ABSTRACT

The use of stone and ceramics for the external fabric of late churches in the region (mid-eighteenth century to First World War) is found to display complex patterns that depend on geology, topography and newly emerged means of transport, as well as economic circumstances and changing architectural taste and religious attitudes (notably a profound mid-nineteenth-century revival). Flint facings abound on the downlands and brick, locally in structural polychromy, is widespread in the Cenozoic lowlands. Other facings, each with a particular distribution, are of Lower Carboniferous Limestone, Pennant Sandstone, Swindon Stone, Chilmark-Tisbury Stone, malmstone, Kentish rag, sarsen and terracotta. Bathstone was widely imported for dressings; less common are Uttoxeter-Mansfield stone, Hamstone, Caenstone, Portland limestone, malmstone, and artificial Coade stone. The most important architects of the period were involved in these ventures but tended to accept commissions in particular areas.

INTRODUCTION

Unprecedented technological, economic, social, religious and cultural developments in nineteenth-century England created a lasting material record partly in the form of a multitude of new or significantly modified church buildings. Normally the most conspicuous of buildings in villages and towns, they remain even in today’s secular and neglectful times an important focus of community activity. The slumbering Church of England of the Georgians and Regency was shaken to its roots and stirred into action by the emergence of the Tractarian or Oxford Movement (c. 1833) and the Cambridge Camden Society (c. 1836), later to become the Ecclesiological Society (1845). These revivalists (there were others of Nonconformist persuasion) stirred up a new religious fervour and determined for several decades what was for very many Anglicans a ‘correct’ church, in terms of external appearance, ordering, liturgical functioning and doctrinal position. A host of architects, artists and craftsmen emerged to service the resulting frenzied church-building, which marked rural and urban areas alike. Aided by improvements in transport introduced by turnpike roads and especially navigations, canals and then railways (Darwin 1976, Bagwell & Lyth 2001, Wolmar 2007), these artists seized on the opportunity to work with unfamiliar building styles and materials and new forms of decoration while drawing inspiration from classical and, more particularly, medieval models. During earlier episodes of church-building, the emphasis had been strongly laid on the use of local materials.

The main aim of this paper is to create a geologically annotated gazetteer of the ‘late’ churches — that is, those built from the mid-eighteenth century to the First World War — to be found in the chalklands of historic Hampshire and historic Berkshire and geologically similar parts of Oxfordshire and Buckinghamshire. This large region is, on the face of it, geologically and topographically simple. It is predominantly rural and dominated by high, rolling, wooded downlands. Partly dividing it along the middle are the eastward-expanding Thames Basin lowlands underlain by Cenozoic clays and sands where most of the main centres of population are to be found. The gazetteer is then used to show how the ecclesiastical geology of this large region was influenced by the devel-
opments in the nineteenth century noted above. In particular, patterns of transport, largely determined by geology and topography, exercised an important constraint on the ability of church architects and builders to experiment with unfamiliar materials.

SETTING

The geology and geological history of the region (Friend 2008) have determined its landscape, natural resources and communications (Fig. 1). In the north is the low-lying Oxfordshire Clay Vale underlain by the Upper Jurassic Oxford Clay, the Corallian limestones and sandstones that form the Faringdon Ridge, and the Kimmeridge Clay and early Cretaceous clays and sands of the Vale of White Horse. Immediately to the south are the scarped Marlborough and Berkshire Downs and the Chiltern Hills, formed by the Upper Cretaceous Chalk Group but dotted with small Cenozoic outliers, that rise in places to 250–300 m. These chalklands gradually fall southward toward the Vale of Pewsey and the Kennet Valley which, at Newbury, meets lowlands underlain by the early Cenozoic clays, sand and gravels at the head of the Thames Basin. Scarped Chalk Group downlands come on again further south in the form of the Hampshire Downs. These descend southward to a second major outcrop of Cenozoic clays, sands and gravels that underlie the low-lying Hampshire Basin ranging to the Channel coast. Eastwards, around Petersfield, the Hampshire Downs give way to wooded ridges formed on early Cretaceous sands and some clays.

