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SOME APPLICATIONS OF CLASSIC ECONOMIC THEORY

TO PIONEER CONDITIONS.

by

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CLASSIC THEORY AND PIONEER CONDITIONS.

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THE PROBLEM.

No man, however great, can escape from his environment. The conditions of his life will colour his thoughts and his conceptions, even when he aims at generality or abstraction.

Nowhere is this truth more clearly illustrated than in the development of economic theory. Some of the bitterest controversies of Political Economy centre round the question of the extent to which the theories of the founders of the English school of Classic Theory have been invalidated by assumptions based on conditions of their own time and place, but not capable of general extension to other times and to other countries.

In the light of a century or more of economic development such limitations are thrown into bold relief. It is quite easy today to recognize in ADAM SMITH the reaction of an expanding industrial era against the restrictions of a worn-out past. It is quite as easy to trace in the much-criticised assumptions of RIGARDO the actual conditions of his own immediate environment : Economic man, Equality of opportunity, freedom of competition and of contract, and perfect mobility were no mere assumptions on the Stock Exchange.

The England of the day was the England of the Poor Laws; when the falling of the wages below a fixed minimum tended automatically to throw the labourer on the parish for relief; while the congested condition of the labour market, following the French war, as steadily pressed wages down toward that Bare Subsistence. The threefold land system, with its Landlord, Capitalist tenant, and Labourer, all sharing in the returns from the land, gave its characteristic form to the classic analysis of Income; and the farmer capitalist represented a condition approximating to perfect mobility. Such a capitalist would demand Normal Returns, or failing to obtain them through a lower rental, he would move his stock and implements to more promising fields. Thus Margin, Prices, Rent, Cost of Production, were seen as Definite Mutually Adjusting Variables, acting with automatic precision. It was the England of the Corn Laws, where the food demands of a rapidly increasing industrial population were forcing the margin of cultivation higher and higher up the barren hillsides; where Diminishing Return was no speculative theory; but the Niggardliness of Nature a menacing reality.

Theories coloured by such environment were formulated with qualifications it is true, but often these qualifications were waved aside as negligible or silently ignored.

Our present inquiry is, to what extent such absolute treatment has limited the validity of Classic Theory; and to what degree the theory can be extended in time and space. An exhaustive inquiry of this nature would be an ambitious one indeed; but a more limited one may be made with some benefit, we hope, by means of a comparative survey of the working out of economic tendencies in a pioneer region in northern Manitoba at the present time. A New World, a new century, and pioneer conditions in the newest part of a new country should offer a searching test of the economic theory of a crowded industrial country forced to produce its own food.

THE INTERLAKE.

For this survey we have chosen an outlying territory on the east side of Lake Manitoba. It is a thinly settled strip, averaging about thirty miles in width, tributary to the Gypsumville line of the Canadian National Railway. It is isolated on the north and east by wilderness, on the west by the lake, while its southern neighbours have economic conditions quite distinct. Young though it is, it has seen the ebb and flow of the margin of cultivation, with the most tremendous inflation and deflation of prices within the memory of the oldest citizen of Canada. To this restricted area, fairly representative of conditions between the two great lakes, I have given the name Inter Lake. (Appendix A).

GEOLOGY AND TOPOGRAPHY.

The flat InterLake is the youngest part of Manitoba, both in geology and in settlement. It was the last portion of the ancient lake bed to emerge from the waters. As the Great Lake receded, it left a series of lesser lakes, separated by mud bars or linked by sluggish channels. A glance at any older map of the province will show that the struggle with the waters has extended down to our own day. Most of the lakes so thickly studded on the map have ceased to exist, or have shrunk to reedy ponds or sloughs, or grassy flats; but the boulder-strewn wave-scarred beaches far inland still bear witness to the fury of storms in the not very distant past. Many of the older settlers came in by canoe. Even recent arrivals can recall the difficulties and even dangers of trails where now the automobile is a familiar sight. The long lines of railway ditches, and the breaking up of the soil were the decisive factors in the battle.

Every acre broken absorbed the surface drainage of another and hastened the reclamation of the country.

Probably the wide-flung protection of the waters saved the young forests from the all-destroying sweep of the prairie fires and left the InterLake what it is today, a region of woods and forests intersected by marshes and meadows. Beside the ubiquitous poplar, there are wide areas of spruce, ridges of jack-pine, isolated uplands of oak, tracts of birch and belts of maple along the lakes.

The lowlands have a rich black soil, sometimes tending to peat or alkali, but deep and free from stone. The uplands have a shallow soil with dense sub-soil. Many portions are stony or scrubby; and difficult to bring under cultivation; but its limestone foundation makes it yield largely to manure without souring, and yield well to continuous cultivation.

SETTLEMENT.

Such a territory offered no inducement to the first wave of home-seekers in the early seventies. These were in search of grain lands which could be quickly brought into extensive cultivation and made to produce an early return. Of grubbing and stone picking, they had seen more than enough on pioneer farms in the east. So the tide swept west across the prairies, leaving the InterLake a backwater.

The barrier of two great lakes deflected railway construction in the same direction. Winnipeg became the centre instead of Selkirk, the original choice; and construction was pushed south and west, leaving the InterLake far to one side.

The difficulties of wagon traffic were also a very serious obstacle to development, especially in field cultivation. The first settlement therefore came as an influx of ranchers and fishermen, - a development of some economic significance as we shall notice later.

The original Hudson's Bay Railway survey skirted the east side of Lake Manitoba to the Narrows, but only the first sixty miles were constructed, and this was not put into regular operation. The line fell into decay until the Canadian Northern, in consolidating their scattered lines into a system, acquired the right of way. The line was built to Oak Point, and put into operation. The gypsum and lime development in the north soon led to further extensions to Gypsumville and Steep Rock.

Each railway project was accompanied and to some extent anticipated by a certain amount of actual settlement, and a greater amount of speculative appropriation. The lake front had already been largely appropriated by the first ranchers and a substantial colony of Icelanders; Settlement began to spread outward from the railway into the woods; Settlements began to gather about the gypsum works; and an immigration of Swedes and Germans began to fill in the intervals.

The outbreak of the Great War, the demand for greater and yet greater production, - reinforced, as time passed, by the prospect of three dollar wheat, - brought a rush of land appropriation, some speculative, some by real settlers.

NATURE OF THE APPROPRIATION.

