

## TRADITIONAL ROOF COVERINGS OF NORFOLK PARISH CHURCHES

by Robin Lucas

### SUMMARY

*Lithographs made from drawings by Robert Ladbrooke and James Sillett in the third decade of the nineteenth century have been analysed to provide statistics on materials used to cover church roofs, distinguishing the parts of churches covered and the districts in which churches were situated. Different uses are explained and the use of thatch to cover churches is compared to its use to cover houses.*

In the 1820s and 1830s the artists Robert Ladbrooke and James Sillett published a series of lithographs of churches in the county of Norfolk and the city of Norwich which survive today as a valuable record for the conservators and historians of Norfolk churches. The lithographs were published separately, but printed titlepages were available to collectors<sup>1</sup>. Not only do the lithographs show the forms of churches as they then existed, with features which - in some cases - have been altered and removed, but they also show the materials with which roofs were covered. Examples of the work of Ladbrooke and Sillett are reproduced here as Plate 1 and 2. The first part of this article presents figures on the use and distribution of the roof coverings of churches as furnished by the lithographs. The second part discusses the importance attached to particular roof coverings and contrasts them with the coverings of buildings in the vicinity of churches.



Plate 1

Parish church of Saint Peter, Swainsthorpe. Lithograph by Robert Ladbrooke



Plate 2

Parish church of Saint Julian, Norwich. Lithograph by James Sillett

### The lithographs

The analysis was made from the bound collection of Ladbrooke and Sillett lithographs in the Central Library in Norwich and other Ladbrooke lithographs in the Library of the University of East Anglia. It is presumed that the fire which consumed the Central Library on 1 August 1994 destroyed the lithographs held there. In practical terms this research, made before the fire, does itself constitute a record, although there may exist less accessible or less complete collections of the lithographs elsewhere.

The Ladbrooke lithographs illustrated 677 churches in the county at large, the Sillett lithographs 37 churches within the city of Norwich. Within the number of 714 lithographs there are illustrated the roofs of 570 chancels, 605 naves, 141 aisles, 412 porches, 64 towers and 62 roofs of other parts. Not all roofs are shown, for the obvious reasons that only some roofs were visible from the viewpoint selected by the artist and churches which were ruined (36 in all) had no roofs. Most tower roofs were concealed behind parapets. The roof coverings shown were lead, thatch, pantile, plaintile and slate. Some churches were roofed entirely in one material but a greater number were roofed with a range of materials, one material being used – generally – for a discrete part of the structure (although, occasionally, some parts were covered by more than one material). Table A presents figures on roof coverings of parts of churches under 23 districts. The information assembled in Table A is illustrated in Figures 1 to 3. Figure 1 is a histogram constructed from the summary of Table A showing the relative use of roof coverings

according to the parts of the church covered. Figures 2 and 3 are maps of pie-charts showing the district use of roof coverings on chancels and naves. The districts are the censal registration units of 1851, units that had no ecclesiastical function but do, as well as indicating district use, allow comparison with district evidence available for the number of thatchers. This evidence is discussed in the part which follows.