The rivers are few, reflecting the dominant chalk substrate. In the north the Thames, Ock, Kennet and Lambourn drain eastward to the North Sea, allowing communication with the Thames Estuary and London. The Wey from the south is also a tributary of the Thames. To the south, the Test and Itchen by contrast flow to the Channel coast at Southampton Water, while the Meon reaches the sea further east. The chalk escarpment along the northern edge of the Hampshire Downs is a major watershed and topographic barrier, and no rivers reach southward across the whole region. The escarpment of the Berkshire Downs and Chiltern Hills is another natural obstacle.

The region boasts several navigations and canals (Fig. 1). In the south, the medieval Itchen Navigation linked Winchester with tidewater at Southampton (Course 1967, Hadfield 1969, Vine 1990). The Andover Canal (1796), following the Test and then the Anton, similarly joined Andover to the sea; a branch led westward toward Salisbury (Hadfield 1969; Vine 1990). In contrast, the canals to the north of the chalk massif follow mainly east-west lines. Exploiting the Cenozoic lowlands, the tortuous Basingstoke Canal (1791) joins Basingstoke eastward with the Wey Navigation and the Thames (Hadfield 1969; Vine 1990). Of especial importance to the development of the region was the Kennet Navigation, extended westwards as the Kennet and Avon Canal (1810). This linked the Thames at Reading across the Wiltshire downlands with the Avon at Bath (Clew 1968; Hadfield 1969; Allsop 1999). Two lesser northern canals deserve mention. The Wilts and Berks Canal (1810) branched off the Kennet and Avon near Bath to connect Swindon and the Vale of White Horse with Abingdon on the Thames south of Oxford (Darwin 1976; Hadfield 1969; Dalby 1986). Further north still lay the Thames and Severn Canal of 1789 (Gardom 1901; Household 1969), a venture that aimed to join the upper Severn Estuary with the Upper Thames at Lechlade. A north-south branch, the North Wilts Canal (1819), linked the Thames and Severn and the Kennet and Avon Canals (Hadfield 1969; Dalby 1986).

Railways quickly superceded the canals, gradually driving them out of business (Wolmar 2007); they proved to be crucial in church building (e.g. Allen 2008, 2011). Crossing the region are a number of main railway lines that radiate westward and southwestward out of London (Fig. 1). The most northerly, largely avoiding the chalk massif, is Brunel's broad-gauge Great Western Railway (1840/41) that follows the Thames through the Goring Gap to reach the Vale of White Horse and Bath and Bristol beyond, to which branches were later added to Windsor, Basingstoke, Wallingford, Oxford and Abingdon, and Faringdon (MacDermot 1964a, 1964b; Vaughan 1979; Karau & Turner 1982; Maggs 1993; Mitchell &
Fig 1 Geology, topography and chief communications in the region, together with the locations of the commissions of the main architects working there. Key to architects: C – John Colson; E – G.E. Street; F – Benjamin Ferrey; J – Sir T.G. Jackson; M – Sir A. Blomfield; S – Sir G.G. Scott; T – William Butterfield; W – William White; Y – Henry Woodyer. To avoid the overcrowding of symbols in the Lower Test Valley, the railway between Southampton and Winchester is not separately depicted.
Smith 1994). A second westward line exploited the Kennet Valley, connecting Hungerford and Newbury with Devizes by 1862 (MacDermot 1964a). The most important of the many standard-gauge lines that were to become the Southern Railway (Dendy Marshall 1963; Body 1984; Bonavia 1987) was that from London to Basingstoke (1839) and then Andover (1854), Salisbury (1857), Yeovil (1859) and Wimborne (1866). A line was opened between Southampton and Winchester in 1839 and extended to Basingstoke in 1840; however, Brunel’s link from Reading of 1848 (Mitchell & Smith 1994) introduced an incompatible gauge that severely restricted north-south traffic at the town. Gradually other lines were added to the system — although north-south communications across the downlands never became good — until eventually almost all settlements in the area lay within about 10 km of a railway. The transport of goods beyond railway yards depended in the earlier years on horse-drawn tip-carts and waggons (e.g. Vince 1975, 1987; Thompson 1980). By the 1860s, however, self-propelled, steam-powered traction engines had appeared (Clark 1960; Hughes 1968; Bonnett 1985; Rayner 2002) that were soon put to use in church-building (e.g. Allen 2008).

