

suggesting that the Snodland Rocks mark the course of the beaten track or causeway that carried the Way from Snodland to Burham.

Other possible crossings deserve a mention, if no more. There may have been one between Halling and Wouldham, though this would have lengthened the detour for the Way. Southward, the important Roman villa at Eccles stands on several feet of Hillwash Head overlying the Gault Clay; traces of a Roman road are said to have been found¹⁰ on the sides of the large clay-pit close to the villa. If the continuation of Bell Lane, Burham, marks its course it passed by the villa to arrive at the later site of the New Hythe ferry.

It would be beyond the scope of this paper to trace the changes in the valley-floor of post-Roman times—the upstream encroachment of the tides (beyond Maidstone until Allington lock stopped them), the spread of alluvial marshes, the embanking and consequent confining and deepening of the river, the change from fords to ferries (Aylesford is the lowest named ford), and eventually industrialization and the decline of the ferries.

The following conclusions appear to be consistent with the evidence:

(1) There was a prehistoric crossing of the Medway at Rochester, which may then have been at or near the limit of tides.

(2) A prehistoric Way ran by Coldrum, Birling Place, Paddlesworth, Holborough Knob and Holborough spring, and crossed the gravel and sands of the yet-unburied Medway channel close to the northern end of the present Holborough cement-works wharf (N.G.R. TQ 71036291), whence it continued eastward by way of Blue Bell Hill.

(3) In Roman times a road was made, or improved, from the escarpment summit at South Hill straight to the Holborough crossing and then via Hall Road and Scarborough to the summit above Wouldham Common. (From South Hill a mile-long short cut was also made to the Way leading to Rochester).

(4) Later, a branch from (2) was made at Paddlesworth, and a branch from (3) at South Hill, which converged on a crossing at Snodland that apparently went by way of Snodland Rocks to Burham and the Blue Bell Hill route. This suggests, though it does not prove, that the advance of the tides up the valley was by later Romano-British times forcing wayfarers to abandon the old Holborough crossing in favour of the new Snodland route.

¹⁰ *V.C.H. Kent*, iii (1932), 145, 153.

ARCH. CANIT
89/1974

THE TITHE COMMUTATION SURVEYS

By ROGER J. P. KAIN, B.A., PH.D.

ON the 13th August, 1836, Lord John Russell's tithe commutation bill received the royal assent. It was a complex piece of legislation which had been given a stormy passage through Parliament. Opposition came from many quarters, and the act itself was very much a compromise. But, after generations of dispute, a just settlement of the tithe question was in sight.¹ Kent, in particular, had a long history of tithe disputes. Ernle identified Kent as one of a number of counties where tithe was still commonly collected in kind at the end of the eighteenth century.² Also, the valuable produce of hop-gardens was subject to high, or extraordinary, rates of tithe payment. Some farmers felt overburdened by extraordinary charges and petitioned Parliament for a reduction.³ Discontented farmers could also seek redress by litigation or they might be called to give evidence about tithes before Select Committees.⁴ Illiterate and impoverished farm labourers also protested about tithes; encouraged in many cases by their tithe-paying employers, they set to and assaulted local parsons. Farmers tried to offset the higher wages demanded by labourers by winning a reduction of tithe payments. So, at Goudhurst, for example, tithe-payers urged their labourers to, 'stop the tithes!' Only then would they consider an increase in wages.⁵ Hobsbawm and Rudé list some ten attacks on parsons in Kent during the swing riots of 1830-1.⁶

A tithe 'system' as such did not exist in early nineteenth-century Kent. Tithing practices had become so complicated, so encumbered by local varieties of exemptions, prescriptions, extraordinary charges and moduses that one of John Boys' correspondents was driven to write, 'what is meant by a fair commutation for tithes I know not. An equi-

¹ For a discussion of the tithe question in England see: E. J. Evans, *A History of the Tithe System in England, 1690-1850 with special reference to Staffordshire*, unpublished University of Warwick Ph.D. thesis, 1970; Hugh C. Prince and Roger J. P. Kain, *The Tithe Surveys*, Newton Abbott, forthcoming.

² Lord Ernle, *English Farming Past and Present*, London, 1961 edition, appendix 5.

³ The Hawkhurst tithe file (P.R.O.L.R. 18/3635) preserves a typical example of one of these petitions together with an account of the way it originated.

⁴ The majority of complaints about tithe given in evidence before the Select Committee on the state of agriculture in 1833 came from Kent. See *P.P.s(H.C.)*, V (1833).

⁵ M. Dutt, *The Agricultural Labourers' Revolt of 1830 in Kent, Surrey and Sussex*, unpublished University of London Ph.D. thesis, 1966, 167.

⁶ E. J. Hobsbawm and G. Rudé, *Captain Swing*, London, 1969, appendix III.



valent, or commutation that would satisfy all parties, is perhaps impossible'.⁷ In the event, Russell's formula did satisfy most parties for the majority of Kent commutations were voluntary agreements. After only seven years, 359 of the 407 rentcharges had been confirmed by the tithe commissioners in London and 311 apportionments made. By the end of 1848, tithe commutation in Kent was virtually complete.

The general method by which commutation was conducted is described elsewhere.⁸ The act required a field-by-field survey of land-ownership, occupancy and use in each tithe district. This was recorded on the tithe maps and in the tithe apportionments. Also, details of cropping and descriptions of local agricultural practices were needed for the calculation of rentcharges and these have often been preserved in parish tithe files. The aim of this paper is to examine the extent and progress of commutation in Kent and to analyse the nature and accuracy of the Kent tithe surveys.

TITHE SURVEY COVERAGE OF KENT

Figs. 1 and 2 show that apportionments and maps are extant for almost all the tithe districts of Kent. No tithes were payable from the ex-parochial ville of Dunkirk, while all the tithes of St. Thomas, Isle of Harty, Poulton in east Kent, and the vacant rectory of Stonar had been merged in the land. At Queenborough, the only agriculturally productive land was 250 acres used exclusively for grazing and agreed to be exempt from tithe.⁹ There were also sundry small districts where land was exempt from tithe for a variety of reasons. For example, 50 acres of Stelling Minnis lay in waste and no titheable produce arose from Canterbury city parishes, Rochester cathedral precincts, and Dover castle.¹⁰ In total, just 10,000 acres lay in districts excluded from the tithe surveys. Kent can thus be ranked alongside counties like Devon and Cornwall where about 99 per cent of tithe districts have apportionments and maps.¹¹

The titheable land of Kent was divided into 407 districts for the purpose of commutation, and almost all of these were co-extensive with ecclesiastical parishes. West Barming, Kidbrooke and Mottingham were extra-parochial places, while the town of Folkestone and the village of Lidsing were distinguished as separate tithe districts.¹² The boundaries of tithe districts shown on Figs. 1, 2 and 4-6 are those indicated on the

⁷ John Boys, *A General View of the Agriculture of Kent*, 1796, 37.