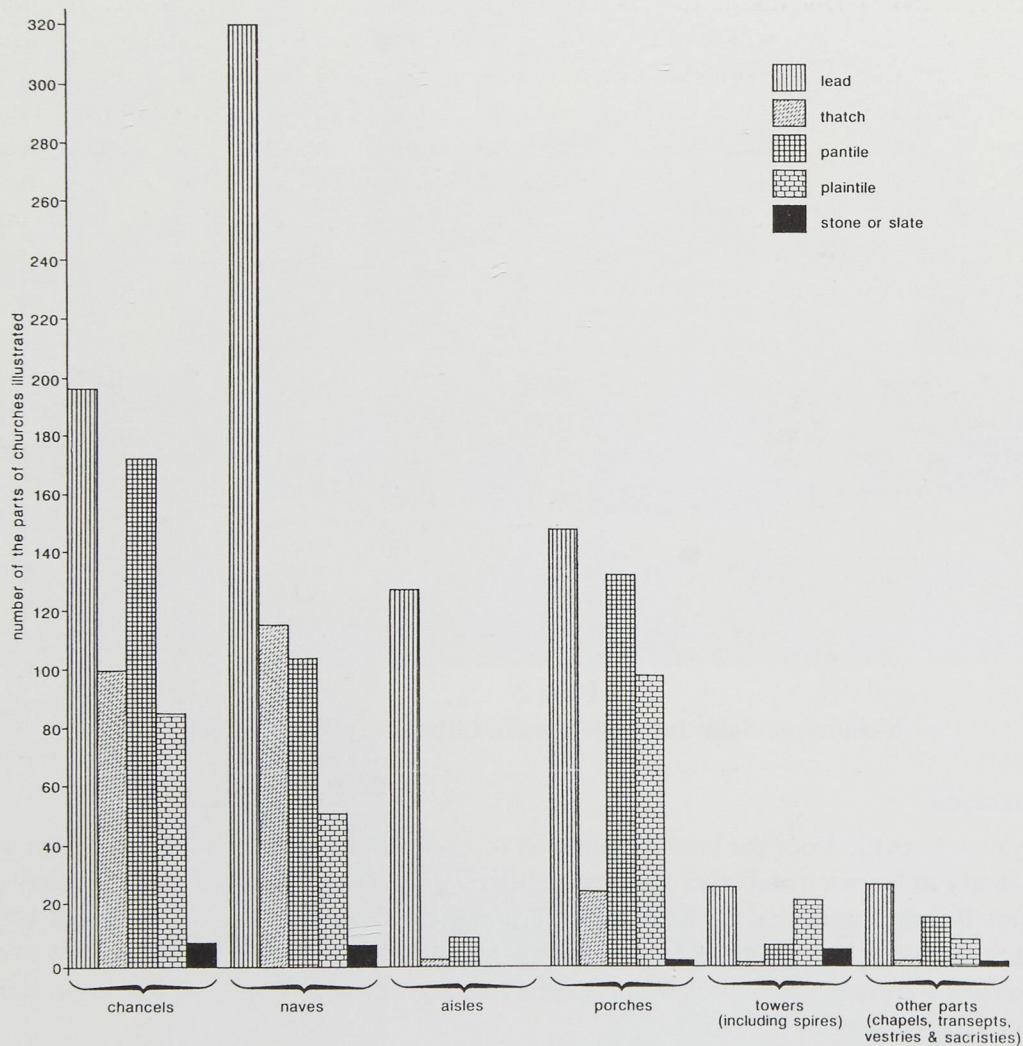


Fig. 1

Proportional use of different roof coverings on parts of Norfolk churches, *circa* 1825

### Comment

Analysis of the coverings of church roofs both according to the parts of churches covered and according to the districts in which they occurred produced widely differing results. Status was conferred by the type of roof covering chosen and this corresponded, more or less closely, with the cost. Lead, used most extensively on the cathedral and the richer churches, ranked highest, followed by plaintile, pantile and thatch. Documents occasionally allude to this hierarchy of rankings. In his will, dated 1505, John Dade of Witton ordered a new roof for the parish church, 'and because I am not able to lead it, I will that it be reeded'<sup>2</sup>. Slate, a late-comer in the

1820s, ranked with, and sometimes ahead of, plaintile. The rigid gradation of status was not universally observed and reed thatch, which could cost more than pantile, almost certainly enjoyed a higher ranking in some areas, notably in Broadland<sup>3</sup> and Marshland<sup>4</sup>. A gradation of status was not, it seems, reflected in the use of coverings over parts of the same church. Chancels, which were maintained by patrons and so might have been expected to receive special treatment, commonly bore 'inferior' covers to naves, which were maintained by congregations (Figures 2 and 3). One reason for this was that the maintenance of chancels was commonly included within the estate works of the patron and the materials used in roofing were what was available from the estate brickyard or the estate fen. In some cases the cover given to church roofs reflected not status but the performance ability of the material employed. Lead was competent for most purposes including – and this despite its density – light-weight covering. Low-pitched aisle roofs were, necessarily, leaded. Spires which constitute, in effect, roofs to towers, could also be clad in lead. Slate is almost as versatile as lead, although less lasting. The use of slate for roofing in Norfolk churches was only just beginning in the 1820s and was illustrated infrequently in the lithographs.