ARCHITECTS AND BUILDING RATES

Rapid economic and social change in the early nineteenth century allowed architects to multiply and architecture to emerge as a profession, the Institute of British Architects arising in 1834 (royal charter 1837) and the Architectural Association in 1847. The 291 late churches in the region surveyed (see Gazetteer) commanded the attention of 151 known architects and architectural studios (Sherwood & Pevsner 1974, Pevsner et al 2000; Pevsner & Lloyd 2002; Tyack et al 2010). The strongly asymmetrical distribution of their commissions, chiefly for the Church of England (Fig. 2A), is heavily biased toward the larger offices — Henry Woodyer undertook 22 — but the architects of 51 projects, perhaps incumbents or local builders, remain unidentified. These commissions represent new-builds, partial or total rebuilds, and substantial altera-

Fig 2 Architects and their churches in the region. A — Numbers of commissions as a function of numbers of architects/studios (NB scale semilogarithmic). B — Numbers of commissions per decade (new builds, rebuilds, substantial alterations/additions) from 1740 to 1920.
tions/additions to an earlier church such as an aisle(s) or a tower, but exclude what are described as 'restorations'.

Geographically, the commissions of the most prolific architects are unevenly spread (Fig. 1). The Ecclesiological Benjamin Ferry (1810-80), a fellow-pupil with A.W.N. Pugin in the studio of the latter's father, undertook eight commissions in Hampshire and Berkshire, with an emphasis on the central and eastern parts of the region. He built almost exclusively in flint (7) but also in chalk. Pugin himself built just three churches, of which only his flint churches in Reading (Romanesque) and Marlow (Gothic) are memorable. The Ecclesiologist Sir George Gilbert Scott (1811-78) undertook nine projects, only one of which is in Hampshire, chiefly in the northwest of the area nearest his London base, seven of which were in flint. Something of an Ecclesiologist but also with a strong interest in polychromy (Thompson 1971), William Butterfield (1814-1900), accepted six commissions, including three in brick, one given exuberant internal and external decoration (Beech Hill), the rest in flint. These occur mainly in an east-west, central zone, but only one is to be found in Hampshire. The largest total of commissions in the area (22) can be attributed to Henry Woodyer (1816-96), a strong Ecclesiologist based in Guildford (Elliott & Pritchard 2002). Fairly evenly spread, but slightly more in Berkshire than Hampshire, half of these are in flint; Woodyer also built more ecclesiastically in brick (Basingstoke, Greenham, Reading, Windsor), Bargate stone (Church Crookham, Wokingham), handsomely in Pennant sandstone (Reading, Wokingham), and Corallian sandstone (Milton). With a practice in Winchester (Poole 2000), it is unsurprising to find that John Colson (1819-95) undertook 14 mainly south-westerly commissions, all in Hampshire. Two are in Swanage stone (Awbridge, Lockerley) and the rest in flint. George Edmund Street (1824-81), a ‘developed’ Ecclesiologist with a taste for constructional polychromy (Elliott & Pritchard 1998), had a large practice in London that accepted 16 commissions, but only in the Berkshire portion of the region. Only five of these churches are in flint, the rest in brick, including Sunningdale and his famous All Saints in Maidenhead, and in an eclectic range of materials such as Bisley Common stone (Brightwalton, Great Fawley), Corallian sandstone and Coral Rag (East Hanney, Milton, Watchfield), and Bargate stone (Sandhurst). William White (1825-1900) shared many architectural interests with Street and also practiced from London (Hunter 2010). Most of his British projects were in the southwest of England but he undertook six in the present region. Concentrated in western Hampshire, they are in flint, flint and brick (Smannell) or polychrome brick (Reading). Sir Arthur Blomfield (1829-99), again with a large London practice, took on 11 commissions throughout the region, but chiefly in an east-west central zone and the southeast. His costly flint church at Privett in Hampshire, for the distiller and MP W. Nicholson, is especially impressive. Last to appear on the scene was Sir Thomas Jackson (1835-1924), building mainly in post-High Victorian styles. His six commissions, in flint (e.g. Northington) or brick, are found only in Hampshire and lie in the east-centre of the region.

