economic is the desire to make this surplus large.”¹ It is of the essence of the scheme that the acquisitive activities of mankind afford a net balance of pleasure. It is out of this net balance, presumably, that “the consumer’s surpluses” arise or it is in this that they merge. This optimistic conviction is a matter of presumption, of course; but it is universally held to by hedonistic economists, particularly by those who cultivate the doctrines of marginal utility. It is not questioned and not proven. It seems to be a surviving remnant of the eighteenth-century faith in a benevolent Order of Nature; that is to say, it is a rationalistic metaphysical postulate. It may be true or not, as matter of fact; but it is a postulate of the school, and its optimistic bias runs like a red thread through all the web of argument that envelopes the “normal” competitive system. A surplus of gain is normal to the theoretical scheme.

The next great theorem of this theory of acquisition is at cross-purposes with this one. Men get useful goods only at the cost of producing them, and production is irksome, painful, as has been recounted above. They go on producing utilities until, at the margin, the last increment of utility in the product is balanced by the concomitant increment of disutility in the way of irksome productive effort,—labor or abstinence. At the margin, pleasure-gain is balanced by pain-cost. But the “effective utility” of the total product is measured by that of the final unit; the effective utility of the whole is given by the number of units of product multiplied by the

¹ Essentials, p. 39.

effective utility of the final unit; while the effective disutility (pain-cost) of the whole is similarly measured by the pain-cost of the final unit. The "total effective utility" of the producer's product equals the "total effective disutility" of his pains of acquisition. Hence there is no net surplus of utility in the outcome.

The corrective objection is ready to hand,¹ that, while the balance of utility and disutility holds at the margin, it does not hold for the earlier units of the product, these earlier units having a larger utility and a lower cost, and so leaving a large net surplus of utility, which gradually declines as the margin is approached. But this attempted correction evades the hedonistic test. It shifts the ground from the calculus to the objects which provoke the calculation. Utility is a psychological matter, a matter of pleasurable appreciation, just as disutility, conversely, is a matter of painful appreciation. The individual who is held to count the costs and the gain in this hedonistic calculus is, by supposition, a highly reasonable person. He counts the cost to him as an individual against the gain to him as an individual. He looks before and after, and sizes the whole thing up in a reasonable course of conduct. The "absolute utility" would exceed the "effective utility" only on the supposition that the "producer" is an unreflecting sensory apparatus, such as the beasts of the field are supposed to be, devoid of that gift of appraisal and calculation which is the hypothetical hedonist's only human trait. There might on such a supposition—if the producer were an unintelligent sensitive organism simply—emerge an excess of total pleasure over total pain, but there could then be no talk of utility or of disutility, since these terms imply intelligent reflection, and they are employed because they do so. The hedonistic producer looks to his own cost and gain, as an

¹ Cf. *Essentials*, chap. iii., especially pp. 51-56.

intelligent pleasure-seeker whose consciousness compasses the contrasted elements as wholes. He does not contrast the balance of pain and pleasure in the morning with the balance of pain and pleasure in the afternoon, and say that there is so much to the good because he was not so tired in the morning. Indeed, by hypothesis, the pleasure to be derived from the consumption of the product is a future, or expected, pleasure, and can be said to be present, at the point of time at which a given unit of pain-cost is incurred, only in anticipation; and it cannot be said that the anticipated pleasure attaching to a unit of product which emerges from the effort of the producer during the relatively painless first hour's work exceeds the anticipated pleasure attaching to a similar unit emerging from the second hour's work. Mr. Clark has, in effect, explained this matter in substantially the same way in another connection (*e.g.*, p. 42), where he shows that the magnitude on which the question of utility and cost hinges is the "total effective utility," and that the "total absolute utility" is a matter not of what hedonistically is, in respect of utility as an outcome of production, but of what might have been under different circumstances.

An equally unprofitable result may be reached from the same point of departure along a different line of argument. Granting that increments of product should be measured, in respect of utility, by comparison with the disutility of the concomitant increment of cost, then the diagrammatic arguments commonly employed are inadequate, in that the diagrams are necessarily drawn in two dimensions only,—length and breadth: whereas they should be drawn in three dimensions, so as to take account of the intensity of application as well as of its duration.¹

¹ This difficulty is recognized by the current marginal-utility arguments, and an allowance for intensity is made or presumed. But the allowance admitted is invariably insufficient. It might be said to be insufficient by hypothesis, since it is by hypothesis too small to offset the factor which it is admitted to modify.

