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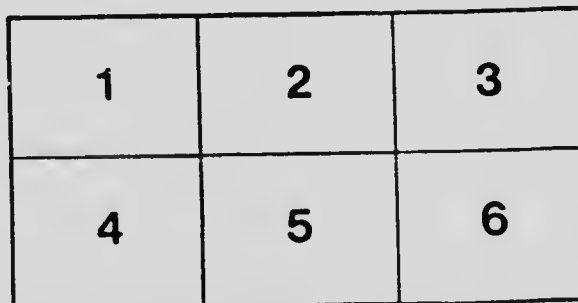
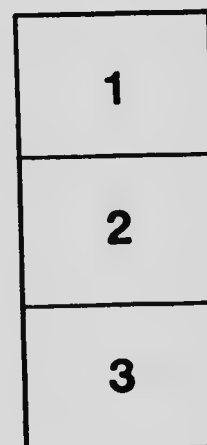
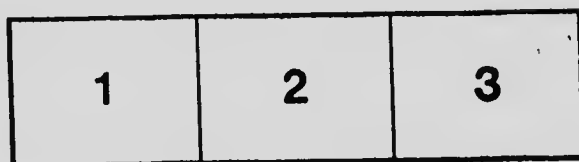
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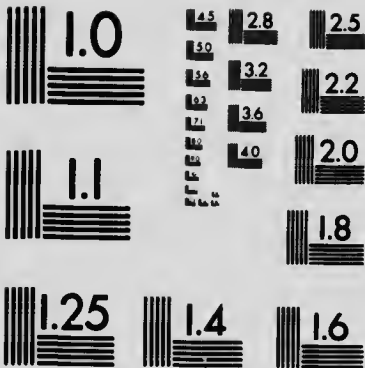
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**THE ECONOMIC RESULTS OF THE SPECIALIST
PRODUCTION AND MARKETING OF WHEAT**

**BY
JAMES MAVOR**

**REPRINTED FROM POLITICAL SCIENCE QUARTERLY
VOL. XXVI, No. 4**

**NEW YORK
PUBLISHED BY GINN & COMPANY**

1911

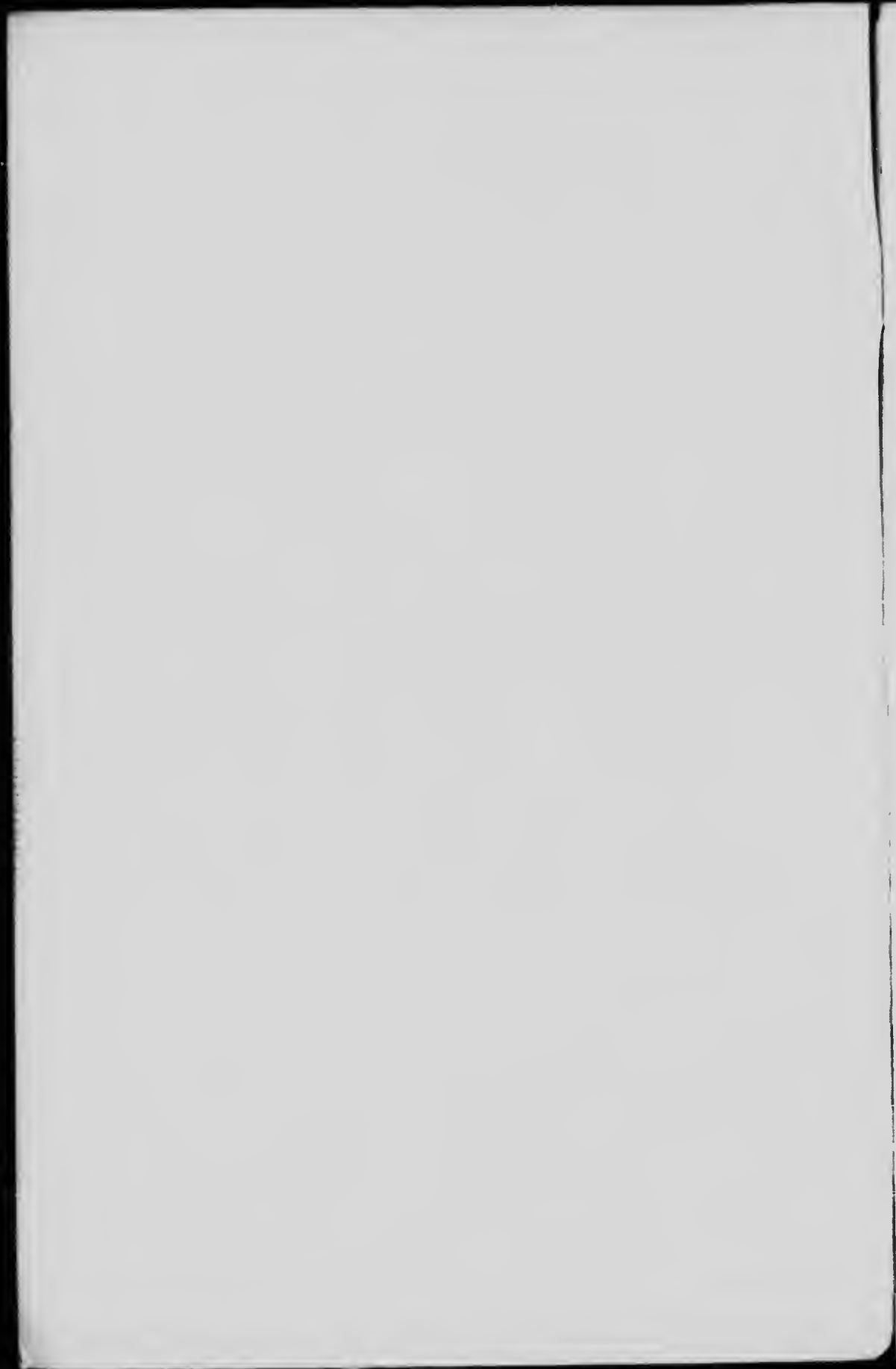
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THE ECONOMIC RESULTS OF THE SPECIALIST PRODUCTION AND MARKETING OF WHEAT