Most of the new arrivals sought grain lands, either for cultivation, or for the expected rise in land values. The large investor had the same ultimate purpose, which led them all to select the lands apparently most suited for field cultivation. This was in contrast to the ideas of the first settlers, who preferred the grassy flats along the lake fronts and seemed to regard distance from water frontage as more serious than distance from market. They had rejected lands on the wooded uplands, which the new settlers now cleared and broke up at great cost. Some of these lands, with the minimum of stone picking, cost from fifty to seventy dollars an acre, - a staggering capitalization for pioneer land under present agricultural conditions.

The great strike of 1919 brought an influx of trades-labour men, mostly in search of a garden and a rent-free holding, which might some time have a selling value. Many were transients fluctuating between their trades and their limited farming operations. Their direct influence on the economic situation was less important than their introduction of certain social and political ideas, which indirectly influenced economic development.

A large number of the least desirable farms were bought up for the ill-starred Soldier-Settlers at prices out of all proportion for even these times of inflation. With few exceptions, the soldiers lost their investment and the money advanced by the government; and abandoned the land, leaving paralyzed School Districts and crippled municipalities in their wake, as a result of the board repudiating its legal obligations as a trading company.

A Jewish Colonization project was equally unfortunate.

MARGIN OF CULTIVATION.

In developing his theory of Rent, RICARDO distinguished lands as to quality - Marginal, above margin or below margin. The classification had relation to the market conditions, and the "Natural and Indestructible Powers of the Soil". (1). It is to be noted that he made no allowance for the most important condition of successful cultivation - the intelligence and industry of the cultivator; but assumed a trained farmer of average ability and industry. Assuming this as a fixed element, under given market conditions the Margin becomes a physical rather than a psychological phenomenon. Despite the fact that subsequent analysis has led to the elimination of the terms "natural and indestructible" as limiting the qualities too narrowly, this distinction still holds. Marginal Land can therefore be determined with fair accuracy at any time and place. But this method, while necessary to give objective significance to the conception, makes it necessary in a new country of unsurveyed possibilities, and miscellaneous population with widely differing skill in agriculture, to distinguish carefully between Margin of Actual Cultivation, and True Economic Margin. Considering the difficulties arising from the amount of speculative appropriation, which is quite different from cultivation (and will proceed most actively near the Margin, if the prices are sufficiently tempting), the best general method of classifying the "qualities of land" would seem to be based on the relative prices at which they are sold to actual cultivators.

"Qualities of the Soil" has been found a misleading term, for even RICARDO found himself obliged to make allowance for "Distance from Market"; but under English conditions he laid less stress on this factor than he should for purposes of general theory. This factor has been elaborately worked out from personal experiments and records by VON THUNEN (2) who lays more stress on Distance than on Soil.

Combining these factors, we would expect the settlement of the InterLake to show the following tendencies :

- A. With reference to soil fertility, - the soils chemically or mechanically best suited for production would be the first appropriated;
- B. With reference to Winnipeg, the natural market, - the lands nearest the city would be appropriated before the more distant.

(1) Principles of Political Economy and Taxation, Ch. 11. p.47.

(2) Von Thunen - The Isolated State.

These are real and obvious tendencies, seen everywhere, if we adopt the "Price to Producers" Standard of interpretation suggested above. It might be worth our trouble to inquire as to the relative weight of these two tendencies in a new territory like the InterLake.

Considering (for this comparison only) all the agricultural lands to the outskirts of Winnipeg which have not taken on a speculative value as sites for Industrial Plants or for real estate subdivision, we are struck with the fact that up to a certain point "Distance" seems the dominant factor; while beyond this point "Soil Qualities" is the primary consideration. This point is the limit of the Market Garden and Small Dairy Zone. Beyond this "Fertility" receives chief consideration to the limits of continuous settlement.

It must be remembered that the recent improvements in roads and transportation are continually widening the first zone; and on the other extreme, there is a fringe of appropriation preceding cultivation and development where fertility is not easily determined, but where distance is an obvious condition. This fact tends to increase the importance of Distance beyond the limits of continuous settlement.

Turning now to the InterLake, we find several complicating factors, some of which have special application to a new country. Experience has shown that distance in miles can be a standard of comparison, only when all agents of transportation are equally efficient on all roads. The factor for which most allowance must be made is the railroad. So true is this that settlers are apt to regard distance from market as generally equivalent to distance from the most convenient railway point. Even for wagon traffic, all miles are far from equal. One settler may take hours to drive only a short distance through a bog, while one more fortunately situated will cover a greater distance in much less time. Such contrasts are not rare in the InterLake.

Rough roads cause a wastage of quantity or quality of many products, such as eggs, fresh cream, milk and small fruits. They cause a greatly increased expense from wear and tear of vehicles, and require added horse power. Where roads are suitable for the profitable use of the automobile, the nature of agriculture is greatly modified, and the importance of mere distance is diminished. The extent of these effects depends on the crops which can be successfully raised or sold. There are crops which can be marketed best in the winter, and others which can be marketed all the year round, but are chiefly produced in early

summer, and subject to rapid deterioration. Winter has a tendency to equalize the miles, or even to discriminate against the improved summer roads.

The speculation which invariably accompanies and even precedes settlement may be part of a land improvement scheme for colonization, or it may be an attempt to appropriate the "unearned increment". The tendency of the former is not necessarily in conflict with the natural trend of settlement; but the latter, by "holding for a rise", will tend to limit the settler's freedom of choice and to drive him to less desirable land, thus extending the Margin. Districts where this speculation is more prevalent than others are retarded in their development by settlers seeking other areas. From the earliest settlement this obstacle has been a clog to progress in the Red River Valley, but it has been the bane of agricultural development in all parts of Manitoba favorably situated with regard to markets. It is no small factor in the high cost of living in Winnipeg.

Again reckoning from the neighbourhood of Winnipeg, we may say that actual settlement of the InterLake has been according to the following tendencies :

A. - Before Railway Construction :

1. Land close to the City according to distance, with fertility a second consideration.
2. Land beyond the market garden and dairy zone, according to fertility, with distance a second consideration.

B. - After Railway Construction :

1. Land close to the City, as above.
2. Land beyond the garden and dairy zone, according to fertility, with distance from the railway a second consideration, and distance from Winnipeg, a third.

The second tendency in each of the above cases is somewhat counteracted beyond the limits of continuous settlement by uncertainty of estimating fertility. Water Transportation has counted for much in the InterLake. It made possible the development of the northern gypsum deposits, and today it is no small factor in Dairy Farming beyond the Narrows of Lake Manitoba. The settler in that almost trackless wilderness can often ship his cream from his own doorstep for trans-shipment at the lake terminal to the creamery with which he prefers to deal. He is practically nearer his market than many settlers within sound of the railway whistle.