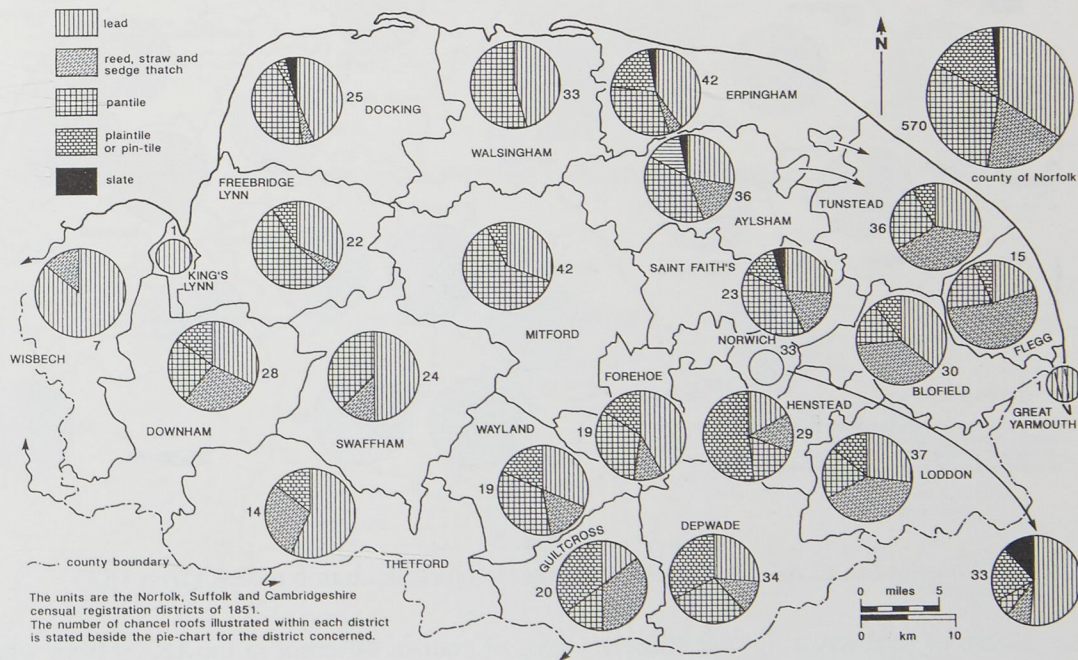


Fig. 2

District use of different roof coverings on Norfolk church chancels, *circa* 1825

Plaintile adds great weight to the roof and cannot be laid at low pitches: plaintile works well, however, on church porches and was well adapted to the covering of conical roofs on church towers. Pantile, which is half the weight per area of plaintile, is amenable to laying at low pitches, although not so low as those of lead and slate. Thatch requires a generous pitch and a sizeable overhang.

District attachments to different materials could be explained by differing resources and differing preferences. Although church architecture is commonly considered apart from domestic architecture, the pattern of roof coverings for houses had some reflection in the materials used to cover churches. This was not, of course, the case with lead, which had very limited domestic

application, but in the case of materials other than lead, and especially with thatch, there were, indeed, district strengths for the use of particular covers shared alike by houses and churches. Figure 4, which is constructed from evidence provided by Norfolk parish glebe terriers for roof coverings of parsonage houses in 1794<sup>5</sup>, shows the use of thatch to have been concentrated within a crescent of districts sweeping west to east through the south of the county, precisely the same area, in fact, in which the majority of thatched churches were situated. Not surprisingly, it was within this same area that there was resident the greatest number of the county's thatchers. Table B sets out the number of thatchers per censal registration district in 1851 and the ratio of thatchers to houses in those districts: Figure 5 is a visual presentation of the same information<sup>6</sup>.