Apparently, the exigencies of graphic representation, fortified by the presumption that there always emerges a surplus of utility, have led marginal-utility theorists, in effect, to overlook this matter of intensity of application.

When this element is brought in with the same freedom as the other two dimensions engaged, the argument will, in hedonistic consistency, run somewhat as follows,—the run of the facts bring what it may. The producer, setting out on this irksome business, and beginning with the production of the exorbitantly useful initial unit of product, will, by hedonistic necessity, apply himself to the task with a correspondingly extravagant intensity, the irksomeness (disutility) of which necessarily rises to such a pitch as to leave no excess of utility in this initial unit of product above the concomitant disutility of the initial unit of productive effort.¹ As the utility of subsequent units of product progressively declines, so will the producer's intensity of irksome application concomitantly decline, maintaining a nice balance between utility and disutility throughout. There is, therefore no excess of "absolute utility" above "effective utility" at any point on the curve, and no excess of "total absolute utility" above "total effective utility" of the product as a whole, nor above the "total absolute disutility" or the "total effective disutility" of the pain-cost.

A transient evasion of this outcome may perhaps be sought by saying that the producer will act wisely, as a good hedonist should, and save his energies during the earlier moments of the productive period in order to get the best aggregate result from his day's labor instead

¹The limit to which the intensity rises is a margin of the same kind as that which limits the duration. This supposition, that the intensity of application necessarily rises to such a pitch that its disutility overtakes and offsets the utility of the product, may be objected to as a bit of puerile absurdity; but it is a long time since puerility or absurdity has been a bar to any supposition in arguments on marginal utility.

of spending himself in ill-advised excesses at the outset. Such seems to be the fact of the matter, so far as the facts wear a hedonistic complexion: but this correction simply throws the argument back on the previous position and concedes the force of what was there claimed. It amounts to saying that, instead of appreciating each successive unit of product in isolated contrast with its concomitant unit of irksome productive effort, the producer, being human, wisely looks forward to his total product and rates it by contrast with his total pain-cost. Whereupon, as before, no net surplus of utility emerges, under the rule which says that irksome production of utilities goes on until utility and disutility balance.

But this revision of "final productivity" has further consequences for the optimistic doctrines of hedonism. Evidently, by a somewhat similar line of argument the "consumer's surplus" will be made to disappear, even as this that may be called the "producer's surplus" has disappeared. Production being acquisition, and the consumer's cost being cost of acquisition, the argument above should apply to the consumer's case without abatement. On considering this matter in terms of the hedonistically responsive individual concerned, with a view to determining whether there is, in his calculus of utilities and costs, any margin of uncovered utilities left over after he has incurred all the disutilities that are worth while to him,—instead of proceeding on a comparison between the pleasure-giving capacity of a given article and the market price of the article, all such alleged differential advantages within the scope of a single sensory are seen to be nothing better than an illusory diffractive effect due to a faulty instrument.

But the trouble does not end here. The equality: pain-cost = pleasure-gain, is not a competent formula. It should be: pain-cost incurred = pleasure-gain anticipated.

And between these two formulas lies the old adage, "there's many a slip 'twixt the cup and the lip." In an appreciable proportion of ventures, endeavors, and enterprises, men's expectations of pleasure-gain are in some degree disappointed,—through miscalculation, through disserviceable secondary effects of their productive efforts, by "the act of God," by "fire, flood, and pestilence." In the nature of things these discrepancies fall out on the side of loss more frequently than on that of gain. After all allowance has been made for what may be called serviceable errors, there remains a margin of disserviceable error, so that $\text{pain-cost} > \text{eventual pleasure-gain} = \text{anticipated pleasure-gain} - n$. Hence, in general, $\text{pain-cost} > \text{pleasure-gain}$. Hence it appears that, in the nature of things, men's pains of production are underpaid by that much; altho it may, of course, be held that the nature of things at this point is not "natural" or "normal."

