

Book Reviews

A. G. HAUDRICOURT and M. J-B. DELAMARRE,
L'Homme et La Charrue à travers le Monde.
Paris, 1955. 506 pp.

No single instrument has so affected the history of the last 5,000 years as the plough. Like Pliny's ploughman, with back bent to his task, this history has been bent, even on occasion yoked, to the plough. We may—for some time yet, we must—dispute the finer points of the relationship; the precise effects of plough type on field shape, village site, community, and so on. But no one is likely now to question its broad and impressive proportions, or willingly to put the plough (as does the Bayeux Tapestry) in the margins of the story. By implication, indeed, English medieval historians at least have, in a sense, often erred the other way, by concentrating too much on arable fields, too little on pasture, rather as if, in the line of some sixteenth-century writers, they felt the plough's advance alone represented solid and typical agrarian achievement; an emphasis which has not, unfortunately, prevented us being very mistaken about the history of the plough in England, and consequently probably wrong about much of the history of settlement. As these recently corrected errors show,¹ it is too soon to hope to write a definitive history of the plough, even in a single country, let alone "à travers le monde." But so much valuable work has been done recently that some preliminary attempt at synthesis was desirable, if only to suggest lines of future enquiry. This book, the twenty-fifth volume in the important series of *Géographie Humaine* directed by M. Pierre Defontaines, attempts to do two main things. First, and more important, to reconstruct the typology of the plough throughout the world's

history, basing this typology on detailed regional evidence; and secondly, to suggest ways in which this typology has been related to the needs and environments of men. The result is the most important general contribution to our knowledge of plough types that has yet appeared, rivalling Leser² in learning (though not, unfortunately, in clarity of type³), and excelling him in, so to say, human understanding.

The human emphasis is fundamental and gives the work distinctiveness. Even when some general proposition of typology is presented a shade too enthusiastically, we seldom stray far from the men who made and used the tools. Their mental and physical habits of work, the living basis for their abiding conservatism; their inherited craftsmanship; the changing needs of climate and soil; these and kindred points will ultimately be much more fully understood, but the *importance* of understanding them is here firmly and decisively accepted.

This general approach is carried through with a great breadth of knowledge and an impressive bibliography. The familiar types of evidence are all used: cylinder seals from the ancient middle east; representations of many kinds from ancient Egypt, Greece, and later periods; the literary records, Pliny being discussed in considerable detail; the early Scandinavian instruments on which Glob has recently written a study of fundamental importance;⁴ regional plough types in use in the past two centuries or so, this information being summarized in several valuable, if small-scale, distribution maps. Some of the archaeological material is used less than is normal, for example the details of finds of coulter (there is

¹ See especially F. G. Payne, 'The Plough in Ancient Britain', *Archaeological Journal*, CIV, 1947, pp. 82-111; 'The British Plough', *Agric. Hist. Rev.*, v, 1957, pp. 74-84.

² P. Leser, *Entstehung und Verbreitung des Pfluges*, 1931.

³ The paper is wretched, and the stitching spasmodic and inadequate. Books of this importance deserve better presentation. They also demand an index; it passes understanding why it should have been issued without one.

⁴ P. V. Glob, *Ard and Plough in Prehistoric Scandinavia*, 1951, which the authors have, I believe, overlooked.

a special reason for this) and shares. Again, as an examination of wheeled carts and harness shows, further comparison of ploughs with other tools, especially harrows, hoes, and spades, would (as the authors point out) be valuable. On the other hand, the authors adduce less well-worn evidence: ideograms from the middle east and China; detailed consideration of variations in the nomenclature of the plough and its parts which, despite obvious pitfalls,¹ can give important indications of date and distribution. One striking limitation in the evidence is its sparseness for the period between the ancient worlds and fairly modern times. A great deal of work needs to be done here. In this country, for instance, medieval accounts need closer investigation; and more discussion will surely clarify the vexed question of the size and composition of the medieval plough-team.²

The diversity of recorded plough types is, of course, enormous; and the nature of the evidence—inadequate dating, the forced reliance on survivals in backward areas, for instance—makes the task of discerning the different stages of development incredibly difficult. The typology here presented is, in many respects, novel; and, on the whole, it rings true. Its basic division is between the (early) symmetrical instrument, the *aratrum* or ard, and the asymmetrical *carruca* or plough properly speaking. And, although the book's title implies concentration on the latter, in fact it is the ard which takes up more space. Whether

or not the ard originated elsewhere—and the authors toy with the idea that it came from an area of 'dry farming'—the first for which we have evidence are in ancient Mesopotamia and Egypt, the oldest going back to about 3000 B.C., and implying, by their already advanced development, a considerable past. These ards are of very distinctive construction; two handles meet together at the lower end to form a pointed, symmetrical share beam and share combined, the 'depth' of which, in the Egyptian examples, is regulated by what we know as a sheath.³ Their use is also distinctive, for, according to the authors (as against the view of Leser), they were primarily associated with sowing, either by a central drill fixed between the handles, or broadcast. It is from these already diverse ancient middle eastern ards that—it is assumed—all the ards and ploughs of the world derive. It is here suggested that the later development of the ard took three main lines, more or less distinct. First, the type called here the *araire chambige*, in which the handle (usually single) and share beam (whether combined in one piece or not) pass through a mortise in the plough beam; in most cases, the share, if separate, is of the tanged type (with the bar share as the limiting type), here referred to as the *reille* (L. *regula*). The well-known Døstrup and Donneruplund ards⁴ and the votive bronze model from Cologne are of this kind; and the Virgilian *aratrum* is generally (and surely rightly) interpreted as such

¹ e.g. though a *carruca* was extensively used in Anglo-Saxon England, the O.E. verb 'to plough' is *erian*, cognate with L. *arare*. For the word 'coultter' see Payne's remarks, *Arch. Jl.*, CIV, 1947, p. 92n.

² Two important recent contributions on English ploughs are overlooked by the authors: H. M. Colvin, 'A Medieval Drawing of a Plough', *Antiquity*, xxvii, 1953, pp. 165-7; M. Nightingale, 'Ploughing and Field Shape', *ibid.*, pp. 20-6. Col. Drew's work, deposited in the Public Record Office, shows the value of medieval accounts.

³ Not, however, in all Egyptian examples; e.g. W. S. Smith, *The Art and Architecture of Ancient Egypt*, 1958, pl. 58B (Dynasty XI, 2134-1991 B.C.).

