The Enclosures in England an Economic Reconstruction

Harriett Bradley

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email: batoche@gto.net

It fareth with the earth as with other creatures that through continual labour grow faint and feeble-hearted."

From speech made in the House of Commons, 1597.

To Emilie Louise Wells

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Introduction

The enclosure movement—the process by which the common-field system was broken down and replaced by a system of unrestricted private use—involved economic and social changes which make it one of the important subjects in English economic history. When it began, the arable fields of a community lay divided in a multitude of strips separated from each other only by borders of unplowed turf. Each landholder was in possession of a number of these strips, widely separated from each other, and scattered all over the open fields, so that he had a share in each of the various grades of land. But his private use of the land was restricted to the period when it was being prepared for crop or was under crop. After harvest the land was grazed in common by the village flocks; and each year a half or a third of the land was not plowed at all, but lay fallow and formed part of the common pasture. Under this system there was no opportunity for individual initiative in varying the rotation of crops or the dates of plowing and seed time; the use of the land in common for a part of the time restricted its use even during the time when it was not in common. The process by which this system was replaced by modern private ownership with unrestricted individual use is called the enclosure movement, because it involved the rearrangement of holdings into separate, compact plots, divided from each other by enclosing hedges and ditches. The most notable feature of this process is the conversion of the open fields into sheep pasture. This involved the eviction of the tenants who had been engaged in cultivating these fields and the amalgamation of many holdings of arable to form a few large enclosures for sheep. The enclosure movement was not merely the displacement of one system of tillage by another system of tillage; it involved the temporary displacement of tillage itself in favor of grazing.

In this monograph two things are undertaken: first, an analysis of the usually accepted version of the enclosure movement in the light of contemporary evidence; and, secondly, the presentation of another account of the nature and causes of the movement, consistent with itself and with the available evidence. The popular account of the enclosure movement turns upon a supposed advance in the price of wool, due to the expansion of the woollen industry in the fifteenth and sixteenth centuries. Landlords at this period (we are told) were increasingly eager for pecuniary gain and, because of the greater profit to be made from grazing, were willing to evict the tenants on their land and convert the arable fields to sheep pasture. About the end of the sixteenth century, it is said, this first enclosure movement came to an end, for there are evidences of the reconversion of pastures formerly laid to grass. An inquiry into the evidence shows that the price of wool fell during the fifteenth century and failed to rise as rapidly as that of wheat during the sixteenth century. Moreover, the conversion of arable land to pasture did not cease when the contrary process set in, but continued throughout the seventeenth century with apparently unabated vigor. These facts make it impossible to accept the current theory of the enclosure movement.

There is, on the other hand, abundant evidence that the fertility of much of the common-field land had been exhausted by centuries of cultivation. Some of it was allowed to run to waste; some was laid to grass, enclosed, and used as pasture. Productivity was gradually restored after some years of rest, and it became possible to resume cultivation. The enclosure

movement is explained not by a change in the price of wool, but by the gradual loss of productivity of common-field land.

This explanation is not made here for the first time. It is advanced in Denton's *England in the Fifteenth Century*² and Gardiner, in his *Student's History of England*, accepts it. Prothero⁴ and Gonner⁵ give it some place in their works. Dr. Simkhovitch, at whose suggestion this inquiry was undertaken, has for some time been of the opinion that deterioration of the soil was the fundamental cause of the displacement of arable farming by grazing. This explanation, however, stands at the present time as an unverified hypothesis, which has been specifically rejected by Gibbins, in his widely used text-book, and by Hasbach, who objects that Denton does not prove his case. In this respect the theory is no more to be criticised than the theory which these authorities accept, for that does not rest upon proof, but upon the prestige gained through frequent repetition. But the matter need not rest here. It is unnecessary to accept any hypothetical account of events which are, after all, comparatively recent, and for which the evidence is available.

Of the various sources accessible for the study of the English enclosure movement, one type only has been extensively used by historians. The whole story of this movement as it is usually told is based upon tracts, sermons, verses, proclamations, etc. of the sixteenth century—upon the literature of protest called forth by the social distress caused by enclosure. Until very recently the similar literature of the seventeenth century has been neglected, although it destroys the basis of assumptions which are fundamental to the orthodox account of the movement. Much of significance even in the literature of the sixteenth century has been passed over—notably certain striking passages in statutes of the latter half of the century, and in books on husbandry of the first half. Details of manorial history derived from the account rolls of the manors themselves, and contemporary manorial maps and surveys, as well as the records of the actual market prices of grain and wool, have been ignored in the construction of an hypothetical account of the movement which breaks down whenever verification by contemporary evidence is attempted.

The evidence is in many respects imperfect. It would be of great value, for instance, to have access to records of grain production over an area extensive enough, and for a long enough period, to furnish reliable statistical indications of the trend of productivity. It would be helpful to have exact information about the amount of land converted from arable to pasture in each decade of the period under consideration, and to know to what extent and at what dates land was reconverted to tillage after having been laid to grass. There are no records to supply most of this information. It is possible that the materials for a statistical study of soil productivity are in existence, but up to the present time they have not been published, and it is doubtful if this deficiency will be supplied. It is even more doubtful whether more can be learned about the rate of conversion of arable land to pasture than is now known, and this is little. Professor Gay has made a careful study of the evidence on this question, and has analysed the reports of the government commissions for enforcing the husbandry statutes before 1600,9 and Miss Leonard has made the returns of the commission of 1630 for Leicestershire available. The conditions under which these commissions

worked make the returns somewhat unreliable even for the years covered by their reports, and much interpolation is necessary, as there are serious gaps in the series of years for which returns are made. For dates outside of the period 1485–1630 we must rely entirely on literary references. Unsatisfactory as our statistical information is on this important question, it is far more complete than the evidence on the subject of the reconversion to tillage of arable land which had been turned into pasture.

It is to the unfortunate social consequences of enclosure that we owe the abundance of historical material on this subject. Undoubtedly much land was converted to pasture in a piece-meal fashion, as small holders saw the possibility of making the change quietly, and without disturbing the rest of the community. If enclosure had taken no other form than this, no storm of public protest would have risen, to express itself in pamphlets, sermons, statutes and government reports. Enclosure on a large scale involved dispossession of the inhabitants, and a complete break with traditional usage. For this reason the literature of the subject is abundant. When, however, the process was reversed, and the land again brought under cultivation, there was involved no interference with the rights of common holders. It was to the interest of no one to oppose this change, and no protest was made to call the attention of the historian to what was being done. References to the process are numerous enough only to prove that reconversion of land formerly laid to grass took place during the fifteenth, sixteenth, and seventeenth centuries—to an extent of which not even an approximate estimate can be made.

Imperfect as the evidence is from some points of view, it is nevertheless complete for the purposes of this monograph. It would be impossible, with the material at hand, to reconstruct the progress of the enclosure movement, decade by decade, and county by county, throughout England. My intention, however, it not so much to describe the movement in detail as it is to give a consistent account of its nature and causes. Even a few sixteenth-century instances of the plowing up of pasture land should be enough to arrest the attention of historians who believe that the conversion of arable land to pasture during this period is sufficiently explained by an assertion that the price of wool was high. What especial circumstances made it advantageous to cultivate land which had been under grass, while other land was being withdrawn from cultivation? Contemporary writers speak of the need of worn land for rest for a long period of years, and remark that it will bear well again at the end of the period. Evidence such as this is significant without the further information which would enable us to estimate the amount of land affected. For our purposes, also, the notice of enclosure of arable land for pasture on one group of manors in the early thirteenth century is important as an indication that the fundamental cause of the enclosure movement was at work long before the Black Death, which is usually taken as the event in which the movement had its beginning. Low rents, pauperism, and abandonment of land are facts which indicate declining productivity of the soil, and statistical records of the harvests reaped are not needed when statutes, proclamations, and books of husbandry describe the exhausted condition of the common fields. The fact that the enclosure movement continued vigorously in the seventeenth century is conclusively established, and when this fact is known the

impossibility of estimating the comparative rate of progress of the movement in the preceding century is of no importance. Upon one point at least, the evidence is almost all that could be desired. The material for a comparison of the prices of wheat and wool throughout the most critical portion of the period has been made accessible by Thorold Rogers. It is to this material that the defenders of the theory that enclosures are explained by the price of wool should turn, for they will find a fall of price where they assume that a rise took place. Instead of an increase in the supply of wool due to a rise in its price, there is indicated a fall in the price of wool due to an increase in the supply. The cause of the increase of the supply of wool must be sought outside of the price conditions.

Acknowledgment should here be made of my indebtedness to Dr. V. G. Simkhovitch of Columbia University, without whose generous help this study would not have been planned, and whose criticism and advice have been invaluable in bringing it to completion. Professor Seager also has given helpful criticism. Professor Seligman has allowed me the use of books from his library which I should otherwise have been unable to obtain. For material which could not be found in American libraries I am indebted to my mother and father, who obtained it for me in England.

Chapter I: The Price of Wool

The generally accepted version of the enclosure movement turns upon supposed changes in the relative prices of wool and grain. The conversion of arable land to pasture in the fifteenth and sixteenth centuries is accounted for by the hypothesis that the price of wool was rising more rapidly than that of grain. The beginning of the enclosure movement, according to this theory, dates from the time when a rise in the price of wool became marked, and the movement ended when there was a relative rise in the price of agricultural products. Before the price of wool began to rise, it is supposed that tillage was profitable enough, and that nothing but the higher profits to be made from grazing induced landholders to abandon agriculture. The agrarian readjustments of the fourteenth century are regarded as due simply to the temporary shortage of labor caused by the Black Death. High wages at this time caused the conversion of some land to pasture, according to the orthodox theory, and from time to time during the next two centuries high wages were a contributing factor influencing the withdrawal of land from tillage; but the great and effective cause of the enclosure movement, the one fundamental fact which is insisted upon, is that constant advances in the price of wool made grazing relatively profitable. It is usually accepted without debate that the withdrawal of arable land from tillage did not begin until after the Black Death, that the enclosures of the fifteenth and sixteenth centuries were caused by a rise in the price of wool, and that the conversion of arable land to pasture ceased when this cause ceased to operate.

Against this general explanation of the enclosure movement, it is urged, first, that the withdrawal of land from cultivation began long before the date at which the enclosure movement, caused by an alleged rise in the price of wool, is ordinarily said to have begun. The fourteenth century was marked by agrarian readjustments which have a direct relation to the enclosure movement, and which cannot be explained by the Black Death or the price

of wool. Even in the thirteenth century the causes leading to the enclosure movement were well marked. Secondly, the cause of the substitution of sheep-farming for agriculture in the fifteenth and sixteenth centuries cannot have been a rise in the price of wool relatively to that of grain, because statistics show that the price of wool fell during the fifteenth century, and failed to rise as rapidly as that of wheat in the sixteenth century. Thirdly, a mere comparison of the relative prices of grazing and agricultural products cannot explain the fact that conversion of open-field land to pasture continued throughout the seventeenth century in spite of prices which made it profitable for landowners at the same time to convert a large amount of grass-land to tillage, including enclosures which had formerly been taken from the common fields. If these facts are accepted the explanation of the enclosure movement which is based upon a comparison of the prices of wheat and wool must be rejected, and the story must be told from a different point of view.

Taking up these points in order, we shall inquire first into the causes of the agrarian readjustments of the fourteenth century. A generation after the Black Death, the commutation of villain services and the introduction of the leasehold system had made notable progress. The leasing of the demesne has been attributed to the direct influence of the pestilence, which by reducing the serf population made it impossible to secure enough villain labor to cultivate the lord's land. The substitution of money rents in place of the labor services owed by the villains has been explained on the supposition that the serfs who had survived the pestilence took advantage of the opportunity afforded by their reduction in numbers to free themselves from servile labor and thus improve their social status. The connection between the Black Death and the changes in manorial management which are usually attributed to it could be more convincingly established had not several decades elapsed after the Black Death before these changes became marked. A recent intensive study of the manors of the Bishopric of Winchester during this period confirms the view of those who have protested against assigning to the Black Death the revolutionary importance which is given it by many historians. On these estates the Black Death "produced severe evanescent effects and temporary changes, with a rapid return to the status quo of 1348."11 The great changes which are usually attributed to the plague of 1348–1350 were under way before 1348, and were not greatly accelerated until 1360, possibly not before 1370, and cannot, therefore, have been due to the Black Death.

Levett and Ballard devote especial attention to the effect of the Black Death upon the substitution of money payments for labor services and rents in kind, but their study also brings out the fact that the difficulty in persuading tenants to take up land on the old terms (usually ascribed to the Black Death) began before the pestilence, and continued long after its effects had ceased to exert any influence. Before the Black Death landowners were unable to secure holders for bond land without the use of force. A generation after the Black Death they were still contending with this problem, and it had become more serious than at any previous time. Whatever the significance of the Black Death, it must not be advanced as the explanation of a condition which arose before its occurrence, nor of events which took place long after its effects were forgotten. One result of the pestilence was, indeed, to place villains

in a stronger position than before, but the changes which took place on this account must not be allowed to obscure the fact that landowners were already facing serious difficulties before 1348. Holders of land were already deserting, and the tenements of those who died or deserted could frequently be filled only by compulsion. Villains were refusing to perform their services on account of poverty, and they were already securing reductions in their rents and services. The temporary reduction of the population by the Black Death has been advanced as the reason for the ability of the villains of the decade 1350-1360 to enforce their demands; but without the help of any such cause, villains of an earlier period were obtaining concessions from their lords, and after the natural growth of the population had had ample time to replace those who had died of the pestilence, the villains were in a stronger position than ever before, if we are to estimate their strength by their success in lightening their economic burdens. The Black Death at the most did no more than accelerate changes in the tenure of land which were already under way. Villain services were being reduced, and the size of villain holdings increased. The strength of the position of the serfs lay not so much in the absence of competition due to a temporary reduction in their numbers as in their poverty. Tenants could not be held at the accustomed rents and services because it was impossible to make a living from their holdings. The absence of competition for holdings was no temporary thing, due to the high mortality of the years 1348–1350, but was chronic, and was based upon the worthlessness of the land. The vacant tenements of the fourteenth century, the reduction in the area of demesne land planted, the complaints that no profit could be made from tillage, the reduction of rents on account of the poverty of whole villages, all point in the same direction. These matters will be taken up more fully in a later chapter. Here it need only be pointed out that the withdrawal of land from cultivation was under way because tillage was unprofitable.

If tillage was unprofitable in the fourteenth century, so unprofitable that heirs were anxious to buy themselves free of the obligation to enter upon their inheritance, while established landholders deserted their tenements, the enclosure of arable land for pasture in the fifteenth century is seen in a new light. When there was no question of desiring the land for sheep pasture, it was voluntarily abandoned by cultivators. Displacement of tillage due to an internal cause precedes displacement of tillage for sheep pasture. The process of withdrawing land from cultivation began independently of the scarcity of labor caused by the Black Death and independently of any change in the price of wool; the continuation of this process in the fifteenth century is not likely to depend entirely upon a rise in the price of wool. That the enclosures of the fifteenth century were in reality merely a further step in the readjustments under way in the fourteenth century cannot be doubted. And that the whole process was independent of the especial external influence upon agriculture exerted in the fourteenth century by the Black Death and in the fifteenth and sixteenth centuries by the growth of the woollen industry is shown in the case of a group of manors where the essential features of the enclosure movement appeared in the thirteenth century. More than a hundred years before the Black Death the Lord of Berkeley found it impossible to obtain tenants for bond land at the accustomed rents. Villains were giving up their holdings because they could not pay the rent and perform the services. The land which had in earlier times been sufficient for the maintenance of a villain and his family and had produced a surplus for rent had lost its fertility, and the holdings fell vacant. The land which reverted to the lord on this account was split up and leased at nominal rents, when leaseholders could be found, just as so much land was leased at reduced rents by landowners generally in the fourteenth century. Moreover, some of the land was unfit for cultivation at all and was converted to pasture under the direction of the lord.¹²

If the disintegration of manorial organization observed in the fourteenth century and earlier was not due to the Black Death; if this disintegration was under way before the pestilence reduced the population, and was not checked when the ravages of the plague had been made good; if tillage was already unprofitable before the fifteenth century with its growth of the woollen industry; and if land was being converted to pasture at a time when neither the price of wool nor the Black Death can be offered as the explanation of this conversion; then there is suggested the possibility that the whole enclosure movement can be sufficiently accounted for without especial reference to the prices of wool and grain. If the enclosure movement began before the fifteenth century and originated in causes other than the Black Death, the discovery of these original causes may also furnish the explanation of the continuance of the movement in the fifteenth and sixteenth centuries. The amount of land under cultivation was being reduced before the date at which the price of wool is supposed to have risen sufficiently to displace agriculture for the sake of wool growing, and this early reduction in the arable cannot, clearly, be accounted for by reference to the prices of wool and grain. But it also happens that, in the very period when an increase in the demand for wool is usually alleged as the cause of the enclosures, the price of wool fell relatively to that of grain. The increase in sheep-farming in the fifteenth and sixteenth

 $\begin{tabular}{ll} TABLE\ I \\ PRICES\ OF\ WHEAT\ AND\ WOOL,\ 1261-1582.\ \ DECENNIAL\ AVERAGES \\ \end{tabular}$