⁸ H. C. Prince, 'The Tithe Surveys of the mid-nineteenth Century', *Agricultural History Review*, vii (1959), 14-26; Prince and Kain, *op. cit.*, in note 1.

⁹ P.R.O. I.R.18/3405, 3758, 3831, 3819 and 3761.

¹⁰ P.R.O. I.R.18/3811/, 3540, 3769 and 3402.

¹¹ Roger J. P. Kain, *The Land of Kent in the Middle of the nineteenth Century*, unpublished University of London Ph.D. thesis, 1973, frontispiece map.

¹² *P.P.s(H.C.)*, lxiv (1887), 329-39.

THE TITHE COMMUTATION SURVEYS

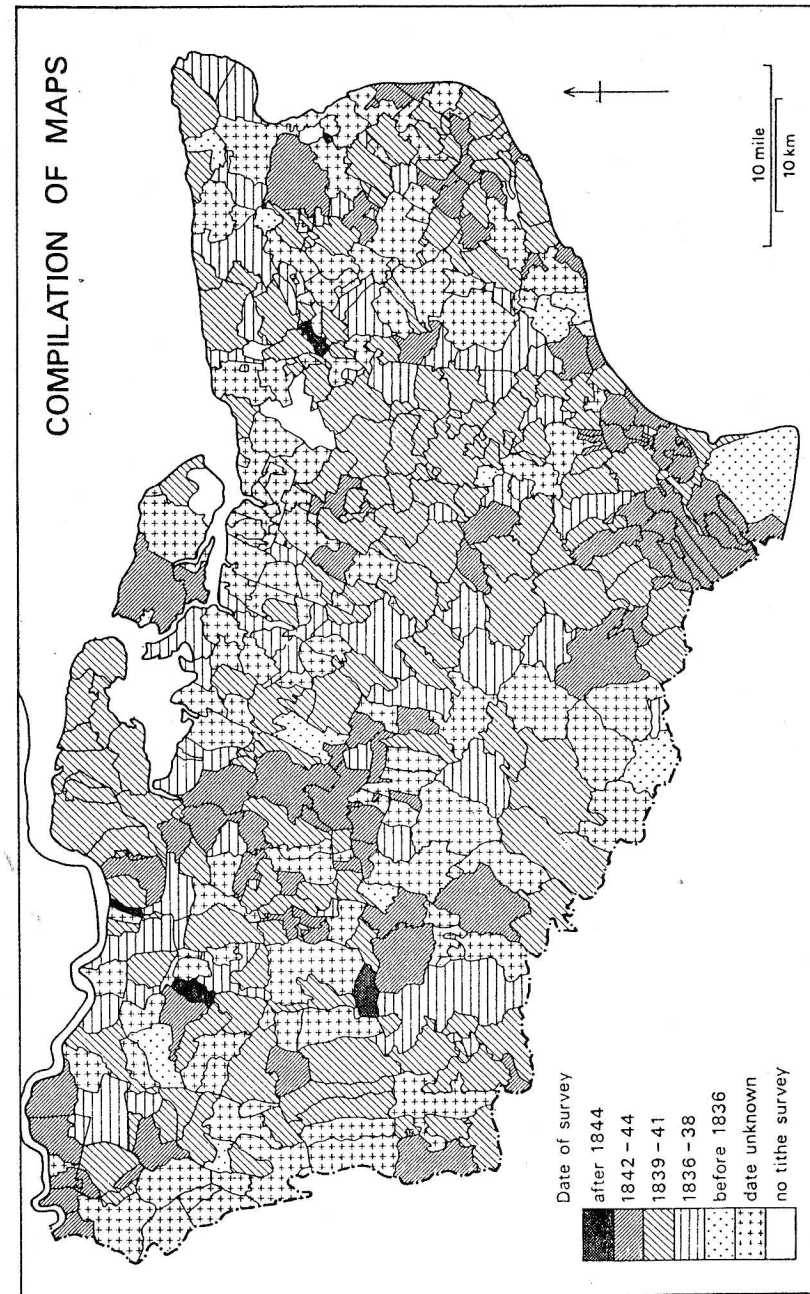


Fig. 1. Compilation of Tithe Maps. Source: Tithe Maps.