⁴ The description of these instruments (pp. 78 ff.) is not altogether accurate; each has a pointed share (separate or made out of the foot of the handle or ard head) and what Glob calls a fore-share (here *reille*). Payne also seems to be wrong (*Agric. Hist. Rev.*, v, 1957) when he writes (p. 75) that the Donneruplund ard "proves that the well-known specimen found at Døstrup in 1884 was incomplete, that it had lost a very important part, the ploughshare. . . The size of the mortise in the beam foot itself should have raised doubts about its completeness." On the contrary, as Glob's plan of the mortise shows (Glob, *op. cit.*, fig. 57), there is no room for such an additional piece; nor need for it, since the ard head is fashioned into a share, being altogether more massive than the ard head of the Donneruplund ard which had a separate wooden share. There were clearly at least two varieties of 'bow ard' (*araire chambige*); equally efficient (there is no question of the Døstrup ard being merely a "thin pointed stick" as Payne

(though not here).¹ Secondly, the *araire manche-sep*, in which the plough beam passes through a mortise in the combined handle-share beam; in modern times, at least, this has been the most widely distributed type. Thirdly, the *araire dental*, which has a (usually narrow, straight, and 'shallow') share beam into which the plough beam and the handle are separately tenoned. This is familiar as the instrument of ancient Greece, and the authors argue (not, in my view, convincingly) that Virgil's *aratrum* was also of this type; the 'crook ards' of ancient Scandinavia are a slightly developed variety. In each of these three types, the handle is most often single, but the lower portions of the primitive double handles survive, it is suggested, in the ears or projections often found on each side of the share beam.

These three main types, and numerous variants (including the corresponding rectangular types, which Leser made into one of his two basic plough types!) had clearly emerged long before the beginning of our era, which is the approximate date to which the authors assign the appearance (in the west) of the *carruca*, an instrument which is constructed and operated asymmetrically, and which turns rather than merely pulverizes the soil. There was clearly an intermediate stage during which the *aratrum* was employed similarly, by leaning it to one side and using the ears (or equivalent) to turn the soil. This adaptation of the *aratrum* led easily to the addition of a coulter, of wheels to facilitate control (noted by Pliny as a recent innovation), and of a better device to guide the soil over (of which the mould-board is the final example). As future development showed (see e.g. the modern English swing plough) the wheels were the least important addition. By contrast, coulter and better turning device were fundamental, and the differences in their arrange-

ment and design divide *carrucae* into two basic types: those in which the ploughman can choose which way he turns the soil (the so-called "one-way plough"); and those in which he cannot.

Broadly persuasive though this typology is, not all its stages carry equal conviction. Since so much depends on the precise point at which an instrument was introduced into an area, it is not surprising, given the present uncertainty over much of the dating, that there are gaps in our knowledge where a rather theoretical typology must do service for sound historical evidence. On occasion, the authors hardly seem to have allowed sufficiently for the variety of skills and therefore the adaptability possessed by users of the plough in some primitive communities; for instance, the late Bronze Age rock engravings at Finntorp show two very different types of ard presumably in use in the same area; Pliny points to similar variety, and in this country British coulters may indicate differences between instruments. Again, the transitional stage between the *aratrum* and the *carruca* is hardly stressed adequately. As Payne's articles have shown, this is one of the really crucial moments in the history of the plough, symmetrical construction (or nearly so) and asymmetrical use, allowing the soil to be deeply cultivated and properly turned as demanded in well-watered land. Not surprisingly, perhaps, the authors have no very clear place in their typology for this kind of bastard employment. But they also minimize the use of coulters with ards. They admit that coulters were occasionally so used, but (I suspect) almost feel that they ought not to have been. They explain most of the early iron coulters as belonging to a separate instrument, a *coutrier*, consisting merely of a coulter attached to the end of a beam, with a handle for control, for whose existence they cite one or two modern

says), though the Døstrup ard must have been more difficult to make and more expensive to maintain because the combined share-handle demanded much working and might need complete replacement if the share part was damaged.

¹ See the very important article by R. Aitken on 'Virgil's Plough', *Journal of Roman Studies*, XLVI, 1956, pp. 97-106. Perhaps we should take more seriously Seneca's comment that Virgil "aimed not to teach farmers, but to please readers" (*Epistula*, 86.15).

examples and the evidence of Pliny. Neither kind of evidence seems to do their case much good. Pliny, if read in a good text,¹ seems, more probably, to say what most people have always supposed him to say; that, for the first ploughing (the verb is *proscindere*, on the technical meaning of which see Varro, *Rerum Rusticarum*, I. XXIX. 2) of very thick or dense land (*praedensa terra*) there was a special type of share used in conjunction with (and, literally, preceded by) a coulter on the same instrument.

If plough types are difficult to arrange in historical sequence, the factors which determined their evolution can, as yet, only be glimpsed in broadest outline; climate, soil, field shapes, resources of the users, and so on. But it is at least clear that simple generalizations will not suffice. We are now much more cautious than historians once were about the relationship between ploughs and fields. Consider also the effects of race and political domination. If the authors are right, the political influence of China and of the Hindoo civilization were vital in the spread and evolution of the plough in the east; in the west, while they agree that the Roman Empire brought no fundamental change in plough types, they suggest (not very plausibly) that it may have helped to spread the *araire dental*. By contrast, the barbarian invasions no longer seem the great determinant they did, and like (apparently) the Arab conquests, probably had little effect on plough types. On these and similar points, the authors have contributed a great deal. But they would be the first to agree that the task of explaining the history of the plough is only in its infancy. "Nous ne présentons pas notre ouvrage," they conclude (p. 464), "comme une 'conclusion' mais comme un 'point de départ'." If there is injustice in this, it is at least as unjust to them as to their predecessors in the field. One hopes, however, that this remark will not be used as a general invitation to speculate on

world-wide plough history. A synthesis of this kind was certainly needed. But, between the lines, its most insistent lesson really is this: the present need for close study of all types of evidence on a less ambitious scale.

T. H. ASTON

JAMES H. SHIDELER, *Farm Crisis 1919-1923*. Cambridge University Press for University of California Press, 1958. x+345 pp. 37s. 6d.

It is a sobering experience to find the events of the early 'twenties already being described by a historian and the result selected for review in a historical journal. The historian is James H. Shideler of the University of California and he deals with the farm crisis in the U.S.A.

His book is based on a most painstaking study of records of public agencies, private manuscript collections, federal documents and official publications, newspapers and correspondence, farm journals, memoirs, and in fact of wellnigh all the records, published and unpublished, on the subject. It is not altogether surprising, therefore, that it reads more like a documentary than a commentary, although the reasons Mr Shideler gives for the Crisis, and its significance in America's agricultural history, are easily the most interesting features.

Agriculture in the U.S.A., as in most other countries, underwent a period of extreme depression between 1920 and 1923 in the process of readjustment from the inflated conditions that arose during the first World War. Mr Shideler thinks the period marks a "gulf between two worlds of American agriculture, an old world of soaring ambition resting upon expansion and land value increment" and a "new world of uncertainty distinguished by diversity, inequality, and contraction," and this, presumably, is the reason why he has concentrated his attention on the events of this relatively short period of time. Cer-

¹ The text the authors use is not the best. They omit the word *infelix* (?*inflexus*) which qualifies *culter*, and, later on, give the name for the wheeled ploughs as *planarati* without mentioning the more probable *plauamorati*. There are at least eight other mistakes, one of which makes complete nonsense of the Latin.

tainly there were things that the first World War changed for ever, and an important one in the U.S.A. was its metamorphosis from a debtor to a creditor nation. But fundamentally there was nothing new in the position, for prices had "tobogganed" before 1920, and *The Grapes of Wrath* described conditions in the 'thirties.