	Wheat, per	W	ool, per		Whea	t, per	Woo	ol, per
	quarter	t	od (28 <i>lbs</i> .)		quai	rter		tod
	s d	s.	d.		S.	d.	s.	d.
1261-1270.	4 8 5/8	9	_	1421-1430.	. 5	43/4	7	$5\frac{1}{2}$
1271–1280.	5 73/4	9	2	1431-1440	6	11	5	9
1281-1290.	5 0 7/8	8	10	1441-1450.	. 5	53/4	4	$10\frac{1}{2}$
1291-1300.	6 1 1/8	7	10	1451-1460.	. 5	$6\frac{1}{2}$	4	33/4
1301-1310.	5 71/4	9	_	1461-1470.	5	$4\frac{1}{2}$	4	111/2
1311-1320.	7 101/4	9	11	1471-1480.	5	41/4	5	4
1321-1330.	6 11 5/8	9	7	1481-1490	. 6	31/2	4	81/2
1331-1340.	4 83/4	7	3	1491-1500.	5	03/4	6	$0\frac{1}{2}$
1341-1350.	5 3 1/8	6	10	1501-1510.	5	$5\frac{1}{2}$	4	53/4
1351-1360.	6 10 5/8	6	7	1511-1520.	6	83/4	6	71/4
1361-1370.	7 31/4	9	3	1521-1530.	7	6	5	$4\frac{1}{4}$
1371-1380.	6 11/4	10	11	1531-1540.	7	81/2	6	83/4
1381-1300.	5 2	8	_	1541-1550.	10	8	20	8

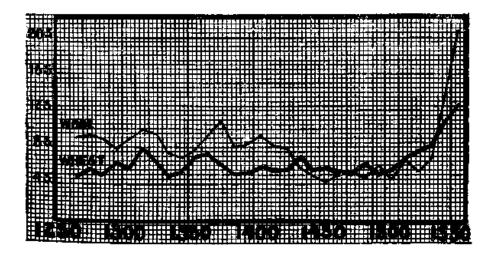
1391-1400.	5	3	8	4	1551-1560	13	33/4	15	8
1401-1410.	5	81/4	9	21/2	1561-1570.	12	101/4	16	_
1411-1420.	5	$6\frac{3}{4}$	7	81/4	1571-1582.	. 16	8	17	_

centuries, together with the fact that the domestic cloth manufacture was being improved at this time, has been the basis of the assumption that the price of wool was rising. The causal sequence has been supposed to be: (1) an increase in the manufacture of woollens; (2) an increase in the demand for wool; (3) an increase in the price of wool; (4) an increase in woolgrowing at the expense of tillage, and the enclosure of common lands. If, as a matter of fact, the price of wool fell during this period, the causal sequence is reversed. If the price of wool fell, the increase in the manufacture of woollens has no relation to the enclosure movement, unless it is its result, and we are forced to look elsewhere for the cause of the increase of sheep-farming.

TABLE II
PRICES OF WHEAT AND WOOL. LONG PERIOD AVERAGES

	Wheat, per			Wool, per		
Date	qu	arter		t	od	
	s.	d.		S.	d.	
1261-1400	5	11		8	7	
1351-1400	6	13/4		8	7	
1401-1460	5	9		6	21/2	
1461-1500	5	$6\frac{1}{2}$		5	3	
1501–1540	6	101/4		5	91/2	

The accompanying tables and chart, showing the changes in the price of wool and of wheat from the middle of the thirteenth century through the first quarter of the sixteenth century, have been prepared from the materials given by Thorold Rogers in his *History of Agriculture and Prices in England*. ¹³ The averages given in his tables are based upon records of actual sales. They furnish, therefore, the exact information needed in connection with the theory that a rise in the price of wool relatively to that of wheat was the cause of the enclosure movement in England. In the century and a half before 1400, there were wide fluctuations in the prices of both commodities, but the price of wool rose and fell with that of wheat. The first quarter of the fourteenth century was a period of falling prices. The fall continued in the case of wool until about the middle of the century, when a recovery began, culminating about 1380. A rise in the price of wheat occurred sooner than that of wool and reached its climax about 1375. In the last quarter of the century the prices of both wool and wheat fell, with a slight recovery in the last decade of the century.



After 1400 the price of wheat held at about the average price of the previous period, but for sixty years the price of wool fell, without a check in its downward movement. It is in this period that the woollen industry entered upon the period of expansion which is supposed to have been the cause of the enclosure movement, but there was no rise in the price of wool. Instead, there was a decided fall. ¹⁴ The average price for the decade 1451–1460 was just about one-half of the average price for the period 1261–1400. (The average price of wool in the last fifty years of the fourteenth century happens to be the same as the average for the period 1261–1400. Either the longer or the shorter period may be used indifferently as the basis for comparison). The average price for the period 1401–1460 was 25 per cent lower than the average for the preceding half-century. A comparatively slight depression in the price of wheat in the same period is shown in the tables. The average for 1401–1461 is only three per cent lower than that for 1265–1400 (seven per cent lower than the average for 1351-1400). Before 1460, then, there was nothing in market conditions to favor the extension of sheep farming, but there is reason to believe that the withdrawal of land from tillage had already begun. Leaving aside the enclosure and conversion of common-field land by the Berkeleys in the thirteenth century, we may yet note that 'An early complaint of illegal enclosure occurs in 1414 where the inhabitants of Parleton and Ragenell in Notts petition against Richard Stanhope, who had inclosed the lands there by force of arms." Miss Leonard, who is authority for this statement, also refers to the statute of 1402 in which "depopulatores agrorum" are mentioned. 15 In a grant of Edward V the complaint is made that "this body falleth daily to decay by closures and emparking, by driving away of tenants and letting down of tenantries."16 It is strange, if these enclosures are to be explained by increasing demand for wool, that this heightened demand was not already reflected in rising prices.

But, it may be urged, the true enclosure movement did not begin until after 1460. If a marked rise in the price of wool occurred after 1460, it might be argued that enclosures spread and the price of wool rose together, and that the latter was the cause of the former. Turning again to the record of prices, we see that although the low level of the decade 1451-1460 marks the end of the period of falling prices, no rise took place for several decades after 1460. Rous gives a list of 54 places "which, within a circuit of thirteen miles about Warwick had been wholly or partially depopulated before about 1486."¹⁷ Two or three years later acts were passed against depopulation in whose preambles the agrarian situation is described: The Isle of Wight "is late decayed of people, by reason that many townes and vilages been lete downe and the feldes dyked and made pastures for bestis and cattalles." In other parts of England there is "desolacion and pulling downe and wylfull wast of houses and towns... and leying to pasture londes whiche custumably haue ben used in tylthe, wherby ydlenesse is growde and begynnyng of all myschevous dayly doth encrease. For where in some townes ii hundred persones were occupied and lived by their lawfull labours, now ben there occupied ii or iii herdemen, and the residue falle in ydlenes." It may be remarked that while the price records show conclusively that no rise in the profits of wool-growing caused these enclosures, the language of the statutes shows also that scarcity of labor was not their cause, since one of the chief objections to the increase of pasture is the unemployment caused.

It would seem hardly necessary to push the comparison of the prices of wool and wheat beyond 1490. In order to establish the contention that the enclosure movement was caused by an advance in the price of wool, it would be necessary to show that this, advance took place before the date at which the enclosure problem had become so serious as to be the subject of legislation. By 1490 statesmen were already alarmed at the progress made by enclosure. The movement was well under way. Yet it has been shown that the price of wool had been falling for over a century, instead of rising, and that the price of wheat held its own. Even if it could be established that the price of wheat fell as compared with that of wool after this date, the usually accepted version of the enclosure movement would still be inadequate. But as a matter of fact the price of wheat rose steadily after 1490, reaching a higher average in each succeeding decade, while the price of wool wavered about an average which rose very slowly until 1535. The entries on which these wool averages are based are few, and greater uncertainty therefore attaches to their representativeness than in the case of the prices of earlier decades, but the evidence, such as it is, points to a more rapid rise in the price of wheat than in the price of wool. Between 1500 and 1540 the average price of wheat was nearly 24 per cent above that of the previous forty years, but the average price of wool rose only ten per cent. There are only nine entries of wool prices for the forty-six years after 1536, but these are enough to show that the price of wool, like that of wheat and all other commodities, was rising rapidly at this time. The lack of material upon which to base a comparison of the actual rate of increase of price for the two commodities makes further statistical analysis impossible, but a knowledge of prices after the date at which the material ceases would add nothing to the evidence on the subject under consideration.

Sir Thomas More's *Utopia* was written in 1516, with its well-known passage describing contemporary enclosures in terms similar to those used in the statutes of thirty years before, and complaining that the sheep

that were wont to be so meke and tame, and so smal eaters, now, as I heare saye, be become so great devowerers and so wylde, that they eate up, and swallow downe the very men them selfes. They consume, destroye, and devoure whole fields, howses, and cities. For looke in what partes of the realme doth growe the fynest, and therfore dearest woll, there noblemen, and gentlemen: yea and certeyn Abbottes... leave no grounde for tillage, thei inclose al into pastures: thei throw doune houses: they plucke downe townes, and leave nothing standynge, but only the churche to be made a shepehowse. ¹⁹

These enclosures were not caused by an advance in the price of wool relatively to that of wheat, as the rise in the price of wool in the decade 1510–1520 was no greater than that of corn. Nor does sheep farming seem to have been especially profitable at this time, as More himself attributes the high price of wool in part to a "pestiferous morrein." Again, the complaint is also made that unemployment was caused, showing that scarcity of labor was not the reason for the conversion of arable to pasture:

The husbandmen be thrust owte of their owne,... whom no man wyl set a worke, though thei never so willyngly profre themselves therto. For one Shephearde or Heardman is ynoughe to eate up that grounde with cattel, to the occupiyng wherof aboute husbandrye manye handes were requisite.²⁰

In 1514 a new husbandry statute was passed, penalising the conversion of tillage to pasture, and requiring the restoration of the land to tillage. It was repeated and made perpetual in the following year. In 1517 a commission was ordered to enquire into the destruction of houses since 1488 and the conversion of arable to pasture. In 1518 a fresh commission was issued and the prosecution of offenders was begun. These facts are cited as a further reminder of the fact that the period for which the prices of wool and wheat are both known is the critical period in the enclosure movement. It is the enclosures covered by these acts and those referred to by Sir Thomas More which historians have explained by alleging that the price of wool was high. As a matter of record, the course of prices was such as to encourage the extension of tillage rather than of pasture.

After an examination of these price statistics it hardly seems necessary to advance further objections to the accepted account of the enclosure movement, based as it is upon the assumption that price movements in the fifteenth and sixteenth centuries were exactly opposite to those which have been shown to take place. There is no reason to doubt the accuracy of Rogers' figures within the limits required for our purpose, and the evidence based on these figures is in itself conclusive. Even without this evidence, however, there is sufficient reason for rejecting the theory that changes in the prices of grain and wool account

for the facts of the enclosure movement. For one thing, if the price of wool actually did rise (in spite of the statistical evidence to the contrary) and if this is actually the cause of the enclosure movement, the movement should have come to an end when sufficient time had elapsed for an adjustment of the wool supply to the increasing demand. If the movement did not come to an end within a reasonable period, there would be reason for suspecting the adequacy of the explanation advanced. As a matter of fact, it is usually thought that the enclosure movement did end about 1600. Much land which had not been affected by the changes of the fifteenth and sixteenth centuries (it is usually asserted) escaped enclosure altogether until the need for better agriculture in the eighteenth century ushered in the socalled second enclosure movement, which did not involve the conversion of tilled land to pasture. This alleged check in the progress of the enclosure movement is inferred from the fact that new land, and even some of the land formerly withdrawn from the common-fields to be converted to pasture, was being tilled. This is interpreted by economic historians as evidence that arable land was no longer being converted to pasture. We are told by Meredith, for instance, that "Moneyed men at the end of Elizabeth's reign were beginning to find it profitable-to sink money in arable farming, a fact which points to the conclusion that there was no longer any differential advantage in sheep-raising."²¹ Cunningham is also of the opinion that "So far as such a movement can be definitely dated, it may be said that enclosure for the sake of increasing sheep-farming almost entirely ceased with the reign of Elizabeth."²² Innes gives as the cause of this supposed check in the reduction of arable land to pasture that "The expansion of pasturage appears to have reached the limit beyond which it would have ceased to be profitable."23 It is indeed reasonable that the high prices which are supposed to have been the cause of the sudden increase in wool production should be gradually lowered as the supply increased, and that thus the inducement to the conversion of arable to pasture would in time disappear. The theory that the enclosure movement was due to an increase in the price of wool would be seriously weakened if the movement continued for a time longer than that required to bring about an adjustment of the supply to the increased demand.

For the sake of consistency, then, this point in the account of the enclosure movement is necessary. It would follow naturally from the original explanation of the movement as the response to an increased demand for wool, as reflected in high prices. With the decrease in prices to be expected as the supply increased, the incentive for converting arable to pasture would be removed. Historians sometimes speak of other considerations which might have contributed to the cessation of the enclosure movement. Ashley, for instance, suggests that land-owners found that to "devote their lands continuously to sheep-breeding did not turn out quite so profitable as was at first expected." Others refer to the contemporary complaints of the bad effect of enclosure upon the quality of wool. The breed of sheep which could be kept in enclosed pastures was said to produce coarser wool than those grazing on the hilly pastures, and this deterioration in the quality of wool so cut down the profits from enclosures that men now preferred to plow them up again, and resume tillage. The extent to which the plowing up of pasture can be attributed to this cause must be very slight, however, as even

contemporaries disagreed as to the existence of any deterioration in the quality of the wool. Some authorities even state that the quality was improved by the use of enclosed pasture: when Cornwall,

through want of good manurance lay waste and open, the sheep had generally little bodies and coarse fleeces, so as their wool bare no better name than Cornish hair... but since the grounds began to receive enclosure and dressing for tillage, the nature of the soil hath altered to a better grain and yieldeth nourishment in greater abundance to the beasts that pasture thereupon; so as, by this means... Cornish sheep come but little behind the eastern flocks for bigness of mould, *fineness of wool, etc.*²⁵

The plowing up of pasture land for tillage cannot, then, be explained by the effect of enclosure upon the quality of wool. It has been ordinarily taken as an indication that the price of grain was now rising more rapidly than that of wool, partly because a relaxation of the corn-laws permitted greater freedom of export, and partly because the home demand was increasing on account of the growth of the population. Graziers were as willing to convert pastures to corn-fields for the sake of greater profits as their predecessors had been to carry out the contrary process. The deciding factor in the situation, according to the orthodox account, was the relative price of wool and grain. When the price of wool rose more rapidly than that of grain, arable land was enclosed and used for grazing. When the price of grain rose more rapidly than that of wool, pastures were plowed up and cultivated. Up to this point, the account is consistent. If the price of wool was rising more rapidly than that of grain during the fifteenth and sixteenth centuries (in spite of the statistical evidence to the contrary) it is reasonable that the differential advantage in grazing should finally come to an end when a new balance between tillage and grazing was established. It is not even surprising that the conversion of arable to pasture should have continued beyond the proper point, and that a contrary movement should set in. Bacon, in 1592, remarked that men had of late been enticed by the good yield of corn and the increased freedom of export to "break up more ground and convert it to tillage than all the penal laws for that purpose made and enacted could ever by compulsion effect."²⁶ In 1650 Lord Monson plowed up 100 acres of Grafton Park, which had formerly been pasture, and there are many other records showing a tendency to convert pasture to arable in the seventeenth century.²⁷ It is true that men were able to make a profit from agriculture by the end of the sixteenth century. But there is one difficulty which has been overlooked: the withdrawal from agriculture of common-field land did not cease. The protests against depopulating enclosure continue, and government reports and surveys show that enclosure for pasture was proceeding at as rapid a rate as in the sixteenth century. Miss Leonard's article on "Inclosure of Common Fields in the Seventeenth Century"28 contains a mass of evidence which is conclusive. A few quotations will indicate its character:

"In Leicestershire the enclosures of Cottesbach in 1602, of Enderby about 1605, of Thornby about 1616, were all accomplished by a lessening of the land under the plough. Moore, writing in 1656, says: 'Surely they may make men as soon believe there is no sun in the firmament as that usually depopulation and decay of tillage will not follow inclosure in

our inland countyes." (p. 117). Letters from the Council were written in 1630 complaining of "enclosures and convercons tending as they generallie doe unto depopulation.... There appeares many great inclosures... all w^{ch} are or are lyke to turne to the conversion of much ground from errable to pasture and be very hurtfull to the commonwealth.... We well know wth all what y^e consequence will be, and in conclusion all turne to depopulation!" (p. 128). Forster, writing in 1664, says, "there hath been of late years divers whole lordships and towns enclosed and their earable land converted into pasture!" (p. 142).

Frequently the same proprietor in the same year plowed up pasture land for corn and laid arable to pasture. Tawney cites a case in which ninety-five acres of ancient pasture were brought under cultivation while thirty-five acres of arable were laid to grass.²⁹ In 1630 the Countess of Westmoreland enclosed and converted arable, but tilled other land instead.³⁰ The enclosure movement, then, did not end at the time when it is usually thought to have ended. Since it is difficult to suppose that the price of wool could have been advancing constantly throughout two centuries, without causing such a readjustment in the use of land that no further withdrawal of land from tillage for pasture would be necessary, the continuance of the conversion of arable to pasture in the seventeenth century throws suspicion upon the whole explanation of the enclosure movement as due to the increased demand for wool.