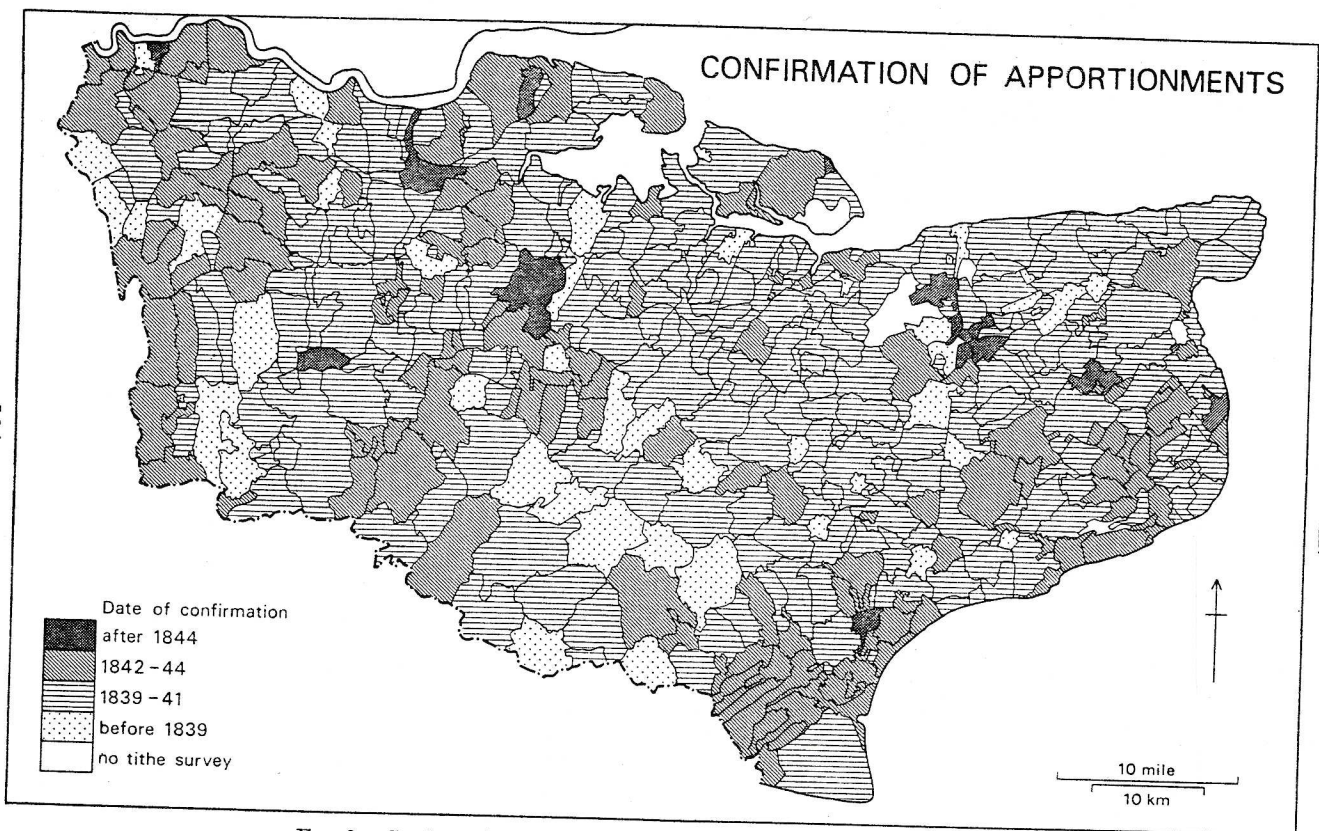


Fig. 2. Confirmation of Appointments. Source: Tithe Apportionments.

THE TITHE COMMUTATION SURVEYS

original tithe maps with some simplification. In particular, tiny detached portions have been omitted to permit reduction to published size. The individual tithe districts can be identified from the half-inch to a mile key sheet of the Ordnance Survey first edition 25 in. plans of Kent.

Not all land in the 407 districts was subject to tithe. In many districts there were single estates or farms exempt from tithe. For instance, the Old Palace Estate in Canterbury, St. Mary Northgate, was exempt because it was once land attached to an Augustine monastery. In West Langdon, only 81 of 606 acres were tithable. The remainder was at one time part of the Langdon Abbey Estates.¹³ Woodland in the Weald was customarily exempt by prescription from tithe payments. To effect a commutation for tithes it was not necessary to survey exempt land, but often such land was described in the apportionments and delimited on the maps. Occasionally, exempt woodlands were assigned to particular farms, and the total acreage of woodland and hedgerow annexed to the schedule of other lands held by each occupier. At Wye, for example, the preamble to the schedule of apportionment states that 1,725 acres of woodland had been exempt from tithe from time immemorial. In the apportionment, parcels of woodland varying in size from 8 to 918 acres are assigned to 28 farms. 862,638 acres, or 86.8 per cent of the surface area of the county at the time of the tithe surveys, were subject to tithe. One-hundred and fifty-nine parishes contained tithe-free land other than small amounts of glebe in the occupation of parsons, and roads and wastes. In all but one parish the use and extent of tithe-free lands are described in the Kent tithe surveys.¹⁴ This means that in total the tithe surveys contain a record of the ownership, occupation and use of 974,706 acres of land, amounting to 98.1 per cent of the surface area of Kent c. 1840.

THE PROGRESS OF COMMUTATION

The work of the tithe survey in Kent began in 1837 when 15 agreements for the commutation of tithe were received by the tithe commissioners. Subsequent progress can be traced on Fig. 3. The chronology of the tithe surveys in Kent follows a somewhat similar course to that of the nation as a whole, described in the annual reports of the Tithe Commissioners. At first, there was a time lag between the receipt of agreements and the confirmation of apportionments which the Tithe Commissioners explained by 'difficulties as to the characters of the maps to which our official seal was to be attached'.¹⁵ Certainly, the work of the Commission got off to a slow start in Kent. In Essex, for

¹³ Prince, *op. cit.*, in note 8: P.R.O. I.R.18/3545-6 and 3675.

¹⁴ At Goodstone-next-Wingham only tithable land was surveyed.

¹⁵ Tithe Commissioners' annual report, P.P.s(H.C.), xxviii (1837-8), 33.

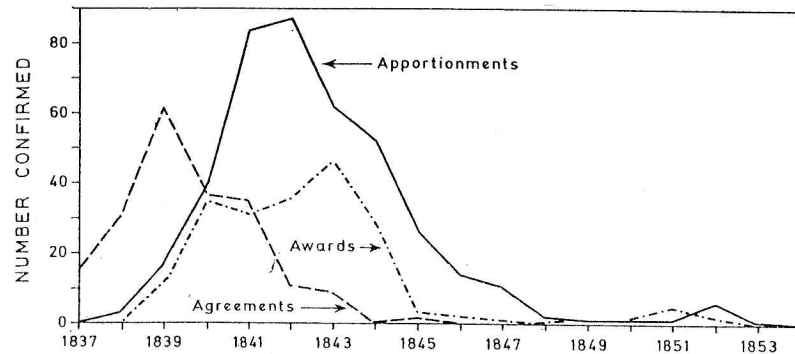


FIG. 3. The Progress of Tithe Commutation. Source: Six-monthly and later annual Returns of Agreements, Awards and Apportionments confirmed by the Tithe Commissioners, P.P.(H.C.), 1837-8, XXXVIII to 1854-5, XLI.

example, no fewer than 63 agreements were confirmed during the first year. This contrast was due in large part to the widespread practice of collecting tithe in kind in Kent.¹⁶

The Tithe Commissioners encouraged voluntary agreements and, at first, only imposed awards in districts where litigation was in progress or other difficulties encountered. Not until 1842, did the number of awards exceed the number of agreements in one year.¹⁷ At all times, the confirmation of apportionments lagged behind the confirmation of rentcharges. This caused some complaint but at all times the Tithe Commissioners upheld the privilege of tithe payers to apportion rentcharges by agents of their own selection.¹⁸ Critics of the Tithe Commissioners may have complained of inactivity and delay; yet in Kent, 75 per cent. of settlements were completed within six years of the confirmation of the first agreement. Here at least, the declaration by the commissioners that, 'we have to repeat the assurance that the whole process of commutation is proceeding tranquilly and harmoniously', seems fully justified.¹⁹

By July, 1849, the end of tithe commutation was clearly in sight. But the Commissioners were not so confident of an early completion of apportionment. 'The conduction of this operation constitutes the greater part of our Office work at present, and will continue to press upon us until our labours close. Deaths among the persons appointed

¹⁶ P.P.s(H.C.), xxviii (1837-8), 189, 213; xvi (1839), 335; Boys, *op. cit.*, in note 7, 34-9.