The importance of distance varies with the nature of the product - whether perishable, and if so, whether through wet, frost, heat or rough handling; whether it must be carried to market or driven on the hoof; and, most important of all, its value in proportion to cost of transport. Garden produce requires a nearer market than grain; grain than cattle, except for the marketing of milk and sweet cream on a small scale. Ranching seems to flourish in the remoter areas where greater freedom of range can be secured. Co-operation among cream and milk producers to provide truck or other facilities is tending to extend the margin of profitable dairying.

Thus throughout the range of agriculture there is a tendency for extensive systems to be pushed back by more intensive systems as the country progresses. As we shall see below, this is a phase of the general movement of Industry to avoid the too strong working of Diminishing Return. It is not to be forgotten, however, that the leading products of a region are afforded special facilities for grading, marketing and transport, which are not extended to others. On the prairie these advantages are given to grains; in the Interlake the favoured products are cream, milk, fish, gypsum and to some extent, pulp and cordwood.

RICARDO avoids the difficulty of the products of diversified farming by a generalized field crop which he designates "corn". In so doing he gives simplicity, but artificiality, to his Margin by ignoring the progressive development of agriculture. So long as his actual crops are all worked on a standardized rotation, or make equal demands on the soil while yielding equal returns to productive power, his treatment would seem justifiable. As applied to the Interlake it is a very large assumption.

The first settlers in the Interlake were ranches who occupied the grassy lake margins and avoided the uplands, which a subsequent influx of grain farmers broke up and brought into cultivation at great cost. Conditions which attracted one made the land impossible for the other. It will therefore appear that the term "fertility" has reference to the immediate plans of the farmers who are cultivating the land at the time, and its significance varies with the system of agriculture. This, however, does not invalidate what has been said above regarding the physical rather than psychological basis of the marginal conception. At the same time it deprives it of some of the fixity which a reading of RICARDO would suggest.

Analogy with the order of land settlement might suggest that the towns on

the railway would diminish in size and number with the distance from Winnipeg, but this is not the case. That portion within fifty miles of Winnipeg has no settlement which could be called a village (1), and scarcely any development of retail trade. Quick and easy access to Winnipeg has brought a competition which the retail merchant has found very difficult to meet. No village of any size is found until about seventy miles from the City, after which they vary with district development to the end of the steel.

A feature of this, as of most new lines in the west, is the alternations of flag boxes and fairly developed villages. This phenomenon is usually due to the action of the first merchants. These, with the whole line to choose from avoid too close competition by leaving a station vacant in making their selection of business location. Other non-competing trades are drawn to the same point, - blacksmith, implement agent, lumber dealer, and butcher, each strengthening the resulting trend of traffic. Farmers tend to gravitate to the point where all the various business facilities are provided. Roads are built to suit the prevailing traffic. Each step tends to reinforce and perpetuate the lead of the fast developing town. Thus the larger places tend to grow, and the smaller to stand still or decay. The question will naturally arise whether better roads and the more general use of the automobile may not result in the absorption of even large towns through the competition of the City. This question will receive some notice hereafter.

RICARDO'S assumption that all unoccupied land was submarginal (2) would require some qualification for English conditions, but would have no validity in a new country. There is much excellent land not yet appropriated, and there are few farmers in the Interlake who have brought all their land into production. In these circumstances the term Marginal requires some further explanation.

CONDITIONS OF CULTIVATION.

"A family from Central Europe will make a living where Britishers would starve" is a saying with a suggested inference very unfair to the greatest colonizing race the world has ever seen. What usually happens is that a numerous slavie family, including children of school age or even more tender years, are set to toil beyond their years or strength, with a meagre standard of living, and often without the comforts or decencies of home life. A profit is shown at the expense of real wages by the exploitation of child labour.

(1) Stonewall and Selkirk are outside our area, and their growth is due to exceptional local conditions.

RICARDO has assumed an "economic man" an able business man with "adequate capital" or credit, and the "necessary knowledge" to judge as to his own interests and "mobile capital", so that he can withdraw from any business when it fails to yield "normal returns". These assumptions, even applied to the England of his day, while fairly representative of agricultural production for a term of years required some qualifications to give them reality in Commerce and Industry. When applied to the test of InterLake conditions, they have very limited application. Here the Owner, Tenant and Labourer are the same person, often a newcomer untrained in agriculture, with little capital and less credit, working in a region whose resources are little known and whose lands are therefore regarded as very poor security for loans. Few of the new settlers were drawn to the InterLake by exclusively economic motives. The formation of great blocks on the basis of racial origin, language and religion has been one of the greatest social and educational problems of the Canadian West, has hindered the development of a Canadian spirit, and has complicated and not infrequently frustrated the administration of justice. The distinction which in older countries goes with the ownership of land has been no small influence, and the freedom and adventure which are supposed to characterize "Frontier Life" has also carried weight with many younger men.

"Margin" to have reference to the land itself rather than its occupant must refer to that quality or situation of land whereby, in the opinion of experienced farmers, it could with cultivation appropriate to the time and place be made to yield normal wages and profits, but to yield no surplus for rent. It will be shown (Appendix C) that the average land in the municipal area in 1924 was somewhat below the economic margin; and it could not doubt be shown, were statistics as complete for 1919, that most of the same land was then above the margin.

Yet, though many farmers left the territory since 1921, most of the actual cultivators of the soil have remained, and a considerable number have come in during the period of depression. There was no definite relation between the abandoned farms and the ones still cultivated which would characterize the latter as above and the former as below the margin, though the relation was obvious enough in many cases. The personal element was as weighty as the influence of soil conditions.

If returns fall below "normal" the average pioneer has no choice but to continue to produce in order to meet his obligations, unless he wishes to lose all he has sunk in the land and part with his stock and outfit at heavy loss. He

cannot see far ahead, and must at all times be prepared for an unprofitable year or two. Only when bare subsistence fails through a series of progressive downhill years is he likely to abandon the land. "Bare Subsistence" is a conception whose interpretation varies with the person, time and place. So long as hope seems good for ultimate success, the idea is very elastic. It is as difficult for him to restrict as to increase production, since he is already obliged to work at full capacity. Extension is gradual except that due to colonization or return to abandoned farms of absent owners. But the gradual extension by old settlers will indicate the true margin better than the ebb and flow of a stream of new colonists. Thus, while the margin of settlement and cultivation expands and contracts with the economic Margin, it has less elasticity and the coincidence is never very close.