Miss Leonard, indeed, advances the hypothesis that the price of wool ceased to be the cause of enclosure during the seventeenth century, but that other price changes had the same effect:

The increase in pasture in the sixteenth century was rendered profitable by the rapid increase in the price of wool, but, in the seventeenth century, this cause ceases to operate. The change to pasture, however, continued, partly owing to a great rise in the price of cattle, and partly because the increase in wages made it less profitable to employ the greater number of men necessary for tilling the fields.³¹

The assumption that wages and the price of cattle advanced sufficiently in the seventeenth century to account for the change to pasture are no better justified than the assumption of the rapid rise in the price of wool in the sixteenth century. If the price of meat and dairy products rose in the seventeenth century, so did the price of grain and other foods. The relative rate of increase is the only point significant for the present discussion. No statistics are available to show whether the price of cattle rose more rapidly than that of grain, and the evidence afforded by the reduction of arable land to pasture is counterbalanced by the equally well-established fact that much pasture land was plowed and planted in this period. It is equally probable on the basis of this evidence that the prices of wheat and barley advanced more rapidly than those of meat and butter and cheese. The same difficulty is met in the suggestion that the increase in pasturage was due partly to higher wages for farm labor. The extension of tillage over much land formerly laid to pasture as well as that which had never been plowed at all is sufficient cause for doubting a prohibitive increase in wages. Moreover, in modern times, wages lag in general rise of prices. Unless conclusive evidence is presented to show that this was not the case in the seventeenth century, it must be assumed

to be inherently probable that the increased wages of the time were more than offset by the rapidly advancing prices.

During the seventeenth century, then, when it is admitted that the high price of wool was not the cause which induced landowners to convert arable to pasture, it cannot be shown that the high price of cattle or exorbitant wages will account for the withdrawal of land from cultivation. This is an important point, for historians frequently support their main contention with regard to the enclosure movement (*i.e.*, that it was caused by an increase in the price of wool), by the statement that increasing wages made landlords abandon tillage for sheepfarming, with its smaller labor charges. It has been shown that the conversion of arable to pasture in the fifteenth and sixteenth centuries cannot be explained by the price of wool, but it may still be urged that agriculture was rendered unprofitable by high wages. Indeed, it is usually stated that the withdrawal of land from cultivation which took place in the fourteenth century was due to the scarcity of labor caused by the Black Death. In the fifteenth century population was reduced by the Wars of the Roses; and throughout the period under consideration, agriculture had to meet the competition of the growing town industries for labor. Is it not possible that these influences caused an exorbitant rise in wages which would alone account for the substitution of sheep-farming for tillage?

The obvious character of the enclosure movement makes it impossible to accept this hypothesis. The conversion of arable land to pasture was caused by no demand for higher wages, which made tillage unprofitable. The unemployment and pauperism caused by the enclosure of the open fields are notorious, and it is to these features of the enclosure movement that we owe the mass of literature on the subject. Enclosures called forth a storm of protest, because they took away the living of poor husbandry families. The acute distress undergone by those who were evicted from their holdings is sufficient indication of the difficulty of finding employment, and it is impossible that wages could remain at an exorbitant level when the enclosure of the lands of one open-field township made enough men homeless to supply any existing dearth of labor in all of the surrounding villages. If agriculture was unprofitable, it was not because laborers demanded excessive wages, but because of the low productivity of the land. The significance of contemporary complaints of high wages is missed if they are interpreted as an indication of an exorbitant increase in wages. The facts are, rather, that land was so unproductive that farmers could not afford to pay even a low wage.

If it were necessary to argue the point further, it could be pointed out that wages even in industry were not subject to that steady rise which would have to be assumed, if high wages are to furnish the explanation of the substitution of pasture for tillage from the thirteenth century to the eighteenth. The statistical data on this subject are fragmentary, but Thorold Rogers' calculations for the period 1540–1582 are significant. In this period wages rose 60 per cent above the average of the previous century and a half; but the market prices of farm produce rose 170 per cent.³² The rise in wages was far from keeping pace with the rise in selling prices, and the displacement of agriculture for grazing at this time must be due to some cause other than the greater number of laborers needed in agriculture. If, during

certain periods within the four centuries under consideration wages advanced more rapidly than the prices of produce (statistical information on this subject is lacking) the continuous withdrawal of land from tillage during periods when wages fell remains to be explained by some cause other than high wages. Nor can high wages account for the conversion of tilled land to pasture simultaneously with the conversion of pasture land to tillage in the seventeenth century.

If wages were exorbitantly high in the seventeenth century, and if this is the reason for the laying to pasture of so much arable, how could farmers afford to cultivate the large amount of fresh land which they were bringing under the plow? Is this accounted for not by any expectation of profit from this land but by the statutory requirement that no arable should be laid to pasture unless an equal amount of grass land were plowed in its stead? Pasture in excess of the legal requirements was plowed up, and persons who did not wish to convert any arable to pasture are found increasing their tilled land by bringing grass land under cultivation. The movement cannot be explained, therefore, merely on the basis of the husbandry statutes. Nor is the law itself to be dismissed without further examination, for in it we find the explicit statement that fresh land could be substituted for that then under cultivation, because common-field land was in many cases exhausted; it was therefore better to allow this to be laid to grass while better land was cultivated in its place. Here then, is the simple explanation of the whole problem. The land which was converted from arable to pasture was worn out; but there was fresh land available for tillage, and some of this was brought under cultivation.

No alternative explanation can be worked out on the basis of hypothetical wage or price movements. The historian is indeed at liberty to form his own theories as to the trend of prices in the seventeenth century, for he is unhampered by the existence of known records such as those for the sixteenth century; but it is impossible to construct any theory of prices which will explain why the conversion of arable land to pasture continued at a time when much pasture land was being plowed up. It is necessary to choose a theory of prices which will explain either the extension of tillage or the extension of pasture; both cannot be explained by the same prices. If, as some historians assume, the increase of population or some such factor was causing a comparatively rapid increase in the price of grain in this period, the continued conversion of arable to pasture requires explanation. If, as Miss Leonard supposes, the contrary assumption is true, and the products of arable land could be sold to less advantage than those of pasture, then the cause of the conversion of pasture to arable must be sought.

It is not only in the seventeenth century that this double conversion movement took place. In the second half of the fourteenth century pastures were being plowed up. At Holway, 1376–1377, three plots of land which had been pasture were converted to arable.³³ In this period much land was withdrawn from cultivation. The explanation usually advanced by historians for the conversion of arable to pasture at this time is that the scarcity of labor since the Black Death (a quarter of a century before) made it impossible to cultivate the land as extensively as when wages were low, or when serf labor was available. If this is the whole

case, it is difficult to account for the conversion to arable of land already pasture. Other factors than the supposed scarcity of labor were involved; land in good condition, such as the plots of pasture at Holway, repaid cultivation, but the yield was too low on land exhausted by centuries of cultivation to make tillage profitable.

In the sixteenth century, also, the restoration of cultivation on land which had formerly been converted from arable to pasture was going on. Fitzherbert devotes several chapters of his treatise on surveying to a discussion of the methods of amending "ley grounde, the whiche hath ben errable lande of late," (ch. 27) and "bushy ground and mossy that hath ben errable lande of olde time" (ch. 28). This land should be plowed and sown, and it will produce much grain, "with littell dongynge, and sow it no lengar tha it will beare plentye of corne, withoute donge," and then lay it down to grass again. Tusser also describes this use of land alternately as pasture and arable. A farmer on one of the manors of William, First Earl of Pembroke, had an enclosed field in 1567, which afforded pasture for 900 sheep as well as an unspecified number of cattle, "qui aliquando seminatur, aliquando iacet ad pasturam."³⁴ The motives of this alternating use of the land would be clear enough, even though they were not explicitly stated by contemporaries; arable land which would produce only scant crops unless heavily manured made good pasture, and after a longer or shorter period under grass, was so improved by the manure of the sheep pasturing on it and by the heavy sod which formed that it could be tilled profitably, and was therefore restored to tillage.

The fact of two opposite but simultaneous conversion movements is unaccountable under the accepted hypothesis of the causes of the enclosure movement, which turns upon assumptions as to the relative prices of grain and wool or cattle or wages. The authorities for this theory have necessarily neglected the evidence that pasture land was converted to arable in the sixteenth century and that arable land was converted to pasture in the seventeenth, and have separated in time two tendencies which were simultaneous. They have described the increase in pasturage at the expense of arable in the early period, and the increase of arable at the expense of pasture in the later period, and have explained a difference between the two periods which did not exist by a change in the ratio between the prices of wool and grain for which no proof is given.

It has been shown in this chapter that the conversion of arable to pasture in the fifteenth and sixteenth centuries cannot have been caused by increased demand for wool, since the price of wool relatively to that of grain fell, and the extension of tillage rather than of pasture would have taken place had price movements been the chief factor influencing the conversion of land from one use to the other. It has also been shown that the conversion of arable to pasture did not cease at the beginning of the seventeenth century. If the principal cause of the enclosure movement had been the increasing demand for wool, this cause would have ceased to operate when time had elapsed for the shifting of enough land from tillage to pasture to increase the supply of wool. That the conversion of arable to pasture did not cease after a reasonable time had passed is an indication that its cause was not the demand for wool. When it is found that pasture was being converted to arable at the same time that other

land was withdrawn from cultivation and laid to grass, the insufficiency of the accepted explanation of the enclosure movement is made even more apparent. A change in the price of wool could at best explain the conversion in one direction only. The theory that the cause of the enclosure movement was the high price of wool must be rejected, and a more critical study must be made of the readjustments in the use of land which became conspicuous in the fourteenth century, but which are overlooked in the orthodox account of the enclosure movement.

Chapter II: The Fertility of the Common Fields

Up to this point attention has been given chiefly to the theory that the enclosure movement waxed and waned in response to supposed fluctuations in the relative prices of wool and grain, and it has been found that this theory is untenable. It is now necessary to consider more closely the true cause of the conversion of arable land to pasture—the declining productivity of the soil—and the cause of the restoration of this land to cultivation—the restoration of its fertility.

The connection between soil fertility and the system of husbandry has been explained by Dr. Russell, of the Rothamsted Experiment Station:

Virgin land covered with its native vegetation appears to alter very little and very slowly in composition. Plants spring up, assimilate the soil nitrates, phosphates, potassium salts, etc., and make considerable quantities of nitrogenous and other organic compounds: then they die and all this material is added to the soil. Nitrogenfixing bacteria also add to the stores of nitrogen compounds. But, on the other hand, there are losses: some of the added substances are dissipated as gas by the decomposition bacteria, others are washed away in the drainage water. These losses are small in poor soils, but they become greater in rich soils, and they set a limit beyond which accumulation of material cannot go. Thus a virgin soil does not become indefinitely rich in nitrogenous and other organic compounds, but reaches an equilibrium level where the annual gains are offset by the annual losses so that no net change results. This equilibrium level depends on the composition of the soil, its position, the climate, etc, and it undergoes a change if any of these factors alter. But for practical purposes it may be regarded as fairly stationary.

When, however, the virgin soil is broken up by the plough and brought into cultivation the native vegetation and the crop are alike removed, and therefore the sources of gain are considerably reduced. The losses, on the other hand, are much intensified. Rain water more readily penetrates, carrying dissolved substances with it: biochemical decompositions also proceed. In consequence the soil becomes poorer, and finally it is reduced to the same level as the rate of gain of nitrogenous matter. A new and lower equilibrium level is now reached about which the composition of the soil remains fairly constant; this is determined by the same factors as the first, *i.e.*, the composition of the soil, climate, etc.

Thus each soil may vary in composition and therefore in fertility between two limits: a higher limit if it is kept permanently covered with vegetation such as grass, and a lower limit if it is kept permanently under the plough. These limits are set by the

nature of the soil and the climate, but the cultivator can attain any level he likes between them simply by changing his mode of husbandry. The lower equilibrium level is spoken of as the inherent fertility of the soil because it represents the part of the fertility due to the soil and its surroundings, whilst the level actually reached in any particular case is called its condition or "heart", the land being in "good heart" or "bad heart", according as the cultivator has pushed the actual level up or not; this part of the fertility is due to the cultivator's efforts.

The difference between the higher and lower fertility level is not wholly a question of percentage of nitrogen, carbon, etc. At its highest level the soil possesses a good physical texture owing to the flocculation of the clay and the arrangement of the particles: it can readily be got into the fine tilth needed for a seed bed. But when it has run down the texture becomes very unsatisfactory. Much calcium carbonate is also lost during the process: and when this constituent falls too low, the soil becomes "sour" and unsuited for crops.

The simplest system of husbandry is that of continuous wheat cultivation, practiced under modern conditions in new countries. When the virgin land is first broken up its fertility is high; so long as it remains under cultivation this level can no longer be maintained, but rapidly runs down. During this degradation process considerable quantities of plant food become available and a succession of crops can be raised without any substitution of manure... After a time the unstable period is over and the new equilibrium level is reached at which the soil will stop if the old husbandry continues. In this final state the soil is often not fertile enough to allow of the profitable raising of crops; it is now starving for want of those very nutrients that were so prodigally dissipated in the first days of its cultivation, and the cultivator starves with it or moves on.

Fortunately recovery is by no means impossible, though it may be prolonged. It is only necessary to leave the land covered with vegetation for a period of years when it will once again regain much of the nitrogenous organic matter it has lost.³⁵

Dr. Russell adds that soil-exhaustion is essentially a modern phenomenon, however, and gives the following reasons for supposing that the medieval system conserved the fertility of the soil. First, the cattle grazed over a wide area and the arable land all received some dung. Thus elements of fertility were transferred from the pasture land to the smaller area of tilled land. This process, he admits, involved the impoverishment of the pasture land, but only very slowly, and the fertility of the arable was in the meanwhile maintained. Secondly, the processes of liming and marling the soil were known, and by these means the necessary calcium carbonate was supplied. Thirdly, although there was insufficient replacement of the phosphates taken from the soil, the yield of wheat was so low that the amount of phosphoric acid removed was small, and the system was permanent for all practical purposes. One of the facts given in substantiation of this view is that the yield after enclosure increased considerably.³⁶

In discussing these points, it will be well to begin with the evidence as to exhaustion afforded by the increased yield under enclosure. The improvement in yield took place because of the long period of fallow obtained when the land was used as pasture; or, in the

eighteenth century, with the increase in nitrogenous organic matter made possible when hay and turnips were introduced as field forage crops. That is, the increase in yield depended either upon that prolonged period of recuperation which will *restore fertility*, or upon an actual increase in the amount of manure used. Apparently, then, open-field land had become exhausted, since an increase in yield could be obtained by giving it a rest, without improving the methods of cultivation, etc., or by adding more manure.

There was not, as Dr. Russell supposes, enough manure under the medieval system of husbandry to maintain the fertility of the soil. It is true that the husbandman understood the value of manure, and took care that the land should receive as much as possible, and that he knew also of the value of lime and marl. But, as Dr. Simkhovitch says:

It is not within our province to go into agrotechnical details and describe what the medieval farmer knew, but seldom practiced for lack of time and poor means of communication, in the way of liming sour clay ground, etc. Plant production is determined by the one of the necessary elements that is available in the least quantity. It is a matter of record that the medieval farmer had not enough and could not have quite enough manure, to maintain the productivity of the soil.³⁷

The knowledge of the means of maintaining and increasing the productivity of the soil is one thing, but the ability to use this knowledge is another. The very origin and persistence of the cumbersome common-field system in so many parts of the world is sufficient testimony as to the impossibility of improving the quality of the soil in the Middle Ages. The only way in which these men could divide the land into portions of equal value was to divide it first into plots of different qualities and then to give a share in each of these plots to each member of the community. They never dreamed of being able to bring the poor plots up to a high level of productivity by the use of plentiful manuring, etc., but had to accept the differences in quality as they found them. The inconvenience and confusion of the common-field system were endured because, under the circumstances, it was the only possible system.

Very few cattle were kept. No more were kept because there was no way of keeping them. In the fields wheat, rye, oats, barley and beans were raised, but no hay and no turnips. Field grasses and clover which could be introduced in the course of field crops were unknown. What hay they had came entirely from the germanent meadows, the low-lying land bordering the banks of streams. "Meadow grass," writes Dr. Simkhovitch, "could grow only in very definite places on low and moist land that followed as a rule the course of a stream. This gave the meadow a monopolistic value, which it lost after the introduction of grass and clover in the rotation of crops." The number of cattle and sheep kept by the community was limited by the amount of forage available for winter feeding. Often no limitation upon the number pastured in summer in the common pastures was necessary other than that no man should exceed the number which he was able to keep during the winter. The meadow hay was supplemented by such poor fodder as straw and the loppings of trees, and the cattle were got through the winter with the smallest amount of forage which would keep them alive, but even with this economy it was impossible to keep a sufficient number.

The amount of stall manure produced in the winter was of course small, on account of the scant feed, and even the more plentiful manure of the summer months was the property of the lord, so that the villain holdings received practically no dung. The villains were required to send their cattle and sheep at night to a fold which was moved at frequent intervals over the demesne land, and their own land received ordinarily no dressing of manure excepting the scant amount produced when the village flocks pastured on the fallow fields.

The supply of manure, insufficient in any case to maintain the fertility of the arable land, was diminishing rather than increasing. As Dr. Russell suggested in the passage referred to above, the continuous use of pastures and meadows causes a deterioration in their quality. The quantity of fodder was decreasing for this reason, almost imperceptibly, but none the less seriously. Fewer cattle could be kept as the grass land deteriorated, and the small quantity of manure which was available for restoring the productivity of the open fields was gradually decreasing for this reason.

