A Modification of the Ricardian Theory of Rent.

A Criticism.

Among the different modifications of the classical theory of rent found in modern economic literature there is one that appears more often than any other. It is found in the writings of authors who would claim to follow Ricardo and in the writings of others who would dissent from his whole method of treatment. The modification referred to is the one which holds that if a rent is paid for the poorest piece of land used for producing any given commodity, that rent is a part of the marginal cost of production for that commodity and is, therefore, an element in determining its price. +

(1) "High rents do not make high prices any more than the height of the barometer governs the state of the weather. On the contrary it is the high prices that make the high rents. In qualification of this statement it must be added that a rent charge comes into play in settlement of price when the marginal land for a given purpose can only be obtained by buying out somebody who requires it for another purpose. The marginal factory in the outskirts of a town has had to win its site from agriculture in all probability, and to do so it has had to pay for the land a charge equal at least to its rentable value for agriculture. This charge, in being incurred at the margin, is an unavoidable element in marginal cost, and therefore enters into the supply price of the article produced in the factory."

(2) "If the marginal land used for gardening will yield a rent for wheat, the value of

+ The modification put forth by J. S. Mill has been grouped with this one (See Davenport, "Economics of Enterprise", p. 189) but it is an entirely different theory.

(1) Chapman–, "Political Economy", p. 217.

(2) Patten–, "The Theory of Dynamic Economics", p. 58.

the marginal produce of garden products must equal the cost of the labor employed plus the rent of the land when used for wheat."

(1) "In the cost of wheat, therefore, there must always be included the rent which the marginal (or no-wheat-rent) land would earn if employed for the next lower use."

(2) "Rent is thus composed usually of a differential and of a marginal element.........the marginal element must be paid by all enterprisers engaged in the given branch of production and hence figures as an element in the normal expenses of production."

(3) "Though the worst grazing land may pay no rent, the worst wheat land might be better for grazing than the worst grazing land, in which case it can only be obtained for growing wheat by paying a little more than its differential rent for grazing purposes; this rent for the worst wheat land will be a positive rent and will enter into wheat prices;......"

(4) "That the farmer of the marginal wheat land, (formerly grazing land) must pay the owner of this land an amount that is equal to its rent as grazing land must be admitted. It must also be admitted that as this is a payment at the margin of wheat production it will enter into the determination of the price of wheat."

This theory is sometimes presented as supplementary to an analysis based on straightforward Ricardian reasoning, assuming that the two doctrines are in entire harmony.(5) It appears, however, to be inconsistent with the Ricardian reasoning. Furthermore, it seems to be fundamentally in error and inconsistent with the facts. Its inconsistency, in both cases, seems to be due to its building

(1) Seligman–, "Principles of Economics", 5th ed. Revised, pps. 377–378

(2) Seager,– "Principles of Economics," p. 240.

(3) Hobson,– "The Economics of Distribution," p. 120–121.

(4) Macfarlane,– "Value and Distribution" p. 130.

(5) See Chapman,– "Political Economy," Chapter VIII.

upon a non-essential rather than upon the essential principle in Ricardo's theory. It undertakes to explain rent on the ground that different pieces of land have different powers in production, rather than by the fact that different increments of the same supply are produced at varying costs in capital and labor. (1) It neglects the fact that diminishing returns are universal; that they appear on the poorest land for any use the same as on the better. It thus comes to a particular view of the margin which seems to be erroneous.

The Ricardian theory of rent is not based upon variation in fertility or situation, or on the existence of no-rent land. It is based upon variation in the capital and labor costs of the different increments of the same supply. This variation in cost may be due to the varying powers of production of different pieces of land, or it may be due to the varying returns gotten by successive applications of capital and labor to the same piece of land. If no-rent land is to be had for a given use, along with better grades, there will be varying costs from both causes, and we may find marginal produce on either the intensive or the extensive margin. If no-rent land is not available for that use, that is if the real extensive margin has disappeared, we will find marginal produce only on the intensive margin. For a clear explanation of the phenomena we must think of varying cost in capital and labor as due, in this case, not to the varying powers of production of different pieces of land, but to varying returns to successive applications of capital and labor to the same land.

