

Book Reviews

G. E. FUSSELL, *Jethro Tull: his influence on mechanized agriculture*. Reading, Osprey, 1973. 134 pp. £2.45.

The last major review of Jethro Tull's work and writings was made by T. H. Marshall in an article in 1929. He dealt harshly with some of Tull's theories on plant nutrition—"childish absurdities", he called them—but judged more appreciatively his practical achievements: Tull learned important lessons from English, French, and Italian gardeners about the value of spade cultivation, and these were an underlying inspiration when he campaigned for row cultivation and invented the horse hoe. His theories about plant nourishment, however, showed up badly when set against those of his scientific contemporaries in the Royal Society.

In this new publishing series on great innovators, Dr Fussell takes a fresh look at Tull's work and reputation. The title of his book does not exactly repeat the tribute engraved on a recently erected memorial plaque at Basildon, which called Tull "Pioneer of Mechanized Agriculture." Dr Fussell claims only to describe Tull's "influence on mechanized agriculture." He is cautious in assessing his role in the history of mechanized agriculture, and with good reason, for the story is a strange one. One is still left wondering what tricks history may have played with Tull's reputation.

Dr Fussell starts with a careful re-examination of Tull's career, adding some new information about his lease of the farm at Shalborne, based on documents in the Wiltshire Record Office. Gaps in the chronology of his life remain, however, as the principal source of information on Tull is still an article written in the *Gentleman's Magazine* in 1764, nearly twenty-five years after his death. Dr Fussell then describes Tull's precursors. Seventeenth-century agriculturists toyed with the idea of a seed drill, attempted to devise a satisfactory machine, and wrote books about their inventions. Dr Fussell refuses to treat them seriously, and while he is doubtless right in claiming that their practical achievements were disappoint-

ing, it is not clear that they were a complete failure. At all events, interest in experimentation was kept alive, while books on agriculture continued to stimulate the search for new ideas. But Dr Fussell has a prejudice against the seventeenth-century "book farmers", and even sweeps Walter Blith into this category. Yet Blith was the son of a farmer, his brother was a substantial gentleman farmer, and Walter's son inherited his uncle's estate. So what does the term "book farmer" mean? Many gentlemen in the seventeenth century owned farms and studied books on farming. They were deeply serious agricultural improvers, and took it for granted that theory and practice went hand in hand. Were they any different from today's farmers who have degrees in agriculture and continue to read the technical literature?

Fortunately, these prejudices do not obtrude when Dr Fussell comes to assess Tull. He makes "forgotten storms rage again" by giving a full account of the controversies that Tull stirred up in his lifetime. He is more sympathetic than was T. H. Marshall to his theories on plant nourishment, concluding that they were not altogether fallacious, but owed their limitations to the state of scientific knowledge at the time.

Tull's reputation after his death in 1741 makes the strangest reading of all. Silence settled upon his work until the Frenchman, Du Hamel du Monceau, publicized his writings in a French translation in 1753-61. These aroused wide interest in Europe, and English agriculturists once more took notice of their countryman's theories when Du Hamel's work was translated into English by John Mills in 1759 and by Philip Miller in 1764. The idea of row cultivation was canvassed anew, and in the course of the later eighteenth century better seed drills and horse hoes were invented. Dr Fussell concludes with an account of the improved machines of the nineteenth and twentieth centuries.

In the last lines of his book Dr Fussell is happy to describe Tull's seed drill as the first agricultural machine with internal moving

parts, and in that sense Tull may fairly be deemed a pioneer of mechanized agriculture. Whether Tull could ever claim the title of *the* pioneer of mechanized agriculture is another matter. His reputation seems to rest to a large extent on his success as a writer and publicist. In short, the same verdict holds for Tull as for other famous figures in the agricultural revolution. We can be far more certain of their role as publicists than of their role as principal innovators.

JOAN THIRSK

JOAN WAKE and DEBORAH CHAMPION WEBSTER (eds.), *The Letters of Daniel Eaton to the Third Earl of Cardigan, 1725-1732*. Northamptonshire Record Society Publications, XXIV, 1971. lvi + 186 pp., 6 illus., map. £2.65.

The editing of this fine volume of letters of an eighteenth-century land steward to his master stands as a model of how it should be done. Miss Wake and Mrs Webster are to be complimented in that nearly everything is here which either the general reader or the scholar interested in agriculture, in estate management, in the life of the landed classes, in local custom or classes, could want: fine introductions, good maps, photographs and facsimile reproductions of letters, useful appendixes, a glossary of terms used in the letters, and wonderfully useful indexes of places, persons, and subjects. A Plan of the Deene Estate, drawn by Bruce Bailey, at the end of the book can be usefully referred to when reading the letters.

Daniel Eaton (1698-1742) was land steward to George Brudenell, third Earl of Cardigan (1685-1732) whose absences from Deene necessitated the writing of the 167 letters reproduced here. They provide a detailed picture of the running of an estate in Northamptonshire and Leicestershire in the early eighteenth century, and bring a host of local people—farmers, craftsmen, labourers, merchants, and professional people—stewards, lawyers, clergy and surveyors—into the scene of action.

Miss Wake's introduction provides an extremely useful background for understanding the letters; in fact, it could stand alone on its

own merit for it provides a wealth of information on local customs and practices. It begins with short sketches of Lord Cardigan and of Daniel Eaton, before discussing the Brudenell estates, manor courts, woodlands, Deene Park, the home farm and crop management, and an especially useful section dealing with labour "by the great" and by wage-earners. Since Deene Park was being rebuilt to the Earl's specifications during the period of these letters, Miss Wake includes a section on building followed by one on eighteenth-century accounts and finance. Lord Cardigan was an avid fox-hunter and here we find a bit on the history of fox-hunting, the financing of the local hunt by Cardigan, the Duke of Rutland, and by other gentlemen, the breeding and rearing of fox-hounds—all of which are frequently mentioned in the letters. Mrs Webster's introduction, 'The Language of the Letters' is also helpful on Eaton's vocabulary, spelling, grammar, and use of idiom. From his use of language she speculates on the "style of the man."

The letters themselves are largely for the years 1725-7, and a few for the period 1729-32. They show Eaton to have been a highly capable, intelligent, and above all diligent steward. In reading them one is constantly amazed at the experience and knowledge needed by a competent steward: accountancy, costing, surveying, some law, architecture, animal husbandry, farming practices, land improvement, new crops and grasses, and local custom and usage. He wrote frequently and in great detail upon all matters under his jurisdiction. He was full of proper deference to his master, and often awaited his discretion in specific matters. In his beautiful hand he wrote of rent collections, expected or estimated income from sale of wood which he has viewed, progress of building, the condition of hounds and horses—giving each its name, reports on parks and deer, and all with great intimacy. The letters demonstrate as well Cardigan's full acquaintance with his estates, with local problems and expectations, and with persons high and low in the area.