Soil exhaustion went on during the Middle Ages not because the cultivators were careless or ignorant of the fact that manure is needed to maintain fertility, but because this means of improving the soil was not within their reach. They used what manure they had and marled the soil when they had the time and could afford it, but, as the centuries passed, the virgin richness of the soil was exhausted and crops diminished.

The only crops which are a matter of statistical record are those raised on the demesne land of those manors managed for their owners by bailiffs who made reports of the number of acres sown and the size of the harvest. These crops were probably greater than those reaped from average land, as it is reasonable to suppose that the demesne land was superior to that held by villains in the first place, and as it received better care, having the benefit of the sheep fold and of such stall manure as could be collected. Even if it were possible to form an accurate estimate of the average yield of demesne land, then, we should have an overestimate for the average yield of ordinary common-field land. No accurate estimate of the average yield even of demesne land can be made, however, on the basis of the few entries regarding the yield of land which have been printed. Variations in yield from season to season and from manor to manor in the same season are so great that nothing can be inferred as to the general average in any one season, nor as to the comparative productivity in different periods, from the materials at hand. For instance, at Downton, one of the Winchester manors, the average yield of wheat between 1346 and 1353 was 6.5 bushels per acre, but this average includes a yield of 3.5 bushels in 1347 and one of 14 bushels in 1352,³⁹ showing that no single year gives a fair indication of the average yield of the period. For the most part the data available apply to areas too small and to periods too brief to give more than the general impression that the yield of land was very low.

In the thirteenth century Walter of Henley and the writer of the anonymous *Husbandry* are authorities for the opinion that the average yield of wheat land should be about ten bushels per acre. ⁴⁰ At Combe, Oxfordshire, about the middle of the century, the average yield during several seasons was only 5 bushels. ⁴¹ About 1300, the fifty acres of demesne planted

with wheat at Forncett yielded about five-fold or 10 bushels an acre (five seasons). 42 Between 1330 and 1340, the average yield (500 acres for three seasons), at ten manors of the Merton College estates was also 10 bushels. 43 At Hawsted, where about 60 acres annually were sown with wheat, the average yield for three seasons at the end of the fourteenth century was a little more than $7\frac{1}{2}$ bushels an acre. 44

Statistical data so scattered as this cannot be used as the basis of an inquiry into the rate of soil exhaustion. Where the normal variation from place to place and from season to season is as great as it is in agriculture, the material from which averages are constructed must be unusually extensive. So far as I know, no material in this field entirely satisfactory for statistical purposes is accessible at the present time. There is, however, one manor, Witney, for which important data for as many as eighteen seasons between 1200 and 1400 have been printed. A second suggestive source of information is Gras's table of harvest statistics for the whole Winchester group of manors, covering three different seasons, separated from each other by intervals of about a century. The acreage reported for the Winchester manors is so extensive that the average yield of the group can be fairly taken to be the average for all of that part of England. Moreover, Witney seems to be representative of the Winchester group, if the fact that the yield at Witney is close to the group average in the years when this is known can be relied upon as an indication of its representativeness in the years when the group average is not known. The average yield for all the manors in 1208–1209 was 4 1/3 bushels per acre; for Witney alone, 3 2/3. In 1396–1397 the yield of the group and the yield at Witney are, respectively, 6 and 6½ bushels per acre. 45

Table III shows the yield of wheat on the manors of the Bishopric of Winchester in the years 1209, 1300 and 1397. If it could be shown that these were representative years, we should have a means of measuring the increase or decrease in productivity in these two centuries. Some indication of the representativeness of the years 1300 and 1397 is given by a comparison of prices for these years with the average prices of the period in which they lie.

 $\label{thm:table} \textbf{TABLE III}$ YIELD OF WHEAT ON THE MANORS OF THE BISHOPRIC OF WINCHESTER 46

	Area sown	Produce	Ratio produce
Date	Acres	Bushels per acre	to seed
1208-1209	6838	4 1/3	2 1/3
1299-1300	3353	9*	4
1396–1397	2366½	6	3

^{*}Gras gives 1.35 quarters as the acre produce, or nearly 11 bushels. This figure is incorrect, as it is derived by dividing the total produce of 42 manors by the total acreage planted on only 38 manors. The produce of the four manors on which the acreage planted is unknown amounts to nearly 750 quarters, a large item in a total of only 4527 quarters for the whole group of manors. The ratio of produce to seed, however, is independent of the number of acres planted, and these four manors are included in the computation of this figure.

The price in 1300 was about 17 per cent below the average for the period 1291–1310,⁴⁷ an

indication that the crop of nine bushels per acre reaped in 1299–1300 was above the normal. The price of wheat in 1397 was very slightly above the average for the period;⁴⁸ six bushels an acre or more, then, was probably a normal crop at the end of the fourteenth century. This conclusion is supported also by the fact that the yield in that year at Witney was approximately the same as the average of the eleven seasons between 1340 and 1354 noted in Table V. The price of wheat in the year 1209–1210 is not ascertainable. Walter of Henley's statement that the price of corn must be higher than the average to prevent loss when the return for seed sown was only three-fold⁴⁹ is an indication that the normal yield must have been at this time at least three-fold, or six bushels, so that the extremely low yield of the year 1208–1209 can hardly be considered typical. This examination of the yield in the three seasons shown in the table gives these results: at the beginning of the thirteenth century the average yield was probably about six bushels and certainly not more than ten; at the beginning of the fourteenth century the average was less than nine bushels—how much less, whether more or less than six bushels, is not known—at the end of the fourteenth century the yield was about six bushels.

The yield of the soil in single seasons at widely separated intervals is a piece of information of little value for our purpose. These tables reveal other facts of greater significance. The yield for the year gives almost no information about the normal yield over a series of years, but the area planted depends very largely upon that yield. The farmer knows that it will pay, on the average, to sow a certain number of acres, and the area under cultivation is not subject to violent fluctuations, as is the crop reaped. The area sown in any season is representative of the period; the crop reaped may

	TABLE V	
	YIELD OF WHEAT AT WIT	TNEY 51
Date	Bushels per acre	Acres sown
1209	3 2/3	417
1277	8½	180
1278		191
1283	8½	
1284	10½	
1285	71/4	
1300	(7–10)	
1340	5½	126
1341	7½	138

1342 6	132
1344	129
1346 5½	127
1347 6½	128
1348 63/4	138
1349 43/4	128
1350 51/4	
1351 6½	
1352 8½	
1353 5	
1397 61/4	511/2

or may not be representative. Land which, over a series of years, fails to produce enough to pay for cultivation is no longer planted. If the fertility of the soil is declining, this is shown by the gradual withdrawal from cultivation of the less productive land, as it is realized that it produces so little that it no longer pays to till it. Table IV shows that in fact this withdrawal of worn out land from cultivation was actually taking place. The area sown with wheat on the twenty-five manors for which the statistics for both periods are available was reduced by more than fifty per cent between the beginning and the end of the thirteenth century. A similar reduction in the area planted with all of the other crops, mancorn, rye, barley and oats, took place. A process of selection was going on which eliminated the less fertile land from cultivation. If six bushels an acre was necessary to pay the costs of tillage, land which returned less than six bushels could not be kept under the plow. The six bushel crop which seems to be normal in the fourteenth century is not the average yield of all of that land which had been under cultivation at an earlier time, but only of the better grades of land. Plots which had formerly yielded their five or six bushels an acre had become too barren to produce the bare minimum which made tillage profitable, and their produce no longer appeared in the average. Even with the elimination of the worst grades of land the average yield fell, because the better land, too, was becoming less fertile. At Witney (Table V) the area planted with wheat fell from about 180 acres in 1277 to less than 140 acres in 1340; but, in spite of this reduction in the amount of land cultivated, the average annual yield after 1340 was less than 6½ bushels, while it had been about 8½ bushels per acre in the period 1277-1285. This withdrawal of land from cultivation took place without the occurrence of any such calamity as the Black Death, which is ordinarily mentioned as the cause of the reduction of arable land to pasture in so far as this took place before 1400. It affords an indirect proof of the fact that much land was becoming barren.

These statistical indications of declining productivity of the soil are supported by the overwhelming evidence of the poverty of the fourteenth century peasantry—poverty which can be explained only by the barrenness of their land. Many of the features of the agrarian changes of this period are familiar—the substitution of money payments for villain services, the frequency of desertion, the amalgamation and leasing of bond-holdings, the subdividing

and leasing of the demesne. A point which has not been dwelt upon is the favorable pecuniary terms upon which the villains commuted their services. Where customary relations were replaced by a new bargain, the bargain was always in favor of the tenant. What was the source of this strategic advantage of the villain? The great number of holdings made vacant by the Black Death and the scarcity of eligible holders placed the landowner at a disadvantage, but this situation was temporary. How can the difficulty of filling vacant tenements before the Black Death be accounted for, and why were villains still able to secure reductions in their rents a generation after its effects had ceased to be felt?

Even before the Black Death, it was frequently the case that villain holdings could be filled only by compulsion. The difficulty in finding tenants did not originate in the decrease in the population caused by the pestilence. There is little evidence that there was a lack of men qualified to hold land even after the Black Death, but it is certain that they sought in every way possible to avoid landholding. The villains who were eligible in many cases fled, so that it became exceedingly difficult to fill a tenement when once it became vacant. Land whose holders died of the pestilence was still without tenants twenty-five and thirty years later, although persistent attempts had been made to force men to take it up. When compulsion succeeded only in driving men away from the manor, numerous concessions were made in the attempt to make land-holding more attractive. It is important to notice that these concessions were economic, not social. The force which was driving men away was not the desire to escape the incidents of serfdom, but the impossibility of making a living from holdings burdened with heavy rents. These burdens were eased, grudgingly, little by little, by landlords who had exhausted other methods of keeping their land from being deserted. It was necessary to reduce the rent in some way in order to permit the villains to live. The produce of a customary holding was no longer sufficient to maintain life and to allow the holder to render the services and pay the rent which had been fixed in an earlier century when the soil was more fertile.

Notices of vacated holdings date from before 1220 on the estates of the Berkeleys. Thomas the First was lord of Berkeley between 1220 and 1243, and

Such were the tymes for the most part whitest this Lord Thomas sate Lord, That many of his Tenants in divers of his manors... surrendred up and least their lands into his hands because they were not able to pay the rent and doe the services, which also often happened in the tyme of his elder brother the Lord Robert. ⁵²

This entry in the chronicle is significant, for it is typical of conditions on many other manors at a later date. The tenants were not able to pay the rent and do the services, and therefore gave up the land. It was leased, when men could be found to take it at all, at a rent lower than that which its former holders had found so oppressive. It is interesting to note that much of this land was soon after enclosed and converted to pasture, more than a century before the event which is supposed to mark the beginning of the enclosure movement. The productivity of the land had declined; its holders were no longer able to pay the customary rent, and the lord had to content himself with lower rents; the productivity was so low in

some cases that the land was fit only for sheep pasture.

Land holding was regarded as a misfortune in the fourteenth century. The decline in fertility had made it impossible for a villain to support himself and his family and perform the accustomed services and pay the rent for his land. Sometimes heirs were excused on account of their poverty. Page has made note of the prevailing custom of fining these heirs for the privilege of refusing the land:

In 1340 J. F., who held a messuage and half a virgate, had to pay two shillings for permission to give up the land, because he was unable to render the services due from it. Three other men at the same time paid six pence each not to be compelled to take up customary land... at Woolston, 1340, R. G. gave up his messuage and half virgate because he could not render the necessary services; whereupon T. S. had to pay three shillings three pence that he might not be forced to take the holding, and another villain paid six shillings eight pence for the same thing.⁵³

Miss Levett mentions the fact that cases were fairly frequent at the Winchester manors in the fourteenth century where a widow or next of kin refused to take up land on account of poverty or impotence;⁵⁴ and three villains of Forncett gave up their holdings before 1350 on account of their poverty.⁵⁵ In case no one could be found who would willingly take up the land, the method of compulsion was tried. The responsibility for providing a tenant in these cases seems to have been shifted to the whole community. A villain chosen by the whole homage had to take up the land. At Crawley in 1315 there were two such cases. A fine was paid by one villain for a cottage and ten acres "que devenerunt in manus domini tanquam escheato pro defectu tenentium & ad que eligebatur per totam decenuam." At Twyford in 1343–1344. J. paid a fine for a messuage and a half virgate of land, "ad que idem Johannes electus est per totum homagium." In other entries cited by Page, the element of compulsion is unmistakable: the new holder of land is described as "electus per totum homagium ad hoc compulsus," a phrase which is frequently found also in the entries of fines paid on some of the Winchester manors after the Black Death. ⁵⁷

This method of compulsion was useful to some extent, but there were limits beyond which it could not be pushed. Five men of Therfield in 1351 were ordered to take up customary land, and several of them left the manor rather than obey. "Vendiderunt quod habuerunt et recesserunt nocitctante." At Nailesbourne, in the same year, "Robertus le Semenour compulsus finivit et clam recessit et ea tenere recusavit." The problem which confronted landowners during the Black Death was not so much an absolute lack of men on the manors, as a stubborn unwillingness on the part of these men to hold land. There were enough men left by the pestilence, but they were determined to avoid taking up the tenements whose holders had died. The pressure which was brought upon the villains to induce them to take up land and to prevent them from leaving the manor could not prevent the desertions, which had begun before the pestilence, and which took away the men who would naturally have supplied the places of those who died. The whole village must have been anxious to prevent the desertion of these men, for the community was held responsible for the services

from vacant tenements, when they failed to provide a tenant. At Meon, for instance, each of twenty-six tenants paid 1d. in place of works due from a vacant holding, according to an arrangement which had been made before the Black Death, 60 and at Burwell, in 1350, when three villains left the manor, their land was "tradita toto homagio ad faciendum servicia et consuetudines."61 In spite of the deterring force which must have been exerted by public opinion under these conditions, and in spite of the aggressive measures taken by bailiffs to prevent desertion and to recapture those who had fled, the records are full of the names of those who had been successful in making their escape. Throughout the latter half of the fourteenth century and the first part of the fifteenth there was a gradual leakage from the Winchester manors. "Villeins were apt 'to go away secretly' and to be no more found."62 Page describes a similar tendency on the part of villains of the manors whose records he has examined. At Weston, three villains deserted in 1354. At Woolston in 1357 a serf "recessit a dominio et dereliquit terram suam." At Chilton, between 1356 and 1359, eleven men and two women fled, some of whom were recaptured. At Therfield in 1369 a man who held twenty-three acres of land fled with his whole family. In the same year at Abbot's Ripton a man escaped with his horses, and three years later another villain left Weston by night. 63 At Forncett, "Before 1378 from 60 to 70 tenements had fallen into the lord's hands. It was the serfs especially who were relinquishing their land; for a larger proportion of the tenements charged with week-work were abandoned than of the more lightly burdened tenements."64 This, of course, is what we should expect, as the lighter burdens of these holdings caused their tenants to feel less severely than the ordinary serfs the declining productivity of the land.

The method of compulsion failed to keep the tenants on the land. They ran off, and the holdings remained vacant. It was necessary to make concessions of a material nature in order to persuade men to take up land or to keep what they had. They were excused of a part of their services in some cases, and in others all of the services were definitely commuted for small sums of money. When no tenants for vacant land could be secured who would perform the customary services due from it, the bailiff was forced to commute them. "So and so holds such land for rent, because no one would hold it for works,' is a fairly frequent entry both before and after 1349," on the records of the Bishopric of Winchester. The important point to be noticed here is that the money rent paid in these cases was always less than the value of the services which had formerly been exacted from the land; not only that, it was less than the money equivalent for which those services had sometimes been commuted, an amount far less than the market value of the services in the fourteenth century at the prevailing rates of wages. For instance, when Roger Haywood took up three virgates and a cotland at a money rent instead of for the traditional services, "quia nullus tenere voluit," he contracted to pay rents whose total sum amounted to less than twenty-five shillings and included the church scot for one virgate and the cotland. On this manor, Sutton, the total services of *one* virgate valued at the rate at which they were ordinarily "sold" must have amounted to at least eighteen or twenty shillings. At Wargrave the services of thirty-two virgates were all commuted at three shillings each, and the same sum was paid by each of twenty-three virgates at Waltham.65

At Forncett and on the manors of the Berkeley estates commutation had little part in the disappearance of labor dues. The vacated land was leased in larger or smaller parcels at the best rents which could be obtained. This rent bore no relation to the value of the services formerly due from the land. The customary tenements which had been the units upon which labor dues were assessed were broken up, and the acres leased separately, or in new combinations, to other men. At Forncett, as in the case of the Winchester manors where the services were commuted, the terms of the new arrangement can be compared with those of the old, and it is seen that the money rent obtained was less than the value of the services formerly due. The customary services were here valued at over two shillings per acre; the average rent obtained was less than one shilling an acre. The net pecuniary result of the change, then, was the same as though the services had been commuted for money at less than their value.