THE increase of population in western Europe, especially in Great Britain and Germany, during the past fifty years and the contemporaneous advance in the general standard of comfort have led to an increased consumption of wheat, absolutely and *per capita*. The increased consumption of wheat has promoted, and it has been promoted by, the enlargement of the area devoted to wheat production. The list of countries exporting wheat to western Europe has now become a long one and the effect of wheat importation into Europe has been to increase the allocation of agricultural capital to wheat production in these countries and to check it in Europe. Although the yield per acre of wheat in England and in Germany is very much greater than the yield in other countries, the growth of wheat upon lands where, which do not need or do not receive enrichment in general kept the price of wheat down, in spite of the vast increased demand for it, and has thus rendered wheat farming in western Europe unprofitable. Two factors, however, seem to be making either for a check in the increase of demand in Europe, which would mean a change of diet or a diminution of comfort, or, alternatively, for further advances in the price of wheat, which would probably be accompanied by commercial and industrial readjustments and crises.

(1) The first of these factors is the increase in population in the wheat-producing areas themselves. This factor has of great importance in the United States and in Canada where the population has been increasing rapidly; and it might be of great importance in Russia, if in that country there came to be a higher standard of comfort among the peasantry or the government changed its railway policy with regard to wheat exports.

(2) The second factor is the limitation imposed upon production (*a*) by the limitation of the area, no matter how large it may be assumed to be, which can be devoted to wheat cultivation;

(*b*) by the progressive exhaustion of the areas devoted to the cultivation of wheat; and (*c*) by the possible diversion of agricultural capital and labor from the production of wheat to the production of other crops.

Both of these factors make for a situation in which, the precise period being matter of speculation, the West-European farmer may once more find wheat a profitable crop, although the profit to be derived from this as compared with other crops would determine to what extent it might be advantageous to cultivate it.

As a countervailing factor it is necessary to take into account a probable, and possibly considerable, increase in the productivity of the wheat areas. As the price of wheat advances, there will be an increasing tendency to divert to wheat cultivation lands which are now used for other purposes and to enrich lands now unintensively cultivated.

Meanwhile the enormous European demand for wheat and the relatively high price which at present is secured for it, have resulted in the specialist growth of wheat, the chief incidents of which it is the purpose of this paper to describe.