The Northamptonshire Record Society is to be complimented on the publication of these letters which will be useful and infor-

mative to economic and social historians as well as to readers of history for many years to come.

RAY A. KELCH

RAY A. KELCH, *Newcastle. A Duke Without Money: Thomas Pelham-Holles 1693-1768*. Routledge & Kegan Paul, 1974. x + 222 pp. £4.00.

Although its causation is still debated, the "rise of the large estate" was undoubtedly a major feature of British landownership between 1660 and 1815. Exceptions to this trend, however, have been somewhat neglected. Some estates disintegrated for demographic reasons, while sections of the landed *élite*, for example Catholic families in the north-east after the 1715 rebellion, experienced considerable hardship. Sometimes the force of personality also had an adverse effect on developments. Despite safeguards such as strict settlements and increasingly flexible credit facilities, certain landowners undermined their patrimony and were obliged to sell large amounts of property. The primary aim of this work is to outline the economic history of one such individual.

Newcastle is best known as the most influential and successful of contemporary politicians. He held high office, with salaries worth around £5,600 a year, for nearly forty years. However, the bulk of his income, some £27,000 annually, came from property scattered throughout eleven counties. Despite succeeding to this vast, debt-free estate, Newcastle himself was permanently and hugely indebted, owing £88,572 in 1721, £135,998 in 1734, and £285,996 by the early 1740's. Repeated resolves to retrench were interspersed with more drastic measures: trusts for the payment of debts were established in 1721 and 1738, and in 1741 a settlement barring the entail on his estates allowed the sale of two-thirds of his property. Old debts were thereby reduced but so too was income, while new debts were constantly created. After his death much of the rest of his property and effects was sold to satisfy creditors.

Political expenses were partially responsible for this decline, but as Professor Kelch esta-

blishes beyond doubt, unavoidable absenteeism and more culpable neglect were equally important factors. Newcastle's inability to control his expenditure was even more crucial, and will no doubt surprise those hitherto aware only of his skill as a political manipulator. In so far as it derived from his public position his behaviour was rooted in the eighteenth century, but in other respects the scale of his extravagance was reminiscent of a much earlier age. Although on the whole Professor Kelch's careful, well-tabulated analysis commands respect, there is one area of considerable doubt. Due to lack of sources income movements cannot be charted as precisely as patterns of expenditure. For similar reasons, but particularly because of the dearth of estate correspondence, the nature and quality of management policies also remain obscure. A few references suggest that both the situation on Newcastle's estates and his employees' attitude to improvement were governed by political considerations and were also distinctly anachronistic. At present, however, firm conclusions in this sphere are simply out of the question, although a diligent search among the papers of those families who obtained Newcastle's property might yet yield vital additional information. In spite of this flaw the book should be warmly welcomed. It provides a detailed case-study in an area where, curiously, very few such studies have so far appeared.

PETER ROEBUCK

JOHN G. GAZLEY, *The Life of Arthur Young, 1741-1820*. Memoirs of the American Philosophical Soc., Philadelphia, vol. 97, 1973. xvi + 727. pp. illus. \$10.00.

The story of the agricultural revolution has been so expanded by modern scholars that it is almost possible to believe that it began with the expulsion of Adam and Eve from the Garden of Eden. It has been going on ever since, and continues. But of course there were periods of stagnation when men were content to continue in the ways of their fathers, mainly no doubt because they had no other option, climate, soil, elevation, and so on prescribing the boundaries of their efforts and limiting their output because they were unable or un-

willing to make changes; but every human activity is modified as time passes because, fortunately for the race, there are individuals who strike out of the conventional rut and make contributions to what is so curiously known as technology.

Many centuries had passed between the time when primitive man, or more possibly primitive woman, had first planted seeds and when Young was born. It would have been incredible if there had been no improvements in the processes on which life depended during all these centuries. That there had been is because human beings generally speaking are ingenious, and make some improvements in their way of life in spite of the great majority who are diehards.

The condition of society, its structure, and its intimate dependence upon local production, despite an elementary international trade in the eighteenth century, is well known to all historians. It was one restriction, amongst others, that kept population within reasonable limits, but which has vanished with the development of "technology": but when Young was born the country, as is well known, was mainly self-supporting in cereal production, though this self-sufficiency had vanished by the time he died. Then not only cereal products were imported but also large amounts of dairy produce of one kind and another. Not only was there a population explosion in the second half of the eighteenth century which made it necessary to increase food production, but also there was colonial expansion that led to great increases in material wealth, if only in purchasing power in the hands of a limited number of people. These were the greater and lesser landowners, plus the merchants who were making money at home and abroad, and aspired to join the ranks of the aristocracy; but all this is so well known, an old story, especially to readers of this *Review*, that it hardly bears referring to.

The life of Arthur Young was a stimulus to and reflection of the agricultural progress of his period, and a review of his biography could easily slip into a history of farming at that time mixed with some touch of politics—as indeed his own writings are.

The question how should biography be

written must be asked. Gazley has chosen to do so in the most minute detail and seems to have read practically everything Young ever wrote. This is the exhaustive method. The opposite is to tell the story in broad outline, perhaps against a sketch of contemporary events—something that was done by the amateur Amelia Defries in her *Sheep and Turnips* in 1939, and by A. S. Haslam in his biography, up to a point, in 1930.

Gazley wrote in 1941 that he had hoped to complete this work in that year, but it was not finished until nearly thirty years later. This is hardly surprising when the contents of the book are examined. It not only gives minute details of Young's personal life but also examines his mental outlook (psychology) and the changes that took place in some of his opinions as the years passed, something that is not unusual in most people's lives.

In personal character Young was a man who pursued his chosen path with the utmost determination despite an inharmonious married life, continual failures at practical farming, and chronic financial difficulties. He managed to make many distinguished friends, and for a time to lead a fairly gay social life on his visits to London, and, possibly elsewhere, though that is not recorded. But after the death of his beloved daughter, "Bobbin", he sank into the miseries and melancholy of some sort of Methodism. Fortunately this did not prevent him from continuing with his agricultural propaganda and other cognate activities.

With hindsight it is possible to say that Young was fortunate to be born when he was. With the time comes the man, or so it would seem if history is looked upon as a series of biographies of men of influence, invention, decision, and industry. This is indeed no bad way of looking at history, especially when these individuals are men of the calibre of Young and his contemporaries, Coke of Norfolk, the fifth Duke of Bedford, Sir John Sinclair, and many other great improving landlords. The spur was then as ever the lust for money, but although Young, like everybody else, wanted money, the driving force that carried him along was enthusiasm, an enthusiasm that lasted throughout his life in spite of personal difficulties, and at the last a sort of

subfusc colour to his mind so far as his domestic life was concerned.