Another method of reducing rents in this period was the remission of a part of the services due. Miss Levett notes the extent to which this took place on the Winchester manors, and suggests that the Bishop wished to avoid the wastefulness and inefficiency of serf labor.⁶⁷ She overlooks the fact that he failed to exact the money payment in place of the services for which manorial custom provided. It was a well established custom that in case work owed by the tenants was not used they should pay money instead. The amount of work needed each year on the demesne varied according to the size of the harvest, etc., but the number of days' works for which the tenants was liable was fixed. The surplus of works owed above those needed were "sold" each year to the villains. Frequently the number of works sold exceeded the number performed, although formal commutation of dues had not taken place. At Nailesbourne (1348–1349), 4755 works were due from the villains, but nearly 4000 of these were sold.⁶⁸ If the Bishop had merely wished to avoid waste, then, in ceasing to require the performance of villain services on his manors, he would have required the payment of the money equivalent of these services. When the services were excused, and the customary alternative of a money payment also, the change was clearly an intentional reduction in the burden of villain tenure. This fact makes emphasis upon the payment of money as the distinguishing feature of the changed relations between landlord and tenant in this period misleading. There was every precedent for requiring a money payment in the place of services not wanted. When, therefore, a great many services were simply allowed to lapse, it is an indication that it was impossible to exact the payment. It makes little difference whether the services were commuted at a lower rate than that at which they had formerly been "sold" or whether the villain was simply held accountable for a smaller number of services at the old rate; in either case the rent was reduced, and the burden of the tenant was less.

The reduction of rent is thus the characteristic and fundamental feature of all of the changes of land tenure during this period. This fact is ignored by historians who suppose the chief factor in the commutation movement to have been the desire of prosperous villains to rid themselves of the degrading marks of serfdom. Vinogradoff, for instance, in his preface

to the monograph from which most of the foregoing illustrations have been drawn, has nothing at all to say of the reduction of rent and the poverty of the tenants when he is speaking of the various circumstances attending the introduction of money payments.

In the particular case under discussion the cultural policy of William of Wykeham may have suggested arrangements in commutation of labour services and rents in kind. In other cases similar results were connected with war expenditures and town life. In so far the initiative in selling services came from the class of landowners. But there were powerful tendencies at work in the life of the peasants which made for the same result. The most comprehensive of these tendencies was connected, it seems to me, with the accumulation of capital in the hands of the villains under a system of customary dues. When rents and services became settled and lost their elasticity, roughly speaking, in the course of the twelfth, thirteenth, and fourteenth centuries, the surplus of profits from agriculture was bound to collect in the hands of those who received them directly from the soil, and it was natural for these first receivers to turn the proceeds primarily towards an improvement of their social condition; the redemption of irksome services was a conspicuous manifestation of this policy. ⁶⁹

This paragraph contains several suggestions which are shown to be misleading by a study of the extracts from the original sources embodied in the essay of whose preface it forms a part. It is true that the cultural policy of William of Wykeham was an extravagant one, and that he was in need of money when the system of tenure was being revolutionized on his estates; but it is misleading to interpret the changes which took place as measures for the prompt conversion into cash of the episcopal revenues. No radical changes in the system of payment were necessary in order to secure cash, for the system of selling surplus services to the villains had become established decades before the time of this bishop, and no formal commutation of services was necessary in order to convert the labor dues of the villains into payments in money. The bulk of the services were not performed, even before commutation, and the lord received money for the services not used on the demesne. The essential feature of the changes which took place was a reduction in the amount paid—a reduction which the bishop must have resisted so far as he dared, just as other landowners must have resisted the reductions which their tenants forced them to make at a time when they were in need of money. The commutation of services was incidental, and was only a slight modification of the system formerly in use, but, whether services were commuted or were in part excused, the result was a lessening of the burden borne by the tenant, and the reduction of the rent received by the lord.

It is true, as Professor Vinogradoff states, that there were powerful tendencies in the life of the peasants which made for this result. In fact no initiative in selling services—at these rates—could have come from the side of the landowners. The change was forced upon them. Unless they compromised with their tenants and reduced their rents they soon found vacant tenements on their hands which no one could be compelled to take. The amount of land which was finally leased at low rents because the former holders had died or run away and no one could be forced to take it at the old rents is evidence of the reluctance with which

landowners accepted the situation and of their inability to resist the change in the end.

But it is not true that the most comprehensive of these tendencies was the accumulation of capital in the hands of the villains, and their desire to improve their social condition. The immediate affect of the commutation of services and similar changes at this time was to leave their social condition untouched, whatever the final result may have been. These villians did not buy themselves free of the marks of servitude. Their gradual emancipation came for other reasons. At Witney, for example, where the works of all the native tenants had been commuted by 1376, they were still required to perform duties of a servile character:

they were all to join in haymaking and in washing and shearing the lord's sheep, to pay pannage for their pigs, to take their turn of service as reeve and tithingman, and to carry the lord's victuals and baggage on his departure from Witney as the natives were formerly wont to do.⁷⁰

This example, taken at random, is typical of the continuance of conditions which should make the historian hesitate before adopting the view that the social condition of the peasants was improved by the new arrangements made as to the bulk of their services and rents. But more than that, the terms of the new arrangements are not those which would be offered by well-to-do cultivators in whose hands the profits from the soil had accumulated. In all of these cases the new terms were advantageous to the tenants, not to the lord, and advantageous in a strictly pecuniary way. The lord had to grant these terms because the tenants were in the most miserable poverty, and could no longer pay their accustomed rent.

Neither the Black Death, whose effects were evanescent, nor the desire of prosperous villains to free themselves of the degrading marks of serfdom was an important cause in the sequence of agrarian changes which took place in the fourteenth century. Serfdom as a status was hardly affected, but a thousand entries record the poverty and destitution which made it necessary to lighten the economic burdens of the serfs. At Brightwell, for example, the works of three half-virgaters were relaxed, the record reads, because of their poverty (1349–1350). Some villains had no oxen, and were excused their plowing on this account, or were allowed to substitute manual labor for carting services. At Weston, in 1370, a tenant "non arat terram domini causa paupertate." At Downton, in 1376–1377, no money could be collected from the villains in place of the services they owed in haymaking. Frequently when services were commuted for money, the record of the fact is accompanied by the statement that the change was made on account of the poverty of the tenants. At Witney, for instance, the

works and services of all the native tenants were commuted at fixed payments (*ad certos denarios*) by favour of the lord as long as the lord pleases, on account of the poverty of the homage.⁷⁵

The reduction in rent in this case was at least a third of the total. The value of the customary services commuted was at least ten shillings six pence per acre, and they were

commuted at six shillings eight pence. Other explicit references to the poverty of the tenants as the cause of commutation are quoted by Page:

At Hinton, Berks, the Bailiff reports in 1377, that the former lord before his death had commuted the services of the villains for money, "eo quod customarii impotentes ad facienda dicta opera et pro eorum paupertate"... At Stevenage, 1354, S. G. "tenuit unam vergatam reddendo inde per annum in serviciis et consuetudinibus xxii solidos. Et dictus S. G. pauper et impotens dictam virgatam tenere. Ideo concessum est per dominum quod S. G. habeat et teneat predictam terram reddendo inde xiii solidos iv denarios pro omnibus serviciis et consuetudinibus.⁷⁶

In connection with the matter of heriots, also, evidences of extreme poverty are frequent. Frequently when a tenant died there was no beast for the lord to sieze.

The heriot of a virgate was generally an ox, or money payment of its value. But the amount as often reduced "propter paupertatem," and sometimes when a succeeding tenant could not pay, a half acre was deducted from the virgate and held by the lord instead of the heriot. The succeeding tenant could not pay, a half acre was deducted from the virgate and held by the lord instead of the heriot.

The rate at which the value of these holdings declined when their tenants possessed too few cattle was rapid. Land without stock is worthless. The temptation to sell an ox in order to meet the rent was great, but when the deficiency was due to declining productivity of the soil, there was no probability that it would be made up the following year even with all the stock, and with fewer cattle the situation was hopeless. After this process had gone on for a few years nothing was left, not even a yoke of oxen for plowing. Whatever means had been taken to keep up the fertility of the land, attend to the drainage, *etc.*, were of necessity neglected, and finally the hope of keeping up the struggle was abandoned. The spirit which prompted the reply of the Chatteris tenant when he was ordered by the manorial court to put his holding in repair can be understood: "Non reparavit tenementum, et dicit quod non vult reparare sed potius dimittere et abire." If he left the manor and joined the other men who under the same circumstances were giving up their land and becoming fugitives, it was not with the hope of greatly improving his condition. Some of the fugitives found employment in the towns, but this was by no means certain, and the records frequently state that the absent villains had become beggars.

The declining productivity of the soil not only affected the villains, but reduced the profits of demesne cultivation. It has already been seen that the acreage under crop was steadily decreasing, as more and more land reached a stage of barrenness in which it no longer repaid cultivation. This process is seen from another angle in the frequent complaints that the customary meals supplied by the lord to serfs working on the demesne cost more than the labor was worth. According to Miss Levett:

This complaint was made on many manors belonging to the Bishop of Winchester in spite of the fact that if one may judge from the cost of the "Autumn Works" the meals were not very lavish, the average cost being 1d. or 1¼ d. per head for each *Precaria....* The complaint that the system was working at a loss comes also from Brightwaltham (Berkshire), Hutton (Essex), and from Banstead (Surrey), as early as 1325, and is reflected in contemporary literature. "The work is not worth the breakfast" (or the *reprisa*) occurs several times in the Winchester Pipe Rolls.... By 1376 the entry is considerably more frequent, and applies to ploughing as well as to harvest-work. At Meon 64 acres of ploughing were excused *quia non fecerunt huiusmodi arrura causa reprisae*. A similar note occurs at Hambledon (*Ecclesia*) and at Fareham with the further information that the ploughing was there performed *ad cibum domini*. At Overton four virgates were excused their ploughing *quia reprisa excedit valorem*. 81

Miss Levett quotes these entries as an explanation for the tendency to excuse services, forgetting that the lord could usually demand a money equivalent for services not required for any reason. We have here the reason why so few services are demanded, but no explanation of the failure to require money instead. The fundamental cause of the worthlessness of the labor on the demesne is the fact which accounts for the absence of a money payment for the work not performed. The demesne land was worn out, and did not repay costs of cultivation; the bond land was worn out, and the villains were too poor to "buy" their labor.

The profits of cultivating this unproductive land were so small that a deficit arose when it was necessary to meet the cost of maintaining for a few days the men employed on it. It is not surprising that men who had families to support and were trying to make a living from the soil abandoned their worthless holdings and left the manor. The lord had only to meet the expense of food for the laborers during the few days when they were actually at work plowing the demesne or harvesting the crop. How could the villain support his whole family during the entire year on the produce of worse land more scantily manured? In this low productivity of the land is to be found the reason for the conversion of much of the demesne into pasture land, as soon as the supply of servile labor failed. It was, of course, impossible to pay the wages of free men from the produce of soil too exhausted to repay even the slight cost incidental to cultivating it with serf labor. The bailiffs complained of the exorbitant wages demanded by servants in husbandry; these wages were exorbitant only because the produce of the land was so small that it was not worth the pains of tillage. The most important of the many causes which were at work to undermine the manorial system in the fourteenth century is, therefore, plain. The productivity of the soil had declined to a point where villain holdings would no longer support the families which cultivated them and where demesne land was sometimes not worth cultivation even by serf labor. Under these conditions, the very basis of the manor was destroyed. The poverty of the peasants, the difficulty with which tenants could be found for vacant holdings, even though the greatest pressure was brought to bear upon eligible villains? and even though the servile burdens were considerably reduced, and the frequency with which these serfs preferred the uncertainty and risk of deserting to the certain destitution and misery of land-holding, are facts which are intimately connected, and which are all due to the same cause. It had been impossible to maintain the productive capacity of the land at *a* level high enough to provide a living for the tillers of the soil.

Chapter III: The Disintegration of the Open-fields.

For the reasons given in the last chapter, bailiff-farming rapidly gave way to the various forms of the leasehold system in the fourteenth and early fifteenth centuries. The economic basis of serfdom was destroyed; a servile tenement could no longer be depended upon to supply an able-bodied man to do work on the demense for several days a week throughout the year, with extra helpers from his family at harvest time. The money received in commutation of customary labor, or as rent from land which had formerly been held for services was far less than the value of the services, and would not pay the wages of free men hired in place of the serfs who had formerly performed the labor. Moreover, the demense land itself was for the most part so unproductive that it had hardly paid to cultivate it even at the slight expense incurred in furnishing food for the serfs employed; it was all the more a waste of money to hire men to plow it and sow it.

The text books on economic history usually give a careful account of the various forms of leases which were used as bailiff-farming was abandoned. We are told how the demense was leased either as a whole or in larger or smaller pieces to different tenants and sets of tenants, for lives, for longer or shorter periods of years, with or without the stock which was on it, and, in some cases, with the servile labor of some of the villains, when this had not all been excused or commuted into money payments. Arrangements necessarily differed on the different manors, and the exact terms of these first experimental leases do not concern us here.

The fact which does interest us is that with the cessation of bailiff fanning the last attempt at keeping the land distributed in fairly equal shares among a large number of tenants was abandoned. Bond land had been divided into portions which were each supposed to be sufficient for the maintenance of a laborer and his family. As long as the demesne was cultivated for the lord, it was to his interest to prevent the concentration of holdings in a few hands, unless some certain provision could be made to insure the performance of the labor due from all of them. But even when the demesne was still being managed for the lord, it had already become necessary in some cases to allow one man to hold two or more of these portions, for the productivity had so declined that one was no longer enough. Now, with the leasing of the demesne, the lord no longer had an interest in maintaining the working population of the manor at a certain level, but was concerned with the problem of getting as much rent as possible. When the demesne and the vacant bond tenements began to be leased, the land was given to the highest bidder, and the competitive system was introduced at the start. This led to the gradual accumulation of large holdings by some tenants, while other men were still working very small portions, and others occupied holdings of every intermediate size. The uniformity of size characteristic of the early virgates disappeared. In this chapter these points will be considered briefly, and a study will also be made of the way

in which these new holders managed their lands.

In the first place, as the more destitute villains were giving up their holdings and leaving the manor, and as no one could be found to take their places on the old terms, the landlords gave up the policy of holding the land until someone should be willing to pay the accustomed services and let the vacant lands at the best rents obtainable. Freeholders, and villains whose land was but lightly burdened, and those who by superior management had been able to make both ends meet, were now able to increase their holdings by adding a few acres of land which had been a part of the demesne or of a vacated holding. The case of the man at Sutton, who took up three virgates and a cotland, has already been mentioned. Another case of "engrossing," as it was called, dated from 1347–1348 at Meon, where John Blackman paid fines for one messuage with ten acres of land, two other messuages with a virgate of land each, one parcel of four acres and another holding whose nature is not specified.⁸²

Legislators who observed this tendency issued edicts against it. No attempt was made to discover the underlying cause of which it was merely a symptom. The first agrarian statutes were of a characteristically restrictive nature, and no constructive policy was attempted by the government until after a century of futile attempts to deal with the separate evils of engrossing, enclosure, conversion to pasture, destruction of houses and rural depopulation. The first remedy these evils suggested was limitation of the amount of land which one man should be allowed to hold.⁸³ In 1489 the statutes begin to prohibit the occupation of more than one farm by the same man, or to regulate the use of the land so occupied. The statute of 1489 refers to the Isle of Wight, where "Many dwelling places, fermes, and fermeholdes have of late tyme ben used to be taken in to oon manys hold and handes, that of old tyme were wont to be in severall persons holdes and handes." The proclamation of 1514 regulated the use of land held by all persons who were tenants of more than *one* farm. Alaw of 1533 provides that no person should occupy more than *two* farms.

The old villain holdings did not necessarily pass intact into the hands of one holder, but were sometimes divided up and taken by different men, a few acres at a time. One Richard Grene in 1582 held lands of which ten and a half acres had been gradually acquired through as many as ten grants. This land had formed part of six other holdings, and much of the rest of the land belonging to these holdings had also been alienated. The Inquisition of 1517 reported numerous cases of engrossing, and Professor Gay notes some of the entries in the returns of the Inquisition of 1607 which are also interesting in this connection: W. S. separated six yardlands from a manor house and put a widow in the house, a laborer in the kitchen and a weaver in the barn. The land was divided between two tenants who already had houses, and presumably, other land, and were taking this opportunity to enlarge their holdings of land. G. K. took from a farmhouse the land which formed part of the same tenement and leased the house to a laborer who; had "but one acre of land in every field."

The growing irregularity of holdings, combined with the decrease in the number of holders whose interests had to be consulted, made it easier than it had formerly been to modify the traditional routine of husbandry. Even though the new land acquired by tenants from the demesne or from old bond-holdings did not happen to be adjacent to strips already

in their possession, exchange could accomplish the desired result. At Gorleston, Suffolk, a tenant sublet about half of his holding to eight persons, and at the same time, acquired plots of land for himself from another eight holdings. Before 1350 exchanges, sales and subletting of land by tenants had become general on the manors of the Bishopric of Winchester. It is unusual to find more than two cases of exchanges in any one year, even on a large manor; but Miss Levett adds: "On the other hand, one can hardly look through the fines on any one of the episcopal manors for a period of ten years without finding one or two. From the close correspondence of the areas exchanged, together with exact details as to position, it is fairly clear that the object of the exchange was to obtain more compact holdings."

Fitzherbert writes that "By the assente of the Lordes and tenauntes, euery neyghbour may exchange lands with other." This practice was especially sanctioned by law in 1597 "for the more comodious occupyinge or husbandrie of anye Land, Meadows, or Pastures," but it was common in the open-field villages before the legal permission was given. Tawney reproduces several maps belonging to All Souls' Muniment Room, which show the ownership of certain open-field holdings of about 1590. Here consolidation of plots had proceeded noticeably. There are several plots of considerable size held by a single tenant.