Even the attempt which the farmers made to influence government policy in the early 'twenties had its prototype in the Populist Party which achieved such success that in 1890 it was swept into power in a dozen southern and western States and inspired William Jennings Bryan to urge the Democrat Party to fuse with it. And if the troubles in the 'twenties were the result of overproduction, they only reflected the misfortunes of an earlier generation of farmers whom a Kansas virago implored to "raise less corn and more Hell." Mr Shideler seems to think his historical model is a linear one, when in fact it is cyclical.

The emphasis which he puts on overproduction is another feature of Mr Shideler's thesis with which not everyone will agree. No one will question his facts: some crops suffered from overproduction, others were left on the shelf by temporary market dislocations, while the railroads chose this of all times to impose big increases on their rates for agricultural goods. Moreover Europe, although still desperately in need of food, was in a position to pay only much lower prices than previously. But are these facts of themselves sufficient to describe the catastrophic price falls that occurred with such suddenness in the middle of 1920 and continued for eighteen months? Mr Shideler does not ignore credit shortage and the policy of the Federal Reserve Board during this period. Indeed he devotes six pages to examining the interpretation which farmers put on monetary policy. But he gives no indication that monetary causes were very close indeed to the heart of the trouble. Rather he blames farmers' organizations for concentrating their attention on a credit "plot," and seeking relief through emergency credit expansion when

they should have been "searching for the causes of the agricultural crisis." The fact that the decision of the Federal Reserve Board to increase the re-discount rate to 7 per cent coincided with the beginning of the fall in prices receives much less attention than its importance deserves. Yet most students of the subject would agree that the tightening of credit had an overriding effect on the course of prices in this period, just as the demonetizing of silver was responsible for the suddenness of the recession in the middle eighteen-seventies.

This is not an exciting book: Steinbeck is much more readable. But there are some interesting features in it. It shows, for instance, that the idea of the 'soil bank' is not so novel as may be thought from the publicity it now receives. As early as 1921 *Wallace's Farmer* was trying to persuade farmers to 'bank' the fertility in the soil by raising less corn and more legumes.

Mr Shideler gives interesting sidelights on some of the chief actors who occupied the agricultural stage at this time. Henry C. Wallace was described by one of his friends as "a natural born gamecock . . . redheaded on his head and in his soul." As Secretary for Agriculture he "lived close to his job and kept farmer hours. He was tautly nervous; the strain of responsibility to farmers during their crisis and exhausting battles within the administration to protect his department were physically wearing." His death in 1924 suggests how near to the truth was this assessment of Wallace.

The quotation which gives Liberty Hyde Bailey's conception of farming, too, is too rare to be lost: "it is the farmer's rare privilege to raise crops and rear animals. The sheer joy of the thing is itself a reward. . . It will be a calamity if we sacrifice this vast reward by insisting so exclusively on a financial or business view of agriculture. By such insistence we shall make the occupation sordid." There was wisdom in erecting one or two other buildings between Bailey Hall and the Farm Management Building on the campus at Cornell!

These pictures stand out from a mass of

rather wearying detail which is unlikely to interest many British historians or agriculturists. But for any one who wishes to refer to the sources of the history of the period, this book is first-rate.

HARWOOD LONG

J. K. STANFORD, *British Friesians: a History of the Breed*. Max Parrish, 1956. 216 pp., illus. 18s. 6d.

Breed histories have a Betjemanesque air about them: they tend to be of a period, with Ampthill lamp posts, the Imperial Institute, and *The Times*. They delight the connoisseur; but have no great significance to the man in the street. They are full of pedigrees of farm livestock which never had practical value; and they are the collected biographies of men who chose dairy bulls only by their shape and stood their beeves hock deep in straw immediately a photographer hove in sight.

Mr Stanford's history of the Friesian breed in Britain has none of this nonsense about it. He approaches the black-and-white cow with a pail in his hand, and judges his stock by yield of milk and not horn shape, by butterfat percentage and not set-on of tail, by calving index and not colouring. His book is, therefore, about the first chronicle of any one breed of stock which is worth its place on the book-shelf, and not in the attic, of the agricultural historian.

The antecedents of the Friesian breed are one of the most tantalizing mysteries in farm history. From what European stock did it evolve; how closely is it related to the dairy cow which was the foundation of the great medieval dairy industry of the Low Countries; when did this type first come into Britain—was it to the monastic farms, or in the sixteenth century, or not until the 'Dutch cow' began to catch the attention of the English farming writers of the late seventeenth century? These, and a dozen more, questions come to mind. Netherlands research has not yet found the answers, nor yet Mr Fussell's work from the British side; and Mr Stanford may therefore be excused for his failure to take these matters any further.

It is certain that Dutch cattle carrying factors of size, high milk yield, and colour marking were in England from at least the time of the Restoration. They had soon afterwards established the prototypical Shorthorn of the north-east coast and a short-lived southern Shorthorn breed in Kent. They moved out from these centres, strengthened by new direct imports, to modify British local stock into the Hereford beef breed, the dual-purpose Longhorn, and the dairy Gloucesters and Ayrshires; and the Low Countries blood also probably influenced indirectly the present Channel Island, Red Poll, and South Devon breeds. There are, therefore, no modern milch breeds in Britain, except the Kerry, which do not stem in greater or lesser degree from Low Countries stock; and only the whole-coloured black and red breeds and the Highlander among beef types have been kept free from any recognizable Low Countries cross.

All this great inpouring into the melting-pot of British bovine stock Mr Stanford only touches upon lightly. The history of the British Friesian as such is his prime concern. This had its first beginnings in Britain about half way through the nineteenth century—rather earlier than Mr Stanford suggests—when a proportion of Dutch cattle imported on the hoof for meat began to be retained on farms. From about 1870 Friesian herds begin to appear, of which the Terling herd of Lord Rayleigh, started about 1890, is the earliest still to survive.

The British Friesian Cattle Society was founded in 1909. It took the Society's first honorary inspectors three years to sort out about 7,000 acceptable animals from the tens of thousands of commercial black-and-whites as foundation stock for the first herd book. The breed was first scheduled at the Royal Show in 1911, and drew a dozen entries; and at the first Terling sale in the same year an average of only £25 8s. a head was returned. The Friesian in Britain was then very much of a cow-keeper's cow. Its present eminence is due mainly to the work of the Breed Society under a succession of shrewd leaders. The

founder of the H.M.V. gramophone business, Mr Trevor Williams, was one of the first of these. In 1912 he was in negotiation with the Ministry of Agriculture for the import of selected new blood from Holland, so that the hotch-potch of black-and-whites could be made into a homogeneous breed. Members of the Society's council themselves financed the first importation of 60 animals, in 1914, from milk-recorded stock in Holland. They cost less than £2,500 and were sold for £15,000—and the handsome windfall was the foundation of the Society's financial stability.