Young's literary life began with an unsuccessful attempt to write fiction, and a polemic upon politics, a sporadic interest throughout his life for all farmers must watch the market, and in doing so watch the odd manœuvres of the politicians making their futile and often misguided efforts to control it. From this he proceeded to make contributions to the magazine *Museum Rusticum et Commerciale*, but it was not in this direction that he achieved his major success. It was the *Southern Tour* of 1768 which set the pattern of much of his later writing, and has supplied our generation (and earlier ones) with a meticulous, and in some ways profound, description of the places through which he travelled. It had been preceded by the *Farmer's Letters* of 1767, and was followed by the *Eastern and Northern Tours*, each in four volumes.

Young was extremely conscious of the economic side of food production. How could he not be? He was himself a failure as a commercial farmer, not only at Bradfield Combus, but in other places. He seems to have had a genius for choosing infertile and unproductive farms to occupy. Consequently he collected a great variety of indiscriminate economic information, wages, costs of this and that, seeding rates, soil preparation, rates of manuring and material used, crops normally grown, how animal husbandry was pursued, and so on. All this data he tried to tabulate and understand in the closing pages of his *Tours*. Modern economists no doubt regard his methods as unscientific, but it could be argued that their own are too profound. At all events these costs, yields, and so on give his descendants in our generation, who have a somewhat morbid interest in such things, a great deal of material to support a variety of arguments.

It might be asked how a man who was chronically short of money was able to go on these travels. The answer is that it was a time when great landowners, and even lesser ones, were pleased to offer hospitality to such a distinguished traveller, in common of course with the general custom of the time. The drawback to this kind of hospitality was the formidable rank of domestics who gathered to

see the guest off the premises, and who one and all expected their accustomed vails, which may quite often have amounted to more than the expense that would have been incurred at a local hostelry. Young found means of solving this problem, though how is somewhat of a mystery. One repayment of hospitality that he consistently made was to catalogue the *objets d'art* and paintings owned by the nobility and gentry who put him up. When he did stay at inns he must have found it expensive. On one occasion he spent a night or so at the Angel at Cardiff, a hotel that was in existence in the 1930's, and still is. His bill was no less than a guinea a night—almost equal to the charge forty years ago.

Young's writings made him well known, but awakened a good deal of rather acerbic criticism, something he did not bear with equanimity. Like most men of genius he was extremely irascible and impatient of criticism, the brunt of which he could not bear without angry argument. However, this did not very much matter in the long run. His critics have been forgotten and sunk into oblivion while his fame has lasted and is known it could almost be said, to every schoolboy.

Fools, the old adage proclaims, rush in where angels fear to tread. Perhaps the same thing can be said of men of genius. It was certainly true of Young at the outset of his career. His *Course of Experimental Agriculture* was published in 1770, and describes in great detail the experiments this novice in the technique of farming had carried out. It was of course rather in the fashion of the day, and other writers of the time and later have made judgements based upon their own trial plots, real or imaginary. Some of these plots it is certain existed nowhere but in the imagination of their authors. Young does not fall into this category. He did make his trials in the real world. But in this world it is impossible to please everybody, and the *Monthly Review* had no mercy upon Young, remarking that "geniuses may form designs too extensive for themselves to execute." True as this may be, the proportion of his designs that Young was able to carry out is rather more than remarkable.

With his growing reputation it is not sur-

prising that he joined in the activities and competed for the premiums of the Society for the Encouragement of Arts. At that date it was the only public venue for trials and experiments by farmers who were encouraged by the Society to enter for medals and money prizes. At first the Society had no means of publishing the results it obtained, but it encouraged the issue of Dossie's *Memoirs of Agriculture*, and began the publication of its own *Transactions* in 1783. Young became Chairman of the Agricultural Committee of the Society, and in that capacity co-operated in promoting comparative trials of ploughs, crops and other aspects of agriculture, working with other men whose activities have placed them in the memorials of history as persons of consequence in promoting the greatness of the country.

In the 1770's Young was offered a job in Ireland, and though this did not prove a success (it would have been surprising if it had) it produced yet another farming tour published in London in 1780, *A Tour in Ireland*, which demonstrated very clearly that, in spite of the activities of the Dublin Society, farming in Ireland was in neither a prosperous nor a progressive state; the Dublin Society had supported the experimental farm conducted by John Wynn Baker, who was another innovating spirit.

Young modified his opinions upon various subjects as his years and experience advanced. It would be a poor sort of man who retained the inevitable prejudices of his youth for the rest of his life. This resilience is evident in his attitude to the enclosure of waste lands, with its resultant consequences upon the lives of the poorer members of society who lived to some extent, if not wholly, upon the products and privileges of the waste. Young at first had been a virulent supporter of the enclosure of these lands and their more productive use, that is more productive than in a state of nature. He had an eighteenth-century aristocrat's contempt for the lower classes, but this mental attitude changed as his years, and maybe his wisdom, advanced. He began to appreciate that the squatters, the poor who enjoyed privileges on the commons, were human beings like himself and his aristocratic friends, but

had been made into a different sort of human being whose actions and outlook were dictated by the restrictions of a life of poverty, semi-starvation, and exacting physical labour.

It would be ridiculous to try to mention all Young's writings or all his journeys or the psychological changes he underwent. For the best reason all these things have been exhaustively covered by Gazley, but it is necessary to say something about his activities in his later years. In 1784 he initiated the publication of his *Annals of Agriculture* which, after some rather trying birth pangs, achieved a distinctive position in the contemporary literature of farming. In 1793 he became Secretary to the then novel establishment, the Board of Agriculture, and not only served this organization until his death but undertook the preparation of several of the County Reports which were part of its initial programme, and were so strongly supported by Sir John Sinclair.

Mention of Sir John leads to the enumeration, if that were possible, of the nobility and gentry who were friends and admirers of Arthur Young, and who formed the vanguard of agricultural improvement in those days. Young had the widest possible range of friends, admirers, and acquaintances, but he did not want for critics. Who does? In his early days the anonymous writers in the *Monthly Review* were amongst these. In his later days one Thomas Stone, a land agent and surveyor to the Duke of Bedford, was one of the most virulent of his critics, but his virulence (it was a masculine age) was not approved by the *Monthly Review* which made a *volte face*. So do times change all things!

The most famous and well-known of all Young's records of travel is the tour in France which has been repeatedly reprinted. It supplies a sketch of rural France and parts of Spain and Italy on the eve of the Revolution but really needs no more than a mention here.

It is not necessary to say very much more to an informed audience. What can be said is that Arthur Young, as is generally recognized, was one of the most remarkable galaxy of great men who have ever been concerned with the farming of this country, men who lived in a

world of organic materials, whereas we, their descendants, live in a world of plastic and metal tins of food and travel machines.

G. E. FUSSELL

GEORGE ORDISH, *John Curtis and the Pioneering of Pest Control*. The Great Innovators Series, Osprey Publishing Ltd, Reading, 1974. vii + 121 pp., 16 illus. £2.45.