The advantage of consolidated holdings are considerable. In the first place, the turf boundaries between the strips could be plowed up, or the direction of the plowing itself could be changed, if enough strips were thrown together. Fitzherbert advises the farmer who has a number of strips lying side by side and who

hath no dung nor shepe to compost nor dung his land withall. Then let the husband take his ploughe, and cast al such landes three or four tymes togider, and make theyr rigge theyr as ye raine was before.... And so shel he finde new moulde, that was not sene in an hundred yeres before, the which must nedes gyue more come than the other dydde before. ⁹³

In two Elizabethan surveys examined by Corbett, we have evidence that the theoretical advantages urged by Fitzherbert were not unknown in practice. It is now and then stated that the *metae* between strips have been plowed up. But sometimes, even though all of the strips in a furlong had been acquired by the same owner, and enclosed, the land was left in strips. Some of the pieces were freehold, others copyhold, and the lord may have objected to having the boundaries obliterated. Cross plowing is also occasionally referred to in these surveys, but it was apparently rare. ⁹⁴

The possibility of improvement in this direction, although not be ignored, was, however, comparatively slight. The important changes which resulted from the increased size of the holdings were not so much in the direction of superior management of the land as in that of making a selection between the different qualities of land, and cultivating only the land in comparatively good condition. Tenants taking up additional land cultivated only a part of their enlarged holdings. The least productive strips were allowed to become overgrown with grass. The better strips were kept under crop.

If we are to accept the testimony of Fitzherbert and Tusser, strips of grass in the common fields, or lea land, as it was called, were a feature of every open-field township, by the sixteenth century. According to Fitzherbert, "in euery towneshyppe that standeth in tillage in the playne countrye, there be.... leyse to tye or tedder theyr horses and mares vpon." According to Tusser, the process of laying to grass unproductive land was still going on.

Land arable driuen or worne to the proofe, and craveth some rest for thy profits behoof, With otes ye may sowe it the sooner to grasse more sooner to pasture to bring it to passe. 96

The later surveys give additional evidence of the extent to which the new tenantry had restricted the area of cultivation in the old fields which had once been entirely arable land. The most noteworthy feature of the survey of East Brandon, Durham (1606), was, according to Gray,

the appearance in certain fields of meadow along-side the arable. Lowe field was almost transformed by such procedure, for seldom did the tenants retain any arable there. Instead they had large parcels of meadow, sometimes as many as twenty acres; nor does anything indicate that these parcels were enclosed. They seem, rather to have remained open and to point to a gradual abandonment of arable tillage. Such an abandonment is more clearly indicated by another survey of this series, that of Eggleston.... Presumably the fields had once been largely arable. When, however, the survey was made, change had begun, though not in the direction of enclosure, of which there was still little. Conversion to meadow had proceeded without it: nearly all the parcels of the various tenants in East field and West field are said to have been meadow; arable still predominated only in Middle field, and even there it had begun to yield.⁹⁷

At Westwick, Whorlton, Bolam and Willington in Durham, and at Welford, Northamptonshire, a similar transformation had taken place. 98

This land was obviously withdrawn from cultivation not because the tenants preferred grass land, or because grass land was more valuable than arable, but because it could be plowed only at a loss. Where, as at Greens Norton, arable and leas are valued separately in the survey, the grass land is shown to be of less value than the land still under cultivation. The land craved rest, (to use Tusser's phrase), and and the grass which grew on it was of but little value. Here we have no capitalist systematically buying up land for grazing, but a withdrawal of land from cultivation by the tenants themselves, even though they were in no position to prepare it properly for grazing purposes. The importance of this fact cannot be over-emphasized. It is true that pasture, properly enclosed and stocked, was profitable, and that men who were able to carry out this process became notorious among their contemporaries on account of their gains. But it is also true that the land which was

converted to pasture by these enclosers was fit for nothing else. Husbandmen had had to withdraw much of their open-field ground from tillage simply because it was so unproductive that they could not count on a bare return of seed if they planted it. The pasturage for an additional horse or cow which these plots furnished was pure gain, and was not the object of the conversion to grass. The unproductive strips would have been left untilled even though no alternative use had been possible. They were unfit for cultivation.

The advantage of holding this lea land did not end, however, with the fact that a few additional horses or cows could be kept on the grass which sprang up. This was undoubtedly of some value, but the greatest advantage lay in the fact that this land gradually recovered its strength. When the strips which were kept under cultivation finally produced in their turn so little that they had to be abandoned, the tenant who had access to land which had been laid to grass years before could plow this instead, for it had regained its fertility and had improved in physical quality. Fitzherbert recommends a regular interchange between "Reyst" ground and arable land which had become exhausted. When the grass strips become mossy and make poor pasture, plow them up and plant them; when arable strips fail to produce good crops, lay them to grass. Lea ground, "the whiche hath ben errable land of late" should be plowed up.

And if a man haue plentie of suche pasture, that wil be mossie euery thyrd yere, lette hym breaike vp a newe piece of gronde, and plowe it and sowe it (as I haue seyde before), and he shal haue plentye of come, with littell dongynge, and sow it no lengar thu it will beare plentye of corne, without donge, and it will beare much better grasse, x or xii yere after.... Reyst grounde if it be dry, will bringe much corne, for the mosse will rotte, and the moll hillockes will amende the ground wel. 100

Tusser's references to the practice of plowing up lea ground and laying other land to grass are so incidental as to be good evidence of the fact that this was not merely the recommendation of a theorist, but a common practice, the details of which were familiar to those for whom he intended his book. A passage in which he refers to the laying to grass of land in need of rest has already been quoted. ¹⁰¹ In discussing the date at which plowing should take place he mentions the plowing up of lea land as well as of fallow. ¹⁰²

The superior value of enclosed pasture to open-field leas, and of enclosed arable to open-field arable, is not only asserted by Fitzherbert and others who are urging husbandmen to enclose their land, but appears also when manorial surveys are examined. It would seem, therefore, that the tenants would have been anxious to carry the process to an end and enclose their land. Undoubtedly the larger holders were desirous of making the change, but as long as the rights of the lesser men were respected, it was almost impossible to carry it out. The adjustment of conflicting and obscure claims was generally held to be an insuperable obstacle, even by those who urged the change most strongly, while those who on principle opposed anything in the way of enclosure took comfort in the fact that holdings were so intermixed that there was little prospect of accomplishing the change:

Wheare (men) are intercominers in comon feildes and also haue theare portions so intermingled with an other that, thoughe they would, they could not inclose anie parte of the saide feldes so long as it is so. 103

Just as the services of a promoter are needed in the formation of a modern industrial combination, pressure from above was usually necessary in order to overcome the difficulties of the situation. The Lord of Berkeley (1281–1321)

drewe much profitt to his Tenants and increase of fines to himselfe... by makeing and procuringe to bee made exchanges of land mutually one with an other, thereby casting convenient Parcells togeather, fitting it for an inclosure and conversion. And by freeinge such inclosures from all comonage of others. ¹⁰⁴

A landlord of this sort would do much to override the opposition of those who, through conservatism, fear of personal loss, or insistence upon more than their share of the benefits of the readjustment, made it impossible for tenants to carry out these changes unassisted.

Where tenants with or without the assistance of the lord had managed to enclose some of their land and free it from right of common, they were in a position to devote it to) sheep-farming if they chose to do so. Ordinarily they did not do this. If, as has been claimed, the large-scale enclosures which shall be considered later were made because of an increasing demand for wool, it is surprising that these husbandmen were willing to keep enclosed land under cultivation, and even to plow up enclosed pasture. The land had to be kept under grass for a part of the time, whether it was open or enclosed, because if kept continuously under the plow it became unproductive; and it was better to have this land enclosed so that it could be used advantageously as pasture during the period when it was recovering its strength. But the profits of pasturage were not high enough to prevent men from plowing up the land when it was again in fit condition.

At Forncett, the tenants had begun sheep-farming by the end of the fourteenth century, and had also begun to enclose land in the open-fields; the situation was one, therefore, in which agriculture was likely to be permanently displaced by grazing, according to the commonly accepted theory of the enclosure movement. This change failed to take place; not because enclosures ceased to be made—nearly half of the acreage of the fields was in enclosures by 1565—but because the tenants preferred to cultivate this enclosed land. ¹⁰⁵ If the enclosures had been pasture when they were first made, they did not remain permanently under grass. Like the land still in the open fields, and like the small enclosures in Cheshire reported by the commission of 1517, they were sometimes plowed and sometimes laid to grass, according to the condition of the soil. In a Cheshire village, two tenants had small enclosures in the same field, which were treated in this way. At the time the commission visited the place, one of these closes was being used as pasture, and the other was in cultivation. John Monkesfield's close, which had been made six years before,

pastura & nunc occupata est in pastura. 106

John Molynes' close of one acre had been made the year before and

fuit antea in pastura & nunc occupata est in cultura.

It had evidently been a strip of lea land which had been so improved by being kept under grass that it was in fit condition for cultivation, while John Monkesfield's close had been plowed long enough and was just at this time in need of rest. These men were apparently unaffected by any increasing demand for wool, but were managing their land according to its needs.

By the sixteenth century, then, some enclosures had appeared in the open fields, and the old common-field system was disintegrating. The old customary holdings had been so altered that they were hardly recognizable. Some tenants held a great number of acres, and had managed by purchase or exchange to get possession of a number of adjacent strips, which they might, under certain conditions, be able to enclose. Much of the land, however, was withdrawn from cultivation, and for years was allowed to remain almost in the condition of waste.

For the most part, however, there had been no revolutionary change in the system of husbandry. The framework remained. The whole community still possessed claims extending over most of the land. The village flocks pastured on the stubble and the fallows of the open fields. The advantages which could in theory be derived from the control of several adjacent strips of land were reduced to a minimum by the necessity of maintaining old boundaries to mark off from each other lands of differing status. Even where the consolidation of holdings had proceeded to some extent, the tenants who had acquired the most compact holdings in comparison with the majority still possessed scattered plots of land separated from each other by the holdings of other men, and some of the smaller holders had no two strips which touched each other. When the tenants had been left to themselves, all of the changes which took place before the eighteenth century, numerous as they were, usually left the fields in a state resembling more their condition in the twelfth and thirteenth centuries than that of the nineteenth century.

Chapter IV: Enclosure for Sheep Pasture

Enclosure made by the tenants themselves by common agreement aroused no opposition or apprehension. No diminution of the area under tillage beyond that which had already of necessity taken place occurred, and the grass land already present in the fields was made available for more profitable use. The Doctor in Hales' dialogue carefully excepts this sort of enclosure from condemnation:

I meane not all Inclosures, nor yet all commons, but only of such Inclosures as turneth commonly arable feildes into pastures; and violent Inclosures, without Recompense of them that haue the right to comen therein: for if the land weare seuerallie inclosed to the intent to continue husbandrie theron, and euerie man, that had Right to commen, had for his portion a pece of the same to him selfe Inclosed, I thincke no harm but rather good should come therof, yf euerie man did agre theirto.¹⁰⁷

In this passage Hales recognizes the theoretical possibility of a beneficial sort of enclosure, but the conditional form in which his remarks are thrown indicates that, so far as he knew, there was little systematic division of the land among the tenants by common consent.

Orderly rearrangement of holdings into compact plots suitable for enclosure was difficult unless the small holders had all disappeared, leaving in the community only men of some means, who were able to undertake the expenses of the readjustment. In most villages, however, holdings of all sizes were the rule. Some tenants had almost no land under cultivation, but picked up a living by working for others, and by keeping a few sheep on the commons and on the fallow lands of the town. There was thus always a fringe of peasant families on the verge of destitution. They were being gradually eliminated, but the process was extremely slow. A few of them in each generation, feeling as a realized fact the increasing misery which has been predicted for the modern industrial laborer, were forced to give up the struggle. Their land passed into the hands of the more prosperous men. who were thus gradually accumulating most of the land. In some cases, no doubt, all of the poorer tenantry were drained off in this fashion, making it possible for those who remained to consolidate their holdings and enclose them in the fashion advocated by Fitzherbert, keeping a part under tillage until it needed a rest, and pasturing sheep and cattle in the closes which were under grass.

It is impossible to estimate the number of these cases. What we do know is that in the sixteenth and seventeenth centuries no such stage had been reached in hundreds of English townships. The enclosures which had been made by the tenants were of a few acres here and there. The fields for the most part were still open and subject to common, and consisted in part of poor pasture land. We do know also that many landlords took matters into their own hands, dispossessed the tenants, and enclosed a part or all of the land for sheep pastures. The date at which this step was made, and the thoroughness with which it was carried out, depended very much upon the character and needs of the landlord, as well as upon local circumstances affecting the condition of the soil and the degree of poverty suffered by the tenants. The tendency for landlords to lose patience with the process which was gradually eliminating the poorer men and concentrating their land in the hands of the more prosperous is not characteristic of any one century. It began as early as the middle of the fourteenth century, and it extended well into the seventeenth. By 1402 clergy were being indicted as depopulatores agrorum. 108 In the fifteenth century statutes against enclosure and depopulation were beginning to be passed, and Rous gives a list of fifty-four places near Warwick which had been wholly or partially depopulated before about 1486. For the sixteenth century, we have the evidence of numerous statutes, the returns of the commissions, doggerel verse, popular insurrections, sermons, etc. Miss Leonard's study of the seventeenth-century enclosures is confirmed by additional evidence presented by Gonner that the movement was unchecked in this period. In 1692, for instance, Houghton was attacking the "common notion that enclosure always leads to grass," by pointing out a few exceptions. ¹⁰⁹ In 1695 Gibson spoke of the change from tillage to pasture, which had been largely within living memory. ¹¹⁰

There is no reason to believe that the landowners who carried out this process were unsually mercenary and heartless. The need for putting their land to some remunerative use was imperative, and it is surprising that the enclosure movement was of such a piecemeal character and extended over so many years, rather than that it took place at all.

There was little rent to be had from land which lay for the most part in open fields, tilled by men who had no capital at their command for improving the condition of the soil, or for utilizing profitably the portion of the land which was so impoverished that it could not be cultivated.

Poor tenants are unprofitable tenants; it is difficult to collect rent from them and impossible to raise their rent, and they attempt to save by exploiting the land, leaving it in worse condition than when they received it. Contemporary references to the poverty of these open-field tenants all confirm the impression given by Hales:

They that be husbandmen now haue but a scant lyvinge therby. ¹¹¹ I that haue enclosed litle or nothinge of my grond could (never be able) to make vp my lordes rent weare it not for a little brede of neate, shepe, swine, gese and hens that I doe rere vpon my ground: whereof, because the price is sumwhat round, I make more cleare proffitt than I doe of all my corne and yet I haue but a bare liuinge. ¹¹²

Harrison, at the end of the century, writes of the open-field tenants:

They were scarce able to Hue and paie their rents at their daies without selling of a cow or an horsse, or more, although they paid but foure poundes at the vttermost by the yeare. ¹¹³

The tenant who could not pay this rent without selling stock was, of course, one of those who would soon have to give up his land altogether, if the landlord continued to demand rent. If he sold his horses and oxen to raise the rent one year, he was less able to work his land properly the next year, and the crop, too small in the first place to enable him to cover expenses, diminished still more. When the current income was ordinarily too small to cover current expenses, no relief was to be found by reducing the capital. A time came when these men must be either turned away, and their land leased to others, or else allowed to stay and make what poor living they could from the soil, without paying even the nominal rent which was to be expected of them.

Lord North's comment on the enclosure movement as he saw it in the seventeenth century is suggestive of the state of affairs which led to the eviction of these husbandmen:

Gentlemen of late years have taken up an humor of destroying their tenements and cottages, whereby they make it impossible that mankind should inhabit their estates. This is done sometimes barefaced because they harbour poor that are a charge to the parish, and sometimes because the charge of repairing is great, and if an house be ruinous they will not be at the cost of rebuilding and repairing it, and cast their lands into very great farms which are managed with less housing: and oftimes for improvement as it is called which is done by buying in all freeholds, copyholds, and tenements that have common and which harboured very many husbandry and labouring families and then enclosing the commons and fields, turning the managry from tillage to grasing. 114

Not only were these men able to pay little rent for the land they held, but, as has been suggested, they were unable to maintain the land in proper condition by the use of manure and marl. These expenses were beyond the means of the farmer who was falling behind; they neglected the soil because they were poor, and they were poor because the yield of the land was so low; but their neglect caused it to decline even more. Fitzherbert, who deplores the fact that marl is no longer used in his time, points out that not only the leaseholder, who is averse to making improvements on account of the insecurity of his tenure, but the freeholder, also, is neglecting his land; although

He knoweth well, he shall take the profits while he liueth, & his heyres after him, a corrage to improw his owne, the which is as good as and he purchased as much as the improvement cometh to. 115

But if he spent money on marling the soil, he would have nothing to live on while waiting for the crop. The very poverty of the small holders made it necessary for them to sink in still greater poverty, until the lord deprived them of the land, or until they became so discouraged that they gave it up of their own volition. They might easily understand the force of Fitzherbert's arguments without being able to: follow his advice. "Marie mendeth all manor of grounde, but it is costly." The same thing is true of manure. According to Denton, the expense of composting land was almost equivalent to the value of the fee simple of the ground. He refers to a record of the early fourteenth century of the payment of more than twice the ordinary rent for composted land. With manure at high prices, the man in difficulty might be tempted to sell what he had; it was certainly out of the question for him to buy more. Or, what amounted to the same thing, he might sell hay or straw, and so reduce the forage for his cattle, and return less to the soil by means of their dung.