Some less prolific but nonetheless important architects deserve mention. J.L. Pearson (1817-97) undertook four projects (Quiney 1979), and T.H. Wyatt (1807-80) and Alfred Waterhouse (1830-1905) each four. The unconventional S.S.Teulon (1812-73) built at Hawkhley in Hampshire and Leckhampstead and Windsor in Berkshire (Teulon 2009). The Roman Catholics had their own architects in G. Raymond and Canon A.J.C. Scoles, whose projects, coming late in the sequence, are at Bramshott (1872), Ascot (1889), Basingstoke (1902), Caversham (1902), and Reading (1905).

The rejuvenation of the Church of England in the 1830s was marked by unprecedented church building in the following decades (Fig. 2B), partly with government help, but largely through widespread efforts - not without a competitive edge - at rural and urban parish level. Nationally (Cooper & Brown 2011), the number of Anglican consecrations peaked in the 1840s and again in the 1870s and 1880s. Aided by a mid-Victorian economic boom in the 1850s-70s (Gregg 1973), heralded by the Great Exhibition of 1851, building projects were funded a few pennies at a time by public
subscription or privately from the coffers of moneyed landowners, businessmen or industrialists; some incumbents were wealthy enough to afford to build their own churches. Within the region surveyed, only at Holy Trinity (1853), Winchester, did the government-inspired Church Building Commission (Port 2006) contribute toward the building costs (typically, the Commission aided ten churches in the Hampshire coastal conurbation, which is not included in the present survey). As noted separately for historic Berkshire (Allen 2007) and north Hampshire (Allen 2009), the building rate surged to a peak in the 1860s before declining at a slightly lower pace into the period of the First World War. During that decade the region saw on average no less than roughly eight new commissions annually. A secondary burst of activity came earlier in the 1840s, a feature also of such diverse counties as Devon, Bedfordshire, and Leicestershire and Rutland (Allen 2009). The situation in Kent differed slightly, however, where the rate was flat during the 1840s and 1850s, before a dramatic rise in the 1870s (Cooper & Brown 2011). Small differences from the present region may also exist in the case of other counties.

Numerous architectural styles are represented by the churches built between the mid-eighteenth century and the First World War. The Georgian and Regency periods saw Anglican building (such as there was) in both the Classical tradition and in the Early Gothic Revival manner (Quenell 1970; Friedman 2011). The former is well-represented by churches at Stratfield Saye (1754), Avington (1768), Crux Easton (1775) and Kingston Bagpuize (1799), with their round-headed windows, and the latter by Winchester (Old St. Peter, 1792) and Deane (1818) in Hampshire, with Perpendicular tracery – Brown Candover (1845) is late – and Theale (1820) and Sulham (1836) in Berkshire in the Early English manner. The Ecclesiologists profoundly affected the character of churches of the mid-nineteenth century; the favoured Early Decorated (Geometrical) style and to a lesser extent Early English overwhelming the countryside and towns. These High Victorian churches, many the creations of the most distinguished architects of the period, well merit Smart’s (1989) appellation as ‘muscular’. Only in the late nineteenth century did Perpendicular architecture reappear throughout Hampshire and Berkshire, as at Farleigh Wallop (1871), East Stratton (1885), Northington (1887) and Caversham (1910). French influences are detectable at Itchen Stoke (1866) in Hampshire and Reading (1872, 1882) in Berkshire. The Romanesque style was used sporadically in the region, as at Reading (1857), Shaw-cum-Donnington (1840), Cove (1844), Swanmore (1845), Itchen Abbas (1863), Hawkley (1865) and Sandhurst (1879). The Roman Catholics built little and mainly late, as elsewhere in Britain (Little 1963; Martin 2006), but chose a wider range of styles. Gothic was king, but their churches at Petersfield (1890) and Aldershot (1912) in Hampshire are gloriously Italianate.