The rental of the InterLake land for the past three years has amounted generally to the taxes, whether determined by direct agreement or by crop shares. This of course is not, as a rule, the best land, for that is generally cultivated by the owner. On the other hand, the economic rent for 1924 was calculated as on the average a negative rent. (Appendix C). In times of agricultural prosperity, the tendency is for the economic to exceed the contract rent, but for the contract rent to be above economic in times of depression. The farmer is willing to hold on, to possess an independent job, some return to capital, and the chance of recompense with the next cycle of expansion.

DIMINISHING RETURN.

In all land theory the principle of Diminishing Return is of central importance. RICARDO makes it the foundation of his Law of Rent; and JOHN MILL calls it "the most important proposition in Political Economy". (1). This tendency has been so often misinterpreted and misapplied, so often linked with tacit assumptions of limited validity, that an examination of the principle is a necessary preliminary.

"After a certain point is reached, all other things remaining the same, the returns to successive applications of labour and capital (or units of productive power) will diminish"; - and an extensive form of the same principle :

"Beyond a certain point, every additional quality of land taken into cultivation, will give a diminishing return to equal doses of productive power". (2)

(1) Mill, Principles of Political Economy, Bk.1. Ch.XII, Sec. 2.

(2) Nicholson, Elements of Political Econ. 2nd Ed. Pp. 69, 70.

The above statements by the ablest living British Economist, are in harmony with RICARDO (1), MILL (2), and other earlier leaders of the classic school. Its second or extensive form is another way of stating that the more productive land (in the large sense) is appropriated before the less productive, and requires no discussion. CAREY, it is true, declares this proposition not only an error but the direct opposite of the truth (3). We shall later show that this writer is led astray partly by misconceptions of the law in question, and is more wrong than right in his generalizations of history.

It has been assumed that the extensive and intensive development of Diminishing Return keep pace. Such may indeed be the natural tendency, but this is not true of Manitoba conditions. Homestead regulations allow the appropriation of more land than the average farmer can bring under cultivation for years, while the expected rise in prices of land leads to greater appropriation by residents and to speculative investment. This holds lands from cultivation and tends to extend the margin, at the same time giving less motive for intensive culture by the owners.

It is often assumed, but seldom asserted, that Diminishing Return is the universal law of agricultural production. Even some of our leading writers have made this tacit assumption in their development of production theory; but in directly dealing with the subject, there is general agreement that in a new country the tendency for a time will be that of Increasing Return. The line of cleavage is regarding the stage at which Diminishing Return becomes dominant. This difference is at the root of much of the conflict between the American and English Economists, each reflecting conditions of their own environment.

The reason why the first tendency is usually to Increasing Return is that there is a necessary expensive preliminary minimum of cultivation to secure any return whatever, and the succeeding units will for a time be more productive. The enormous distribution of grain cars in the West has spread many of the world's worst weeds throughout the cultivated lands everywhere. A certain minimum of productive power will merely make the land capable of bearing a minimum of produce, while the next additional units will produce more evident results. The added cultivation will often give the ordinary pioneer a chance to get better return in the form of continuous use of machinery and horses which might other-

(1) Ric., Principles of Pol. Ec. & Taxation, Chap. 11.

(2) Principles, Bk. 1. Ch. XII.

(3) Carey, Principles of Social Science, Preface.

wise be idle for part of the time. Tractors are often worked night and day, binders and other more expensive machinery are worked in shifts co-operatively by small pioneer farmers, and labour is often similarly exchanged.

Diminishing Return is a static principle. It makes no comparison of one age or system with another. It is freely admitted that inventions, permanent improvements in the soil, changes in the system of cultivation may and probably will counteract the law for a time, but "after a certain, and not very advanced stage" (1) Diminishing Return will re-assert its sway. The improvements which are counteracting and postponing this operation in the InterLake are Drainage, Road Making, Stock Improvement, Diversified Farming, especially the introduction of sunflowers, sweet clover, alfalfa, and sugar beets.

The principal difficulty of this Doctrine is that of finding a common measure for various "units of productive power", and another for the various crops in case of Diversified Farming. The products of the InterLake include such varied commodities as dairy produce, hay, grain, fish, wool, meats, furs, hides, cordwood, lumber and senega root. Each product has its law of return at a given time. Sometimes the relation of power to return is quite definite, but with some crops there is a large element of fortune, making large averages necessary for reliable results. It therefore appears that there is no place for the artificial simplicity of the generalized conception of "corn" representing the chief food crops. Yet there must be some measure provided for the returns to productive power.

An obvious suggestion would be to express all these returns in terms of money values, but to do so would be to read into the doctrine something which does not belong there. Diminishing Return is a phenomenon of a state of progress when Capital and Labour are abundant in ratio to the land. In this state of society the Landowner's position is a strong one, unless he has to meet foreign competition. He enjoys assured markets and prices which at least compensate for the "Diminishing Return" of produce. Thus a money estimate would be misleading, and might indicate "Increasing Return", where the actual tendency was Diminishing Return. The law of Return has reference to produce return per unit of power.

According to MARSHALL : "Diminishing Return has its chief application not to a particular crop but to the chief foods." (2) "The units are rough, more or less arbitrary modes which aim at no numerical precision, but will yet suffice

(1) Mill. Principles - Bk I. Chap. XII. Sect. 2.

(2) Marshall - Principles V, VII, 4.

for the broader purposes of history". (1) This great economist has traced through many pages the diminishing utility of unwise distribution of resources, and diminishing efficiency of failure to so employ the principle of substitution as to secure the best net return to productive resources, and has suggested a close relation to the law of Diminishing Return, when he speaks of agricultural rent as the "leading species of a very large genus". He would now seem to employ too sweeping distinctions, to warn the reader against carrying his analogy too far. It is true that the nation at large may feel the pinch of conditions which bring wealth to a privileged class; the fact remains that each farmer has his own problem as to the prevailing law of production to which he must adapt his cultivation or fail. The national law is but the average of all the individual laws. Nor does the law apply to food crops alone, but to all agriculture and raw material supply.

The fact is that each producer must at each stage consider the distribution of his resources, especially in making new investments. He will consider the relative advantage of so much machinery, so much horse power, or additional farm labour. He will balance the advantage of employing these powers in more intensive cultivation of his present land, as compared with spending at least part of his resources in buying or leasing more land for less intensive cultivation. If he decides on more intensive cultivation, he thereby expresses the belief that Diminishing Return operates feebly, or not at all. If he obtains more land he thereby expresses the contrary opinion.