Four years later the first 2,000-galloner appeared—Eske Hetty, bred by Lord Rayleigh from an ancestry which was “shrouded in mystery.” Performances of this calibre, and the post-war boom, caused prices to rise to fantastic heights; in 1919 four animals from the Rayleigh stud made £14,385. The excitements of these days are brought out well in this book, with vivid anecdote and a judicious selection of detail. Mr Stanford, unlike earlier historians of other breeds, is also candid about the Society's failures and the breed's shortcomings.

Despite a few setbacks, the Friesians could by 1925 boast six 3,000-galloners; and by then over 160 animals in the breed had passed the 2,000-gallon yield mark, against only sixteen in all the other breeds in Britain put together. The supremacy of the British Friesian as a milk producer was now unchallenged; and it had been achieved in less than two decades of work by the breed Society and in little more than a generation's work by breeders. With such a subject Mr Stanford could hardly have failed to do justice to a piece of rural history as impelling as any in the long story of British agriculture.

R. TROW-SMITH

P. M. SYNGE and Miss G. E. PETERSON, eds., *The Fruit Year Book, 1958*. Royal Horticultural Society, 1957. 176 pp., illus. 10s. The 1958 edition of *The Fruit Year Book* maintains the high standard of production of previous numbers at the same very reasonable price. In addition to covering topics of

interest to amateur and commercial fruit-growers this edition contains several articles of a historical nature.

In ‘John Laurence and his pears’ Professor H. W. Miles describes the fruit-growing activities in the early eighteenth century of this enthusiastic clergyman, who, like many of the same calling since, did much by his example and writings to encourage the art of gardening. He published *The Clergyman's Recreation* in 1714 and *The Gentleman's Recreation* in 1716, and the charming frontispiece of the latter book is reproduced here. Professor Miles points out that Laurence's list of varieties of pears contains a few still occasionally to be found today.

The Rev. C. L. Dunkerley writing on ‘Some notable nineteenth-century English fruit books’ places Ronald's *Pyrus Malus Brentfordiensis*, published in 1831, as marking “the end of an age of great and glorious fruit books”—those lavishly illustrated “pomona” costing at the time anything from thirty to fifty guineas each. Books produced in the period from 1831 to 1865 were written for a less exclusive and more technically minded public, but, nevertheless, writers like Charles McIntosh and Benjamin Maund, whose works are described here, also illustrated their books with beautiful engravings coloured by hand. Three of these are reproduced in the *Year Book*. Mr Dunkerley expresses some surprise that McIntosh should refer so freely to Latin and Greek authors, and attributes this to the fact that Loudon's *Encyclopaedia of Gardening* had been published only a few years previously. The practice of reproducing classical advice on gardening, however, was indulged in by only too many writers of horticultural books from Thomas Hyll (1563) onwards.

The Gardener's and Forester's Record, a monthly publication of the 1830's, is the subject of a short note by H. H. Crane. We are told that this periodical, also illustrated with hand-coloured engravings was originally published at 6d. per copy!

Many horticultural crops suffer from the dictates of fashion and wax and wane in

popularity in an unpredictable way. Miss B. A. Rake in 'The history of gooseberries in England' describes how this fruit, not very popular today, was the subject of tremendous enthusiasm in the eighteenth and nineteenth centuries, when members of Gooseberry Clubs were actively engaged in breeding more and more new varieties. By 1831 there were 722 varieties in existence.

The history of such a popular domestic fruit as the apple, which, as stated by C. S. Gundry in 'The evolution of apple growing in England', can be traced for at least 2,000 years, must inevitably have social implications of a much wider nature. Mr Gundry compresses a great deal of information into his essay which covers the whole of this period, and it is to be hoped that he will have the opportunity of continuing and expanding this work. Apple growing represents a highly developed skill, particularly in the propagation of the trees by grafting, a practice which was certainly known to the Romans. Mr Gundry is perhaps over cautious in stating in reference to the fifteenth century that "it can be assumed that this operation was commonly used *even* in those days." Grafting was practised by Brithnod, first Abbot of Ely, towards the end of the tenth century, and it is a matter of speculation whether or not such skills were really lost for any length of time during the period following the departure of the Romans from this country. One would like to know much more about the standard of horticultural practices during pre-Norman and early medieval times.

R. R. Williams contributes some historical notes on perry pears, those ancient, great pear trees which are such a feature of Herefordshire and other west midland counties even at the present day. Mr Williams recounts some of the delightful names of these old varieties; Merrylegs, Mumblehead, Lumberskull, and others with a flavour evocative of the eighteenth century, when indeed some of the existing trees were planted. He makes a plea for the revival of interest in this fruit and its end-product.

All of these articles make enjoyable reading, and it is to be regretted that *The Fruit Year Book* is now emulating the biennial habit of some of our well-known apple varieties.

WINIFRED M. DULLFORCE

AGRICULTURAL ECONOMICS RESEARCH INSTITUTE. *The Agricultural Register*. New Series, *Changes in the Economic Pattern*, 1956-7. Oxford University Press. 234 pp. 21s.

Twenty years ago the Agricultural Economics Research Institute under Dr Orwin published six annual volumes of the *Agricultural Register* which provided in a compact form all the facts that any one was likely to need on the output, prices, legislation, and administration of British farming. In 1953 and 1954 a series of supplements to the *Farm Economist* contained similar information for the major products (excluding milk) over the intervening years of war and post-war planning. Under Mr Colin Clark the Institute has now resumed the pre-war pattern with a volume dealing roughly with the two price reviews of 1956 and 1957 and the year between. Separate chapters deal with the development of agricultural policy; the changes in output of the principal commodities, the activities of the various marketing boards and imports of competing supplies; the negotiations over the European free trade area, the common market and G.A.T.T.; agricultural workers and wages; rents, land values, and credit; the prices and supplies of other inputs, and the various grants in aid of production. The text is mainly a commentary on the ninety-two statistical tables, supplemented by summaries of current legislation. The authors are to be congratulated on their clear and concise exposition and the price is remarkably moderate for a book containing so much tabular matter. The absence of references no doubt helped to make possible this low price but nevertheless detracts rather from the usefulness of this undoubtedly useful work of reference.

EDITH H. WHETHAM

ANDREAS HOLMSEN, HALVARD BJÖRKVIK, and RIGMOR FRIMANNSLUND, *The Old Norwegian Peasant Community*. Reprint from *The Scandinavian Economic History Review*, Uppsala, 1956. 82 pp.

The Institute for Comparative Research in Human Culture, founded in Oslo in 1922, here makes available the first fruits of a part of its work in three very readable papers in English. They are a general survey and historical introduction by Professor Andreas Holmsen; an account of farmsteads, villages, field systems, and ownership by Halvard Björkvik, and a paper on farm community and neighbourhood community by Rigmor Frimannslund. The two latter papers are largely based on material from western Norway where older social and farming patterns linger in communities isolated by difficult physical conditions. The Oslo institute is accumulating by questionnaire and field study a wealth of material which is the envy of less well-endowed institutions in western Europe. These papers indicate its scope and progress and summarize and analyse a portion of it. The papers describe and explain the lay-out of fjord-side farms and fields. They provide interesting contrasts with farming communities in less harsh European environments and are a pattern for local study everywhere. The excellent text figures include line drawings by Arne Berg in which settlements of 1880 are reconstructed in elevation. Line drawings of this type, a feature of Irish folk-life studies, could be more widely used to illuminate, and replace, some of the detail now used to describe farms and fields and folk.