LOWER CARBONIFEROUS STONE

The hard, brittle, strongly cemented limestones of the Carboniferous Limestone Series that outcrop in the West of England make a poor building material, fit mainly for rough walling and certainly not for freestone work. No church in Hampshire is faced with this material. Only one building, in northwestern historic Berkshire, carries such a facing, at Holy Trinity in Hatford (Fig. 3) at the expense in 1873 of its incumbent (VCHB 1924; Goodrich 1927). Displayed are randomized, rock-faced blocks of occasionally fossiliferous calcite mudstone, some with chert nodules and others with calcite veins. These characteristics are shared with the Black Rock and Clifton Down Groups in the Lower Carboniferous Limestone Series of the Bristol-Mendip area c. 80 km to the west (Kellaway & Welch 1955, 1993). The stone probably came by train through Bristol from quarries near the railway passing between North Mendip and the Failand Ridge, to be unloaded within perhaps 5 km of the site and afterwards hauled.

UPPER CARBONIFEROUS STONE

Upper Carboniferous building stones are represented by the Pennant Measures, a
thick series of sandstones with several much-quarried outcrops in the Bristol-Mendip area (Lloyd Morgan 1885–8; Green & Welch 1965; Cave 1977; Kellaway & Welch 1993) and, west of the Severn, the Forest of Dean (Welch & Trotter 1961; Hart 1971). The stone is a hard, grey, occasionally rusty-brown or reddened, compact, fine- to coarse-grained lithic sandstone, commonly with flecks and streaks of coaly matter and occasionally rolled fragments
of orange-brown clay-ironstone. As a building material, it has travelled even further than the calcite mudstone at Hatford.

There are no known facings of Pennant Sandstone in Hampshire, but there is a marked grouping in Berkshire linked to the Kennet and Avon Canal and the Great Western Railway (Fig. 5). The stone is first seen as metre-scale slabs that form the plinth at Theale (1820) near the Canal. A cluster of Victorian churches (some grand) in the Reading-Maidenhead area – at Reading (1861, 1865), Ufton Nervet (1861), Wokingham (1862), Barkham (1887) and Littlewick Green (1893) – are faced with randomly or neatly dressed, coursed or snecked, rock-faced blocks of the stone. All Saints in Reading is representative of the material and its handling (Figs 4A & B). The Reading Cemetery Company (1842) used it for dressed and rubble walling at their new burial ground in east Reading, as did the Englefield Estate (e.g. East Gates, 1862). Decorative blocks were inserted into the flint walls of several churches, including some in the west of the region. Pennant sandstone was also popular for steps and, internally, for flooring and columns.

NEW RED SANDSTONE

Mansfield stone (Permian) from the northeast Midlands (Smith et al. 1967; Ashurst and Dimes 1977) and Uttoxeter (or Hollington) stone (Trias) from the northwest of this region (Whitehead et al. 1927; Stevenson & Mitchell 1955; Ashurst & Dimes 1977; Chisholm et al. 1988)) are red-brown, mainly very fine-to fine-grained, dolomitic quartz sandstones that can be used externally for decorative dressings, such as nook shafts in doorways or windows and polychromy. As seen in the buildings surveyed (Fig. 5), they are normally impossible to distinguish reliably without documentary help.

Mansfield stone was used in 1884 at Basingstoke in Hampshire, and at Windsor (1878) in Berkshire, Woodyer employed Uttoxeter stone (Elliott & Pritchard 2002). Other applications, possibly of Uttoxeter stone, are at Itchen Stoke (1866) and Aldershot (1912) in Hampshire and at Reading (1865, 1872) in Berkshire. A red-brown sandstone appears as an internal facing at Privett (1876), a grand Hampshire estate church. These applications are all relatively late and accord well with the Decorative Tradition (Barnard 1973).

LOWER JURASSIC STONE

An Upper Liassic building stone from east Somerset fleetingly appeared in the north of the region. This is Hamstone, a shelly facies of the Yeovil Sands exposed on Ham Hill to the west of Yeovil (Wilson et al. 1958), and extensively quarried since earliest Roman times (Clifton-Taylor & Ireson 1983; Stanier 2000; Durman 2006). The rock is a distinctive, orange-brown, unevenly laminated, quartzose, mainly very coarse-grained shelly limestone with occasional silty patches and laminae. It weathers very variably; deep grooves are commonly developed where silty layers occur.

Hamstone is seen only at Laverstoke in the upper Test valley (Fig. 5), where it dresses and decorates the external walls of J.L. Pearson’s church (Fig. 4C), consecrated in 1896 (Allen 2012). By this time (Durman 2006), the use of Hamstone had spread far and wide, to reach into Devon and eastward to Salisbury and London. It was a straightforward matter to import the stone to Laverstoke. By 1882 a branch of the Great Western Railway linked the quarries to the main London-Exeter line (MacDermot 1964b), which passed within 2 km of the building site.