I

The development of wheat production to meet the almost continuous increase of demand has involved the application of a great mass of agricultural, industrial and commercial capital to the production, storage, transportation and distribution of wheat. So vast is this mass of capital that it is almost impossible to form even an approximate estimate of its amount. The utmost that can be done is to analyze it into its various elements.

(1) Although the whole capital invested in railway construction and equipment within the areas in which wheat is the predominant crop cannot be charged (so to say) against wheat, yet there can be no doubt that a very large part of it must be so charged. Main lines and branches have been and are being constructed in the United States and in Canada, primarily with the view of bringing out the wheat crop. Thus at least a large part of railway construction and equipment, not merely within

the wheat-producing area but between that area and the seaboard, must be regarded as having been brought into existence for the sake of the exportation of wheat.

(2) Similarly at least a portion of the costs of canalization, dock accommodation and shipping, with the contingent costs of lighting, buoying and improving the navigation of inland waters and estuaries, must be charged against the movement of wheat to the seaboard; and a portion of the costs of ocean navigation must be similarly debited to wheat exportation.

(3) The provision of elevators, grain warehouses *etc.* at local stations within the wheat area and at shipping and receiving ports must be similarly charged against the wheat trade.

These three large items may be regarded as representing the mass of industrial capital devoted to the collection, transportation and distribution of wheat; but the enumeration of the different forms of capital employed in the total process is not yet exhausted.

The primary form is of course the agricultural capital expended by the farmer in preparing the land, in seeding and in harvesting, as well as the capital invested in agricultural implements and in animals for the conduct of farming operations. In an isolated region, where agriculture is carried on by primitive methods under a system of natural economy, agricultural capital slowly accumulated in seed and in animals is the only capital employed; but when production for sale is undertaken, and particularly when specialist production has practically extinguished natural economy, the reinforcement of agricultural capital by commercial capital comes in practice to be a necessity.

The amount of agricultural capital required by a wheat farmer in the Canadian Northwest is very small. A farmer may take 160 acres on homestead terms by means of a preliminary payment of \$10. He may arrange with another farmer or with a ploughing contractor to plough his land for him. The payment exacted for this service will depend upon the acreage to be brought under cultivation. For \$200, or thereabouts, he can have 30 acres of new land broken and sown. When the harvest time comes, he may again contract for harvesting and threshing, which will cost him about \$120

more. When the crop is threshed, he may obtain payment for it from the elevator in time to pay his contractor for the harvesting and threshing. He may thus manage to get his crop in and out for an advance, on his own part, of little more than \$200. Or he may buy a plough, seed and harvesting implements on credit, devoting his own capital exclusively to the maintenance of himself and his family while the crop is growing. In this case the entire agricultural capital, properly so called, actually employed in field operations, will be supplied by others, while all the labor will be supplied by himself. If, as indicated above, the case of a new settler is taken, a house will have to be built; but the cost of a dwelling is not strictly chargeable as agricultural capital, and in any case it is too variable to be taken into account. The cost of a second year's cultivation by a settler will be much less than that of the first year; it may indeed be only one-half as much.

The great bulk of the agricultural capital employed in the Canadian Northwest is in fact supplied by railway companies, loan companies, banks, implement companies and general dealers. It is only in this way that farmers having little or no agricultural capital at the outset have been able to establish themselves. Moreover, the natural fertility of the unexhausted soil is so great that a very small amount of capital is required per acre. It has consequently been possible to bring a vast area under cultivation by means of a relatively small amount of agricultural capital.

If industrial and agricultural capital alone were employed in the process described, the return of these capitals would be relatively slow. The farmer, the elevator company, the railway company and the steamship company would be compelled to wait until the wheat reached not only the miller but the consumer, were it not for the organization of commercial capital, which forms the connecting link between the successive stages. Commercial capital enables the farmer to obtain payment in cash for his wheat as soon as it is harvested. Commercial capital brings the wheat to the elevator and defrays the cost of storage. It pays all transportation charges until the wheat or flour is finally delivered to the distant consumer. In this way

commercial capital greatly increases the velocity of return, not alone of agricultural capital, but of the industrial capital invested in the means of transportation. This increase in velocity of return implies increased efficiency; indeed it renders the round of coöperative activities possible. Without it, specialist production for sale at distant places, above all production for export, could not be effected on a scale of any magnitude. Not only does this application of commercial capital enable the farmer to sell his wheat for cash, it also enables him, if he wishes to do so, to borrow upon the security of his wheat and to keep it for an advance in price. This anticipated advance does not always occur; but in any case the farmer is not obliged, through the absence of such facilities, to sell his wheat at once for what it will fetch. Moreover, the extensive organization of credit in the western United States and in northwestern Canada and the competition of the numerous banks and financial companies enable the farmer to borrow at a rate of interest which cannot, as a rule, be regarded as exploitative.