MARGARET DAVIES

D. R. DENMAN, *Origins of Ownership*. Allen and Unwin, 1958. 190 pp. 22s. 6d.

The subtitle of this book describes its content. It is a "brief history of landownership and tenure from earliest times to the modern era," that is from Prehistory (Cap. I) through Roman Britain, Old England, and the Norman Kings (II-IV) to the Middle Ages (V-VI). There is a separate chapter on Land

in the Boroughs (VII). The book is a synthesis of considerable reading over a very wide field, and its peculiar virtue is that it brings together conclusions of social, economic, and legal historians, and is written for none or for all of them. Thus the medieval (and modern) lawyer's strict division of tenures and his insistence on uncertainty as the true test of villeinage are exposed as not fitting the facts of medieval life; at all times an attempt is made to get at the reasons for change and development in the law. So much has been compressed into a small book that there is some obscurity. *Alodiarii*, *bordarii*, and *cotarii* make sudden entrances and exits—who were they? The assizes of novel disseisin and mort d'ancestor occur without explanation. The definitions of primer seisin, escheat, and forfeiture are very odd. Complex issues are presented fairly, yet with such metaphoric brevity that the reader may be better informed but cannot be wiser. Exceptionally, the reasons for making Domesday and the development of sales of works to bond tenants are discussed at sufficient length to arouse interest and send the beginner to the bibliographies.

This is, in short, an interesting and a puzzling book. The aim of the author, as stated in his preface, is "by dealing with the historical development of fundamental principles of proprietorship, to review briefly the stories" about "the origins of land ownership in England;" and to "draw them together in a single narrative." There is vagueness in this. What are "the fundamental principles of proprietorship;" what is meant by "ownership"? These basic questions are nowhere discussed; there is no general introduction and no conclusion. There are, rarely, broad statements: "the lord's interest, his *seignory*, is not absolute ownership. It is not ownership under the omniscient will of the lord, within the grace of which the tenant is granted sanction of occupation. The tenant's interest, his *feudum*, is truly ownership" (p. 80). The meaning is not wholly clear, but certainly the bald assertion that the *feudum* is truly ownership must sound strange to any one acquainted

ted with jurisprudence and the *dominium* of Roman Law. To a lawyer the truth of this contention depends on the nature of the claim, or the result of success, in a real action brought by the tenant of such a *feudum*. It is, of course, important to know what were the social and economic facts as well as what were the legal rights of those who had interests in land, but these legal rights have to be considered, and it is not enough to say that the early common law "is not judge-made law; it is revealed law" (p. 107). The substantive common law of land depended on the writ system and the judges who enforced the writs. Without a writ to defend his possession or assert his claim to land, a man was powerless at law. Many writs were based on a seisin by the claimant or his ancestor. To exclude the writs and to give half a page to seisin is to make impossible any analysis of ownership in early English law.

There remains a stimulating survey of landholding in town and country for which beginners will be grateful and in which those who are further advanced will find much of interest. To lawyers in particular the wide sweep of the work should be a salutary reminder of the narrowness of conventional legal history.

G. D. G. HALL

AGRONOMISCH-HISTORISCHE BIJDRAGEN, published by the Studiekring voor Geschiedenis van de Landbouw. Vol. IV containing (1) Ir. W. J. Dewez, *De Landbouw in Brabant's Westhoek in het midden van de achttiende eeuw*; (2) Prof. B. H. Slicher van Bath, *Een Fries Landbouwbedrijf in de tweede helfte van de zestiende eeuw*. H. Veenman & Zonen, Wageningen, 1958. viii+208 pp. (No price stated.)

These two studies, combined with that of J. A. Kuperus, *Resultaten van een Groninger Landbouwbedrijf (1832-1876)* published in vol. III of *Historia Agriculturae*, provide a general outline of the work done and the results obtained in three areas of Holland during three centuries. All are based on original documents.

The sixteenth-century material used by

Prof. Slicher is an account book kept by Rienck Hemmema from 1 May 1569 to 31 December 1573, which is very completely analysed in a careful introduction, followed by a transcript of the text. It is a detailed document that compares favourably with Robert Loder's *Farm Accounts* and with the *Account Book of a Kentish Estate*, both relating to English farming in the seventeenth century. The methods of working the arable land are discussed, the general routine being a rotation of cereals and pulse, either alternately or two crops of grain followed by pulse, as dictated by the fluctuations of price. The animal husbandry, which included dairy work, is equally clear. The economics of the holding disclose the labour employed and wages paid, and the domestic conditions. Since the work was done in time of war the document is quite remarkable.

The basis of Ir. Dewez's essay is a report on the leaseholds of a number of tenants in Brabant's Westhoek made by Johan Dingemans in 1740. The tenants were heavily in debt to their landlord, and the report provides material showing the size of holdings, the use of the land as between arable and grassland, the crops grown on the arable, the maintenance of the grassland, and the purposes for which the cattle were kept, e.g., for milk or beef and manure production, and the kinds of livestock, horses, pigs, sheep, and poultry carried. One interesting point that emerges is that there has been comparatively little change in the number and size of holdings in the area from the date of this report until modern times. The cereal crops grown were mainly wheat, barley, and oats, and there was some clover and artificial grass. Fodder crops were beans, peas, and buckwheat. A few potatoes were grown. Industrial crops were madder, coleseed, and flax, but these do not seem to have been grown on a large scale. The fallow still came round regularly in the rotation, but clover and artificial grass had already taken the place of a proportion of it. Possibly the farmers had changed the old three-course for a six-course by using the second fallow to grow clover, artificial grass, and buckwheat.

Horses were bred in some numbers. The maintenance of cows was calculated at 1.3 per hectare, not very different from the English standard of that date. Little information can be gathered about pigs, which were probably mainly used for domestic consumption. The results show that the net income was very small. Prices were low, and rents high.

These two studies are a welcome addition to our knowledge of the history of Dutch farming.

G. E. FUSSELL

B. H. SLICHER VAN BATH, *Een Samenleving onder Spanning* (A society in tension). *Geschiedenis van het platteland in Overijssel*. Vol. 1. *Historische Sociografieën van het Platteland*. Van Gorcum & Co., N.V., Assen, Holland, 1957. x+768 pp., illus. Hfl. 25.

Holland is a small country, and Overijssel is one of its provinces. As the title of the series indicates, this study is devoted mainly to the social and economic history of this province from the early middle ages to the present day. Careful studies of such localities are important in their bearing upon wider areas of social history. It could not, of course, neglect the development of agriculture, which is a fundamental; but the tension arose when the population increased more rapidly than the area of cultivable land could be expanded with the contemporary means available.