To this it may be objected that the risk is discounted. Insurance is a practical discounting of risk; but insurance is resorted to only to cover risk that is appreciated by the person exposed to it, and it is such risks as are not appreciated by those who incur them that are chiefly in question here. And it may be added that insurance has hitherto not availed to equalize and distribute the chances of success and failure. Business gains—entrepreneur's gains, the rewards of initiative and enterprise—come out of this uncovered margin of adventure, and the losses of initiative and enterprise are to be set down to the same account. In some measure this element of initiative and enterprise enters into all economic endeavor. And it is not unusual for economists to remark that the volume of unsuccessful or only partly successful enterprise is very large. There are some lines of enterprise that are, as one might say, extra hazardous, in which the average falls out habitually on the wrong side of the account.

Typical of this class is the production of the precious metals, particularly as conducted under that régime of free competition for which Mr. Clark speaks. It has been the opinion, quite advisedly, of such economists of the classic age of competition as J. S. Mill and Cairnes, *e.g.*, that the world's supply of the precious metals has been got at an average or total cost exceeding their value by several fold. The producers, under free competition at least, are over-sanguine of results.

But, in strict consistency, the hedonistic theory of human conduct does not allow men to be guided in their calculation of cost and gain, when they have to do with the precious metals, by different norms from those which rule their conduct in the general quest of gain. The visible difference in this respect between the production of the precious metals and production generally should be due to the larger proportions and greater notoriety of the risks in this field rather than to a difference in the manner of response to the stimulus of expected gain. The canons of hedonistic calculus permit none but a quantitative difference in the response. What happens in the production of the precious metals is typical of what happens in a measure and more obscurely throughout the field of productive effort.

Instead of a surplus of utility of product above the disutility of acquisition, therefore, there emerges an average or aggregate net hedonistic deficit. On a consistent marginal-utility theory, all production is a losing game. The fact that Nature keeps the bank, it appears, does not take the hedonistic game of production out of the general category known of old to that class of sanguine hedonistic calculators whose day-dreams are filled with safe and sane schemes for breaking the bank. "Hope springs eternal in the human breast." Men are congenitally over-sanguine, it appears; and the production

of utilities is, mathematically speaking, a function of the pig-headed optimism of mankind. It turns out that the laws of (human) nature malevolently grind out vexation for men instead of benevolently furthering the greatest happiness of the greatest number. The sooner the whole traffic ceases, the better,—the smaller will be the net balance of pain. The great hedonistic Law of Nature turns out to be simply the curse of Adam, backed by the even more sinister curse of Eve.

The remark was made in an earlier paragraph that Mr. Clark's theories have substantially no relation to his practical proposals. This broad declaration requires an equally broad qualification. While the positions reached in his theoretical development count for nothing in making or fortifying the positions taken on "problems of modern industry and public policy," the two phases of the discussion—the theoretical and the pragmatic—are the outgrowth of the same range of preconceptions and run back to the same metaphysical ground. The present canvass of items in the doctrinal system has already far overpassed reasonable limits, and it is out of the question here to pursue the exfoliation of ideas through Mr. Clark's discussion of public questions even in the fragmentary fashion in which scattered items of the theoretical portion of his treatise have been passed in review. But a broad and rudely drawn characterization may yet be permissible. This latter portion of the volume has the general complexion of a Bill of Rights. This is said, of course, with no intention of imputing a fault. It implies that the scope and method of the discussion is governed by the preconception that there is one right and beautiful definitive scheme of economic life, "to which the whole creation tends." Whenever and in so far as current phenomena depart or diverge

from this definitive "natural" scheme or from the straight and narrow path that leads to its consummation, there is a grievance to be remedied by putting the wheels back into the rut. The future, such as it ought to be,—the only normally possible, natural future scheme of life,—is known by the light of this preconception; and men have an indefeasible right to the installation and maintenance of those specific economic relations, expedients, institutions, which this "natural" scheme comprises, and to no others. The consummation is presumed to dominate the course of things which is presumed to lead up to the consummation. The measures of redress whereby the economic Order of Nature is to renew its youth are simple, direct, and short-sighted, as becomes the proposals of pre-Darwinian hedonism, which is not troubled about the exuberant uncertainties of cumulative change. No doubt presents itself but that the community's code of right and equity in economic matters will remain unchanged under changing conditions of economic life.

THORSTEIN VEBLÉN.

STANFORD UNIVERSITY.