MARSHALL'S Distinction is based on the "absolutely limited" quantity of land, and the "Industrial plant which can be increased without limit". (2) Even if such increase were possible, there is still the more important consideration of raw material in which supply Diminishing Return would play an increasingly important role. In economic history the limits of capital and labour have restricted progress more than any "absolute limit" to the quantity of the land, - at least under conditions of Western Civilization.

SELIGMAN, on the other hand, regards "Diminishing Return as the normal tendency in competitive industry", with Increasing Return a sign of "a tendency to Monopoly". (3) But the basic condition seems to be the relative supplies of Land and Productive power. In a new country the returns in wages and profits are higher than in older countries, keeping pace approximately with the return in

(1) Id., IV, 111, 8.

(2) Principles, IV, 111, 8.

(3) Incidence of Taxation, 4th Ed. Pp. 342-3-5.

agriculture. Thus each country in its economic development shows a progressive change in its capital organization, analogous to that in agriculture, and due to the same cause - a movement to evade Diminishing Return.

If a considerable area like the InterLake be regarded as one national estate, then the cost of all public improvements will be included in the "units of power"; but these are by far the most productive units, especially those applied to roads and drainage systems. Such an estimation will accentuate the force of the prevailing law, - Increasing Return. If all the population of the InterLake could be concentrated into half the territory, the development possible with lighter taxation would do away with many of the worst disadvantages of pioneer life, and the people would be more comfortable and prosperous.

Gypsum and lime are important InterLake products. There is an essential difference between the intensive application of Diminishing Return in field culture and in mines. In this development experience has shown that large capital is essential to success, and that at any point a large dose gives proportionately larger return. The failure of companies which have since reorganized and with larger capital have succeeded under the same management is confirmation of the reality of this tendency. To borrow a more striking and familiar illustration from outside fields, the Yukon Gold Company took over large holdings of claims which the small miner was forced to abandon and, with large scale production, reaped returns larger out of all proportion to the investment. (1) The Diminishing Return shows itself in the petering out of the supply, and has more analogy to the exhaustion of soil through improper cultivation than to the Diminishing Return to intensive cultivation. SELIGMAN attempts to treat this as a diminishing return in value depreciation, but there is little theoretical advantage and much confusion in so wresting this principle from its original application as estimated in ratio of produce to power. His suggestion is applicable to accounting rather than to economic theory : "We must write off annually," he says, "a sum from our gain, which when capitalized at the rate of production will ultimately amount to our original capital". (2) This plan has no relation to the law of return prevailing at any given time in the development of the mine. It would be necessary for proper accounting, whatever the Law of Return.

(1) Yukon Gold Fields - Dept. of the Interior, 1910.

(2) Incidence of Taxation, 4th Ed. P. 241.

Fishing is another important seasonal industry. The exact operation of the law of return in this industry is a disputed question, which must be settled by research of biology and statistics. The orthodox view places it in a position analogous to field cultivation, laying stress on the value of regulations as to methods of capture, open seasons, and restocking of the waters. On the other hand many practical fishermen doubt the efficiency of the efforts put forth by the government, and are of the opinion that the variations in fish supply are due chiefly to causes over which man has little or no control. The difference is therefore over the law of return. The spread of fishermen farther away into more distant waters to supply the demands of the markets would indicate that in lake fisheries at least the orthodox view is more in accord with present tendencies, and that Diminishing Return prevails. (1).

CAREY'S attempt to controvert the principle of Diminishing Return is based on the contention that early cultivation sought the thin upland soil, avoiding the rank growth and malaria of the richer bottom lands, so that progress was ever down-hill to the more fertile soils, and that accordingly the prevailing law has been Increasing Return. He interprets the law as historic rather than static. As to his statements of fact - "Everyone knows," says MILL, "That it is the high thin soils that are left to nature, and when progress of population demands an increase of cultivation, the extension is from the plains to the hills. Once in a century, perhaps, a Bedford Level is drained or a Lake of Harlem pumped out, but these are slight and transient exceptions; and in old countries little of this sort remains to be done". (2).

The settlers of the InterLake appropriated the high lands, avoiding the deep fertile marsh soil. But this plan, expensive as it was, had not the prohibitive initial minimum of draining large areas - a task practicable only for the government or a large land improvement company.

In some non-English communities the quarters are often subdivided into two or even four farms for the purpose of better cultivation. Those who follow this plan are neither the less intelligent nor the less prosperous. Such facts indicate that the law of Diminishing Return is not yet in evidence, and does not show itself so early as JOHN MILL believed.

(1) Canadian Fisheries - Commission of Conservation 1908. Commission of Fisheries - Winnipeg 1926.

(2) Principles I, XII, 3.

The fact that few of the farmers in the InterLake have yet brought all their best land into production indicates that they have not yet felt the pressure of Diminishing Return.

INCOME.

The land system of England, with its Landlord, its Capitalist tenant-farmer, and its Labourer, all receiving their returns from the same land, corresponds with the threefold Classic division of Income into Rent, Profits and Wages. The system no doubt had great influence in the formulation of theory. In a pioneer territory like the InterLake, Social conditions are less differentiated, and this adds to the difficulty of applying Classic Theory. The same man, or family unit, usually receives all the above portions of the income, which fact lessens the practical importance and adds to the theoretical difficulties of the division. It sometimes leaves a debatable border between income and costs of production, which offers a great difficulty in discussing economic problems with the farmer. A further complication under present conditions arises from the fact that at present the average InterLake economic rent is negative. (Appendix C). Where land is rented, the contract rent, as shown above, does not coincide with economic rent. This is quite different from stating that no land in the InterLake yields economic rent. Since the average land is close to Margin, much of it must yield a surplus, and this a survey of the territory will easily show.

During the past four years the lot of the Retail Merchant has not been an enviable one. The great trade expansion of 1917-22 found most of the settlers struggling to get a footing, and others pouring in with little or no capital. The expansion of business was chiefly an expansion of credit. With the illusive glamor of three dollar wheat, no one hesitated to ask or give credit almost without limit. In such circumstances the enormous inflation of prices made no obstacle to sales, as neither the merchant nor the customer was willing to believe conditions abnormal. Thus the boom, which brought prosperity elsewhere, plunged the merchants into debt to the wholesalers, loaded their shelves with depreciated goods and their books with accounts, some worthless and some very tedious of collection. Their determined attempts to resist deflation only subjected them to keener competition from mail order houses and chain stores.