The mechanism by means of which agricultural capital is raised by the farmer on the security of his land is provided by loan companies established for the purpose. These companies are so numerous that the business is competitive and the rates of interest are relatively low. The land itself is conveyed to the settler either on homestead terms or on credit on the installment plan, and his house is usually an inexpensive structure, so that nearly the whole of his liquid personal capital may be regarded as available as agricultural capital. Additional capital may sometimes be obtained by the farmer, either through credit extended by the agricultural implement makers or by means of the discount of the farmer's notes by them or by a bank.

The elevator companies that purchase the grain from the farmer and organize its transportation to the seaboard, and the merchants who organize its exportation, while having a certain amount of their own capital involved in their respective operations, draw upon the banks for most of their enormous requirements, thus interposing their credit while the capital is really furnished by the banks. Every year large amounts are withdrawn from their liquid funds by the banks in the United States

and in Canada and are devoted temporarily to the various operations which have been described and which are known collectively as "the movement of crops." Until a few years ago, a large amount of Canadian capital was employed in this way by the banks, in financing crop movements in the United States. At present, not only is a comparatively small amount of Canadian capital used in this way outside of Canada, but bankers in the United States lend large sums to elevator companies for the movement of the crops in Canada. As the population of the United States increases and the surplus of wheat for export from that country diminishes, there will doubtless be further competition of American with Canadian capital in the crop-moving operations in the more northerly country.

Thus the development of the universal wheat market and the internal commercialization of the financial and industrial operations which constitute crop movement have enormously increased the efficiency of agricultural capital and have enabled the farmer to conduct his business on a scale which, without these agencies, would be impossible. This gigantic mechanism has been built up gradually. Upon the smooth interaction of its intricate parts depends the "living" of the American and Canadian farmer and of the European consumer alike.

It is true, in a sense, that under this system the farmer works for the broker; and the farmer is no doubt sometimes under the impression that the whole of the difference between what the consumer pays and what he himself receives is so much taken out of his pocket by a group of remorseless capitalists, whose mere possession of money enables them to exploit the frugal but necessitous cultivator. While occasionally the state of the market may be such as to give at least an apparent advantage to the commercial capitalist, whose representative for the farmer is the elevator company to which he sells his wheat, this is not always the case, and in general the competition is so great that excessive commercial profits are very unusual. The Canadian farmer, who enjoys very great political influence, has been able, through the Grain Acts,¹ to protect himself against any

¹ Especially 63 and 64 Victoria, ch. 30, sec. 58.

overt forms of exploitation by the grain companies; but here as elsewhere the most effective check upon unfair charges is of course to be found in competition. The collection, transportation and distribution of wheat have come to be conducted on so vast a scale, demanding the industry of so immense an army of persons and employing so large a capital, that monopolization has in effect become impossible. The circumstance that a great mass of capital is required at a certain time for only temporary use renders the application of monopolistic methods more difficult than in other branches of business. Engrossing of wheat is indeed occasionally attempted upon a certain scale; and at moments when, owing to deficiency of crops or other cause, there is a relatively slender surplus of wheat, and still more when there is a real shortage, the first persons who apprehend the situation are not unlikely to benefit. The prospect of certain though relatively small seasonal gains has, however, undoubtedly been a more important influence in drawing into the wheat trade an amount large enough to conduct it upon its present scale than the prospect of large adventitious gains.

It should be noted that both farmers and millers may, and that very many of them do, speculate in their own or in other wheat. The farmer who stores his surplus grain instead of selling it speculates in it. The farmer who sells all his grain without retaining sufficient for seed speculates in it. The farmer who sells his grain in the face of an advancing market and buys grain for future delivery speculates in it. The miller who, after he has bought grain sufficient for his flour-milling requirements, sells grain for future delivery in order to protect himself against a falling price, so that should he lose upon flour he could recoup himself upon wheat, also speculates in wheat.