¹⁷ Six-monthly and later annual returns published in P.P.s(H.C.), xxviii (1837-8) to xli (1854-5).

¹⁸ P.P.s(H.C.), xii (1841), 141, xxix (1843), 391.

¹⁹ P.P.s(H.C.), xii (1844), 419.

to apportion, and other causes of delay, may prolong a few of these cases. Still, we see ground for expecting that we shall get through this work by August, 1851.²⁰ In Kent, with one or two exceptions, they did achieve this aim.

Figs. 1 and 2 show the distribution of apportionments and maps which fall into various time categories. The maps highlight facts which have important consequences for reconstructions of the Kent landscape based upon tithe surveys. They show clearly that a majority of surveys were carried out in the three years, 1839, 1840 and 1841, i.e. c. 1840. But, there were often differences, sometimes of ten years or more, between the dates of survey of adjoining parishes. For example, within five miles of Canterbury, apportionments of rentcharges were carried out over a fifteen-year period from 1837 to 1852. Comparison of Figs. 1 and 2 also shows that the apportionments of some parishes were confirmed many years after the maps were made.

TITHE APPORTIONMENTS

The Kent apportionments are of the standard form described by Prince.²¹ Before they are used as a source to reconstruct elements of the landscape, c. 1840, some assessment of their accuracy must be made. In particular, three questions may be asked. Firstly, how reliable are the summaries of parish land-use given in the preambles to the schedules of apportionment? Secondly, are the names entered in the ownership and occupation columns those of the true owners and occupiers of land? Thirdly, what were the criteria upon which land was classified according to use?

There is considerable doubt about the accuracy of the summary land-use statistics given in the tithe apportionments.²² In many cases, they are estimates and so inaccuracy can occur through misestimation. Further, the summaries often refer to a time earlier than the date of award and sometimes only include titheable land. The date of confirmation of the agreement or award for commutation is inscribed on the first page of the tithe apportionment. However, the date of the land-use summaries is rarely recorded in the apportionment. Occasionally, it is stated in the tithe file. For example, the summary for Folkestone was taken from a survey made in 1830, while at Midley it was computed from the tithe map.²³ More commonly, the summaries are prefaced by statements such as, 'by recent survey', 'by actual survey', 'by new survey', or 'by admeasurement'.²⁴ Other statements suggest that some

²⁰ P.P.s(H.C.), xxii (1849), 549.

²¹ Prince, *op. cit.*, in note 8.

²² Kain, *op. cit.*, in note 11, 93-102.

²³ P.R.O. I.R.18/3603, 3710.

²⁴ P.R.O. I.R.18/3560, 3407, 3711.

summaries are of much earlier date. At Bicknor the summary was obtained from 'an old survey', while at Maidstone it was computed 'from an old map'.²⁵

A recent statement about the summaries has been made by Elwyn Cox. He considered that although the actual acreages may sometimes be inaccurate, the proportions of arable, pasture, wood and the like are stated with reasonable accuracy.²⁶ It is possible to make some further assessment of the accuracy of the summaries by comparing them with land-use data obtained from the schedules of apportionment. The schedules describe the state of cultivation and list the measured acreage of every parcel of land. By summing these it is possible to obtain an accurate summary of the total acreage of various types of land in a parish. Such a comparison has been made for a sample of 41 Kent parishes containing 93,570 acres, or 9.4 per cent of the county area. A null hypothesis was set up to the effect that there is no difference between the tithe-apportionment estimates and the summated totals from the schedules of apportionment. A non-parametric Wilcoxon matched-pairs signed-ranks test was employed and for each class of land use the null hypothesis was accepted.²⁷ This confirms Cox's belief that there is no systematic bias towards over- or under-estimation of the acreage of particular categories of land. While for most parishes the two sets of data show a close correspondence, there are some discrepancies that could, for example, lead to an incorrect classification of parishes in detailed choropleth mapping. With blocks of parishes, inaccuracies cancel each other out; for individual parishes errors may be very real.

For the purpose of the tithe act, an owner of land meant any person in the actual possession or receipt of the rents and profits of land, so it is almost certain that some mortgagees and tenants for life were assumed to be owners at tithe commutation. In reply to a question about whether the Tithe Commission investigated a person's interest in a parcel of land, William Blamire, a Tithe Commissioner, replied, 'Oh dear, no!'²⁸ A check on the names of occupiers listed in the apportionment can be made with parish rate books. Rate books not only list the names of occupiers of land but record the acreage of their holdings. A further check is provided by the census enumerators' books compiled by the censuses of 1841 and 1851. These record, house by house, the names of everyone living in a parish or enumeration district at the time of the census and, in 1851, also record the acreage of farms.

²⁵ P.R.O. I.R.18/3506, 3699.

²⁶ E. A. Cox, *An agricultural Geography of Essex c. 1840*, unpublished University of London M.A. thesis, 1963, 41.

²⁷ S. Siegel, *Nonparametric Statistics*, New York, 1956, 75-83.

²⁸ In evidence before Registration of Title and Sale and Transfer of Land Commission, *P.P.s(H.C.)*, xxi (1857 2nd session), appendix D.

These names may appear as occupiers in the tithe apportionments and the houses should be marked on the accompanying map.

The classification of land-use is the most equivocal schedule of apportionment information. The exact nature of the criteria by which a piece of land was assigned a particular state of cultivation in the apportionment will remain something of a mystery until a systematic search of field surveyors' papers has been made. What is clear beyond doubt is that the system of mapping by conventional signs proposed by Lieut. R. K. Dawson was not widely employed.²⁹ This means that corroboration of the state of cultivation is rarely found on the face of the tithe map. Woods, gardens, hops and the like could be unequivocally identified in the field and were frequently marked on the maps. But the distinction between permanent grassland and rotation grasses was not always as clear-cut. It is important to know how the tithe surveyors and valuers tackled this problem.

At first sight, the tithe commutation act provides an answer. Land which was judged to have been ploughed within the previous three years for crops, rotation grasses, or fallow, was to be regarded as arable. Grassland and leys which had not been under the plough for three years were to be recorded as grass.³⁰ Even if these instructions were strictly followed, problems of interpretation remain in those counties, like Kent, where convertible husbandry was practised in the mid-nineteenth century.³¹ Although what the tithe surveyors recorded as arable may not be what modern surveyors would record as arable, we may be fairly sure that it was what local contemporaries would have understood by the term. A field survey was needed in order to apportion tithe rentcharge equitably over various classes of land in a parish. Accuracy was essential. The value of tithes was normally assessed at one-fifth of the arable rent and at about one-eighth or one-ninth of the grassland rent. The difference in value of grassland and arable tithes thus amounted to almost a tenth of the rent or even more in some parishes where moduses of only sixpence or a shilling an acre were applied to grasslands. Because considerable sums of money were involved, it is probable that an accurate identification of arable land would be made in terms of contemporary interpretation of the word. This process has been neatly put by F. D. Hartley: 'On the one hand the parson and the lay impropiator would claim their due; on the other

²⁹ 'Copy of Papers Respecting the Proposed Survey of Lands Under the Tithe Act', *P.P.s(H.C.)*, xli (1837), 383; 'Report of Select Committee . . . best mode of effecting the Surveys of Parishes', *P.P.s(H.C.)*, vi (1837), 77.