"Bugs," as distinct from fungi, have always consumed a part of the farmer's harvest, and the competition between humanity and pests for the crop remains a problem for agriculturists. This is not to say that the "bugs" ever took a major part of the harvest, except locusts in some unfortunate areas: but they did take a measurable part, so mankind in the temperate zone declared war on the insect pests, with no very great success until modern times, which produced as one of its wonders pest control.

The pioneer in the research necessary to make pest control possible, at least in an effective degree, was the John Curtis who is the centre-piece of this study. Curtis was the first professional scientist, that is to say the first man who made his living out of his work, and was not a dilettante in so far as being able to live upon an income derived from other sources. He lived from 1791 to 1862.

From his early childhood Curtis was fascinated by insect life. He collected specimens and preserved them, and when he learned the art of engraving made pictures of these "beasties." He made a fortunate escape from a Norwich lawyer's office when he was twenty. Simon Wilkin then employed him to arrange and catalogue his collection of insects, and so Curtis was able to develop his natural bent. The rest of his life was spent in studying entomology, depicting the insects in a series of most accurate drawings, and finally in producing his book *Farm Insects*, in which he suggested methods of control.

This is not the place to supply details of his life and work, which are most effectively provided by the author, who is himself a modern authority on Curtis's subject, and is also a historian of the recognition and the development of controls over plant pests and diseases. George Ordish has placed John Curtis in his

appropriate niche, and his book on this great innovator is definitive.

G. E. FUSSELL

D. R. GRACE and D. C. PHILLIPS, *Ransomes of Ipswich: A History of the Firm and Guide to its Records*. University of Reading: Institute of Agricultural History, 1975. ix+64 pp., 17 plates. £2.50 (plus 35p postage and packing).

In 1967 the Museum of English Rural Life launched a project for the collection of records of the agricultural servicing and processing industries, an enterprise which received the financial blessing of the SSRC. An early yield of this initiative is the present volume. The records of the famous firm of Ransomes form the most important single archive of the collection, and their significance is recognized in this handsomely produced and interestingly illustrated book.

The founder of the firm, Robert Ransome, born in 1753, established a trade in supplying farmers of Norfolk and Suffolk with plough shares, and his early venture was supported financially by a fellow Norfolk Quaker, Gurney. Ransome's discovery of "chilling," a process which produced a self-sharpening cast-iron share, and his development of interchangeable plough parts, enabled him to build up the large-scale production of a wide variety of ploughs designed to meet local preferences. Bridge-building and gas-supply work enabled the firm to survive the agricultural depression at the close of the Napoleonic Wars, and subsequently production of railway equipment (and of lawn mowers) played a large part in the firm's business. By mid-century a diverse range of agricultural implements was in production, including steam-engines, and the total workforce numbered over a thousand. In due course export interests grew up, and these compensated for the decline in home demand which was experienced in the period of the great depression. Both World Wars saw a switch to armaments, and between the Wars the depressed state of the agricultural branch was again offset by the development of non-agricultural products.

So bald a summary does no more than indicate the general lines of the story. The volume,

in fact, manages to convey a great deal of detail in a limited space, and brings out admirably the important part which diversification and the seizing of current market opportunities have played in the firm's survival and growth.

The summary catalogue of the records, which takes up the larger part of the volume, gives an excellent guide to the documentary sources available, and should inspire research into more specialized aspects of the firm's history. The present collection has been much affected by destruction in the past, and is therefore unbalanced as between different branches of the firm's activities. However, business and commercial records, and papers relating to manufacturing, engineering, and experimentation are all represented, as well as publicity material, the last making up about a third of the entire collection. As the authors conclude, "the survival of Ransomes is doubly fortunate in that the firm spans the whole development of the industry and also has such a comprehensive set of records. That British agricultural engineering was a major contributor to agricultural development throughout the world and of considerable significance in the economy of a number of country towns is indisputable, but it is still one of the great neglected fields of British economic history."

G. E. MINGAY

HAROLD BONNETT, *Saga of the Steam Plough*, Newton Abbot, David & Charles, new impression, 1972. 207 pp., 18 illus. £3.25.

The problems of lightland farming have been traditionally those of soil fertility, and of clayland farming those of soil mechanics. Steam came late to agriculture, but the steam plough for all its novelty and awesome complexity was no panacea for the clayland ills of high, seemingly irreducible, traction costs and trailing receipts. This book barely touches upon the question of why steam power so transformed work in the barn but had little such impact in the field. Rather, the author is concerned mainly with the practical and mechanical aspects of steam cultivation. Here he is on firmer ground, and the result is an informative though baldly documented account of the historical development of the steam plough

from 1619, when James I granted a patent to his Page of the Bedchamber and one, Thomas Wildgoose, for the making and using of "divers New Apte or Compendious Formes or Kind of Engines or Instruments to Ploughe Ground without Horse or Oxen," to the 1920's when, in the twilight of the steam age, lightweight steam tractors such as the "Rhino-cerus" and the "Foden Roadless" tried unsuccessfully to beat off the challenge of the motor tractor. There are useful chapters on steam plough manufacturers and firms of steam plough contractors, and on the work done by British-built machines around the world—cultivating Prussian *latifundia* and Caribbean sugar plantations, draining the Pontine Marshes, and levelling blue earth and spoil at the Kimberley Diamond Mines.

According to Mr Bonnett 1918 was "the Everest of the steam plough era," and the last "good year" for steam work, when all owners were busy and the smoke of a thousand columns drifted across the countryside. Thereafter, the demise was swift, and by 1940 steam cultivation was virtually extinct. One of the last and perhaps most spectacular feats performed by steam ploughing engines was to wind ashore the PLUTO pipelines at the Normandy Landings, and it is sad but curiously fitting that the same engines should have ended their days in West Africa as casualties of the ill-fated groundnuts scheme.

Today, agricultural steam engines—salvaged and skillfully restored—have a high curiosity value and an enthusiastic following. Essentially this is a book for the enthusiast. It leaves almost everything unsaid about the economics of steam cultivation and about the history and organization of this important branch of the British agricultural engineering industry. Even so, it is compulsive reading. The author has conveyed, less through his use and interpretation of the historical evidence, as through his experiences and reminiscences the impact—practical, visual, and aesthetic—of steam on the Victorian and Edwardian countryside.

The book, I am sure, is worth reprinting although since its original publication in 1965 important research has been done on the subject, some of which at least might have been

noted in the bibliography; this remains, as before, thin and epigrammatic.

E. J. T. COLLINS

KEN SILLCOCK, *Three Lifetimes of Dairying in Victoria*. Melbourne: The Hawthorne Press, 1972. 182 pp. \$A5.95.