Some of these chains consisted of actual branch stores of one common company; some were but agencies for disposing of job lots of goods obtained by co-operative buying. Some had nothing in common except the senior partner, with a junior at

each branch; or sometimes a manager who operated the store on some form of percentage arrangement. The primary advantage in each case was in the co-operative buying. At present the chain system shows a tendency to disintegration, with voluntary arrangements for common purchasing.

Co-operative enterprise was rather popular during the years of the Great War. Probably the principle never had a better chance to succeed than in the case of trading companies with strong membership, beginning about 1917; and the opportunities for creameries was equally unique. But the situation required bold yet cautious management. A capable manager can only be secured by payment of a salary such as his ability can command elsewhere. This is a fact which the Farmers' Company seems seldom able to realize. Penny-wise economy and vexatious interferences deprive them of the management which might lead to success. The lack of such management brought these enterprises to the same disastrous end. Two Farmers' Co-operative Creameries went the same road for like cause. In every case the defunct business was successfully reorganized under private management.

The scarcity of cash in many of the remoter settlements has led to the development of a system approaching barter. In some of the centres where the population is largely from Central Europe, one or more merchants of the same race and language transact the business of the community, sometimes on a commission, sometimes by purchase; but in either case paying chiefly in store goods. Prices are quoted in cords of wood, dozens of eggs, or bushels of potatoes. This system is attended with a marked cheapness of farm produce, and an equally marked high price of store goods. It usually results in a considerable premium on money, often as much as twenty-five or even fifty percent. Some of the exceptional profits of the business represent a quasi-rent on rare linguistic ability combined with knowledge of race psychology and advantage of the "conjuncture".

COLLECTIVIST SCHEMES.

This period witnessed much legislation of a socialistic tendency, especially inaugurating government financed plans of rural improvement or land settlement. We are here treating of such schemes only as they worked out in the InterLake, and with no reference to the special authority which made them effective. Three of the most typical were the "Cow Scheme", "Rural Credits", and "Soldiers' Settlement".

The Cow Scheme was a well-conceived plan to improve the breed of stock in this province. It was worthy of success, but it fell on evil days. The scheme was launched when prices were at the peak, or near it. By the time the most of the needs were supplied, the inflation bubble burst. "Cows at one hundred dollars" are not out of proportion when butter-fat sells at seventy-five cents, but is an impossible valuation when the product falls two-thirds in price. To the farmers who tried to meet their obligations, the burden was crushing. The evasion or partial evasion of many was a great expense, and considerable dead loss. It had the further effect of discrediting all schemes for stock improvement - the best hope of the InterLake.

The Rural Credits represented a scheme of decentralized rural finance with insufficient check on the ability of the local directors, or control of their operations. Hundreds of thousands were invested on the recommendation of men on whose judgment no private loan company would have risked a dollar. The present result was recently stated by the Provincial Treasurer, who informed the Directors that the province is now carrying \$700,000 of uncertain accounts on which they are paying 3% more than they are receiving. (1)

The Soldiers' Settlement Scheme will long be regarded as the classic example of an ill-executed government project, so far as concerns the InterLake. The Settlers seemed to be placed as a rule on the most hopeless areas, but at prices which were out of proportion even for those days of inflation. Few of the Soldier Settlers now remain. The others lost their own investment and the loans advanced by the Board, while their stock was sold at a small fraction of its cost. Their failure was followed by the repudiation of taxation by the Board, with the result that every municipality and nearly every school district was badly crippled for revenue. A large part of the organization and expense of schools was incurred to provide for these settlers, and it would seem only just that the cost of a national blunder should be a national expense rather than a burden on a few who are least able to bear it.

On the basis of InterLake experiments, there is little to cause the stalwart individualists of the Classic school to change their views on socialistic legislation. Government administration applied to business fails to supply the initiative to make the most of favorable conditions, or to pull out of an unfavorable situation with a minimum of loss.

(1) Premier Bracken to Rural Credits Annual Convention, 1926.

INCIDENCE OF TAXATION.

Half of the InterLake is organized into municipalities; the remainder has no organization but the School Districts. (Appendix A). Unorganized territory is subject to a provincial tax called the Municipal Commissioner's Levy, and a District School Tax. The land is assessed at a flat rate per acre. The gypsum deposits are taxed as so much rural acreage. Taxes on fish and produce may be levied but are attempted only in exceptionally favorable conditions. Stores, Creameries and Mills have their usual tax often on a light assessment in lieu of a bonus. Rentals of government leased lands may be taxed but there are opportunities for evasion.

In the municipalities there is the provincial tax, also a general school tax to cover a grant of \$3.60 a day to all schools, and a local school tax for each district. The assessment is based on the selling value of the land, with other taxes as in unorganized territory.

Orthodox economists teach that a special tax on production will be shifted, but not a general tax. For InterLake conditions several additions must be made:

1. A tax limited to a narrow district will tend to be shifted as to local markets unless outside competition becomes effective, but for general markets only such part can be shifted as will form a common element in an area large enough to affect the margin.

2. Where mobility is lacking there is not much shifting.

3. In the InterLake there is no validity in the separation of the land tax into a tax on the various forms of Income for purposes of incidence. The tax is one on production values.

4. Only primary results need be considered. "The Long Run" has no significance in rapidly developing pioneer areas.

In the Unorganized, the flat rate is a "fixed rate per acre" which, according to SELIGMAN, should be shifted to the consumer, with additions. (1) His reasoning is based on the supposition that the marginal man must quit producing if he cannot raise his prices. But as already shown, he will hold on as long as possible. If he holds on long enough, he will cease to be submarginal, through gradual farm improvements; so that in such case the theory falls to the ground. The area is too small to affect the margin in the general market. The cultivator will bear such tax as he cannot shift locally. Such shifting is of

(1) Incidence of Taxation, P. 259.

little importance, and at most the community still roll it back and forth in local prices, so that the shifting is very slight and remains on the community.

In so far as the common element forming part of the costs of production for the general market is shifted, it was shifted before the imposition of the Inter-Lake tax, as we might paradoxically observe, and therefore not shifted at all. The prevailing tax wide enough to affect the general margin will be a quasi-rant on exemption for untaxed producers, which the imposition of a local tax removes wholly or partly according to its amount, and is to that extent an added burden. In theory this bonus - either positive or negative - occurs in every taxation area, but its importance is generally negligible.