Dr. Simkhovitch points out the difference between the farmer who is unable to meet expenses in a particular year because of an exceptionally bad season, and one who is suffering because of progressive deterioration of his farm. The first may borrow and make good the difference the following year; the latter will be unable to extricate himself. He neither has means to increase his holding by renting or buying more land, nor to improve the land which he has already. His distress is cumulative:

Only one with sufficient resources can improve his land. By improving land we add to our capital, while by robbing land we immediately add to our income; in doing so, however, we diminish out of all proportion our capital as farmers, the productive value of our farm land. The individual farmer can therefore improve his land only when in an economically strong position. A farmer who is failing to make a living on his farm is more likely to exploit his farm to the utmost; and when there is no room for further exploitation he is likely to meet the deficit by borrowing, and thus pledging the future productivity of his farm. 118

While small holders in the open fields were in no position to pay higher rents, the land owners were suffering. Prices were rising, and while the higher price of farm produce in the market was of little help to the tenant whose own family used nearly everything he could raise, the landlords felt the pressure of an increasing cost of living.

Many of us [says the Gentleman, in Hales' dialogue] haue bene driuen to giue over oure houshold, and to kepe either a chambere in london, or to waight on the courte Vncalled, with a man and a lacky after him, wheare he was wonte to kepe halfe a score cleane men in his house, and xx^{tie} or xxx^{tie} other persons besides, everie day in the weke.... We are forced either to minyshe the thirde parte of our houshold, or to raise the thirde parte of our Revenues. 119

It was difficult for the landowners to make economic use of even those portions of the land which were not in the hands of customary tenants. If they were willing to invest capital in enclosing demesne land and stocking it with sheep, without disturbing their small tenants, they found it impossible to do so. Not only did the poorer tenants have to cultivate land which was barely productive of more than the seed used, because they could not afford to allow it to lie idle as long as it would produce anything; not only did they allow the land which was under grass to remain practically waste, because they could not afford to enclose it and stock it with sheep; not only did they neglect manuring and marling the land because these improvements were beyond their means, so that the land was constantly growing poorer in their hands, and so that they could pay very little rent; but they were also tenacious of their rights of common over the rest of the land, and resisted all attempts at enclosure of the holdings of the more prosperous tenants, because they had to depend for their living largely upon the "little brede of neate, shepe, swine, gese and hens" which were maintained partly by the gleanings from other men's land when it lay common.

They undoubtedly suffered when the lord himself or one of the large leaseholders insisted on enclosing some of the land. If the commonable area was reduced, or if the land enclosed was converted from arable to pasture (as it usually was), the means by which they made their living was diminished. The occasional day's wages for labor spent on the land converted was now withdrawn, and the pasturage for the little flock was cut down. The practical effect of even the most innocent-looking enclosures, then, must have been to deprive the poorer families of the means of livelihood, even though they were not evicted from their worthless holdings. Enclosures and depopulation were inseparably linked in the

minds of contemporaries, even when the greatest care was taken by the enclosing authorities to safeguard the rights of the tenants.

These rights, however, seriously interfered with the most advantageous use of land, and often were disregarded. Not only did the small holders have rights of common over the rest of the land, but their own strips were intermingled with those of the lord and the large holders. The typical problem confronting the enclosing landlord is shown below:

Holdings in Open Field, West Lexham, Norfolk, 1575 120

Strips in Furlong A	Strips in Furlong B
1. Will Yelverton, freeholder.	1. Robert Clemente, freeholder.
2. Demesne.	2. Demesne.
3. Demesne.	3. Demesne.
4. Will Yelverton.	4. Demesne.
5. Demesne.	5. Demesne.
6. Demesne.	6. Demesne.
7. Demesne.	7. Demesne.
8. Demesne.	8. Demesne.
9. Demesne.	9. Will Lee, freeholder.
10. Glebe.	10. Will Gell, copyholder,
11. Demesne.	11. Demesne.
12. Demesne.	12. Demesne.
13. Glebe.	13. Demesne.

If, as was probably the case, the product from these demesne strips was so small that the land was fit only for conversion to pasture, the pecuniary interest of the lord was to be served best by enclosing it and converting it. But should he make three enclosures in furlong A, and two in furlong B, besides taking pains to leave a way clear for Will Yelverton and Lee and Gell to reach their land? Or should he be content merely with enclosing the larger plots of land, because of the expense of hedging and ditching the smaller plots separately from the rest? If he did this, the unenclosed portions would be of little value, as the grass which grew on them could not be properly utilized for pasture. The final alternative was to get possession of the strips which did not form part of the demesne, so that the whole could be made into one compact enclosure. In order to do this it might be necessary to dispossess Will Lee. Will Gell, *etc.* The intermingling of holdings, in such a way that small holders (whose own land was in such bad condition that they could not pay their rents) blocked the way for improvements on the rest of the land, was probably responsible for many evictions which would not otherwise have taken place.

But not all evictions were due to this cause alone. The income to the owner from land

which was left in the hands of customary tenants was much lower than if it was managed by large holders with sufficient capital to carry out necessary changes. Where it is possible to compare the rents paid by large and small holders on the same manor, this fact is apparent:

Average Rent per Acre of Land on Five Manors in Wiltshire, 1568121

	I		II		III		IV		V	
	s.	d. s	. d.	s.	d.	s.	d.	s.	d.	
Lands held by farmers	1	6	$7\frac{3}{4}$	1	$5\frac{3}{4}$	1	13/4	1	$5\frac{1}{2}$	
Lands held by customary tenants		$7\frac{1}{2}$	5	1	$0\frac{3}{4}$		$5\frac{3}{4}$		$5\frac{3}{4}$	

The differences in these rents are sufficient to be tempting to the lord who was seeking his own interest. The large holders were able to expend the capital necessary for enclosing and converting the part of the land which could not be profitably cultivated because of its bad condition. The capital necessary for this process itself was considerable, and besides, it was necessary to wait several years before there was a return on the investment, while the sod was forming, to say nothing of the large expenditure necessary for the purchase of the sheep. The land when so treated, however, enabled the investor to pay higher rents than the openfield husbandmen who "rubbed forth their estate in the poorest plight." ¹²²

A lord who was willing to consider only pecuniary advantage had everything to gain by clearing the land entirely of small holders, and putting it in the hands of men with capital. It is, therefore, to the credit of these landowners that there are "so few authentic cases of the depopulation of entire villages and the conversion of all of the arable land into sheep runs. These cases made the lords who were responsible notorious and were, no doubt, exceptional. Nearly fifteen hundred places were covered by the reports of the commissions of 1517 and 1607, and Professor Gay has found among these "but a round dozen villages or hamlets which were all enclosed and emptied of their inhabitants, the full half of them in Northamptonshire." For the most part, the enclosures reported under the inquisitions as well as those indicated on, the maps and surveys of the period involved only small areas, and point to a process of piece-meal enclosure. The landowners seem to have been reluctant to cause hardship and to have left the open-field tenants undisturbed as far as possible, contenting themselves with the enclosure and conversion of small plots of land.

The social consequences of so-called depopulating enclosure were serious, but they are not seen in their proper perspective when one imagines the condition of the evicted tenants to have been fairly good before they were dispossessed. The cause lying back of the enclosure movement was bringing about the gradual sinking of family after family, even when no evictions were made. To attribute, the poverty and misery of the rural population to the enclosure movement is to overlook the unhappy condition of the peasants, even where no enclosures had been made. Enclosures had been forbidden in the fields of royal manors in Northamptonshire, but this did not protect the peasantry from destitution. The manor of Grafton, for instance, was surveyed in 1526 and a note was made at the end of the survey that the revenue drawn from the lordship had lately been increased, but "there can no ferther

enprovemente there be made and to kepe the tenantries standyng. Item the tenauntriez there be in sore decaye." The surveyor of Hartwell also notes that the "tenements there be in decay." The surveyor of Hartwell also notes that the "tenements there be in decay."

The economic basis of the unfortunate social changes which were associated with the process of enclosure came gradually to be recognized. It was evidently futile to enact laws requiring the cultivation of land "wasted and worn with continual plowing and thereby made bare, barren and very unfruitfull." Merely restrictive and prohibitory legislation was followed by the suggestion of constructive measures. Until the middle of the sixteenth century, laws were made in the attempt to put a stop to the conversion of arable land to pasture under any conditions, and required that land which had been under cultivation should be plowed in the future. In the act of 1552, however, an attitude somewhat more reasonable is to be seen. It was provided that land which had been under cultivation within a certain number of years preceding the act should be tilled, "or so much in quantity." Public men were also urging that less time be devoted to the futile attempt to force men to cultivate land unfit for tillage, and that encouragement be given instead to measures for improving the waste, and bringing fresh land under the plow.

After a time, moreover, another fact became apparent: there was a marked tendency to break up and again cultivate the land which in former generations had been converted to pasture. The statute of 1597 not only contained a proviso permitting the conversion of arable fields to pasture on condition that other land be tilled instead, ¹²⁸ thus tacitly admitting that the reason for withdrawing land from cultivation was not the low price of grain, but the barrenness of the land, but also explicitly referred to this fact in another proviso permitting the conversion of arable land to pasture temporarily, *for the purpose of recovering its strength*:

Provided, nevertheless, That if anie Pson or Body Pollitique or Corporate hath... laide or hereafter shall lay anie grownde to graze, or hathe used or shall use the same grownde with shepe or anie other cattell, which Grownde hath bene or shall be dryven or worne owte with Tillage, onely upon good Husbandrie, and with intente bona fide without Fraude or Covyne the same Grownde shall recover Harte and Strengthe, an not with intent to" continue the same otherwise in shepe Pasture or for fattinge or grazinge of Cattell, that no such Pson or Body Politike or Corporate shall be intended for that Grownde a Converter within the meaning of this Lawe. 129

A speaker in the House of Commons commends these provisions:

For it fareth with the earth as with other creatures that through continual labour grow faint and feeble-hearted, and therefore, if it be so far driven as to be out of breath, we may now by this law resort to a more lusty and proud piece of ground while the first gathers strength, which will be a means that the earth yearly shall be surcharged with burden of her own excess. And this did the former lawmakers overslip, tyeing the land once tilled to a perpetual bondage and servitude of being ever tilled ¹³⁰

Several years before the passage of this statute, Bacon had remarked that men were breaking up pasture land and planting it voluntarily. ¹³¹ In 1619, a commission was appointed to consider the granting of licenses "for arable lands converted from tillage to pasture." The proclamation creating this commission, after referring to the laws formerly made against such conversions, continues:

As there is much arable land of that nature become pasture, so is there by reason thereof, much more other lands of old pasture and waste, and wood lands where the plough neuer entred, as well as of the same pasture lands so heretofore conuerted, become errable, and by husbandrie made fruitfull with corne... the quantitie and qualitie of errable and Corne lands at this day doth much exceed the quantitie that was at the making of the saide Lawe.... As the want thereof [of corn] shall appeare, or the price thereof increase, all or a great part of those lands which were heretofore converted from errable to pasture and have sithence gotten heart, strength and fruitfulness, will be reduced to Corne lands againe, to the great increase of graine to the Commonwealth and profite to each man in his private. ¹

John Hales had protested against depopulating enclosures, in 1549, by appealing ¹³² to the public spirit of landowners. They increased their profits by converting arable land to pasture, but, he argued,

It may not be liefull for euery man to vse his owne as hym lysteth, but eueyre man must vse that he hath to the most benefyte of his countrie. Ther must be somethynge deuysed to quenche this insatiable thirst of greedynes of men. ¹³³

But now it was no longer necessary to persuade the owners of this same land to forgo their own interests for the sake of the public good. Those whose land had been used as pasture for a great number of years were finding it valuable arable, because of its long period of rest and regeneration. Land which had been converted to pasture was being put under the plow because of the greater profit of tillage.

So great was the profit of cultivating these pastures that landlords who were opposed to having pastures broken up by leaseholders had difficulty in preventing it. Towards the end of the sixteenth century at Hawsted, and in the beginning of the seventeenth, a number of leases contained the express provision that no pastures were to be broken up. In 1620 and the years following, some of the leases permitted cultivation of pasture, on the condition that the land was to be laid to grass again five years before the expiration of the lease.¹³⁴

There is no doubt of the fact that much land was being converted from pasture to arable in this period. Evidence of this tendency multiplies as the century advances. In 1656 Joseph Lee gave a list of fifteen towns where arable land hitherto converted to pasture had been plowed up again within thirty years.¹³⁵

Barren and insufficiently manured land did not produce good crops merely because other land had been given an opportunity to recover its strength. The conversion of open-field

arable to pasture went on unchecked in the seventeenth century because it had not yet had the benefit of the prolonged rest which made agriculture profitable, and without which it had become impossible to make a living from the soil. The lands which have been "heretofore converted from errable to pasture.... have sithence gotten heart, strength and fruitfulnesse," and are therefore being plowed again; but the land which has escaped conversion, and has been tied to the "perpetual bondage and servitude of being ever tilled," is "faint and feeble-hearted," and is being laid to grass, for pasture is the only use for which it is suited. The cause of the conversion of arable fields to pasture is the same as that which caused the same change on other lands at an earlier date—so low a level of productivity that the land was not worth cultivating. Lands whose fertility had been restored were put under cultivation and plowed until they were again in need of rest.

Thus the final result was about the same whether an enclosing landlord cut across the gradual process of readjustment of landholding among the tenants, and converted the whole into pasture, or whether the process was allowed to go on until none but large holders remained in the village. In both cases the tendency was towards a system of husbandry in which the fertility of the soil was maintained by periodically withdrawing portions of it from cultivation and laying it to grass. In the one case, cultivation was completely suspended for a number of years, but was gradually reintroduced as it became evident that the land had recovered its strength while used as pasture. In the other, the grazing of sheep and cattle was introduced as a by-industry, for the sake of utilizing the land which had been set aside to recover its strength, while the better land was kept under the plow. Whether enclosures were made for better agriculture, then, as Mr. Leadam contends, or for pasture, as is argued by Professor Gay, 136 the arable enclosures were used as pasture for a part of the time and the enclosed pastures came later to be used for tillage part of the time, and the two things amount to the same thing in the end.

This end, however, had still not been reached in a great number of open-field villages by the beginning of the eighteenth century, and we should expect to find that the history of the land in this century was but a repetition of what had gone before, in so far as the fields which had not hitherto been enclosed are concerned.

But, during the seventeenth century, an agricultural revolution was taking place. Experiments were being made with new forage crops. For one thing, it was found that turnips could be grown in the fields and that they made excellent winter forage; and grass seeding was introduced. The grasses and clovers which were brought from Holland not only made excellent hay, but improved the soil rapidly. The possibility of increasing the amount of hay at will put an end to the absolute scarcity of manure—the limiting factor in English agriculture from the beginning. And the comparative ease with which the artificial grasses could be made to grow did away with the need of waiting ten or fifteen years, or perhaps half a century, for natural grass to cover the fields and restore their productiveness.

Only with the introduction of grass seeding did it become possible to keep a sufficient amount of stock, not only to maintain the fertility of the soil, but to improve it steadily. The soil instead of being taxed year after year under the heavy strain of

grain crops was being renovated by the legumes that gathered nitrogen from the air and stored it on tubercles attached to their roots. The deep roots of the clover penetrated the soil, that no plow ever touched. Legumes like alfalfa, producing pound by pound more nutritious fodder than meadow grass, produced acre by acre two and three times the amount, and when such a field was turned under to make place for a grain crop, the deep and heavy sod, the mass of decaying roots, offered the farmer "virgin" soil, where previously even five bushels of wheat could not be gathered.¹³⁷

As the value of these new crops became generally recognized, some effort was made to introduce them into the regular rotation of crops in the fields which were still held in common, but, for the most part, these efforts were unsuccessful, and new vigor was given to the enclosure movement. Frequently persons having no arable land of their own had right of common over the stubble and fallow which could not be exercised when turnips and clover were planted; for reasons of this sort, it was difficult to change the ancient course of crops in the open fields. For example, late in the eighteenth century (1793) at Stiffkey and Morston, the improvements due to enclosure are said to have been great, for:

being half-year land before, they could raise no turnips except by agreement, nor cultivate their land to the best advantage. 138

At Heacham the common fields were enclosed by act in 1780, and Young notes:

Before the enclosure they were in no regular shifts and the field badly managed; now in regular five-shift Norfolk management. 139

At Northwald, about 3,000 acres of open-field land were enclosed in 1796 and clover was introduced. The comment made is that "the crops bear quite a new face." The common field of Brancaster before enclosure in 1755 "was in an open, rude bad state; now in five or six regular shifts." ¹⁴⁰

Hitherto there had been only one way of restoring fertility to land; converting it to pasture and leaving it under grass for a prolonged period. Now it could be speedily improved and used intensively. Arthur Young describes the modern method of improvement in his account of the changes made in Norfolk husbandry before 1771:

From forty to fifty years ago, all the northern and western and a great part of the eastern tracts of the county were sheep walks, let so low as from 6d. to is. 6d. and 2s. an acre. Much of it was in this condition only thirty years ago. The improvements have been made by the following circumstances.