In the context of his grandfather's dairying experience, that of his father's, and his own, the author recounts the development of dairying in Victoria from the time of settlement in 1834 to the present. In the first half of the book the life of the settlers, especially in Gippsland, is vividly evoked, although reliance on the more popular historical literature has allowed errors to creep in—squatters moving down the rivers, for instance, did not have legal basis for possessing 5,120 acres (p. 16), and lucerne and white clover were introduced long before 1864 (p. 17).

In the second half of the book Mr Sillcock deals with changes in the present century, drawing on his own experience. After forty years with the dairying division of the Victorian Department of Agriculture he is able to discuss with considerable knowledge the gradual mechanization of dairying, increasing legislative control of the industry, and developments in such fields as scientific research, extension, and marketing. This is a complex story dealt with here in detail for the first time, and it is important for future historians that the views and actions of a person so closely involved in these events have been recorded.

LYNNETTE J. PEEL

PHILIP GABRIEL EIDELBERG, *The Great Rumanian Peasant Revolt of 1907: Origins of a Modern Jacquerie*. Studies of the Institute of East Central Europe, Columbia University, New York, Leiden 1974. 252 pp. 64 guilders. Moscow-orientated Marxists have seldom been able to dissociate the Rumanian peasant revolt of 1907 from the great Russian *émeute* of 1905–7. Yet agrarian discontent had been simmering in the Balkans for years, as was seen in 1900 when the Bulgarian peasants rose against the reintroduction of the tithe in kind; in Rumania, too, Dr Eidelberg shows, there is no proof of a "cause-and-effect" relationship between the Rumanian and the Russian ris-

ings, and he advises that "it is more fruitful simply to look for parallels and contrasts."

The parallels are predictable. Rumania, like Russia, was a backward agrarian society which was rocked by the world depression of agricultural prices. For Rumania the problem was intensified in 1882 by the Austro-Hungarian embargo on the import of Rumanian cattle. Events were now following a familiar course. Landlords, losing revenue as wheat prices dipped, and deprived of the chance of switching to cattle as a cash export product (though, interestingly, Russia later imported Rumanian cattle as draught animals), could only make good their losses by exporting more wheat. With primitive, labour-intensive farming methods this meant demanding more in labour-rent from the peasant. So rents, already pushed up by the population growth, rose yet higher.

Of course, there were also contrasts. The Rumanian agrarian question was complicated by the problem of the *arendasi* (landlords' agents and middlemen)—especially if they were Jewish, by the failure of the co-operative movement and the Popular Bank, and by other local factors, all of which Dr Eidelberg explains with commendable lucidity. Naturally, the Rumanian political response to the agrarian crisis was different from the Russian; Rumanian democracy was no better than that of the other Balkan states but it did allow for more than one reaction to the crisis. Indeed the Liberals, like Stolypin, called for a Darwinistic "wager on the strong," with this Rumanian *Kulak* class guaranteeing a market to developing home industries. The Conservatives, on the other hand, advocated immediate concessions to all peasants on rents and a gradual redistribution of land to the benefit of all.

The careful explanation of the interaction of political developments and the intensification of the agrarian crisis is perhaps the best part of the book. Yet it would seem unfair to isolate any one theme or section of a work which maintains consistently high standards. Four years of intensive research in Rumanian archives and libraries have produced a work of impressive scholarship written with admirable economy, efficiency, and clarity.

R. J. CRAMPTON

MICHAEL ADAS, *The Burma Delta. Economic Development and Social Change on an Asian Rice Frontier, 1852-1941*. University of Wisconsin Press, 1974. 256 pp. \$14.85.

The climax of Professor Adas's study of Burma is the racial rioting which followed the economic depression of 1931, when the primary producers of Southeast Asia faced ruin in consequence of the collapse of their world markets: in twelve months the price of paddy, for example, fell by 77 per cent. The bulk of the study traces the economic and social developments of the previous eighty years which led up to Burma's special vulnerability to the 1931 "crisis of capitalism."

Although India, including Burma, was already on the road to self-government, the *Annus terribilis* coincided with the peak both of the extent of colonial rule in the world and of the faith of the colonial powers in their own beneficence, symbolized by the elderly Rudyard Kipling's patronage of the international colonial exhibition that year in Paris. Of the four colonial powers responsible for the destinies of rice-exporting delta lands in South-east Asia, the French were the most deeply shocked in their self-esteem at the misery the collapse of the market caused; the great survey of the Mekong delta by Yves Henry was commissioned in 1932, and that of the Red River delta by Pierre Gourou followed four years later. The British contented themselves with the reports of the Indian Civil Service on the spot. On the other hand, the regular periodical "settlement reports," initiated by the East India Company, constitute a continuous record of economic and social conditions reaching back to the British conquest of lower Burma in 1852. Relying principally on them, Professor Adas has produced an account of conditions in Burma worthy to be set beside the earlier ones for Indochina of Henry and Gourou.

The social causes of the 1931 disturbances were similar in many respects in all three deltas: the theory that European capital and immigrant labour were going to improve techniques of agriculture had not been fulfilled, and the capital had been channelled unintentionally into native moneylending on a usurious scale. In lower Burma, immigration

of skilled and unskilled labour from south India gathered its own momentum and was paralleled by extensive immigration of Burmans from upper Burma; neither movement slowed down when the surplus land had all been taken up, whereas the entry into the world market of rice from European countries and the U.S.A. lowered the total income to be had from the product. A number of widely held misconceptions are dispelled in this book, such as that the moneylenders were all Chinese or Indian, the borrowers all native Burmans; in reality, Burman moneylenders at one time outnumbered all the foreigners put together. More fundamentally, Professor Adas disputes the attribution of the 1931 crisis by British administrators to external factors alone: he concludes that the system—insofar as it can be called a system—contained built-in tensions which were bound to snap soon, and the world depression was no more than the last straw.

The race riots of the Saya San rebellion in 1931 were a terrible indictment of the capitalist system. It was the Indians who suffered most, the Burmans much less, the Chinese less still, the British not at all; indeed, Englishmen walked the streets of Rangoon and other centres in the midst of the rioters with impunity. Yet the recovery of Burma, as of Indochina, between 1931 and 1941—a period about which this book has rather less to say—was no less an *achievement* of the capitalist system, and brought greater prosperity than ever to all the inhabitants of the Irrawaddy-Sittang-Salween delta. Professor Adas points out that the causes of the 1931 troubles were not in the least political: the troubles which have hit Burma in the age of nationalism can fairly be said to have been solely political.