MIDDLE JURASSIC STONE

The limestone-dominated Middle Jurassic ridge that ranges across southern Britain from the Dorset coast northward to the Cotswolds, and from there through the south and east Midlands to the Humber Estuary, afforded from Roman times a range of attractive, pale to dark cream building stone suitable for freestone work as well as rough walling (Clifton-Taylor & Ireson 1983). The most important of these is Bathstone, a portmanteau term for a range of limestones produced from the Great Oolite Series worked in, and vigorously marketed from, numerous quarries and mines in the
Bath, Chippenham, Bradford-on-Avon area (Green & Donovan 1961; Hudson 1971; Baron 1978; Stanier 2000; Willies et al. 2011). These calcite-cemented rocks – the fashionable stone – vary from fine-grained oolites with rare shell debris to coarse-very coarse oolites with shelly laminae and bands (e.g. Allen 2009). Lamination is common but has little influence on workability, but the rocks tend to spall on weathering.

The opening in the north of the region of the Kennet and Avon Canal, followed by the Great Western Railway, fed in their vicinity an early fashion for facing (or partly facing) churches in Bathstone ashlar, in some instances in the form of large but thin, rubbed slabs on a brick core (Fig. 3). These buildings can be seen at Hungerford (1816), Theale (1820), Windsor (1820), Reading (1837, 1837, 1845), Shaw-cum-Donnington (1840) and Bear Wood (1846). Most Holy Trinity at Theale, in the Early English style and modelled on Salisbury Cathedral, is especially fine. Significantly later, when the stone was no longer fashionable, are East Hendred (1865), Bracknell (1866) and Burghfield (1892). Kingston Bagpuize (1799) in northwest Berkshire antedates both the Canal and Railway.

The Nonconformists also built much in Bathstone (1825–1862), mainly in the Early Gothic Revival style, using sites accessible from the Canal or wharfage on the Thames, at Abingdon, Brimpton, Newbury, Reading, and Woodley and Sandford, and Binfield Heath. Figure 4D depicts the Congregational church of 1835 at Binfield Heath in southeast Oxfordshire, coming in the middle of the general sequence of building dates.

Basingstoke (1915) in north Hampshire has the most southerly and recent Bathstone church. This large town church (Fig. 6A) is attractively banded in contrasted shades of the material (Fig. 6B).

A Middle Jurassic oolite from Bisley Common in the Stroud Valley of the mid Cotswolds was used by G.E. Street for two churches c. 60 km away on the Berkshire Downs (Fig. 3). These are at Brightwalton (1861) and the Germanic Great Fawley (1865), where the stone is neatly coursed and rock-faced. Both villages are somewhat isolated and the route followed by the stone is likely to have involved a lengthy cartage from the Great Western Railway to the north after transport by rail to Swindon from Stroud (opened 1844).

Because of its workability as a freestone, Bathstone is ubiquitous throughout the region at all dates as a dressing material (Fig. 7). Surviving documentary sources (e.g. Allen 2009) suggest that the medium-grained oolite known as Box Ground was generally preferred.

Less uniformly spread as a dressing material is Caenstone (Fig. 5), a Middle Jurassic limestone mined since medieval times in the Calvados district around Caen in Normandy, and exported by water from the Orne estuary and canal. By the nineteenth century, however, the best material seems to have been worked out and much stone of inferior quality with poor weathering characteristics was being produced. The rock is cream-coloured and a very uniformly textured, very fine-grained, strongly cemented mixture of calcite pellets and bioclastic debris, including many foraminifera. Caenstone dresses 25 churches in the region, in Hampshire first appearing at Old Alresford (1753) and finally at Ropley (1896). Figure 6C illustrates its use as a dressing at St. Mary's (1840–44) in Andover, where the effects of weathering are strongly evident. The stone is concentrated in southern Hampshire, pointing to dispersal largely through the canals and railways that stem from the southern tide-waters, but examples stray as far to the north and east as Worting (1848) and Dogmersfield (1843) and as far to the west as Bossington (1830) and Monxton (1854). However, two churches with Caenstone far to the northeast, at Sulham (1836) and Frieth (1849), 3 km and 7 km respectively from the Thames, imply some supply through London.