Local sawmills, choppers and grist mills, sell their produce locally and are thus able to shift the tax in so far as it is differential for it is never large enough to overcome their local advantages over outside competition. The tax on creameries, which produce for wider markets, cannot be shifted to any extent. It cannot affect prices on the general market, nor can the producer throw it back on the seller of cream, owing to the keenness of competition of city creameries. But a creamery is such an asset to the small town that the manufacturer is in a strong bargaining position with local taxation authorities, and usually escapes lightly. The result of any failure of the management to make a good bargain will put him at a disadvantage which under his law of Increasing Return will tend to eliminate him from the competition. This process works toward monopoly which, if it goes far enough, will shift the tax both forward and back.

High grade Lake Manitoba "green fish" have a special market in New York, rather inelastic because depending largely on non-economic influences in consumption. Being a seasonal industry, there is considerable elasticity of supply. In the rare cases of a tax on fish stored at railway points for shipping, there is little probability of any portion being rolled back on the fishermen, unless in an exceptionally good year. If general, ⁱⁿ the InterLake, the tax would be largely shifted to the consumer. Ordinarily there will be little shifting in the isolated cases of its imposition, but the Companies fight hard against the tax, (1) and show a tendency to avoid taxation points. For these reasons the tax is not attempted except at points enjoying special advantages of situation.

(1) Hodgson S.D. 1922; Winnipegosis 1920.

As stated above, the gypsum tax is a flat rate on the lands. This has already been discussed. But there are special reasons why this tax cannot be shifted. Production is under partial monopoly conditions, and for markets whose demands have no relation to local taxation. The tax will lie where it falls, and the company's labourers will not suffer.

A special tax on hay or cordwood or pulp stored for shipment is effective only where a shipping point offers at least equal differential advantages. It cannot raise the price to the consumer in the wider market. The extent to which it is thrown back on the producer depends on keenness of buyer's competition. As a rule the producer has to carry most or all the burden, quite frequently with additions. Sometimes instead of cutting the price, the buyers discontinue cash purchases and pay only in trade. Comparison in such cases shows that this is a shifting back of the tax, with heavy additions.

A newly organized municipality or school district in a primitive community offers a favorable opportunity to study the Capitalization of a tax, and to study the validity of the distinction between "onerous" and "beneficial" taxes. "Taxes for specific purposes, which mainly concern the inhabitants of the taxed area, are deemed no tax at all, so far as being a burden". (1). They may be regarded as payment for services, and are only a degree more general than fees. Such taxes have been called "beneficial". The more general taxes, whose utility has been obscured by distribution over a wide area or in non-economic purposes, are called "onerous". A district drainage tax is clearly beneficial. A tax for national defence would be deemed onerous. In unorganized territory the school districts often exercise the power of local taxation for roads and drainage. This tax is never capitalized in lower values of land. On the other hand, the Municipal Commissioner's Levy is an onerous and very unpopular tax. Intermediate between these taxes are the School taxes. They represent a shading of the two classes. Education is a national concern, and the tax is levied on all, whether using the school or not. It has no quantitative relation to the relative advantage the different ratepayers derive from the school. From this view the tax might be considered onerous. On the other hand, no one will deny the economic advantage of co-operative over individual effort in education, or question the cash value

(1) A.B. Clark, M.A. F.S.S. - Real Property Tax.

of an available school to the parent. As the majority of ratepayers are parents, the tax is so far beneficial. The test of the relative value of these two views is the test of Capitalization.

This phenomenon in a remote district is worthy of study. Many pioneers have little conception of the need or the value of education. They are often inclined to resent the imposition of a school and its resulting taxation. Some of the least enlightened sell out or abandon their lands to escape the unaccustomed burden. By doing so they bear the whole capitalized burden, and then only postpone the inevitable. Unless they move further back, they cannot escape. If they move beyond school areas, the development soon overtakes them again. Thus lands at first fall in price, but there are as many less favored settlers attracted as the ones repelled. With clearer public opinion, as the advantages become evident, the former tendency loses force, while the latter grows. Soon the value of the lands rises above that before the tax was imposed, even when general conditions remain static. For this reason even enlightened bachelors and non-residents do not object to a moderate properly administered school tax. It thus appears that the degree of onerousness of this tax depends on the enlightenment of the ratepayers. A general school levy is more onerous than a local tax, and less cheerfully paid.

Practically all that has been said above as applied to unorganized territory, applies to municipal areas, except that the assessment is made on actual selling value, which is the same as a tax on net profits. According to RICARDO, it should be shifted to the consumer (1), but as shown above, this assumes a mobility which in a pioneer territory is quite lacking. Some portion may be shifted in local markets, subject to observations stated above, but the tax will not affect prices in wider markets.

The limits to the shifting of a Merchants' tax are set by the fear of outside competition, which is also the limit to their price schedule in any case. It would appear that in most retail trade the tax will not be shifted to any extent. This consideration will be less effective in some lines of business such as butcher, lumber dealer, and others where the local condition tends to monopoly, but will be reinforced by considerations of elasticity of demand, already effective in their schedules.

(1) Principles of Polit. Economy & Taxation. Ch. XIII.

SUMMARY

Classic Theory is based on a number of assumptions, tacit or expressed, which have limited validity in the area under survey. These assumptions and conceptions have so coloured the Theory that with changing conditions it needs careful restatement from time to time. Production today is mostly for wider markets, and must reckon on wider competition. Pioneer agriculture permits of less mobility and adaptation to sudden changes. The pioneer is frequently limited in resources, training and knowledge. He is moved by racial and religious preferences, love of adventure, and other non-economic influences. His calculations are based not only on the immediate gain, but also on the prospect of future independence and competence through the development of the country and his farm. Such circumstances minimize the conceptions of minimum wages and necessary profits. The marginal conception takes on great elasticity, and has significance only in the long run, which under pioneer conditions seldom happens.

Production for wider markets takes on considerations which had little weight a century ago in England, but Classic Theory applies with slight modification to local markets.

The Margin advances and recedes with trade conditions, but the margin of cultivation corresponds very imperfectly with the true economic margin - possessing much less elasticity. Diversity of produce complicates the marginal problems. The principal factors are distance and fertility, both of which are relative to crops and conditions.

Diminishing Return is of central importance in production. It shows itself in the extensive and the intensive forms with the growth of population. In the Canadian West the liberal homestead regulations and cheap lands have caused the extensive action of the law to outstrip the intensive. The evidence of its extensive action would be seen in the farmer bringing all his available land under cultivation and seeking for more. Its intensive effect would be the progressive substitution of crops requiring closer cultivation. Neither tendency is at all marked in the InterLake today.