³⁰ William Eagle, *The Acts for the Commutation of Tithes in England and Wales*, London, 3rd edition 1840.

³¹ See, for example, the problems encountered in T. R. B. Dicks, *The south-western Peninsulas of England And Wales: Studies in agricultural Geography, 1550-1900*, unpublished University of Wales Ph.D. thesis, 1965.

hand the farmers and landowners would attempt to reduce the claim as much as possible. These two forces pulling against each other would surely produce a truthful record. If they did not, then the mediating values would draft a fair award. Always, the most important piece of evidence was that observed in the field.³²

In the tithe apportionments grassland is sometimes simply described as 'grass', but more usually a finer classification into pasture, downland, meadow, marsh and saltings is employed. Invariably, meadow is defined as mown grassland, its produce being expressed in hundredweights per acre in the tithe files. Pasture was land that was grazed and was valued in shillings per acre or by the number of stock it supported. The marshland classification is probably the least satisfactory. Very often marshes were classified as pasture. These inconsistencies can be partly explained by the fact that often marsh grassland in Kent was not liable to tithe on produce but was subject to some nominal modus, usually one shilling per acre. Therefore, it was unnecessary to distinguish between various types of grassland as the modus applied irrespective of the produce of the land. The reason for saltings and downland being distinguished separately seems to be the much lower charge they were expected to bear in some areas. In the north Kent parish of Swanscombe, for example, four types of grassland were recognized. In 1843, there were 66 acres of pasture valued at 35 shillings an acre, 120 acres of meadow yielding 21 hundredweights, which at three shillings a hundredweight was worth 63 shillings an acre, whilst the pasturage of 80 acres of saltings was valued at only 20 shillings an acre and that of 30 acres of downland at only 22 shillings an acre.³³

Apart from these general difficulties, there are few problems of interpretation peculiar to the Kentish apportionments. Some surveyors did occasionally note combinations of land-use in one field. In Penshurst, for instance, some tithe areas are described as meadow and arable, wood and pasture, and arable and wood and hops. In the Cranbrook apportionment there are no state of cultivation entries and in a few others descriptions of some tithe areas have been omitted. Crops, apart from hops, are not detailed in the Kent apportionments except for the occasional mention of sainfoin.

TITHE MAPS

The tithe maps of Kent were produced at all the usual scales, but that of three chains to an inch is the most common. In detail, they vary from the simplest, showing only the boundaries of tithe areas, to those indicating the land-use of every field. Wood, hops, orchards and gardens

³² F. D. Hartley, *The agricultural Geography of the Chilterns c. 1840*, unpublished University of London M.A. thesis, 1953, 12.

³³ P.R.O. I.R.18/3830.

are frequently portrayed using the conventional signs recommended by Dawson. Although tithe-free lands are usually described in the apportionments, they are not always recorded on the maps. The map of Goodnestone-next-Wingham, for example, shows only the few, scatterep parcels of titheable land. Woodland is indicated by conventional symbols north of the Pilgrims' Way in Chevening, but not to the south where it was tithe-free. Very rare are maps, like that of Standford, on which farm or estate boundaries are indicated. Occasionally, other features are portrayed on the tithe maps. Brickworks, for instance, are shown on the Frindsbury map.

Lieutenant Dawson, the organizer of the tithe survey of England and Wales, put his faith in the ability of local country surveyors to produce suitable maps for commutation. All but one of the Kentish maps which bear the name of their surveyor were produced by men living in London or the county. The sole exception was the map of Woodchurch which was the work of J. McLachlan, of Stowmarket in Suffolk. Sixty-seven different surveyors are named on the Kent maps, but the vast majority of them produced just one or two plans of the parishes near their homes. Notable, however, are five surveyors who between them made a considerable contribution to the tithe survey of Kent. The districts in which they worked are indicated on Fig. 4. Of the five firms one in particular stands out. Thomas Thurston, of Ashford, produced at least 58 maps and worked in almost all parts of the county. It must be admitted that not all his maps were original surveys. Most of the Romney and Walland marsh maps were revised from either the surveys of Thomas Hogben made in 1760-5 or N. and F. Giles' surveys of 1812-13. Dawson inspected these maps himself and agreed with the landowners' request that they could be used as a basis for commutation. Thurston made tracings of them at the six-chain scale and brought them up to date.³⁴ Other maps were originally made for poor assessment purposes and, subsequently, adopted for tithe commutation. The commissions of the four other surveyors named on Fig. 4 show a much more restricted distribution. Frederick and Henry Drayson did most of their work in the Faversham area, but were also employed by some Wealden and north-west Kent landowners. Alexander Doull's contracts were principally in north Kent while the tithe mapping of Small and Sons and John Adams was mainly restricted to east Kent.

As already noted, in many parishes, landowners tried to save themselves some of the cost of a new survey by presenting assistant tithe commissioners with maps drawn originally for other purposes. T. S. Woolley criticised the inaccurate field boundaries on the infamous 1801 map of Tonge. A map of Otford made in 1816 showed that there were 2,852 acres of titheable land. At a commutation meeting in 1843,

³⁴ P.R.O. I.R.18/3774.