The fact that rent may be explained without reference to the varying fertility or situational advantages of different pieces of land has been made clear by almost every expounder of the Ricardian doctrine in the statement that if all land were equally desirable and there were sufficient demand for

(1) Thruout this discussion, "capital and labor cost" is taken to include profits necessary to secure production.

the product to cause cultivation to be carried past the point of diminishing returns, there would still be a rent. It is made perfectly clear by Ricardo himself, although he presents his idea only in barest outline.

(1) "........rent invariably proceeds from the employment of an additional quantity of labor with a proportionally less return."

(2) "If with a capital of £ 1000, a tenant obtain 100 quarters of wheat from his land, and by the employment of a second capital of £ 1000, he obtain a further return of 85, his landlord would have the power at the expiration of his lease, of obliging him to pay fifteen quarters, or an equivalent value for additional rent; for there cannot be two rates of profit."

Proponents of this modification of the classical theory seem to think primarily of the differences in productive power among different pieces of land. They speak of the poorest piece of land for a given use as "marginal" and consider all units of the supply produced on that land as "marginal." (3) Rent being paid for that land they take it as a marginal cost. Strict Ricardian reasoning would consider a part only of those units as marginal and the others, if the land commanded a rent, as infra-marginal. In the last quotation above, Ricardo would consider the first 100 quarters as infra-marginal and the last 85, if they made up the last increment which it paid to produce, as marginal. Certainly diminishing returns would appear in the same way on the poorest land for a given use and in consistency he would be comelled to use the the same reasoning with regard to it. Again Ricardo says:

(4) "The value of corn is regulated by the quantity of labor bestowed on its production on that quality of land, or with that portion of capital which pays no rent"

(1) Ricardo,- "Principles of Political Economy and Taxation," Ch. II, section 26.
(2) Ibid. (3) See particularly the quotations above from Seligman, Chapman, Macfarlane and Patten.
(4) Ricardo,- "Principles of Political Economy and Taxation" Ch. II, sec. 27.

It is evident that some of the capital (and, we would say, labor) applied on this poorest land for the use, pays a rent. But that portion of it which corresponds to the second £ 1000 in the quotation above would pay no rent. And the units of supply corresponding to the 85 quarters produced by the second application would have no rent in their cost of production.

If the proorest land for a given use commands a rent, it indicates that it has become profitable to work that land, as well as the better grades, past the point of diminshing return; that the entire outlay of capital and labor necessary to produce the units gotten from that land is less than it would be if all those units were as difficult to produce as some which it still pays to produce there. Only "the last portion obtained" is the real marginal produce and some of the supply grown on this piece of land is not of that kind. Under free competition there will always be units of the supply of any product coming from the intensive margin on all the better grades of land. It has now come to be profitable to work even the poorest piece of land until an intensive margin has appeared on it. This theory departs from the Ricardian theory when it considers a certain piece of land and all its product as marginal rather than considering as marginal only those units of the supply which are produced at the greatest disadvantage, regardless of what piece of land they may come from.

If each of these increments grown on the poorest land for the use is marginal, and the cost of each contains an element of rent, it would seem reasonable to say that the amount of rent in the cost of each is the same. Since all have the same price, if there is the same amount of rent in each, then the remaining part, capital and labor cost, must be the same in all. That is, costs vary on better grades of land, but here they are uniform. Diminishing returns appear on the better grades of land but on the poorest land for the use they are not to be found. *Certainly, at this point, this theory is* out of Harmony with the Ricardian reasoning and also with the facts. It has been made clear that costs are seldom uniform (1) and it seems that they cannot be taken as uniform in this case. It would be only an accident if they were in one instance and certainly they could not be in every instance.

There is one case in which we may suppose that the costs of all units of the supply coming from a given piece of land are uniform. But in that case there can be no rent as a price determining element, for it is the case in which there is no rent. If the return is just sufficient to replace the minimum necessary outlay,–for instance if the land is used for agriculture, an amount sufficient to make a slight preparation of the soil, to furnish and plant the seed and to harvest the crop,–the costs may be considered the same for each unit gotten. But even this very seldom happens, for actual no-rent land is very seldom found in use. It would also be only an accident if costs continuned the same for each unit of supply gotten by more intensive working.

Again this theory seems to be out of harmony with the Ricardian theory and with the facts, when it assumes that the selling price of an increment of the commodity can, under free competition, remain higher than the capital and labor outlay necessary to produce, by more intensive working, another increment on this poorest (or on some better) piece of land. Unless its price does remain permanently higher than that outlay, there can be no element of rent in its price; for in order to leave room for rent, there must be a difference between selling price and capital and labor cost.