**UPPER JURASSIC STONE**

Stone from two Upper Jurassic horizons has also been exploited for facings. The older horizon is the Corallian Formation that underlies the Faringdon Ridge in the far north (Fig. 3). The younger is the combined Portland-Purbeck Groups, mainly outcropping to the west of the region and in Dorset.
Fig 4. Chalkland churches. A - All Saints (1865-74), Reading, in Pennant Sandstone, from the southeast. B - Neatly coursed, varied, rock-faced Pennant Sandstone, All Saints (1865-74), Reading. C - St. Mary (1896), Laverstoke, flint with dressings of orange Hamstone, from the southeast. D - Congregational church (1885), Binfield Heath, faced with unsmoothed Bath stone slabs, from the southwest.
The Corallian Formation, quarried since Roman times, is a complex, variable sequence of calcareous sandstones, limestones, marls and clays that, very broadly, is arenaceous below but calcareous above (Pocock 1926; Richardson et al. 1946; Arkell 1947; Wilson 1968; Horton et al. 1995; Bristow et al. 1999). Corallian sandstones are grey to yellowish brown, crudely bedded, medium- to very coarse-grained, calcareous, shelly, quartzose rocks, typified by the inclusion
Fig 6  Chalkland churches. A – All Saints (1915), Basingstoke, banded with two tones of Bathstone, from the southeast. B – Two-toned facing of simply coursed, varied bands of Bathstone, All Saints, Basingstoke. C – South aisle, St. Mary (1840–44), Andover, flint facing with abundant, poorly crumbling Caenstone dressings. D – St. Mary the Virgin (1866–69), Stratfield Mortimer, in Swindon stone, from the west.
of brown-black, polished chert granules. Some 14 churches, restricted to the Faringdon Ridge and the countryside southward to Wantage and Wallingford (Fig. 5), are built wholly or partly of Corallian sandstone, typically rock-faced and either horizontally coursed or snecked. The earliest is Kingston Bagpuize (1799) and the most recent Didcot (1890). The most often used calcareous facies of the Corallian Formation is the Wheatley Limestone with
Fig 8  Chalkland churches. A – St. Thomas and St. Clement (1845–6), Winchester, in Swanage stone with poorly weathering Caenstone dressings, from the southeast. B – Christ Church (1861), Winchester, in Swanage stone with Bathstone dressings, from the southeast. C – Facing of simply coursed and varied Swanage stone facing, Christ Church (1861), Winchester. D – Snecked, rock-faced Bargate stone facing at St. Mary (1866), Itchen Stoke
Fig 9  Chalkland churches. The gabled chancel (A), nave (B) and west window (C) of St. Mary (1861), Itchen Stoke, in Bargate stone with Bathstone dressings
Coral Rag, a variable sequence marked by stromatolite and coral debris, the latter generally in mouldic preservation. It makes an indifferent building material and tends to accompany, or be accompanied, by the sandstone (Fig. 3). Wheatley (1858) has the only church wholly faced with the rock. A minor calcareous facies used occasionally is a yellow-orange, thinly-bedded, oolitic-oncolitic stone. It appears at Buckland (1846), on a Recusant estate, followed by Aldington (1856) and Fernham (1861).

The Portland-Purbeck Groups are also a variable sequence of calcareous sandstones, limestones, marls and clays. The outcrops quarried for building stone for the region lie in the Swindon-Bourton district (Arkell 1933), the Vale of Pewsey (Jukes-Browne 1905), the Vale of Wardour (Woodward 1895; Reid 1903; Arkell 1933; Bristow et al. 1999), and the Dorset coast (Arkell 1933, 1948; Townson 1975; Clements 1992; House 1993). Like the Corallian Formation, the succession is in broad terms arenaceous below but calcareous above. The outcrop is on a larger scale, however, and the beds are seen to become gradually thinner and less calcareous northwards.