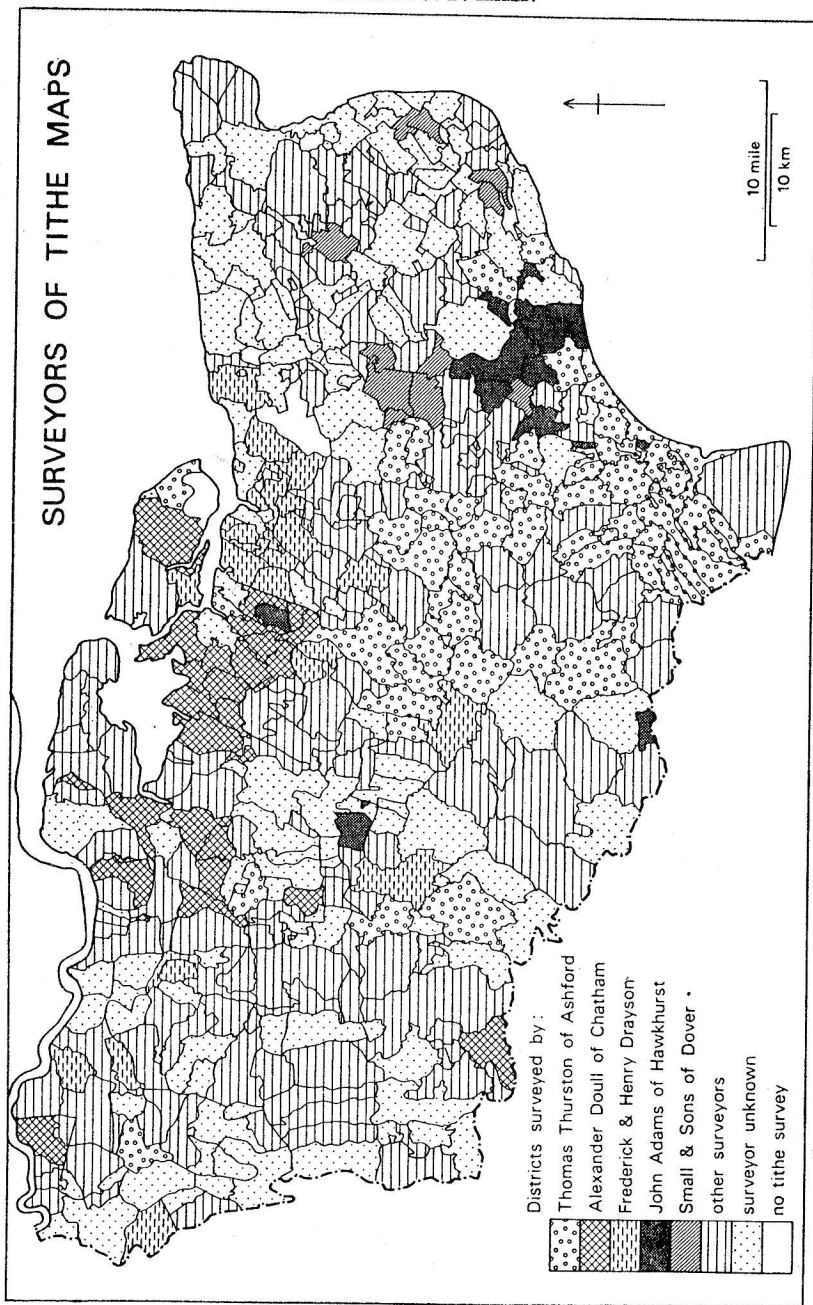


Fig. 4. Surveyors of Tithe Maps. Source: Tithe Maps.

the landowners challenged this, and a new survey showed that only 2,771 acres were subject to tithes.³⁵

Some tithe maps are seriously inaccurate. All the maps were inspected at the office of the Tithe Commissioners and those attaining a standard of accuracy admissible in courts of law were affixed with the commissioners' seal. Those which received the seal of approval were commonly known as first-class maps, while the remainder were titled second-class. The first- and second-class tithe maps of Kent are shown on Fig. 5. Just over half the Kent maps passed the system of checks devised by Lieutenant Dawson which is well above the estimated national average of 20 per cent. Dawson's system was designed to detect involuntary mistakes made by the mappers and measurers. In 1841, the tithe commissioners stated that, 'in a single map 400 such errors have been pointed out and admitted, and like cases, on a somewhat smaller scale, are numerous. We regret to state, however, that maps are sometimes sent here containing errors of which the mappers are conscious, and the existence of which they attempt to conceal, by tampering with and making compensating errors in the field books, or original records of admeasurement which they are required to send with the maps. No examination in this office can enable us to detect here wilful and fraudulent errors of this description'.³⁶ The Commissioners pointed out that there were two ways in which landowners could protect themselves against such frauds. 'The map is deposited in the parish for 21 days before confirmation . . . an assistant commissioner attends at the end of 21 days, to whom such errors may be pointed out and whose business it is to see them corrected.'³⁷ But they regretted that landowners' inspections were often very casual. The only way in which accuracy could be proved was by selecting lines on the map and measuring them on the ground. Unfortunately, the Tithe Commissioners had no powers to pay the expense of such operations or of levying the expense on responsible parties. In conclusion, the Commissioners said, 'unquestionably we believe the maps to which we have attached our seal are very much more accurate than they would have been had they not gone through the ordeal of this office, but we think it prudent that the landowners should know what description of errors we can detect here, and what may escape detection'.³⁸ It is prudent that historians using the tithe maps should also be aware of such errors.

TITHE FILES

A separate tithe file, kept for each tithe district, contains some additional information, not only on procedures adopted in commuta-

³⁵ P.R.O. I.R.18/3743, 3840.

³⁶ P.P.s(H.C.), xii (1841), 141.