DENNIS J. DUNCANSON

ROBERT C. STUART, *The Collective Farm in Soviet Agriculture*. Lexington, D. C. Heath and Co., 1972. xx+254 pp. No price stated. Professor Stuart sets out to present "an in-depth analysis of the structural and operational characteristics of the Soviet collective farm as a mechanism for the organization of economic activity in the countryside" (p. 9). The book is well documented, liberally endowed with

statistical tables, and makes few concessions towards literary elegance. The emphasis throughout is on the current managerial and technical aspects of the collective farm. Nearly all data and comment refer to the period after 1950, during which time the numbers of collectives declined substantially, the average size of each rose, and some important administrative changes, including the abolition of Machine Tractor Stations in 1958, took place. The author deals authoritatively with a number of interesting questions, such as the nature of managerial incentives, the development of cost accounting, and the increasing role of decision-making at the brigade level as the size of the collectives increased. He demonstrates that as far as organization and structure are concerned, the collective farms have come increasingly to imitate the state farms (which receive little separate treatment from Professor Stuart). An illuminating chapter deals with the personnel involved in farm management, discussing, with regional data, the age and educational characteristics of collective-farm managers.

Inevitably historians will be disappointed that collective farms during the Stalin era get such limited treatment, as they will be by the scant attention paid to such issues as the impact of collectives on crop yields, the flexibility of crop systems, and the overall implications of such a system for economic development. Within its framework, however, the book is an excellent study of a neglected topic, and presents valuable information on business management in Soviet agriculture.

M. E. FALKUS

L. C. KNORR, *Citrus Diseases and Disorders*. University of Florida Press, 1973. x+163 pp \$10.00

This volume would seem to have little appeal to the historian, but if he should want to identify a citrus disease he would find it useful. It is a compendium in alphabetical order of the names of such troubles, with suggestions for overcoming them. There is no index of scientific names, which might pain the scientist. In its field it is welcome, particularly Appendix 2, which gives a scientific identity to most citrus varieties, thus avoiding much confusion as to

just what species various way-out varietal names (e.g. the "Box Orange") are.

GEORGE ORDISH

C. A. JEWELL (ed.), *Victorian Farming: A Sourcebook*. Winchester, Barry Shurlock, 1975. xx+138 pp. Illus. £3.50.

This interesting volume is very much a product of the Reading Institute of Agricultural History since it is edited by Andrew Jewell, and has an introduction contributed by E. J. T. Collins. The body of the book consists of numerous illustrations and explanatory paragraphs taken from the third edition of Henry Stephens's *The Book of the Farm* (1871). Stephens's work was intended as a textbook for the farm pupil, and the extracts reproduced here serve not only as a conspectus of the implements and methods of the middle nineteenth century but also as a guide to contemporary ideas on how the efficient farming of the time should be conducted.

Stephens, originally a farmer in Forfarshire, settled near Edinburgh in 1830 and took up a career in agricultural journalism. He was, Dr Collins remarks, a master of the art of description, and *The Book of the Farm*, though biased towards mixed farming and Scottish practices, was the leading practical text of its day. More important perhaps for the historian, its illustrations are considered the best which the period offers. In the descriptions of implements Stephens was assisted by the Edinburgh engineer, John Slight, whose son executed the drawings of machinery. The artist, Gourlay Steele, an Associate of the Royal Scottish Academy, provided the striking silhouette drawings of field operations. (It is interesting that so many of these, as of barn work too, show a high proportion of women providing the labour.) For this volume the original illustrations and text have been enlarged photographically by one-third, and they are set out in Stephens's arrangement of following the main farming activities of each season.

Victorian Farming will be invaluable both for classroom use and for specialists in the history of farming techniques. And in view of the number of illustrations, and the quality of the reproduction, it must be considered excellent value in these inflationary times. A microfiche

edition of the complete text of *The Book of the Farm* is available from the publishers.

G. E. MINGAY

M. K. ASHBY, *The Changing English Village, A History of Bledington, Gloucestershire, in its setting, 1066-1914*. Roundwood Press, 1974. xxiii+425 pp., 8 plates, 2 maps, £5.50.

MARGARET SPUFFORD, *Contrasting Communities, English Villagers in the Sixteenth and Seventeenth Centuries*. C.U.P., 1974. xxiii+374 pp., 13 maps, £7.70.

The appearance of these two excellent books on English rural life in the same year indicates how far the study of local history has progressed in recent times. Studies of this depth, intensity, and relevance to general historical problems are a relatively new occurrence; and these have the further merit that they deal comprehensively not only with agricultural matters, but also with a wide field of social history. In particular, religion and education can seldom before have been analysed so thoroughly at the village level. These books add new dimensions to the trail which Professor Hoskins pioneered so ably with the *Midland Peasant* in 1957.

Miss Ashby takes one village, Bledington in the Cotswold country between Stow-on-the-Wold and Chipping Norton, where she lived for many years, and traces its development from early times to 1914. By contrast, Dr Spufford examines three Cambridgeshire villages from differing natural regions to see how far environment affected their economic, social—and even to some extent political—development during the critical years of change from a medieval to a modern world. The selected villages are Orwell in the clay plain south-west of Cambridge, Chippenham in the chalk country near Newmarket, and Willingham just into the Fens north-west of Cambridge. The book has three sections (1) People, Families and Land; (2) The Schooling of the Peasantry; and (3) Parishioners and their Religion. The first part is the longest. It comprises an opening chapter on population change in Cambridgeshire from the relative over-population of the pre-Black Death years to the late seventeenth century. This is followed by a chapter on the problem of the

disappearance of the small landowner, which is the central theme of the first part of the book. The final three chapters of this section are case studies of changing landownership in the three sample villages of Chippenham, Orwell, and Willingham.

The second section on the schooling of the peasantry begins with a survey of Cambridgeshire schools and schoolmasters, and ends with an analysis of the extent of literacy, based mainly on the ability to sign wills and other legal documents. Of 316 wills made before 1700 in the three villages of Willingham, Orwell, and Milton only 16 per cent bore the testator's signature. As one would expect, literacy (judged by this admittedly rather crude test) was related to wealth and social status. One-third of yeomen making wills could sign their names; only 10 per cent of labourers, craftsmen, and women were able to do so. However, the sample does not distinguish between wills chronologically, but where this distinction was made (for Willingham wills) there was, surprisingly, very little improvement in literacy during the seventeenth century. Only eight out of thirty-nine testators could sign their wills between 1676 and 1700 compared with five out of forty-four in the years 1601-25. Miss Ashby does not analyse the Bledington wills in quite the same way but she notes that in all the wills and inventories prior to 1700 only one book is mentioned; but adds that "a husbandman's sons, if not himself, must be able to read freely if not to write."