Such a situation seems impossible if we take for granted a condition of free competion. Under that condition the return to an additional "dose" of capital and labor cannot permanently be greater than the "dose." If there is a selling price greater than the outlay necessary to produce another increment, competition will force the occupier to produce more, even at increasing costs, so long as the additional outlay necessary to produce the unit is not greater than the price of the unit in the market.

(1) Bullock,– Quartery Journal of Economics, August, 1902.

If the owner-occupant fails to produce every additional increment which will sell for more than the necessary additional outlay, he is failing to appropriate pure bonuses which are his for the willing and, if the landlord fails to force his tenant to pay for the surpluses which would be secured by successively crowding production until the additional outlay equals the additional product, he is failing to get the highest competitive price for his land. This principle holds on every grade of land for every use and is the basis for Ricardo's contention that prices are forced up by costs other than rent; that rent is not a cause but an effect of high marginal cost.

It appears, then, that the case in which the poorest land in use for a given commodity commands a rent is no exception to the general truth of the Ricardian theory. If rent arises on the poorest land in that use, it indicates that capital and labor costs are less on that land, even at diminishing returns, than on the no-rent land available. Instead of taking up no-rent land to satisfy the larger demand, producers have chosen to work the occupied land more intensively. Instead of producing only marginal units, they have come to produce both marginal and infra-marginal increments on this land. Both sorts of increments would have been produced on this piece of land even though poorer land had been available at no rent. In either case all infra-marginal units sell for more than the capital and labor outlay necessary to produce them. The sum of these differentials for the various infra-marginal increments grown on the poorest piece of land, for a given use, constitutes the rent of that land, just as the sum of the same sort of differentials constitutes the rent of any piece of land. In the case under discussion the increments of the supply which are on the margin of not being produced at all, which are the marginal increments, are not all those from the poorest piece of land but those which it just pays to produce on any of the pieces of land. There is no question about producing some increments from the poorest piece of land for they will pay a surplus. There is question only about the last ones that it is profitable to produce on all pieces of land in that use. In any case there is no rent charge in the cost of producing these marginal units.

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Note.—

Two refences have been made which should be taken up further. One was to the modification of the Ricardian doctrine put forth by John Stuart Mill and the other was to that put forth by p "professor Seligman.

Mill says (1) " Rent is not an element in the cost of production of the commodity which yields it............But when land capable of yielding rent in agriculture is applied to some other purpose, the rent which it would have yielded is an element in the cost of production of the commodity which it is employed to produce."

This modification says that the element of rent in the cost of production of commodities produced on a good piece of land is not the amount of rent paid for the poorest piece of land in that use but the amount which the piece of land, itself, would command for the next less productive use..

Mill's two statements seem to be entirely out of harmony. If the rent which a piece of land would command for wheat is an element in the cost of production of shoes produced upon it, certainly it would be an element in the cost of production of beans if the land were used for that crop. If the rent which a corner would command for wheat is an element in the cost of production of cigars on that land, then the rent it would command for a stationery store would be an element in the cost of producing cigars. If the stationer can pay $ 1000 and the tobacconist bids $ 1100 there is a very appreciable amount of rent in the cost of production of cigars. Since economic rents for different uses, and also contract rents offered, vary by amounts infinitely small, this theory must say that all the rent yielded except, say one dollar or one cent, becomes a cost of production for goods produced on a given site. This means that, practically speaking, all the rent is " an element in the cost of production of the commodity which yields it." This is a direct contradiction of the former part of the statement quoted above.

Seligman says (2) " In the cost of wheat, therfore, there must always be included the rent which the marginal (or no-wheat-rent) land would earn if employed for the next lower use."

The phrase, " no-wheat-rent land, " evidently means land which will pay no rent when farmed in wheat. But certainly a land-owner would not use such a piece of land for wheat if it would command a rent for some other crop. He would not forego his rent by raising a no-rent-paying crop when he knows of a crop that will pay a rent. If his land will yield a rent of $ 2 per acre for pasture and nothing for wheat it will be used for pasture and not for wheat.

(1) " Principles of Political Economy, " Bk. III, Ch. , par. IX.
(2) " principles of Economies " 5th Ed. Revised pps. 377-378