³⁷ *Ibid.*

³⁸ *Ibid.*

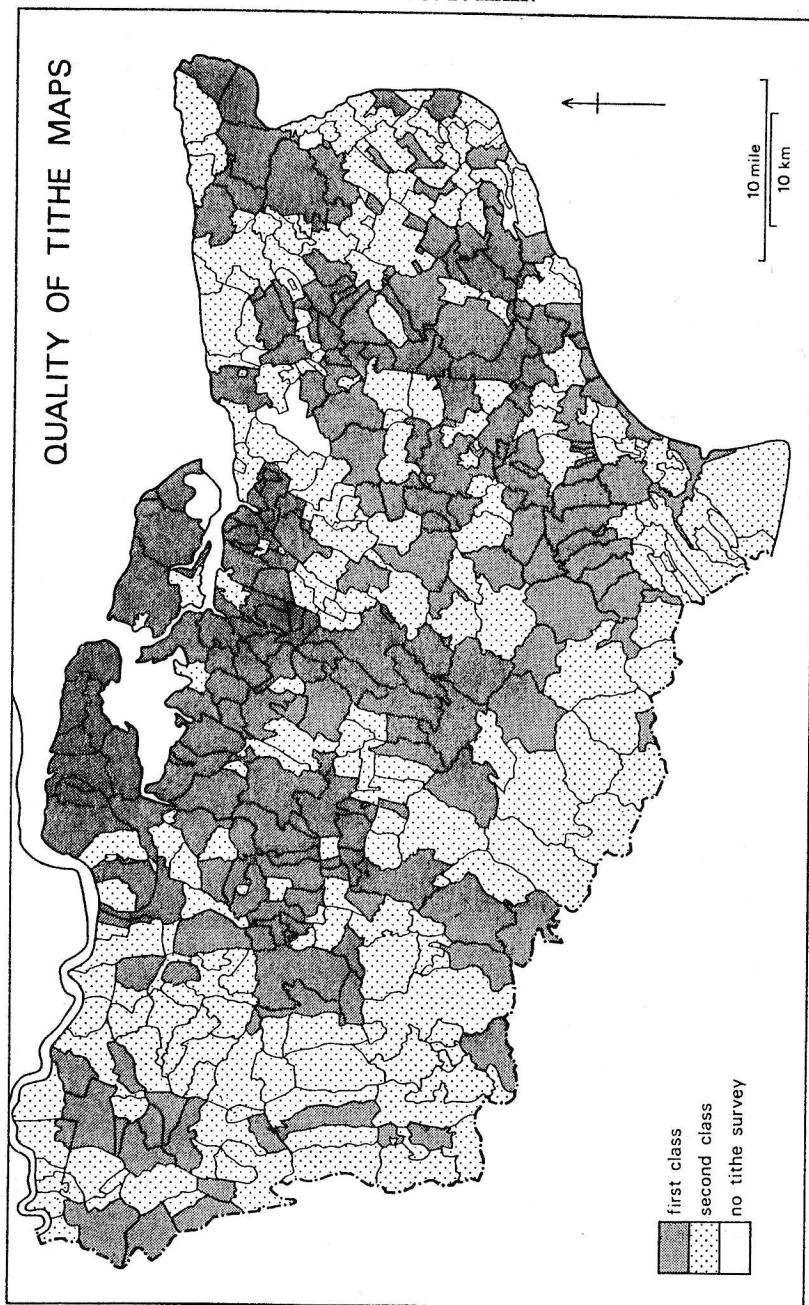


Fig. 5. Quality of Tithe Maps. Source: Tithe Maps.

tion, but also on farming practices in the locality. The Kent files were heavily weeded in 1912, but the most important document which often survives is the official report of the assistant Tithe Commissioner recording the proceedings of the survey from the advertising of the first parish meeting to the final submission of a report and statement of accounts. The manner of conducting local enquiries followed a fairly strict routine prescribed by the act, and printed questionnaire forms helped to ensure that uniform standards were maintained and that important considerations were not overlooked. The format of the Kent questionnaires is identical to those of Essex described by Cox and Dittmer.³⁹ Besides information on local tithing practices, two sections required assistant commissioners to describe local farming practices. Question 11 asked them to provide a brief description of the state of agriculture in each tithe district and asked them to record any instances of extraordinarily high or low farming that they noticed. Subjective though these assessments are, their value is enhanced by the fact that in Kent a large number was written by only six assistant commissioners. Fig. 6 shows that all six conducted enquiries through the length and breadth of the county which ensured their familiarity with a variety of farming practices.

One of the problems that assistant commissioners encountered was that of identifying a 'normal' course of cultivation in a tithe district. This was a necessary first step to enable them to estimate the gross annual produce of parish lands. Tithe rentcharge was then taken as a tenth of this and apportioned over parish lands according to their state of cultivation at the time of field survey. In Kent, this first step was particularly difficult because of the wide variety of soil types and agricultural practices found in many tithe districts. T. S. Woolley was confronted by this problem when officiating at three parishes in different parts of the county. Of the calculations he made at Bromley he said, 'it is not to be supposed that the course of cropping on which I have founded my calculations is universally or even generally adopted in the Parish. Almost every occupier farms his lands as circumstances may seem to require, without very rigid adherence to a particular rotation of crops'.⁴⁰ At Sutton Valence, he reported that the agents of the Dean and Chapter of Canterbury, 'had formed their estimate on their opinion as to the most proper course to pursue though they did not consider it had been generally adopted nor indeed any regular system'.⁴¹ Finally, at Shoreham, 'scarcely two farmers can be found who follow the same course of husbandry'.⁴² There were also other

³⁹ E. A. Cox and B. R. Dittmer, 'The Tithe Files of the mid-nineteenth Century', *Agricultural History Review*, xiii (1965), 1-16.

⁴⁰ P.R.O. I.R.18/3531.

⁴¹ P.R.O. I.R.18/3828.

⁴² P.R.O. I.R.18/3794.