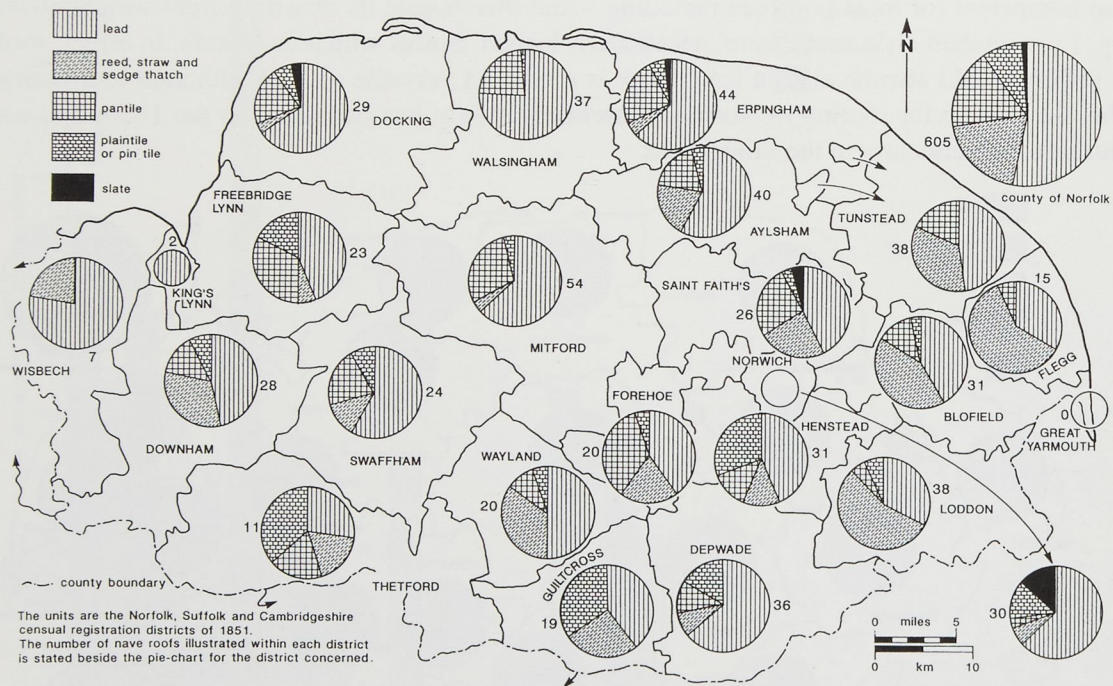


Fig. 3

District use of different roof coverings on Norfolk church naves, *circa* 1825

The pattern of roof coverings for churches was, of course, different in the 1820s from what it had been in the 1720s and from what it was to become in the 1920s. Sir Philip Skippon's mention of the numerous thatched churches of Norfolk in a memoir dated 1668<sup>7</sup> suggests that many more of the county's churches may have been thatched at that time than was the case when Ladbrooke and Sillett made drawings for their lithographs. The survival of thatched buildings in the north of the county, whether they were churches or houses, was already rare in the early eighteenth century<sup>8</sup>. The fact that Norwich as a district had few thatched churches is not surprising, given their urban location and the accompanying risk of fire. What is surprising, perhaps, and was surprising to observers in the late eighteenth century, was the fact that thatched churches did survive in the city at that date<sup>9</sup>. The conversion from thatch to tile owed much to the success of pantiles, which were imported in quantity from Dutch ports in the seventeenth and eighteenth centuries before they were made in Norfolk itself. The pantiles used on church roofs were, very often, of the black-glazed variety, and were superior products to common, unglazed red pantiles<sup>10</sup>. Sometimes it was the case that pantiles replaced lead, as was the case in East Tuddenham in 1779