The fact that wheat is at any moment convertible into cash, its highly liquid character as a security, its great mobility and the rapidity of its movement depend primarily upon the universality of its market and in second instance upon the efficiency of the mechanism of its exchange. Speculation is probably quite inseparable from these conditions. If the speculative element were wholly eliminated from the wheat market, some

of the mobility which characterizes the system would inevitably be sacrificed.

The two factors that determine the price of wheat on the supply side are the crop, quantity and quality being taken into account, and the reserves from previous years. These together make up the total visible supply when the harvest of a new year is reaped. And, considering each year by itself, prices are relatively at their lowest point at the moment of harvesting, unless some climatic cataclysm suddenly affects the crop; and prices are relatively highest in the spring, when the demand for grain for seed and for consumption appear as concurrent phenomena.

Immediately after harvest, the alternative presented to the farmer and the contingencies which he must consider in solving his all-important problem may be stated as follows:

(1) If he sells his wheat at once to the elevator, he obtains immediate cash, a portion or all of which he needs to replace his impaired or exhausted agricultural capital or to repay advances of such capital.¹

(2) If he sells his wheat at once, he avoids the necessity of storing it. If he has a large barn he may regard this as an unimportant element; but, if he has a small barn or none at all, the cost of storage has to be considered. If he needs cash, he may store his grain and borrow upon it; but in that case the interest upon the loan must be taken into account in addition to the cost of storage.

(3) If he sells his wheat at once, he will under normal circumstances have to accept a lower price than he will receive later if he holds it and if the price pursues its customary fluctuations.

(4) If he holds his wheat, he takes the risk that the usual advance of the price in spring may not occur. Since the price is not determined exclusively by the supply of wheat in those countries in which the crop is reaped in precisely the same

¹ The elevator companies usually store wheat for thirty days free of charge, so that the farmer has this period wherein to make up his mind what to do. The farmer whose operations are conducted on any considerable scale, watches closely the movements of wheat-prices, sometimes having them telegraphed to him.

season of the year, and since the price is influenced by many factors other than those that operate on the side of supply, his calculations, however astute, may be upset, and he may secure no higher price than he would have obtained by an immediate sale.

(5) The special conditions of the grain trade in the Canadian Northwest involve further considerations. In order to procure rapid delivery of wheat for export, so that in transporting the crop full advantage may be taken of the relatively cheap water transit through the Great Lakes, the price of wheat is suddenly lowered towards the end of the season of water transportation, that is, in November. This drop in price is intended to offset the cost of storing the wheat at the ports or at interior points until the opening of the next season of navigation, or to make up the difference between the cost of moving the wheat wholly by rail and that of moving the wheat partly by water to the ocean port. The farmer must therefore consider the facts that in September he can get so much for his wheat, certainly; in November so much less, probably; and in May probably so much more, any profit realized in May being diminished by the cost of holding the grain throughout the winter. November and May sales are problematical as regards return. Nevertheless, considerable quantities of wheat in excess of those required for seed are customarily held over the winter by the Canadian farmers, either in the elevators or in their own barns. The mills in Winnipeg and the local mills are of course purchasers throughout the winter, unless they have fully stocked themselves before the winter sets in.

(6) A further consideration that influences sales of wheat is associated with the determination of quality. As a matter of experience the farmer is seldom satisfied with the grading of his wheat at the elevator. He customarily regards his grain as being all of "number one" quality. If it seems probable that it will not be so graded, he may decide to use it for feeding purposes for his animals, if he has any, rather than sell it for what he regards as too low a price.

Having considered the nature of the mechanism, we may now turn to the more important economic results of its operation.

II

The chief economic results of the development of specialist wheat production may be set forth as follows.

Railways have been built in advance of population into regions known or supposed to be possible wheat-producing areas. In such railway enterprises, even when population follows the railway and wheat production results, the traffic must for a long time be a one-way traffic, and the freight upon wheat must contribute at least a large percentage of the revenue of the line. This question of one-way traffic during the wheat-exporting season is a very serious one for the railway companies. Every year enormous numbers of cars must be concentrated in the West to meet the demands of the wheat traffic, and many of these must be sent empty. The regulation of railway rates and the sharpness with which discriminations are watched and punished in the United States and in Canada render it difficult for the railways to make concessions in order to secure traffic by inducing traders to anticipate their requirements; and the variability of the seasons renders it difficult to estimate, within a week or ten days, the date at which the cars will begin to be required.