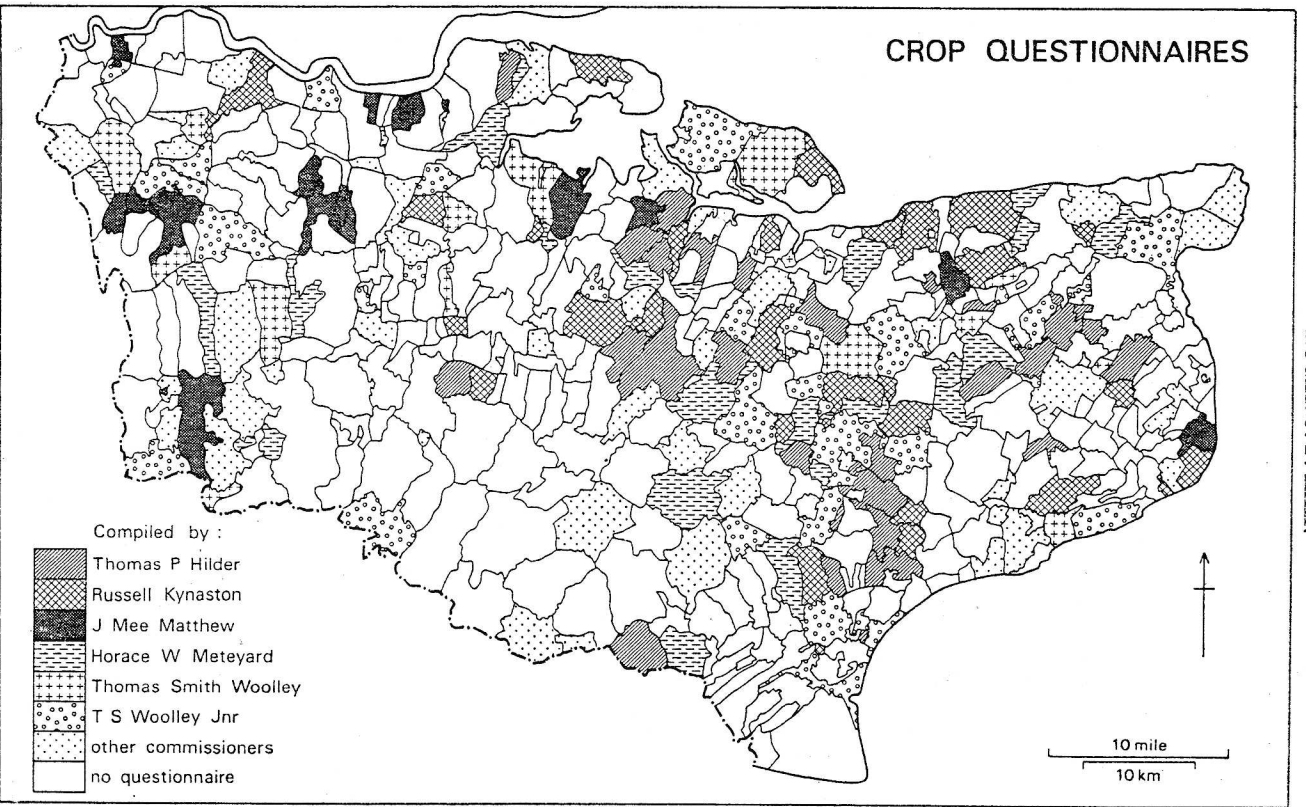


Fig. 6. Tithe File Crop Questionnaires. Source: Tithe Files.

THE TITHE COMMUTATION SURVEYS

circumstances which frustrated assistant commissioners in their quest for accuracy. Woolley thought three crops to a fallow a fair assessment at Beckenham, but could not get more accurate information as all the farmers had gone to a ploughing match at Chislehurst.⁴³

Armed with an estimate of the arable acreage of a tithe district and an opinion of the normal course of cultivation, the assistant commissioners then produced answers to Question 22 which required a statement of the amount of titheable produce and the value of the tithes. For example, at St. Nicholas-at-Wade on 5th July, 1839, Henry Gilbert divided the 1,783 acres of arable into equal portions, considering the normal rotation to be, turnips, barley, clover or beans, wheat, peas or barley, beans, wheat. Then, he calculated the value of the tithes on the basis of 446 acres each of wheat and barley, 334 acres of beans, 223 acres each of turnips and peas, and 111 of clover.⁴⁴ This system of calculating crop acreages means that a cautious approach must be made when attempting a reconstruction of cropping patterns from tithe files. But the great strength of tithe file crop-data, as with tithe survey data in general, is the similarity of the format in which data are recorded from parish to parish. Fig. 6 shows that tithe files containing cropping data are fairly evenly distributed over the county and so can be used to investigate regional patterns and varieties of cropping practices.⁴⁵

CUSTODY OF THE TITHE SURVEYS

An original and two copies of every tithe map and apportionment were produced and certified by the Tithe Commissioners. The originals are now in the custody of the Public Record Office and are stored at their country repository at Ashridge Park, Little Gaddesden, near Berkhamstead, Herts. They can be consulted by arrangement in the Chancery Lane inspection rooms. A copy of the apportionment and map was deposited with the incumbents and churchwardens of each district to be kept in the parish chest. A second copy was deposited with the relevant diocesan registry. The copies have sometimes been lost, damaged, or transferred to county record offices. The Kent Archives Office has a collection of some 174 tithe maps and 184 apportionments for west and mid-Kent parishes. One-hundred and thirty-five are diocesan maps with their apportionments, and there are 39 parish copy maps with 49 apportionments, some of which duplicate the diocesan copies.⁴⁶ A corresponding series for east Kent is in the custody of the Archivist, Cathedral Archives and Library, Canterbury. The

⁴³ P.R.O. I.R.18/3501.

⁴⁴ P.R.O. I.R.18/3731.

⁴⁵ Kain, *op. cit.* in note 8, 188-279, Appendix 4.

⁴⁶ Information kindly supplied by K.A.O. See also *Guide to Kent County Archives Office (1958) and first Supplement (1971)*.

ROGER J. P. KAIN

Tithe Redemption Commission, East Block, Barrington Road, Durrington-on-Sea, Sussex, have microfilm copies of all the original maps plus diocesan copies of those which are damaged and difficult to interpret. Only one file was kept for each tithe district and that is now held in the Public Record Office at Ashridge.

ACKNOWLEDGEMENT

The author wishes to thank Rodney Fry, of the Department of Geography, University of Exeter, for the careful way in which he constructed and drew the figures.

EXCAVATIONS AT ECCLES, 1973¹

TWELFTH INTERIM REPORT

By A. P. DETSICAS, M.A., F.S.A.

INTRODUCTION

EXCAVATIONS were resumed, for the twelfth successive season, under my direction and on behalf of the Eccles Excavation Committee, at the site of the large Romano-British villa located at Rowe Place Farm, Eccles, in the parish of Aylesford (N.G.R. TQ 722605; O.S. 6-in. Sheet TQ 76 SW) and at another nearby site (N.G.R. TQ 718605; O.S. 6-in. Sheet TQ 76 SW); this work was carried out at weekends, from the end of March until the end of October, 1973, and during a fortnight in the summer when a training course in Romano-British archaeology and excavation techniques, jointly sponsored by the Kent Archaeological Society and the Eccles Excavation Committee, was conducted on the site.

I am, once more, greatly in the debt of the landowners, Messrs. Associated Portland Cement Manufacturers Limited and Messrs. Reed Paper & Board (U.K.) Limited, and in particular to Mr. A. W. Baker, their Chief Engineer, for readily allowing this excavation on their property; I am also grateful to their tenant farmers, Messrs. A. A. & A. C. Southwell, for the wholehearted support of our work and many acts of kindness.

Financial assistance for this excavation was again granted by the Kent Archaeological Society, the British Academy, the Haverfield Bequest of the University of Oxford, the Society of Antiquaries of London, and private donors, without whose generosity this work could not be undertaken.

This excavation was carried out entirely by volunteer labour to whom I acknowledge my debt, though space limitations preclude individual mention; however, I am glad to be able to make exceptions in the case of the following, for their sustained support throughout a long campaign: Mr. A. C. Harrison, B.A., F.S.A., who again shouldered much of the supervision of this work; Mrs. P. M. Winzar; Misses C. E.

¹ *Arch. Cant.*, lxxviii (1963), 125-41; lxxix (1964), 121-35; lxxx (1965), 69-91; lxxxi (1966), 44-52; lxxxii (1967), 162-78; lxxxiii (1968), 39-48; lxxxiv (1969), 93-106; lxxxv (1970), 55-60; lxxxvi (1971), 25-34; lxxxvii (1972), 101-10; and lxxxviii (1973), 73-80. I am very indebted to Professor S. S. Frere, M.A., F.B.A., F.S.A., for his continued interest in this work and reading through this report in draft to its great benefit.