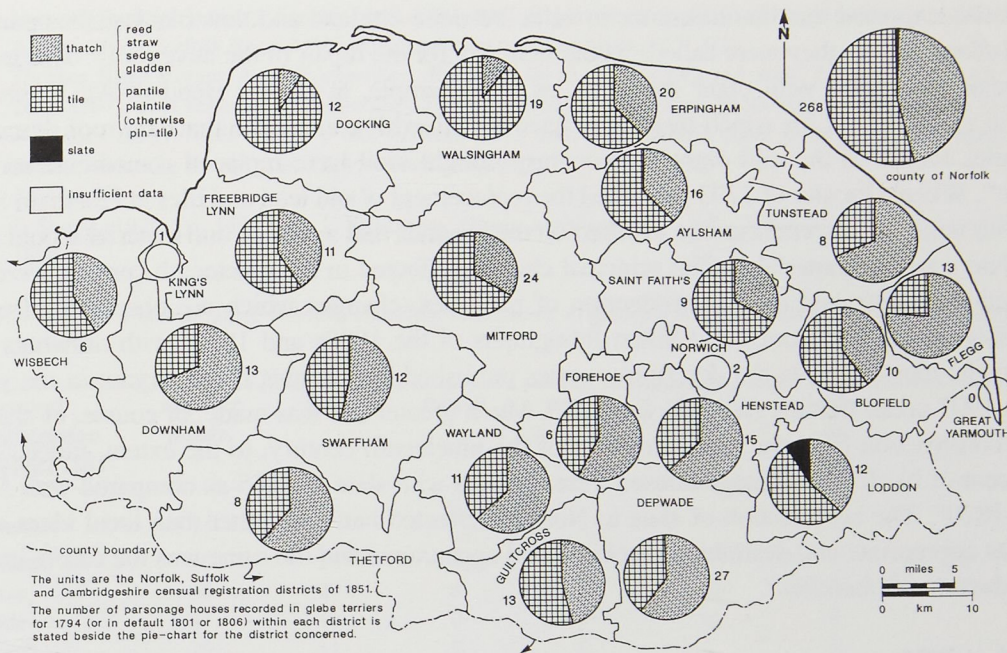


Fig. 4

District use of different roof coverings in Norfolk parsonage houses, 1794

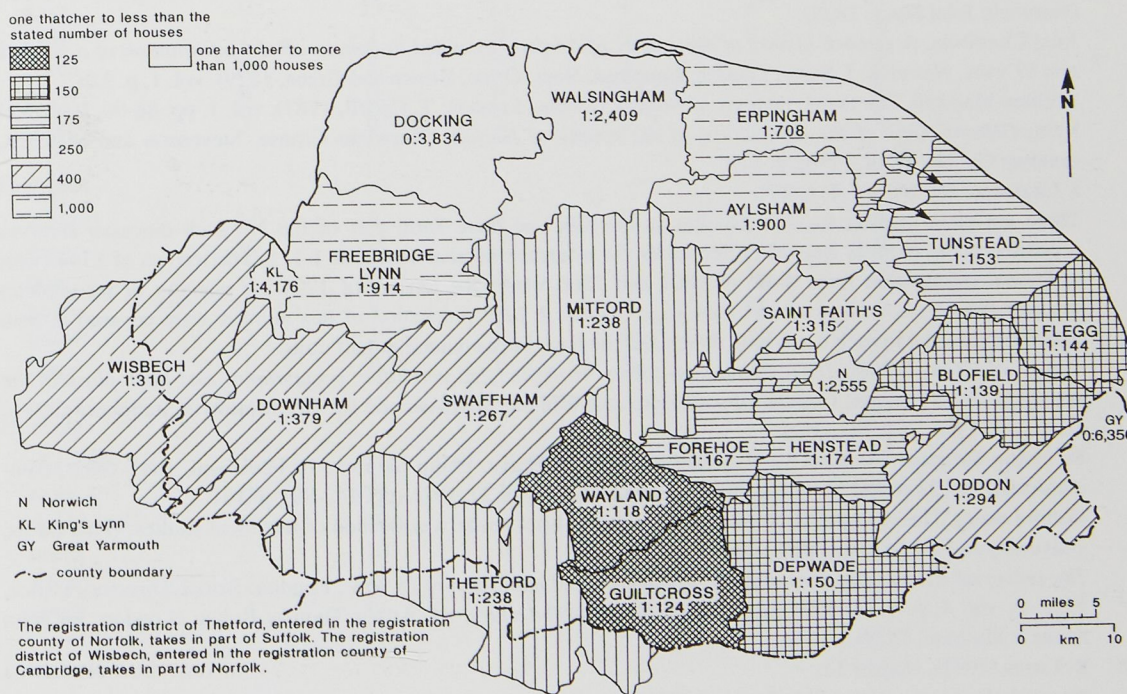


Fig. 5

Ratio of thatchers to houses in Norfolk censal registration districts, 1851

when it was expected that the difference in value between old lead and new black-glazed pantiles (blue Holland tiles as they were called) would help pay for the repair of the nave roof<sup>11</sup>. This move, 'downscale', occurred with other materials, as, for example, at Barton Bendish All Saints, no longer in existence but for which there is archaeological evidence that the thatched roof described by Charles Parkin in the mid eighteenth century<sup>12</sup> might well have replaced a medieval roof of plaintile<sup>13</sup>. When a faculty of 1793 permitted the replacement of old lead and tiles at Horsham Saint Faith with reed, the substitution was justified on the grounds that a roof of one material would look better than a mix of materials<sup>14</sup>. The principal changes effected in the nineteenth century were the introduction of slate and the re-introduction of plaintiles, changes which are observable from a comparison of the Ladbroke and Sillett lithographs of the 1820s and 1830s with drawings and photographs reproduced in the descriptive series published by Thomas Hugh Bryant in the years 1898 to 1907 under the title *Norfolk churches*<sup>15</sup>. Much greater use was made, of course, of slate in secular construction from the second quarter of the nineteenth century, to the extent, indeed, that 44 per cent of Norfolk parsonage houses were covered with slate in 1865 as compared with 5 per cent in 1820<sup>16</sup>. The introduction of slate to Norfolk reflected national rather than local ideas as to what was appropriate and desirable in architectural appearance and the same was the case with the re-introduction of plaintiles<sup>17</sup>.