The reason why the grain trade is so strictly a seasonal trade is that the most economical means of transport is partly by rail and partly by water. The freezing-up of the lake ports early in December and the closing of lake navigation places a limit upon the duration of the season. After the lake ports are closed, the grain can be carried to the seaboard only at an additional expense. Thus the season is a short one. Beginning in the first days of September, it practically ends, for the farmer, early in November; because a month before the actual close of navigation the elevator companies cease to buy for shipment in order to allow time for transportation to the ports and loading.

The increased production of wheat in new areas induces the provision of facilities other than those offered by the railways, *viz.* elevators, docks, steamships *etc.* Industrial and commercial capital is drawn into these enterprises also. The seasonal character of the grain trade exercises an important influence upon the movement of capital. There is, for example, at the

season of the movement of crops, a steady stream of commercial capital in the form of cash and credits from New York, Montreal and Toronto to the West, especially to Chicago and Winnipeg. This stream of funds has its source in European credits which begin to be created as soon as shipment of the crop begins. Regularly, although not quite invariably, exchange rises so high, in consequence of the creation of so great a mass of "one-way" credits, that gold is shipped from Europe in the "autumnal drain." It goes without saying that New York provides exchange for both the United States and Canada. The reactions upon the money markets of both continents need not be pursued in the present study.

The entrance of the new wheat into the universal market, unless it merely suffices to satisfy the increased demand due to the increase of population and the rising standard of comfort, must, other things being equal, contribute to the fall of price. This fall of price must in succeeding years tend to drive out of the market those producers who are unable to offer their wheat at the market price without loss. The value of the wheat lands of such producers must fall as wheat lands and they must be abandoned or devoted to other uses.¹

On the other hand, so long as the demand increases in proportion to or in excess of production, and the price is maintained or rises, the inducement to engage in specialist production of wheat, even on land relatively less suited to such production, is invincible. The farmer will usually cultivate the crop which is most immediately profitable. The value of land so situated that it can be used for the production of the profitable crop will tend to advance more or less rapidly. It will tend to increase sharply when transportation facilities first bring it within reach of the market, and it will tend to advance still further with the

¹ Thus the opening up of the wheat areas in the United States caused a fall in the value of agricultural land in England, and the opening up of the Northwest of Canada caused a fall in the value of agricultural land in Ontario. Even in Manitoba the value of farm lands has been affected by the development of Alberta and Saskatchewan. There can be no doubt that advance of the price of land in the United States, particularly in the Middle West, has been checked by the migration of American farmers to Canada.

development of contingent facilities until these are fully provided, after which it will tend to remain stationary.

The richer new lands, upon which wheat may be grown with a relatively small amount of labor and of agricultural capital, enjoy, so long as these conditions continue, an advantage. This advantage is further secured by the development of a financial mechanism which increases the velocity of the return of such agricultural capital as is employed and thereby increases its economic efficiency. The establishment of this mechanism for the marketing of wheat and the absence of any equally efficient arrangements for the marketing of other agricultural products, for which the demand is not so great or so universal, induces specialist production of wheat. This specialist production may be and often is carried so far that the wheat producer produces nothing else.¹

At the present time the specialist wheat farmer finds that by cultivating his land to the fullest extent he may in many cases obtain so high a return as entirely to recoup the cost of his land by the sale of two or three crops. Although the land is exhausted by this successive cropping, and its productive value seriously diminished, the farmer finds himself in possession of from 160 to 640 acres of land which have cost him almost nothing, in a country in which the price of land is rising rapidly. The successful practice of such "mining," as it has come to be called, is one of the elements to be taken into serious account in estimates of the future. So long as it is possible for the farmer to make a considerable sum of money in a few years and then to sell the partially exhausted land at a good price, recommendations of summer fallowing have little practical effect. In spite of the obvious and proved advantages of this system, summer fallowing, although it is increasing, is as yet ap-