Literacy bore an obvious relationship to the spread of dissent, relying so strongly as it did on individual interpretation of the Bible. However, the relationship was not deterministic judging by the widespread hold of dissent on the Cambridgeshire countryside—far more prevalent than literacy. Dr Spufford analyses its spread and the possible causes thereof in great detail and concludes that no single explanation will suffice. Dissent was widespread among all groups in the villages, except the gentry, but in few was it dominant. However, she quotes a story about a husbandman of Willingham, in 1555, one Henry Orinel, which is very surprising, and should serve as a salutary warning against too easy an acceptance of the idea that villagers were bounded by

the confines of a narrow locality, and were unaware of the events in the wider world. It seems that Orinel, worried by the return of Catholicism under Queen Mary, travelled to Colchester, which he describes as a city which "gave great light to all those who for the comfort of their conscience came to confer there from many diverse places of the Realme, and repairing to common Innes had by night their Christian exercises, which in other places could not be gotten." At the Inn Orinel witnessed a debate between a Dutch Protestant and "a servant to Mr. Lawrence of Barnehall in Essex", on the divinity of Christ. When the servant failed to interpret a Pauline text to his liking, Orinel became so disturbed, that he said "I was fully minded to go to Oxford to aske counsaile of Bishop Ridley and M. Latimer concerning that matter, had I not met with some man, to satisfie my conscience in the meane season." As Dr Spufford aptly comments it is astonishing that a husbandman of small means (he was farming half a yardland—about 15 to 20 acres—in the open fields of Willingham in 1575) should have travelled some fifty miles to Colchester to attend a religious debate, and should have seriously considered going on to Oxford to discuss a disputed point with a bishop. Few such shafts of light on the rural scene have been recorded in contemporary documents, but the existence of even one such example must make us reconsider the significance of abstract ideas and of physical mobility amongst a group often believed to be devoid of both.

In relation to matters more strictly agricultural, case studies of this kind cannot of course resolve leading issues of agricultural history, such as the chronology of the "agricultural revolution," or the decline of the peasantry; but they can offer useful insights. On the question of agricultural improvements the evidence is rather negative. At Bledington enclosure came by private Act in 1769, but it seems that very little change occurred in a fairly simple system of farming, either before or after it. References to the new fodder grasses and roots are few, which is surprising since sainfoin, the most celebrated of them, is said to have been introduced into England at the neighbouring village of Daylesford in

1650. Cropping innovations remained limited, though livestock numbers probably increased judging by land-use figures. In 1798, during the period of wartime corn shortage, the largest farm in Bledington (with about 800 acres) was still mainly in meadow and pasture: only three-eighths of its acreage was growing corn. In 1801 the crop distribution was as follows: 287 acres of wheat, barley, and oats; 80 acres of beans; 25 acres of turnips; half an acre of potatoes; and half an acre of peas. Turnips had certainly arrived, but not apparently in sufficient numbers to affect the rotation very noticeably. Nor is the evidence from the Cambridge villages very striking. At Chippenham, clover and fodder crops were not mentioned in inventories (but then as Miss Ashby states in another context inventories and wills tend to *minimize* change) though a map of 1712 showed sainfoin growing in closes. At Orwell also specific evidence of improvement was lacking, but a major effort to reduce fallow was made because by the early eighteenth century, the old two-course rotation had been replaced by a three-course shift. At Willingham the situation was quite different. There about three-quarters of the land was fen commons, which the Lord, Sir Miles Sandys, accused the tenants of overstocking. His attempts to enclose and deprive the tenants of their commons were not however an "improvement" they appreciated. Resistance was strong and successful. Sir Miles was over-heavily involved in the Earl of Bedford's fen-drainage schemes, and by 1649 was bankrupt. The general impression is that none of these villages was forward in agricultural improvement, but the evidence is nowhere very full and hints like the sainfoin at Chippenham suggest that much may have escaped notice in the records.

On the questions of landownership, tenure, and farm size the evidence is much clearer. Wherever arable farming was important, as at Bledington, Chippenham, and Orwell, there was a clear tendency between 1500 and 1700 towards fewer owners, fewer tenants, and larger farms. But in the fen village of Willingham exactly the reverse was true. As manorial discipline slackened in the seventeenth century, holdings were subdivided so that be-

tween 1575 and the 1720's the number of tenants rose from about 100 to 153, and *only five* of these had more than half a yardland (15-20 acres). Dr Spufford believes that paradoxically it was the sixteenth-century price rise which rendered the old 15 to 30 acre *arable* holding an uneconomic unit. In years of bad harvests (and climatic deterioration seems to have increased these in the late sixteenth century) the small farmer was forced to consume his own scanty produce, and had nothing to sell to meet his sharply rising costs. Sometimes he might even have to buy highly expensive food from larger farms. In these conditions many were obliged to sell their holdings or surrender their leases. Only the man with broad acres could afford to profit from the high grain prices in years of dearth.

No review of books which are as rich and nourishing as these can do more than offer a superficial overview. Miss Ashby has much of interest to say on the development of poverty in the nineteenth century as a steadily rising rural population pressed against a steadily declining number of farms. As one would expect from the author of *Joseph Ashby of Tysoe*, she is excellent on Arch's movement in the 1870's and the reasons for its rise and fall. Her accounts of the village school and the fascinating survival of the Morris-dancing traditions amongst the farm labourers are also full of interest.

In conclusion both authors are to be congratulated on studies which combine significant increases in our knowledge of the structure of rural society with a deep understanding of the virtues and foibles of the human personalities who lie behind the statistical aggregates.

MICHAEL HAVINDEN

IAN KERSHAW, *Bolton Priory: the Economy of a northern Monastery 1286-1325*. O.U.P., 1973. xiii+213 pp. £4.50.

R. B. DOBSON, *Durham Priory 1400-1450*. C.U.P., 1973. xiii+428 pp. 5 figs. £7.20.

These are two welcome additions to the still small collection of competent modern studies of individual medieval religious houses. Both have their limitations imposed by the nature of the surviving records. This is specially true

of Dr Kershaw's book on Bolton Priory. A moderately-sized Augustinian house, it was founded at Embsay near Skipton in 1120 and transferred in 1152 to its splendid setting at Bolton in Wharfedale, more realistically described, from the standpoint of monastic prosperity, as "*in loco silvestri terraue sterili et inculta*." The author is concerned with what he calls the monastic economy; that is how the material side of the life of the house was organized and conducted. Unlike many economic historians he does not use monastic records to study the general development of rural economy and rural society. The work is focused on the period 1286-1325, because for these years alone there survives a quite remarkably comprehensive set of monastic accounts, the so-called Bolton Compotus. Since the financial management of the house was highly centralized, these accounts give as complete a picture of the monastic economy as can be hoped for. Nor have they previously been used for this purpose. Hamilton Thompson in his study of the Priory did not consult them, referring only to indifferently transcribed extracts in Whitaker's *History of Craven* published in 1805. Dr Kershaw has made the most of his opportunity. He looks at how the estates, mostly in the West Riding, were managed and how arable and pasture farming, including wool production, were conducted. It is clear that the support of the household was a heavy burden on the monastic economy and an obstacle to sufficient capital investment. Of most interest is his detailed account of what happened to the Priory between 1315 and 1320 when it was hit by a succession of harvest failures, livestock epidemics, and Scottish raids. Altogether a useful and well-constructed study.