#### September 1994

1. Robert Ladbroke, *Views of churches in Norfolk, printed in lithography, illustrative of Blomefield's history of that county* (7 vols., Norwich: W. Green, 1823-36). James Sillett, *Views of the churches and other edifices in Norwich, illustrative of the history of that city, printed in the lithographic style, from drawings by J. Sillett* (Norwich: John Stacy, 1828).
2. John Chambers, *A general history of the county of Norfolk, intended to convey all the information of a Norfolk tour* (2 vols., Norwich: J. Stacy, London: Longman, Rees, Orme, Brown and Green, 1829), vol. 1, p. 22b.
3. William Marshall, *The rural economy of Norfolk* (2 vols., London: T. Cadell, 1787), vol. 1, pp. 88-90. Nathaniel Kent, *General view of the agriculture of the county of Norfolk* (Norwich: Crouse, Stevenson and Matchett, London: George Nicol, 1796), p. 112.
4. J. Chambers (1829), vol. 1, p. 371.
5. There are glebe terriers for 722 parishes in Norfolk and these form part of the Norwich diocesan archives deposited in the Norfolk Record Office under the reference number DN/TER 1-171. The terriers of 1794 (with additional information from those of 1801 and 1806 where the terriers of 1794 are wanting or incomplete) describe the roof coverings of 268 parsonage houses. A high proportion of this number were covered in both thatch and tile and in such cases both thatch and tile have been counted as half units.
6. *Census of Great Britain, 1851. Population tables. II: Ages, civil condition, occupations, and birth-place of the people* (2 vols., London: George Edward Eyre and William Spottiswoode for Her Majesty's Stationery Office, 1854 (vol. 1, pp. 215, 282, 294).
7. Sir Philip Skippon, 'An East Anglian contemporary of Pepys: Philip Skippon, of Foulsham, 1641-1692', communicated by Christobel M. Hood, *Norfolk Archaeology*, vol. 22, 1926 (pp. 147-89), p. 161.
8. Robin Lucas, 'The example of Norfolk in the English brick-trade: a collection of historical studies' (PhD thesis, University of East Anglia, 1993), chapter 12.
9. *The universal British directory of trade, commerce and manufacture* (5 vols., London: British Directory Office, 1792-4), vol. 4, p. 4. Sir John Soane, *Lectures on architecture*, ed. Arthur Thomas Bolton (London: Sir John Soane's Museum, 1929), p. 142.
10. R. Lucas (1993), chapter 12.
11. Norwich diocesan registry, Faculty book, 1773-86. Repair of the parish church of All Saints, East Tuddenham, 10 July 1779, folia 164 verso - 165 verso (Norfolk Record Office, Norwich diocesan archives, FCB 3/5).
12. Francis Blomefield and Charles Parkin, *An essay towards a topographical history of the county of Norfolk* (11 vols., London: William Miller, 1805-10), vol. 7, p. 284.
13. Andrew Rogerson and others, 'Three Norman churches in Norfolk', *East Anglian Archaeology*, Report 32, 1987, 41-2.

14. Norwich diocesan registry, Faculty book, 1793-1802. Replacement of the church roof at Horsham Saint Faith, 26 August 1793 (Norfolk Record Office, Norwich diocesan archives, FCB 4/2).
15. Thomas Hugh Bryant, *Norfolk churches*, illustrated by C. A. Cormick (19 vols., Norwich: *Norwich Mercury*, 1898-1907). This series omitted churches in the hundreds of Shropham, Brothecross and Diss and to cover the omissions the *Norwich Mercury* did, between 1913 and 1915, publish three further volumes, again by T.H. Bryant, under the altered title: *The churches of Norfolk*.
16. As note 5.
17. J. Soane (1929), p. 143. John J. Stevenson, *House architecture* (2 vols., London: Macmillan and Company, 1880).