Applied to the territory as a unit, the tendency is in the opposite direction at present. There can be no doubt that the present settlers would be much more comfortable and prosperous if more concentrated. They would escape

correspondingly the weight of school and local improvement taxes, and enjoy better roads, markets and social advantages. This reflection suggests the question whether the present system of free homesteads without restriction as to location, and the unsystematic method of alienating public domain, has not been most extravagant and detrimental to public interest. Instead of promiscuous homesteading, the land might be opened one row of townships at a time, until a considerable percentage of the area had been taken up, after which a new row might be opened. This system, combined with the Wakefield Colonization Plan (1) of selling land to actual settlers, instead of offering free homesteads, and thereby establishing a fund for aiding the new settlers and making district improvements would probably be better for all, except speculators and politicians. Land speculation would receive a heavy blow, and the solid blocks of colonists of a single nationality, perpetuating racial prejudices and complicating administrative problems, would not be formed.

The taxation of farm lands, though nominally light, is relatively very high, and is a heavy burden to the pioneer (Appendix B). None of the taxes of the settler are shifted to any extent, and none are lifted from the community. On the other hand, all the goods purchased come in freighted with the weight of taxes levied in Industrial or commercial centres, or import duties. Thus the pioneer bears his own tax and part of that levied by wealthier communities. These facts justify any special grants of the government to pioneer schools or local development projects.

School and municipal organizations offer opportunities for the observation of the phenomena of Capitalization, and the effects of onerous and beneficial taxation. The wider the area, the more onerous the tax; the more specific the purpose, the more beneficial. "Capitalization" is the test of the degree of onerousness.

Under very favorable circumstances Coöperative trading and industry have been largely tried and found a failure, so far as Farmers' Associations are concerned. False economy has been the rock of shipwreck.

The problem of rural retailers has been acute. They show great lack of adaptability to recurring trade cycles, and to credit problems. Mail order houses are making increasing inroads on their cash business, so as to give

(1) Wakefield, View of the Art of Colonization.

rise to the problem of their survival, and with it the continued growth of small towns and villages. It would seem that some reorganization must be made to enable cash, credit and produce departments each to carry its own load. A rational system of credits, which would put the farmer on a cash basis, would be as beneficial to the merchant as to the farmer. The rural retailer who can meet the increasing city competition will be a man of such exceptional ability as to crowd out local competition, so that from either side the present tendency is toward a reduction in the number of local retailers.

Various unfortunate projects of a collectivist nature have been tried, which on their face would make a strong case for the general rule of *laissez faire*. It must not be overlooked that they were launched at a most unsuitable time for successful results. But at best, it is evident that government enterprise lacks the initiative and adaptability to make most of the gains and to minimize the losses.

Our general conclusion is that the Classic Theory requires careful interpretation and cautious application to avoid the colouring of its native environment. Its unguarded application is beset with pitfalls. The theory lacks elasticity of conception, and requires additions to bring it into full harmony with economic conditions.

Yet when all these facts are conceded and allowed for, the truth appears that not one fundamental principle has been found invalid.

APPENDIX "A"

THE INTERLAKE.

The area under survey is made up of the Rural Municipalities of ERIKSDALE, WOODLEA, and SIGLUNES, with an unorganized territory to the north-west of these, extending to the limit of population, which for our purposes is a few miles north of Gypsumville. Some municipal statistice have been compiled in Appendix B. Roughly the population of the unorganized is about equal to that of the municipal area, and will have the same approximate value of total property, but much greater diversity of industry. Three Indian Reserves in the territory are excluded from our survey.

The writer bases his data, not otherwise acknowledged, on several years of administrative work - Courts of Revision, Tax Equalization, and School District organization; and on records and experiences of years of travel in the territory.

APPENDIX "B".

MUNICIPAL STATISTICS OF INTERLAKE, 1923.

<u>Municipality.</u>	<u>Population.</u>	<u>Total Tax</u>	<u>Assessment</u>	<u>Acres Cultivated.</u>
Eriksdale	1982	\$ 50,107.	\$ 1,181,000.	31,000
Siglunes	1384	26,540.	654,000.	11,000
Woodlea	2050	39,236.	826,000.	10,000
	5416	\$ 115,883.	\$ 2,661,000.	52,000.

An estimate from representative areas shows about half of the appropriated land in the hands of non-residents.

The average resident family is five persons, or 1083 families.

Taxation per cultivated acre - \$2.23.

Average mill rate - 43.5

Rate per milking cow - \$7.63.

Acres cultivated per family - 24.

APPENDIX "C".

INCOME OF AVERAGE INTERLAKE FARMER (Municipal Area).

The table below is based on Municipal statistics for 1923 as to population, non-residence, acreage and stock. The returns are based on averages in a number of representative cases, compared with the statistics submitted by practical farmers well informed as to the local conditions. These are in general agreement that field crops supply the table and feed the stock, leaving stock receipts net.

In 1924 each milk cow was supposed to net \$50 a year.

Similar averages might be expected in Unorganized, but the produce would be more diversified, and Fish would take a much more prominent place. We here assume the average family, - one man, one woman, and three children, - which family works for the neighbours as much as it hires outside labour. Wages are based on Department of Agriculture (Manitoba) Statistics for the year.

RECEIPTS :

Produce of 7 cows	\$ 350.	
Pigs	54.	
Poultry and Eggs	56.	
Sheep and Wool	17.	
Fish	65.	
Farm Produce (table supply)	465.	
Smaller miscellaneous	11.	
Use of house	96.	
Fuel from farm	30.	
Stock Increase	<u>120.</u>	
Gross Income		\$ 1264.00

<u>LESS :</u>	Insurance	\$ 15.	
	Taxes	53.50	
	Depreciation	<u>75.00</u>	<u>143.50</u>
NET INCOME			<u>\$ 1120.50</u>

Analysis of Income :

Man - 4 mos. @ \$31.30, 4 mos. @ \$40.		
4 mos. for board	\$ 285.20 and board.	
Woman - 12 months @ \$17.35	208.20 " "	
3 Children - at \$1 per week	<u>156.00</u> " "	
TOTAL WAGES	649.40 " \$465. -	\$ 1114.40
PROFITS - 8% on Investment	-	160.00
RENT (Negative)	-	<u>153.90</u>
NET INCOME	-	<u>\$ 1120.50</u>