Dr Dobson has a richer subject and a larger opportunity, for the "mynistres of Saynt Cuthbert," the monks of Durham, had, and knew they had, a special place among the English religious houses. Also they left behind them a mass of evidence about what they did and how they managed their affairs. Dr Dobson has chosen to examine in careful detail how the community fared in the first half of the fifteenth century, much of which was covered by the well-documented priorate of John

Wessington (1416-46). But this choice of period has a larger significance for it is generally supposed that by this time medieval monastic life, with a few honourable exceptions, was far-gone in decline and decay. Plainly this was not so at Durham, for there with its organization fully elaborated, the community lived in an atmosphere of genuine *stabilitas*; that monastic virtue upon which the Benedictine Rule particularly insisted. While Dr Dobson's book is more wide-ranging than Dr Kershaw's monograph, he does devote an important chapter to the monastic economy and establishes some significant conclusions. Despite their stake in mining and in pasture farming, the monks of Durham still depended chiefly upon the profits of arable cultivation. When they declined the community was in trouble. Also, between 1407 and 1416 the critical decision was taken to lease almost all the convent's manorial demenses, although this failed to halt the decline of its landed income, something from which all landlords then suffered. Falling population, stagnant land values, scarcity of tenants, low cereal prices, and a contraction in the arable acreage saw to that. Nor was Durham exempt from those twin curses of conventual management, incompetent obedientiaries and ill-advised borrowing.

Yet all this is only a small part of the whole study. There is an unusually interesting account of monastic daily life, and of the intellectual activities of the monks in Durham and at Durham College in Oxford. The surviving evidence also allows a close study of the Prior's household and of his Council. From this follows a description of the use of monastic patronage, and of the dealings of the Prior and Convent with the king's government, particularly in matters of clerical taxation, as well as with the magnates and the gentry of the north-east. This is matched by a consideration of how the Durham community managed its relations with ecclesiastical authority in the shape of the Courts of Rome and York, as well as with their diocesan, and with the provincial organization of the English Benedictine houses. The result is an outstanding piece of scholarly research, admirably documented, and well written. Moreover, in what can properly be

described as a distinguished book Dr Dobson has made a significant contribution to our understanding of monastic history in the later Middle Ages.

GEOFFREY TEMPLEMAN

MICHAEL HAVINDEN (ed.), *Husbandry and Marketing in the South-West, 1500-1800*. University of Exeter, 1973. 74 pp. 75p.

This volume is the eighth of a series of occasional papers published by the University of Exeter's Department of Economic History. It concentrates on changes in farming and marketing activity from the sixteenth to the eighteenth centuries, in contrast to an earlier volume (No. 5) which dealt with problems of agrarian structure and transport since 1800. A succinct, lucid introduction by the editor is followed by three farming papers relating to Dorset, Devon and Cornwall, and Cornwall respectively, together with a paper on marketing which offers rather wider coverage.

Vast flocks of sheep have always been the chief characteristic of Dorset agriculture. Joseph Bettey discusses the consequences of a remarkable growth in sheep numbers during the sixteenth and seventeenth centuries: competition for grazing rights on the Dorset chalk downs, which frequently flared into disputes and riots; progressive enclosure by agreement (involving both downland and common arable fields); a great increase in wealth, evidenced by the superb manor houses and farms of the period; and, most notable, the development of water meadows especially along the valleys of the Frome and Piddle.

It is generally held that outfields were used to supplement corn crops by being cultivated in small plots annually. Harold Fox believes, however, that in the south-west outfields "functioned primarily as pastures and were cultivated occasionally and sporadically." His evidence derives mainly from an intensive study of the Exe estuary parish of Kenton. This raises the question of how far Kenton's pattern of outfield management was typical. Investigation of other areas with rural economies similar to those of Devon and Cornwall might provide more conclusive evidence.

Mark Overton's study of the Cornish crop returns for 1801 is intended to show how a

pastoral county reacted to the crisis of the Napoleonic wars when imports of corn were virtually cut off. Overton argues gallantly, albeit somewhat misguidedly, for progressive and up-to-date farming in Cornwall. That the argument is poorly conceived, and the conclusions only partial, must surely reflect the qualities of the source material, notoriously inaccurate and full of omissions. There is no reference to the fact that arable crops in Cornwall were subordinate to the livestock sector, and therefore cannot provide a representative indicator of Cornish farming as a whole. In this respect the returns tell us much less about the progress of farming in Cornwall at this time than in most other counties. Surely the 1801 returns must be analysed in relation to rainfall, relief, and soils. If this were done it would no doubt be seen that grains, particularly wheat, were still being grown in bulk on the unkindest of soils and at unsuitable heights, a form of land-use which cannot be explained by the crisis of war since a similar pattern obtained before 1750. There is no reference to the quality of grains harvested yet, unless the returns for Cornwall are markedly different from those of other counties, references to quality and yield should appear in places in the raw data. Or were the yields so low and the quality so desperately poor that they are best forgotten? In processing the data in the crop returns and in the production of some excellent maps Mr Overton has performed a valuable service. But this evidence on its own is unreliable, and the writer's theme untenable. The backwardness of Cornish farming has yet to be disproved.

It is reassuring to see how the marketing arrangements of a region improved simultaneously with technical changes in its husbandry. Until fairly recently this has remained an undeveloped theme: the effects of changing demands upon the methods of distribution from farm gate to final consumer have received all-too-little attention from agrarian historians. John Chartres casts his net rather widely, and the south-west remains subordi-

nate to a much larger region liberally defined as the "west of England." A dearth of source material no doubt makes a study within more modest limits difficult. The result is, however, an excellent model of its kind. Following a furrow ploughed by Professor Everitt, we are shown the break-up of an old system based on fairs and markets, and the growth of a new network of private marketing arrangements. A number of economic and social developments affected the pattern of food-marketing during this period: an increase of population in London and the provinces; the rise of a leisured society and a sophistication of tastes; the extension of agricultural specialization; and the improvement of all forms of transport and communication. The result was that much inland trade shifted from the smaller to the larger market towns, an increase in the scale of commercial dealings was evidenced, and there was a migration of trade from the traditional "open market" to the "private market" located in corn chambers, warehouses, and above all the inns of London and provincial towns.

Each contribution presents, in its own way, confirmation or disputation of an already familiar hypothesis: the "floating" of Dorset water meadows provides further evidence of a technical development emphasized by Dr Kerridge; the management of outfields in Devon and Cornwall differs markedly from the practices revealed in classic studies of Scotland by Gray and of the Norfolk Brecklands by Saltmarsh and Darby; analysis of the 1801 crop returns challenges time-honoured literary sources as well as Dr Rowe's acceptance of traditional backwardness in Cornish agriculture; a study of marketing in western England substantiates, for this region, the growth of private marketing activity in ever-larger urban centres that was, as Professor Everitt has shown, a development of national significance. Altogether this collection of papers provides a modest addition to the growing body of regional studies in British agriculture.

DENNIS BAKER