Table A: The roof coverings of Norfolk churches as depicted in lithographs by Robert Ladbrooke and James Sillett, circa 1823-26

Censual registration district 1851	number illustr.	lead	thatch	pantile	plaintile	slate or stone
Aylsham						
chancel	36	10	6	14	5	1
nave	40	23	8	7½	1½	0
aisle	11	11	0	0	0	0
porch	29	11	3	8	7	0
tower	0	0	0	0	0	0
other <sup>1</sup>	5	1½	0	2½	1	0
Blofield						
chancel	30	11	11	5	3	0
nave	31	13	13	4	1	0
aisle	2	2	0	0	0	0
porch	16	5	5	2	4	0
tower	8	0	0	1	7	0
other <sup>1</sup>	3	0	2	0	0	1
Depwade						
chancel	34	9	4	10	11	0
nave	36	23	3	4	6	0
aisle	6	6	0	0	0	0
porch	27	9	0	7	11	0
tower	2	1	0	0	1	0
other <sup>1</sup>	1	0	0	0	1	0
Docking						
chancel	25	11	1	11	1	1
nave	29	19	1	6	2	1
aisle	11	10	0	1	0	0
porch	17	10	0	5	2	0
tower	2	0	0	1	0	1
other <sup>1</sup>	4	3½	0	½	0	0
Downham						
chancel	28	9	8	7	4	0
nave	28	13	9	4	2	0
aisle	7	7	0	0	0	0
porch	19	11	2	3	3	0
tower	3	3	0	0	0	0
other <sup>1</sup>	2	1	1	0	0	0



Censual registration district 1851	number illustr.	lead	thatch	pantile	plaintile	slate or stone
Erpingham						
chancel	42	17	2	13½	8½	1
nave	44	28	2	10½	2½	1
aisle	10	8	0	2	0	0
porch	34	12	1	17	4	0
tower	1	1	0	0	0	0
other¹	3	2	0	1	0	0
Flegg						
chancel	15	3	8	3	1	0
nave	15	5	9	1	0	0
aisle	2	2	0	0	0	0
porch	14	5	4	2	3	0
tower	1	0	0	0	1	0
other¹	0	0	0	0	0	0
Forehoe						
chancel	19	8	2	6	3	0
nave	20	8	4	7	1	0
aisle	2	2	0	0	0	0
porch	17	4	1	11	1	0
tower	5	1	0	0	3	1
other¹	0	0	0	0	0	0
Freebridge Lynn						
chancel	22	7	1	12	2	0
nave	23	10	1½	7½	4	0
aisle	6	4	0	2	0	0
porch	18	4	0	8	6	0
tower	2	0	0	0	2	0
other¹	3	1	0	1	1	0
Guiltcross						
chancel	20	3	7	3	7	0
nave	19	7½	5	0	6½	0
aisle	4	4	0	0	0	0
porch	14	6	0	0	8	0
tower	5	2	0	0	3	0
other¹	0	0	0	0	0	0
Henstead						
chancel	29	5	4	5	15	0
nave	31	13½	4	4	9½	0
aisle	1	1	0	0	0	0
porch	25	6	1	3	15	0
tower	2	0	0	0	2	0
other¹	0	0	0	0	0	0

Censual registration district 1851	number illustr.	lead	thatch	pantile	plaintile	slate or stone
King's Lynn						
chancel	1	1	0	0	0	0
nave	2	2	0	0	0	0
aisle	1	1	0	0	0	0
porch	1	1	0	0	0	0
tower	2	2	0	0	0	0
other <sup>1</sup>	2	1	0	0	1	0
Loddon						
chancel	37	10	16	6	5	0
nave	38	13	20 <sup>1</sup> / <sub>2</sub>	2	2 <sup>1</sup> / <sub>2</sub>	0
aisle	3	3	0	0	0	0
porch	27	7	2	6	12	0
tower	4	1	1	0	2	0
other <sup>1</sup>	3	1	1	0	1	0
Mitford						
chancel	42	13	0	26	3	0
nave	54	34	2	16	2	0
aisle	10	9	0	1	0	0
porch	36	20	0	13	3	0
tower	7	4	0	2	1	0
other <sup>1</sup>	6	3	0	3	0	0
Norwich						
chancel	33	17	3	2	7	4
nave	30	19	2	1	4	4
aisle	7	7	0	0	0	0
porch	12	3	1	2	6	0
tower	1	1	0	0	0	0
other <sup>1</sup>	7	3	0	2	1	1
Saint Faith's						
chancel	23	6	4	9	3	1
nave	26	11	6	7	1	1
aisle	11	9	0	2	0	0
porch	20	4	0	11	4	1
tower	2	1	0	0	0	1
other <sup>1</sup>	4	1	0	1	2	0
Swaffham						
chancel	24	12	3	9	0	0
nave	24	14	3	5	2	0
aisle	14	12	0	2	0	0
porch	13	6	0	5	2	0
tower	1	0	0	1	0	0
other <sup>1</sup>	1	1	0	0	0	0