Different parts of the country were affected differently at different dates. Already in Carolingian times and the following centuries there was some urban settlement in Deventer, Oldenzaal, Ootmarsum, and Goor, but this characteristic development became more marked in the thirteenth and fourteenth centuries. The large-scale peasant farmers formed the oldest kernel of population, for it is clear that the Salland district to the west of Zwollerkerispel, the High Shrievalty of Hasselt, and the whole of Vollenhove were very thinly populated in the early middle ages. The oldest settlements were on the Salland and Twente sand land and the river clay along the banks of the river IJssel. The pre-con-

quest population here was not, however, so dense as that in England, but was about double that of the Mosel between Coblenz and Trier. Professor Slicher shows that right down to A.D. 1250 Overijssel was in fact rather underpopulated.

He points out that the thirteenth century was a time of prosperity all over Western Europe, coupled with a large increase of population. Overijssel followed the same pattern. It was during this period that a class of *keuters* (crofters), people with no hereditary or semi-hereditary rights to land occupation, appeared. It was in this century that the moorland of Vollenhove was settled. The population here were cattle breeders, fishers, and barge crews. These occupations were so different from arable farming that the settlers came from Friesland and elsewhere. Though there was probably little or no over-population in the sand land by 1475, there was a density of 16.06 persons per square kilometre as against 5.1 before 1200 over all Overijssel. During the following two centuries this figure rose to 21.30. The appearance of the *keuters* and the beginnings of the textile and turf-cutting industries are perhaps sufficiently explained by this large increase in population.

Professor Slicher has tabulated the further developments as heavy over-population and the growth of industry between 1650 and 1815: a reversion to farming with progressive methods from 1815 to 1890, with no over-population; and from 1890 to the present day the rise of farming to greater importance in the economy of the province than industry, with a consequent agrarian over-population. It seems that the term over-population is used in the sense of a number of people greater than could be provided with food from the available land surface.

Between 1675 and 1755 the possibilities of expanding the cultivated area were slight, and the arable farmers suffered through low grain prices. The area cultivated was also restricted by the scarcity of manure, the supplies of *plaggenbemesting* (turf manure), and other factors such as the decline in cattle numbers through losses by disease. The result was that

the expansion of the arable area did not keep pace with the population. Insufficient food was produced and the weavers in Almelo, for example, reduced to poverty, became slack and spineless. But the outbreaks of cattle disease resulted in an extension of grain-growing. The wars of the eighteenth century brought a temporarily renewed prosperity to the textile industry, but an industrial crisis after 1760 affected both that occupation and the turf-digging of Vollenhove. Other industries there were none, and poverty increased very largely. A desperate population took refuge in a large consumption of alcohol, in Holland brandy as in England it had used gin. After 1760, however, grain prices rose again, but not wages. The only bright spot in the general gloom of poverty was the agricultural improvement that took place after 1760.

The potato was introduced in the second half of the eighteenth century, and was used both as food for the poor, and for cattle feed. Buckwheat was another important new crop. It had been known in the fifteenth century, but its great expansion took place in the eighteenth and nineteenth centuries. It was grown for cattle feed on burned-over heath land. Most important of all was the better type of cattle bred as the ravages of disease were being restored, and these gave larger supplies of animal manure to supplement the turf, and added nitrogen to the soil. Both cows and pigs increased in number in the early nineteenth century. The improvement of the cultivated land included better grassland so that grazing cows on the commons became less necessary, and controlled breeding simple.

The first half of the nineteenth century was a period of prosperity. There was less potato disease in Overijssel than in other parts of Europe, and this meant good fortune for the growers. By 1850 Overijssel was less industrial than in 1795. Then came the agricultural crisis of the later years. The spirit of reclamation declined. After 1889 urbanization took pride of place, especially in Twente. The introduction of steam power to the textile industry about 1860 was an important factor

here, and a second industrial period began. It was the fourth phase in the course of development: first agriculture, then domestic industry, next renewed and improved farming, and finally factory industry.

This book is a pioneer work, and all that it is possible to do is to give some indication of its contents. Professor Slicher has been fortunate in the wealth of new sources he has been able to consult, and he has made ample use of them. The study is very detailed and deserves to be read with attention. It has a good deal to tell us, by implication if not by specific statement, of how men met the consequences of their own increase in one small area of the earth's surface. It however presents some difficulties for English readers unless a large-scale map of the province is used; at least that is what I have found.

G. E. FUSSELL

Report of the Royal Commission on Common Land, 1955-1958, Cmnd. 462, H.M.S.O., 1958. viii+284 pp., illus. 14s.

Authoritative accounts of the common land of England and Wales are all too rare, and much of the available information is difficult of access. Hence the publication of this Royal Commission Report will be widely welcomed. An official report, it nevertheless makes absorbing reading. It deals with such common land as remains today, that is, largely unenclosed commons or open pasture, and some common meadows. In the first six chapters, status, ownership, management and use, and the necessary safeguards are among the matters reviewed, and these are followed by two chapters setting out the recommendations. The second half of the volume consists of Appendices of great interest.

In Appendix II, 'History of Common Land and Common Rights', Dr W. G. Hoskins deals with the subject historically from the earliest times, and his division of the history of commons into six main periods is illuminating, and provides a masterly key to their story. He looks briefly at the open arable fields only in so far as their history is linked with the expansion or contraction of the commons. The

agricultural historian will turn to this succinct account with gratitude.

Appendix III, 'Some Legal Problems', by Sir Ivor Jennings, traces these problems back to numerous Commons Acts and to other Acts dealing with inclosure and property, as well as to custom and common law. In doing so, he underlines the extraordinary complexity of the legal position today.

Several tables and two maps summarize the distribution of common land in 1873 and 1956-8 by counties. The information is amplified by Professor L. Dudley Stamp in Appendix IV, 'The Geographical Distribution of Common Land'. In eighty-three pages he brings together largely unpublished material, the fruits of extensive enquiries in every county in England and Wales. The treatment is by counties grouped in five regional blocks, and many features of interest are brought out: for example, the geological basis of the distribution of the surviving commons, which are, after all, largely residual; the difficulties of management; the variations in utilization; the differences between English and Welsh commons; and, most striking, the discrepancies between the returns for commons acreage in 1873 and 1956-8, and between these and the area of rough grazing at both dates.

As the Report makes amply clear, the one and a half million acres of common land which survive today are fraught with problems of every kind: problems of ownership, of forgotten or disputed rights, of ancient claims and customs, and of the incompatibility of time-honoured rights and new demands. Historic uses like grazing, estovers, and turbary, are frequently at variance with the present need to expand our home timber supplies, to erect electric pylons, to develop water catchment areas, and to provide space for the recreation of large urban populations. Thus drainage, quarrying, and mining, housing programmes, increasing food production, green belts, and many other familiar matters are associated with the question of what we are to do with the remaining commons and whether they are, in fact, to be regarded as outmoded remnants of a vanishing system of

communal farming or to be valued as "unique as a reservoir of land which has not been fully exploited."