¹ In Russia, the wheat farmer sells his wheat and buys potatoes and other food-stuffs relatively inferior. Cf. L. E. Lyatschenko, *Agrarian Evolution in Russia* (in Russian: St. Petersburg, 1908), vol. i, p. 401. In Saskatchewan the wheat farmer at Brandon sells his wheat and buys poultry and eggs brought from Ontario. I am informed, however, that, owing to the high prices prevailing in Ontario for these products, due partly no doubt to the extension of the area of the market, the farmers in the Northwest are turning their attention to the economy of producing them, at least in quantities sufficient for their domestic requirements.

plied in Canada to a comparatively small proportion of the total area devoted to wheat production. Meanwhile, the new lands are ceasing to be new, and the differential advantage which their inexhausted fertility gave them is diminishing. Lands which formerly produced abundant crops without the exercise of any considerable farming skill or the employment of any considerable farming capital are beginning to require both. The rôle played by the natural resources of the land itself is becoming less important and the rôle played by skill and capital more important. The effect of these changes upon the value of land, as well as upon the earnings of the farmer as cultivator, in distinction from his earnings as landowner, must be studied seriously in the immediate future.

In the preceding discussion the economic influence of climate has not been taken into account. This matter, indeed, cannot be considered apart from the question of skill and of capital. At times, no doubt, climatic cataclysms may involve skilled and unskilled, poor and wealthy farmers in common ruin; but the normal variations of climate affect these classes very unequally. The skilful farmer is not merely weatherwise; he knows how to adapt his system of cropping to the exigencies of the climate of his locality. But after all is said that may be said upon this topic, there remains the patent fact that the regions of equable climate are better suited to competitive farming than are those regions that are subject to great and severe alterations of temperature and of moisture. It is quite true that wheat and other cereals may be grown in very high latitudes, but it is not true that in these latitudes wheat is so certain a crop as it is in more southerly regions. If it is assumed that the demand for wheat will constantly increase, the area devoted to wheat production will tend to increase, up to the limits of physical availability and possible colonization. These limits may shift from time to time, but they are insuperable. Wheat will not grow everywhere and men will not live everywhere. As the price of wheat rises, the lands which have gone out of wheat cultivation owing to the fall of price may return to it; and thus it may reasonably be expected that, at some point in the price scale, the lands of western Europe will return to the competitive market as wheat pro-

ducers and help to check the advance of price. This resumption of wheat growing will occur first on the lands that are on the margin of cultivation, whether by reason of fertility or because of nearness to markets.

Specialist farming of wheat involves, among other economic incidents, the employment during harvest of a number of laborers in excess of those needed during the remainder of the year. It is clear that such temporary labor can be procured only when there is a surplus of labor in the neighborhood or when the wages offered by farmers are such as to draw laborers from other employments or from a distance. If laborers are to be drawn from a distant center of supply, the wages must include the cost of transportation; and since in this case the labor is required for a short period only, and since as a rule employment cannot be obtained in an agricultural district after the harvest is over, the wages must also include the cost of the laborer's return to the place from which he came. Such conditions have for many years produced an annual migration of Italian field laborers from Lombardy and Piedmont to southern France and of North-Irish laborers to the southern Scottish counties. In Canada also, during recent years, regular harvesters' excursions at reduced fares have been organized by the railways, bringing laborers even from the Maritime Provinces to harvest the crop in the Northwest. Such occurrences emphasize the obvious fact that the total crop of wheat that can be harvested in any region is limited by the number of laborers who reside in the region or who can be temporarily drawn to it for the period of harvesting. The increase in the total yield must therefore inevitably depend upon an increase of population within the farming area, or upon a price so high that the farmers can afford to pay very high wages for assistance drawn from other areas.

A further and important effect of specialist wheat production for export has been the growth of small towns and of a class of small merchants. The census returns both of the United States and of Canada show a progressive increase in the proportion of urban to rural population. This is a tendency neither new nor confined to wheat-producing regions; but specialist wheat pro-

duction certainly furthers it. Under a system of nat- on-
omy, isolation on the farm or in the agricultural villa the
rule; under the system in which production of a sing ple
is carried on for sale and in which everything else he
farmer consumes is purchased by him, the rise of all
town, parasitically attached, as it were, to the agric dis-
trict, is an economic necessity. Here the farmer who in his
attention to general production gains in the establish ment of
local market. He gains also in variety of social su oundin
and his children enjoy educational advantages which cannot
without disproportionate cost be obtained in sparsely settle
districts.