Censual registration district 1851	number illustr.	lead	thatch	pantile	plaintile	slate or stone
Thetford (Norfolk churches only)						
chancel	14	8	4	0	2	0
nave	11	3	2	2	4	0
aisle	1	1	0	0	0	0
porch	8	5	0	1	2	0
tower	3	2	0	0	1	0
other <sup>1</sup>	1	0	0	1	0	0
Tunstead						
chancel	36	10	14	9	3	0
nave	38	18	13	7	0	0
aisle	9	9	0	0	0	0
porch	25	6	6	11	1	1
tower	0	0	0	0	0	0
other <sup>1</sup>	2	0	0	2	0	0
Walsingham						
chancel	33	15	0	18	0	0
nave	37	28	0	8½	½	0
aisle	10	10	0	0	0	0
porch	21	7	0	13	1	0
tower	5	3	0	2	0	0
other <sup>1</sup>	7	4	0	3	0	0
Wayland						
chancel	19	6	3	6	4	0
nave	20	10	7	2	1	0
aisle	5	4	1	0	0	0
porch	12	4	0	3	5	0
tower	4	4	0	0	0	0
other <sup>1</sup>	2	1	1	0	0	0
Wisbech (Norfolk churches only)						
chancel	7	6	1	0	0	0
nave	9	7	2	0	0	0
aisle	7	6	1	0	0	0
porch	7	4	0	3	0	0
tower	3	1	0	0	0	2
other <sup>1</sup>	5	3	1	0	1	0
Yarmouth						
chancel	1	1	0	0	0	0
nave	0	0	0	0	0	0
aisle	1	1	0	0	0	0
porch	0	0	0	0	0	0
tower	1	0	0	0	0	1
other <sup>1</sup>	1	1	0	0	0	0

Censal registration district 1851	number illustr.	lead	thatch	pantile	plaitile	slate or stone
County of Norfolk						
chancel	570	198 (34.74%)	102 (17.89%)	174½ (30.61%)	87½ (15.35%)	8 (1.40%)
nave	605	322 (53.22%)	117 (19.34%)	106 (17.52%)	53 (8.76%)	7 (1.16%)
aisle	141	129 (91.49%)	2 (1.42%)	10 (7.09%)	0	0
porch	412	150 (36.41%)	26 (6.31%)	134 (32.52%)	100 (24.27%)	2 (0.49%)
tower	64	27 (42.19%)	1 (1.56%)	7 (10.94%)	23 (35.94%)	6 (9.38%)
other <sup>1</sup>	62	28 (45.16%)	6 (9.68%)	17 (27.42%)	9 (14.52%)	2 (3.23%)

<sup>1</sup> Chapels, transepts, vestries and sacristies.

Table B: Thatchers\* resident in Norfolk Districts as recorded by the *Census of Great Britain, 1851*

\*male and aged 20 years and above

Censal registration district 1851	number of thatchers	number of houses	ratio of thatchers to houses
Aylsham	5	4,499	1:900
Blofield	17	2,366	1:139
Depwade	37	5,534	1:150
Docking	0	3,834	0:3,834
Downham	12	4,553	1:379
Erpingham	7	4,958	1:708
Flegg	13	1,872	1:144
Forehoe	18	3,006	1:167
Freebridge Lynn	3	2,743	1:914
Guiltcross	22	2,729	1:124
Henstead	14	2,437	1:174
King's Lynn	1	4,176	1:4,176
Loddon	11	3,231	1:294
Mitford	27	6,416	1:238
Norwich	6	15,330	1:2,555
Saint Faith's	8	2,522	1:315
Swaffham	11	2,937	1:267
Thetford <sup>1</sup>	17	4,053	1:238
Tunstead	23	3,520	1:153
Walsingham	2	4,817	1:2,409
Wayland	22	2,615	1:118
Wisbech <sup>2</sup>	26	8,055	1:310
Yarmouth	0	6,356	0:6,356

<sup>1</sup> The Norfolk registration district of Thetford took in fifteen parishes from the ancient county of Suffolk.

<sup>2</sup> The Cambridgeshire registration district of Wisbech took in thirteen parishes from the ancient county of Norfolk.