It is, significantly, to the latter view that the Commission leans. As is rightly pointed out, the value of the commons and the needs of the public today are utterly different from those of a century ago, so a century and more hence they are likely to be different again. Hence the need to regard the commons as both a heritage from the past enshrining much of ancient custom and historic interest, and as a trust to be wisely administered both for today and tomorrow. The recommendations stress the need for registering and mapping all common land, for safeguarding existing rights, ensuring public access, and at the same time allowing for development or improvement schemes for projects of national or regional importance.

There is no doubt as to the timeliness of this volume. The need for a clarification of the position and the formulation of a realistic policy was urgent. In conducting these enquiries, the Commission has weighed a vast amount of evidence, pondered innumerable problems, and made valuable recommendations. It has also produced a Report which is likely to remain a standard work on the subject for many years to come, and at the same time to act as a stimulus for the further research which our common lands still merit.

DOROTHY SYLVESTER

DOROTHY SYLVESTER and GEOFFREY NULTY (eds.), *The Historical Atlas of Cheshire*. Cheshire Community Council, 53 Watergate Row, Chester; 1958. viii+64 pp. 10s. 6d.

It will be a thousand pities if the circulation of this atlas is limited to the county of origin, for it contains material of great interest to all students of English local history. Readers of this REVIEW, in particular, should be grateful for the maps illustrating the distribution of open arable and common meadow, the selection of rural plans, and the three Domesday maps of (a) wastes and woodlands, (b) manorial population, (c) agriculture and industry.

It has taken nearly six years to collect the information embodied in the atlas, and the result constitutes an example which other counties will do well to follow. The editors hint at the possibility of a second volume. If this is forthcoming, one may hope that the lettering of the maps will be brought into closer conformity with Ordnance Survey standards. In all other respects the atlas is extremely well presented. The Cheshire Community Council deserves the gratitude of students for making it available at so modest a price.

H. P. R. FINBERG

E. W. MARTIN, *Where London Ends: English Provincial Life after 1750*. Phoenix House, 1958. 312 pp., illus. 30s.

This is a polemical, nostalgic, pretentious book. It is polemical because the purpose of the material that Mr Martin has collected on local government, religion, education, medicine, and the press is to point his argument that the country town has something valuable to contribute to English life as a counterbalance to the 'metropolitanism' of London and the big industrial cities, and not just to give an account of English provincial life since 1750. It is nostalgic because Mr Martin looks back to a time when towns were small and agriculture and industry "blended." He wants what he calls his two divisions of England to draw nearer together in amity and understanding till they achieve Charles Kingsley's ideal of "a complete interpenetration of city and country, a complete fusion of their different modes of life, and a confirmation of the advantages of both, such as no country in the world has ever seen." Or is ever likely to see, might well be the comment. For such a view is unhistorical. We certainly need to know more about the history—and sociology—of towns. Nevertheless there is no denying the stagnation or shrinkage of most of the small market towns which find favour in Mr Martin's eyes. And of recent years the criticism of the 'garden city' idea, which might provide one practical expression of them, has been growing. At the same time he does less than justice to the contribution the

large industrial cities make to cultural life. Nasty as they seem to Mr Martin living in his Devon village, the large industrial towns, and particularly London, continue to expand because of what they positively have to offer. They offer different attractions from the small market town but not necessarily inferior ones. Privacy may be preferred to neighbourliness. Mr Martin's case is pretentiously presented in inelegant prose with an ostentatious parade of authorities and a misleading series of references. For the general reader this may not matter, but it should not pass without comment in a scholarly journal. It is impossible to trace quotations, because no page references are given, and *op. cit.*'s and *ibid.*'s abound. For example, "Smailes, *op. cit.*" appears on p. 117, but the title of the book is given more than sixty pages earlier on p. 41. In any competition for titles which best obscure the contents of the books they adorn, Mr Martin, with *Where London Ends* to follow *The Secret People*, must be well in the lead. The serious student of agrarian history will find little in Mr Martin's book to repay his effort in reading it, but it will lend confidence to those who already share the author's views.

W. E. MINCHINTON

W. D. PARISH and HELENA HALL, *A Dictionary of the Sussex Dialect and Collection of Provincialisms in use in the County of Sussex*.

R. J. Acford, Industrial Estate, Chichester, 1957. xxii+186 pp., illus. 35s.

The Rev. W. D. Parish, vicar of Selmeston (pronounced 'Simpson'), published *A Dictionary of the Sussex Dialect* in 1875; it has long been out of print, and Miss Helena Hall, who with her brother had for many years collected additional material, has now incorporated the whole of Parish's work, including the delightful anecdotes with which he illustrated the Sussex use of words, in this much extended *Dictionary*, adding to its value with numerous thumb-nail sketches, mostly of agricultural implements. It is a remarkable achievement for one now in her eighties—an age the more noteworthy when we read the item—"Snotty-gog. A yew berry or fruit. As

children we used to eat them, expelling the pips." Possibly the poison of the yew is confined to the pips and foliage; but few people would have commended its berries as food for children.

Both Parish and Miss Hall have realized the impossibility of completely segregating 'Sussex' words; many of the words here given are found not only in neighbouring counties but in distant parts of the country. They are, however, all non-dictionary words which have been noted in use in Sussex. In one instance, however, Miss Hall leans over the other way. After describing 'Rides'—the doorband part of a hinge, which rides on the 'hook'—she adds, "Really a technical term and not provincial." But it is both; for, at any rate down to the seventeenth century, 'hooks and rides' was a term confined to Sussex and Kent. The local names for birds and flowers, and for the typically Sussex product of mud (gawm, gubber, slub, stuggy, clodgy, etc.) are fascinating; and if 'rebellious' for bilious and 'collapse of the sun' for eclipse are idiosyncratic rather than provincial, they show the countryman's determination to be the master and not the servant of words. A delightful appendix of Sussex Sayings and Crafts completes this remarkable book and includes recipes for various Sussex dishes, such as 'Plumeavies'—though personally I maintain that they should be cut square and not round.

L. F. SALZMAN

JOAN THIRSK and JEAN IMRAY (eds.), *Suffolk Farming in the Nineteenth Century*. Suffolk Records Society, Vol. 1. County Hall, Ipswich. 178 pp. 30s.

This first publication of the Suffolk Records Society consists of a memoir of V. B. Redstone and Miss L. J. Redstone, who played a large part in the establishment of the record offices in Bury and Ipswich; an essay of some twenty pages on Suffolk Farming in the Nineteenth Century; and a hundred and thirty-three pages of extracts from record material, mainly from the East or West Suffolk County Record Offices and private owners.

Mrs Thirsk's essay, in extremely readable

style, is adequate, but tends to perpetuate the conventional outline of nineteenth-century agricultural history interlarded with Suffolk examples. It does not, and probably in the space and time available could not, set out to be a penetrating study of the agriculture of the county within the period.