The practical outcome of the foregoing con- rations
be stated as follows: The specialist wheat farmer who is
cultivating new land must consider that, in the highly compet
market for which he is producing, his rich soil gives him
time a certain advantage, but that this advantage is not per-
nent, and that he should insure himself against fluctuation of
prices and variation of climatic conditions by setting a por-
tion of his farming profits aside as a reserve fund. There is special
reason for so doing if his locality is one in which climatic varia-
tions are more or less frequent. The specialist wheat farmer
who cultivates in a high latitude or in a dry region must there-
fore provide for the continuance of his productive capacity by
the creation of a strong insurance fund out of the yield of favor-
able years. The increase of the local valuation of his land does
not constitute such a fund; for this increase is uncertain of re-
alization, and it depends upon the non-occurrence of the very
contingencies against which it is necessary for him to secure
himself. The form which this insurance should take may well
be subject to variation, but it is not impossible that the farmer
may find it to his advantage to give it an agricultural form by
introducing some modification of his specialist production.

Some sort of insurance against falling prices is no less neces-
sary than insurance against an unfavorable season. The special-
ist farmer is so entirely dependent upon the price of his pro-
duct in the universal market that whatever affects that price

affects him; and yet he has no more control of the market than of the weather.

III

Part of the price which the farmer has to pay for the huge commercial mechanism which has brought the elevator to his immediate neighborhood, and which brings the cash for his wheat into his pocket the moment his crop is reaped, is a certain sacrifice of his independence. Formally, with his farm homesteaded and paid for, or purchased upon fixed terms of payment, he is the proprietor of his land in fee simple and is therefore in a sense independent, but he is nevertheless dependent upon the very mechanism which serves him. The price of wheat at Liverpool or at Chicago is of more interest to him than anything else. The quantity of his crop and his yield per acre are of less importance; for in a year of abundant harvests and low prices he may have a small return, and in a year of scarcity and high prices he may have a large return. His fortunes thus depend by no means exclusively either upon the natural resources of his land or upon his own skill or industry, although of course they depend in some measure upon all of these. The only method by which, within the limits of his business as a farmer, he can diminish his dependence upon the external conditions that affect his market, is to produce for more than one market, that is, to have more crops than one. At all events, he can to a large extent insure himself against a disastrous year by producing all the supplies required for the maintenance of his family that can be produced on a farm. In favorable seasons it may appear to be an economical policy to sell everything he produces and to buy everything he needs, but in the long run he may find that this policy may be pushed too far, and that in committing himself completely to the tender mercies of the wheat market he has compromised his economic position and has imperiled the continuance of his production.

In spite of mutual dependence, a struggle between industrial and commercial capital on the one side and agricultural capital on the other must always be going on in a more or less acute form under the conditions of specialist production. In the United

States and in the Northwest of Canada this antagonism has manifested itself in the Granger and Populist movements and in hostility to the railways and elevator companies. The farmer has had enough political power to secure legislative aid, and in Canada the Grain Acts were passed, compelling the railway companies to send to any railway siding for the use of a farmer a car for loading grain. Much objection was expressed by the railway companies to this legislation; and in certain years, when cars were in demand, it has increased the difficulty of conveying the crop to the lake ports before the close of navigation.

The farmer looks upon the railway company and the elevator company as his natural enemies, and there is undoubtedly fundamental cause for the struggle between them. This struggle is determined in its intensity by the presence or absence of obvious competition in transportation and in marketing; but the antagonism is rendered inevitable by the dependence of the specialist producer upon the agencies that carry his produce to market. He is inevitably dependent upon the series of middlemen who stand and must stand between him and the European consumer. The production of wheat for export, which forms an increasing proportion of the total production, and the commercialization of the entire process are at once the source of the farmer's profit and the cause of an economic dependence from which no legislation can fully free him. So long as the production of wheat was only slightly in excess of the requirements of the local mills, and even during the periods when this production was only slightly in excess of the requirements of Canada for domestic consumption, the competition of the local mills and of the agencies of export was sufficient to secure the farmer against exploitation by one or the other. This security, however, did not necessarily involve greater profits to the farmer; on the contrary, his periods of large profits have undoubtedly been concurrent with the diminishing importance of his local market and the increasing requirements of the export market.

JAMES MAVOR.



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