First. By enclosing without the assistance of Parliament.

Second. By a spirited use of marl and clay.

Third. By the introduction of an excellent course of crops.

Fourth. By the introduction of turnips well hand-hoed.

Fifth. By the culture of clover and ray-grass.

Sixth. By the lords granting long leases.

Seventh. By the country being divided chiefly into large farms. 141

The evidence which has been, examined in this monograph reveals the far-reaching influence of soil exhaustion in English agrarian history in the centuries before the introduction of these new crops. As the yield of the soil declined, the ancient arable holdings proved incapable of supporting their cultivators, and a readjustment had to be! made. The pressure upon subsistence was felt while villainage was still in force, and the terms upon which serfdom dissolved were influenced by this fact to an extent which has hitherto not been recognized. The economic crisis involved in the spread of the money economy threw into relief the destitution of the villains; and the easy terms of the cash payments which were substituted for services formerly due, the difficulty with which holders for land could be obtained on any terms, the explicit references to the poverty of whole communities at the time of the commutation of their customary services, necessitate the abandonment of the commonly accepted view that growing prosperity and the desire for better social status explain the substitution of money payments for labor services in the fourteenth century. The spread of the money economy was due to the gradual integration of the economic system, the establishment of local markets where small land holders could sell their produce for money. Until this condition was present, it was impossible to offer money instead of labor in payment of the customary dues; as soon as this condition was present, the greater convenience of the use of money made the commutation of services inevitable. In practise money payments came gradually to replace the performance of services through the system of "selling" works long before any formal commutation of the services took place. But, whatever the explanation of the spread of the money economy in England during this period, it is not the prosperity of the villains, for, at the moment when the formal change from payments in labor to money payments was made, the poverty and destitution of the landholders were conspicuous. That this poverty was due to declining fertility of the soil cannot be doubted. Land in demesne as well as virgate land was showing the effects of centuries of cultivation with insufficient manure, and returned so scant a crop that much of it was withdrawn from cultivation, even when serf labor with which to cultivate it was available. Exhaustion of the soil was the cause of the pauperism of the fourteenth century, as it was also of the enclosure and conversion to pasture of arable land in the fifteenth, sixteenth and seventeenth centuries. Systematic enclosure for the purpose of sheep-farming on a large scale was but the final step in a process of progressively less intense cultivation which had been going on for centuries. The attention of some historians has been devoted too exclusively to the covetous sheep-master, against whom contemporary invective was directed, and the process which was going on in fields where no encloser was at work has escaped their notice. The three-field system was breaking down as it became necessary to withdraw this or that exhausted plot from cultivation entirely for a number of years. The periodic fallow had proved incapable of keeping the land in proper condition for bearing crops even two years out of three, and everywhere strips of uncultivated land began to appear in the common fields. This lea land —waste land in the midst of the arable—was a common feature of sixteenth and seventeenth century husbandry. The strips kept under cultivation

gave a bare return for seed, and the profit of sheep-raising need not have been extraordinarily high to induce land-owners to abandon cultivation entirely under these conditions. A great part of the arable fields lay waste, and could be put to no profitable use unless the whole was enclosed and stocked with sheep. The high profit made from sheep-raising cannot be explained by fluctuations in the price of wool. The price of wool fell in the fifteenth century. Sheep-farming was comparatively profitable because the soil of the ancient fields was too barren to repay the costs of tillage. Land which was in part already abandoned, was turned into pasture. The barrenness and low productivity of the common fields is explicitly recognised by contemporaries, and is given as the reason for the conversion of arable to pasture. Its use as pasture for a long period of years gave it the needed rest and restored its fertility and pasture land which could bear crops was being brought again under cultivation during the centuries in which the enclosure movement was most marked.

Vita.

The author of this monograph was born at Omaha, Nebraska, October 2, 1892. She attended school at various places in this country and in the Philippine Islands and received the degree of Bachelor of Arts from Vassar College in 1913. She matriculated at Columbia University in 1914 and received the degree of Master of Arts in 1915. During the year 1915–1916 she held the position of Lecturer in Economics at Barnard College, and was appointed a University Fellow of Columbia University for the year 1916–1917. She was a member of the seminar conducted by Professors Seager and Simkhovitch in the years 1914–1917, and attended the lectures of Professors Seligman, Mitchell, Mussey, Beard and others. In the present year (1917–1918) she holds the position of Assistant Professor in Economics at Vassar College.

Notes

- 1. V. G. Simkovitch, *Political Science Quarterly*, vol. xxvii, p. 398.
- 2. (London, 1888), pp. 153–154. Denton refers here to Gisborne's *Ag. Essays*, as does Curtler, in his *Short Hist, of Eng. Ag.* (Oxford, 1909). p. 77.
- 3. Vol. i, p. 321.
- 4. English Farming Past and Present (London, 1912), p. 64.
- 5. Common Land and Enclosure, p. 121.
- 6. See Political Science Quarterly, vol. xxxi, p. 214.
- 7. Industry in England (New York, 1897), p. 181.

- 8. Hist, of the Eng. Ag. Laborer (London, 1908), p. 31.
- 9. Pub. Am. Ec. Assoc., Third Series (1905), vol. vi, no. 2, pp. 146–160: "Inclosure Movement in England."
- 10. Royal Hist. Soc. Trans., New Series (1905), vol. xix, pp. 101-146: "Inclosure of Common Fields."
- 11. Levett and Ballard, *The Black Death on the Estates of the See of Winchester* (Oxford, 1916), p. 142.
- 12. Smyth, Lives of the Berkeley; (Gloucester. 1883), vol. i, pp. 113–160.
- 13. (Oxford, 1866–1902), vols. i, iv.
- 14. Increase in manufacture of woollen cloth constituted no increase in the demand for wool in so far as exports of raw wool were reduced.
- 15. Royal Historical Soc. Trans., N. S. (1905), vol. ix, p. 101, note 2.
- 16. Denton, England in the Fifteenth Century, p. 159.
- 17. Gay, Quarterly Journal of Economics (1902–1903), vol. xvii, p. 587.
- 18. Pollard, Reign of Henry VII (London, 1913), vol. ii, pp. 235–237.
- 19. More, *Utopia* (Everyman edition), p. 23.
- 20. Ibid., p. 24.
- 21. Outlines of the Economic History of England (London, 1908), p. 118.
- 22. Growth of Eng. Ind. and Commerce (Cambridge, 1892), p. 180.
- 23. England's Industrial Development (London, 1912), p. 247.
- 24. English Economic History (New York, 1893), part ii, p. 262.
- 25. Carew, Survey of Cornwall (London, 1814), p. 77.

- 26. Cunningham, *Growth of English Industry and Commerce, Modern Times*, 1903, part i, p. 101.
- 27. Lennard, Rural Northamptonshire (Oxford, 1916), p. 87.
- 28. Leonard, *Royal Hist. Soc. Trans.*, 1905. Gonner in *Common Land and Inclosure* covers much the same ground, but does not bring out as clearly the extent to which the seventeenth century enclosures were accompanied by conversion of tilled land to pasture.
- 29. Tawney, Agrarian Problem in the Sixteenth Cen. (London, 1912), p. 391.
- 30. Royal Hist. Soc. Trans. (1905), vol. xix, note i, p. 113.
- 31. *Ibid.*, pp. 116–117.
- 32. Rogers, History of Agriculture and Prices, vol. iv, p. 757.
- 33. Levett and Ballard, The Black Death, p. 129.
- 34. Tawney, op. cit., p. 220, note 1.
- 35. E. J. Russell, *The Fertility of the Soil*, Cambridge, 1913, pp. 43–46.
- 36. *Ibid.*, pp. 48–52.
- 37. Political Science Quarterly, vol. xxviii, p. 394.
- 38. Ibid., p. 393.
- 39. Levett and Ballard, *The Black Death*, p. 216.
- 40. Walter of Henley's Husbandry, together with an Anonymous Husbandry, etc., ed. by Elizabeth Lamond (London, 1890), pp. 19, 71.
- 41. Curtler, Short History of English Agriculture, p. 33.
- 42. Davenport, Econ. Dev. of a Norfolk Manor (Cambridge, 1906), p. 30.
- 43. Rogers, *History of Agriculture, etc.*, vol. i, pp. 38–44.
- 44. Cullum, *Hawsted*, pp. 215–218.

- 45. Unfortunately, the figures for the year 1299–1300 reveal an error which makes it impossible to use the test of the representativeness of Witney in a third season with accuracy. The acreage planted is obviously understated, and it is possible to make only a rough estimate of the correct acreage. The acceptance of the area given by Gras (82 acres) results in the conclusion that 22 bushels per acre was reaped. The suspicion that this result must be incorrect is confirmed when it is found, also, that 681/4 quarters of seed were sown—an amount sufficient for 270 acres at the average rate of 2 bushels per acre, or for 220 acres at the rate of 2½ bushels per acre, which Ballard gives as the rate usual at Witney. (Levett and Ballard, op. cit., p. 192.) In 1277 the acreage sown with wheat at Witney was 180 acres, and in 1278, 191. (Ibid., p. 100.) If 3 bushels per acre were sown in 1299, the area in this year also was 180 acres. If these estimates are used instead of the figure 82, as indicating the correct acreage, the yield for the year is found to be between 7 and 10 bushels per acre, in a season in which the average yield for the whole group of manors was 9 bushels per acre. The figures at Witney in the three seasons where a comparison with the general average for the group is possible deviate from it within limits narrow enough to indicate that conditions at Witney were roughly typical.
- 46. Gras, Evol. of the Eng. Corn Market (Cambridge, 1915), appendix A.
- 47. Rogers, *History of Agriculture and Prices*, vol. i, p. 228.
- 48. *Ibid.*, vol. i, p. 234; vol. iv, p. 282.
- 49. Op. cit., p. 9.
- 50. Gras, *op. cit.*, appendix A. These figures are given only for the manors for which the acreage planted in both periods is known—25 in the case of wheat, 4 in the case of the other grains.
- 51. Gras, op. cit., appendix A; Levett and Ballard, op. cit., pp. 190, 303.
- 52. Smyth, *Lives of the Berkeleys*, vol. i, p. 113.
- 53. Page, *End of Villainage* (Publications of the American Economic Association, Third Series, 1900, vol. i, pp. 289–387), at p. 324, note 2.
- 54. Levett and Ballard, of. cit., p. 83.
- 55. Davenport, op. cit., p. 71.
- 56. Page, op. cit., p. 345.

- 57. *Ibid.*, p. 340, note 1, and Levett, p. 85.
- 58. *Ibid.*, p. 340, note 1.
- 59. Levett and Ballard, op. cit., p. 85.
- 60. Levett and Ballard, op. cit., p. 85.
- 61. Page, op. cit., p. 340.
- 62. Levett and Ballard, op. cit., p. 135.
- 63. Page, op. cit., p. 344, note 2.
- 64. Davenport, *Decay of Villainage*, p. 127. For further evidence of the voluntary relinquishment of land in this period, see Seebohm, *Eng. Village Community* (London, 1890), p. 30, note 4, and Davenport, *Economic Development of a Norfolk Manor*, pp. 91, 71, 72.
- 65. Levett and Ballard, op. cit., pp. 42–43.
- 66. Davenport, *Economic Development of a Norfolk Manor*, p. 78, and Smyth, *op. cit.*, vol. i, p. 113.
- 67. Levett and Ballard, *op. cit.*, p. 157. "On many manors the majority of the services owed were simply dropped, neither sold nor commuted. They were evidently in many cases inefficient, expensive, and inelastic."
- 68. Ibid., p. 89.
- 69. Levett and Ballard, op. cit., p. v.
- 70. Levett and Ballard, op. cit., p. 199.
- 71. Levett and Ballard, op. cit., p. 108.
- 72. *Ibid.*, pp. 38, 115.
- 73. Page, op. cit., p. 342, note 2.
- 74. Levett and Ballard, op. cit., p. 115.

- 75. *Ibid.*, p. 200.
- 76. Page, op. cit., p. 342, note 2.
- 77. Seebohm, op. cit., p. 30, note 2.
- 78. Page, End of Villainage, p. 365.
- 79. Ibid., p. 384.
- 80. Levett and Ballard, op. cit., p. 157.
- 81. Levett and Ballard, op. cit., p. 121.
- 82. Levett and Ballard, op. cit., p. 49, note.
- 83. A speech on enclosures commending bills proposed in 1597 contrasts the constructive character of that legislation with the earlier laws: "Where the gentleman that framed this bill hath dealt like a most skilful chirugien, not clapping on a plaster to cover the sore that it spread no further, but searching into the very depths of the wound that the life and strength which hath so long been in decay by the wasting of towns and countries may at length again be quickened and repaired." Bland, Brown & Tawney, *Eng. Econ. History—Select Documents*, pp. 271–272.
- 84. 4 H. 7, c. 16, as quoted by Pollard, Reign of Henry VII, p. 237.
- 85. Leadam, Domesday of Inclosures (London, 1897), p. 7. 3.
- 86. 25 H. 8, c. 13.
- 87. Gray, English Field Systems (Cambridge, 1915), pp. 95–96.
- 88. "Midland Revolt," R. H. S. Traits., New Series, vol. xviii, p. 230.
- 89. Tawney, Agrarian Problem, pp. 164–165.
- 90. Levett and Ballard, op. cit., pp. 52–53.
- 91. Husbandry (ed. English Dialect Society, 1882), p. 77.
- 92. 39 EL, c. i, vi.

- 93. Surveying (2nd ed., 1567), ch. 24.
- 94. Corbett, "Elizabethan Village Surveys," *Royal Hist. Soc. Trans.*, New Series, vol. ii, pp. 67–87.
- 95. Surveyinge, ch. 41.
- 96. Five Hundred Points (London, 1812).
- 97. Gray, op. cit., pp. 106–107.
- 98. Gray, op. cit., pp. 35, 106–107.
- 99. Lennard, Rural Northamptonshire, pp. 100–101.
- 100. Fitzherbert, Surveyinge, chs. 27 and 28.
- 101. 79. Another reference to this process is made in October's *Husbandry*, vol. 22, ch. 17.
- 102. Tusser, January's Husbandry, vol. 47, ch. 32.
- 103. A Discourse of the Common Weal of this Realm of England, ed. by Elizabeth Lamond, Cambridge, 1893.
- 104. Smyth, Lives of the Berkeleys, vol. ii, pp. 159–160.
- 105. 'Davenport, Norfolk Manor, pp. 80–81.
- 106. Leadam, op. cit., pp. 641–644.
- 107. Lamond, op. cit., p. 49.
- 108. 4 H. 4, c. 2. Miss Leonard calls attention to this statute. "Inclosure of Common Land in the Seventeenth Century." *Royal Hist. Soc. Trans.*, New Series, vol. xix, p. 101, note 2.
- 109. Gonner, Common Land and Inclosure, p. 162.
- 110. Leonard, op. cit., p. 140, note 2.
- 111. Lamond, op. cit., p. 90.

- 112. Ibid., pp. 56–57.
- 113. Description of Britain (Holinshed Chronicles, London, 1586), p. 189.
- 114. Leonard, op. cit., vol. xix, p. 120.
- 115. Surveyings, ch. 28.
- 116. *Ibid.*, ch. 32.
- 117. Denton, England in the Fifteenth Century, p. 150.
- 118. "Rome's Fall Reconsidered," *Political Science Quarterly*, vol. xxxi, pp. 217, 220,
- 119. Lamond, Common Weal of this Realm of England, pp. 19–20.
- 120. Tawney, Agrarian Problem in the Sixteenth Century, pp. 254–255.
- 121. Tawney, op. cit., p. 256.
- 122. Carew, as quoted by Leonard, op. cit., vol. xix, p. 137.
- 123. "Enclosures in England," Quarterly Journal of Ec., vol. xvii. p. 595.
- 124. Lennard, Rural Northamptonshire, pp. 73–4.
- 125. The reason stated in the preamble of many of the Durham decrees granting enclosure permits (Leonard, *op. cit.*, p. 117).
- 126. S & 6 Ed. 6, c. 5. Re-enacted by 5 El., c. 2.
- 127. Memorandum addressed by Alderman Box to Lord Burleigh in 1576, Conner, *op. cit.*, p. 157.
- 128. 39 El., ch. 2, proviso iii.
- 129. *Ibid.*, proviso iv.
- 130. Bland, Brown & Tawney: Select Documents, p. 272.

- 131. Cunningham, Growth of English Industry and Commerce, Modern Times, part ii, p. 99.
- 132. *Ibid.*, p. 99.
- 133. Lamond, op. cit., p. lxiii.
- 134. Cullum, *Hawsted*, pp. 235–243.
- 135. Leonard, "Inclosure of Common Fields in the Seventeenth Century," *Royal Hist. Soc. Trans.*, N. S., vol. xix, p. 141, note.
- 136. For this controversy see, "The Inquisitions of Depopulation in 1517 and the 'Domesday of Inclosures," by Edwin F. Gay and I. S. Leadam, *Royal Hist. Soc. Trans.*, 1900, vol. xiv, pp. 231–303.
- 137. Simkhovitch, Political Science Quarterly, vol. xxviii, pp. 400, 401.
- 138. Board of Agriculture Report, Norfolk, ch. vi.
- 139. Ibid., ch. vi.
- 140. Ibid.
- 141. Bland, Brown and Tawney, op. cit., pp. 530–531.