One must, however, question the value of devoting so much space to the reproduction of extracts from record material. Some are entertaining, some by themselves of interest, but, simply because they are extracts, few can be of use to the serious student. There cannot really be much justification at a time when publication costs are so high for devoting a complete volume to a kind of pot-pourri reflecting on the general fortunes of agriculture in the county. Indeed, at the best the documents are expanded footnotes to the essay.

If there had been available one kind of material as extensive, say, as Robert Loder's *Farm Accounts* (Camden Society, Third Series, LIII), then there might have been justification for editing and publishing a substantial part of it. Much of the material in the extracts is of the kind we should expect to find in county record offices or among estate papers (letters about rent reduction, specifications of cottages, negotiations for a lease or the premiums offered by the East Suffolk Agricultural Association in 1849). Others, such as extracts from a Select Committee of Evidence or Report of the Royal Commission on Labour, come from published sources.

From the material which Mrs Thirsk and Miss Imray have gathered together it is clear that there exists in the county a wealth of material for a really comprehensive study of Suffolk Agriculture in the Nineteenth Century. The present volume cannot be described as more than a well-produced appetite whetter, or, to borrow a term from the cinema, a 'trailer'.

It is sad not to speak better of it, for the Suffolk Records Society is the first to be founded by voluntary subscription since the war and sets in this first volume a high and worthy standard of book-production.

J. W. Y. HIGGS

H. C. PAWSON, *Robert Bakewell*. Crosby Lockwood, 1957. viii+200 pp., illus. 25s.

Robert Bakewell is accepted as one of the great pioneers of livestock farming, and would appear to provide an ideal subject for a biography. Professor Pawson has obviously had a keen interest in the Leicestershire breeder for many years and it is largely thanks to his efforts that a collection of letters from Bakewell to George Culley was discovered and is now lodged at King's College, Newcastle. The second half of this book consists of a transcript of these and other letters, a valuable primary source for agricultural historians. They contain conclusive proof of Bakewell's bankruptcy and reveal many interesting aspects of his character, breeding methods, and business outlook. The prices he got for hiring his rams were notoriously high, but he certainly would not have agreed with modern breeders who publicize high prices as a good advertisement; he believed that "talking of prices rather harms the cause, for if some People can not have the Best they will not have another . . . therefore I think the less said of it the better."

The first part of the book is a long essay giving the main details of Bakewell's life and some account of his breeding methods. Professor Cooper contributes a present-day valuation of his work, suggesting that its major feature was the development of the progeny test as the basis of a selection programme.

Although this book is a useful addition to our knowledge of Bakewell, it is not a complete or definitive biography—and was not probably intended to be. It is to be hoped, however, that it will encourage the publication of authoritative biographies of other outstanding agriculturalists, for these can provide invaluable contributions to our understanding of agrarian history and usually have a wider reading appeal than general histories. An essential feature of such biographies, however, should be to help us to understand, not only how a particular individual succeeded in solving certain problems, but why such problems had become of universal importance at the relevant time. A little more historic per-

spective would have made this book on Bakewell even more useful.

GEORGE HOUSTON

J. F. SMITHCORS, *Evolution of the Veterinary Art. A narrative account to 1850*. Veterinary Medicine Publishing Co., Kansas City, Miss., 1957. \$6.50.

This is the first comprehensive study of the history of veterinary medicine to appear since the vast work of Major-General Sir Frederick Smith, the final volume of which was published in 1933. (His name is rather oddly given in the bibliography as Smith, F.) It is by so much the more welcome. Naturally it owes a great deal to Sir Frederick, and unfortunately it accepts some of his dogma rather uncritically.

It is easy to do so. Perhaps the most difficult thing for a writer of technical or scientific history is to project himself into the mental atmosphere of an earlier time. Sir Frederick was certainly not able to do this. Markham and Mascall, writing in the early seventeenth century, were obviously ignorant compared with their twentieth-century successors, but Smith condemns them out of hand as ignorant quacks, and Mr Smithcors follows suit. No doubt they were when judged by the measure of modern knowledge, and truly some of their suggested cures were barbarous and disgusting, but they were men of their own time, and they, like the rest of us, were confined within the restricted boundaries of contemporary science. It is insufficient to dismiss them for this reason.

On the other hand, Mr Smithcors is inclined to attribute modern knowledge to much more ancient writers. For example, on p. 124 he infers that the Welsh knew before the Norman Conquest that liver fluke infestation was caused by grazing wet herbage where the snail host had its habitat. In his discussion of ancient Egyptian, Vedic, and Chinese writings he has taken a similar line. He believes that these ancients possessed elements of modern knowledge, and this may, in fact, be due to his interpretation of their writings in the light of modern science rather than

their actual content. Similar conclusions have been reached by writers in other fields, and must be received with equal reserve.

The literature of the more modern period is more accessible, and possibly more generally known, and, despite his frequent reliance upon and acceptance of Sir Frederick Smith's judgements, Mr Smithcours easily unravels the tangled skein of development. Many ancient errors were perpetuated until the nineteenth century, and much of the treatment of animal disease was left in the hands of ignorant farriers, horse leeches, and cow doctors who relied upon traditional methods, which seem to us blatantly ill-judged, even cruel, and often much worse than the disease.

The modern science of veterinary medicine may perhaps be said to have been founded by the horse anatomy of Ruini, and it developed slowly during the eighteenth century, though practice lagged far behind theory. The elementary job of shoeing was often badly done,

and the horse's hooves mutilated before the shoe was nailed on. Most of the writers on the subject, too, were shameless plagiarists. With the founding of the French veterinary schools improvements began to be made. The establishment of the London and Edinburgh colleges followed nearly half a century later, and from that time progress has continued, though at first it was not all that had been expected.

The book, like others of its type, is a useful summary of the subject, and has the merit of being written by a modern scientist, but here and there it is marred by a lamentable facetiousness, which seems inappropriate in a serious treatise. This should be eliminated in any future edition. It would also be improved by the expression of a more personal judgement, and less reliance upon authority. Nevertheless it is convenient to have such a work at hand, and, if used with discretion, it forms a useful work of reference.

G. E. FUSSELL

Letter to the Editor

SIR,—Thanks to the kindness of Lord Spencer in making me free of the Muniment Room at Althorp, I have for some time past been studying the farming activities of the third Earl Spencer, founder of the Royal Agricultural Society. In one of his Cattle Books under date 19 October 1834 is the entry:

"I find that out of 232 calves bred from alloy cows 138 were breeding heifers. But that out of 224 calves bred from cows not having my alloy 101 were breeding heifers. It seems therefore that it is rather more than 6 to 5

in favour of a bull calf from a cow not having alloy, but 23 to 19 in favour of a heifer from a cow having alloy."

Nowhere else in his papers is this alloy mentioned and it is not the subject of any of his articles published in the Journal of the Royal Agricultural Society.

Can any of your readers suggest what it was or tell me of any source where further information about it might be found?

Yours faithfully,

E. H. WYNDHAM

Caversfield, Bicester.