The facings of four churches – at Bourton (1860), Stratfield Mortimer (1866), and Maidenhead (1866, 1873) – are of a very fine-to-fine-grained, calcareous, pelloidal, quartz sandstone/sandy limestone from the Portland Group of a northerly outcrop (Fig. 3). Documentary sources identify Swindon as the source of the stone used to face the stately church of St. Mary the Virgin (Fig. 6D) at Stratfield Mortimer (Allen 2008) and this is the most likely provenance at Maidenhead. At all four buildings the masonry is of neatly coursed or snecked, rock-faced blocks.

A finer grained and more calcareous quartzose facies of the Portland Group – Chilmark-Tisbury stone – from quarries in the Vale of Wardour served by the Salisbury-Yeovil railway (Dendy Marshall 1963), was extensively used to dress a restricted scatter of Hampshire churches (Fig. 3). It appeared chiefly in the 1870s and 1880s, as attested (VCHH 1908) at East Stratton (1885).

The famous Portland limestone, quarried in the Isle of Portland on the Dorset coast (Arkell 1948; Thomas 1998; Stanier 2000), is here and there a dressing in the region (Fig. 5). An early use was in the Classical churches at Avington (1768) and Crux Easton (1775), followed by Woodcott (1853), Itchen Abbas (1863) and Italianate Aldershot (1912). Like Swanage stone (see below), much Portland limestone was routed by water along the Channel and into the North Sea.

The limestones of the Purbeck Group comprise a range of tough, weather-resistant, pale-coloured, calcite mudstones, coquinasand, very rarely, gastropod limestones (e.g. Purbeck Marble) that were extensively quarried in the Isle of Purbeck on the Dorset coast (Arkell 1948; Clements 1992; Thomas 1998; Stanier 2000). Until a branch to the Dorchester line was completed in 1885 (Dendy Marshall 1963), they were mainly exported by sea from the harbour at Swanage under the name Swanage stone. Neatly coursed with a roughish finish, Swanage stone facings appear in a scatter of six southern Hampshire churches (Fig. 5): Winchester (1845, 1860), Hursley (1846), Awbridge (1876), West Tytherley (1877, chancel) and Lockerley (1889). The Winchester city churches are the most impressive, especially the earliest, St. Thomas and St. Clement (Fig. 8A). Later, smaller and in a different style, but also impressive, is Christ Church (Figs 8B & C). There is an especially sharp contrast at St. Thomas’s between the response to weathering of the Swanage facing and the Caenstone dressings.

LOWER CRETAceous STONE

In contrast to building stones so far discussed, the Lower Cretaceous facings come from outcrops in the east of the region, or from further eastward still, and mainly occur in easterly churches.

The Folkestone Beds, low down in the Lower Greensand Group, seems to be the source of a decorative stone – a tough, purple-black sandstone cemented by iron compounds – occasionally used externally, generally along with other materials, in the east of the region. For example, at Alton (1873) lumps of the stone are scattered in the walls and buttresses,
Fig 10  Chalkland churches. A – St. John the Baptist (1875), Greatham, faced in randomly arranged blocks of chalk with Bathstone dressings, from the southeast. B – Facing of random blocks of chalk, All Saints (1876), Kingsley. C – Facing of neatly cours ed and varied, dressed chalk, St. Matthew (1868), Blackmoor. D – St. James, (1839), Bossington, flint with mainly Caenstone dressings, from the southeast. Note the roofing of graded stone slabs.
whereas at Cove (1844) and Kingsley (1876) they are laid in bands.

The Hythe Beds, low in the Lower Greensand Group, are a variable sequence of sandstones with an outcrop that encircles the western Weald (Osborne White 1910, Dines and Edmunds 1929, Kirkaldy 1933, Middlemiss and Knowles 1959, Thurrell et al. 1968, Ruffell 1992). The beds are grey to brown, fine- to medium-grained quartz sands with a little feldspar and glauconite, accompanied by very variable amounts of biogenic debris, especially rhaxellid sponge spicules, and chert cement. Because of the chert (Middlemiss 1978), the stone is not easily worked, but as a facing can be found as ashlar as well as rock-faced courses. It is seen in east Hampshire (Fig. 3) at Headley (1859), Bramshott (1872, 1911) and Grayshott (1901, 111).

More important was Bargate stone, a facies (Bargate Beds) of the uppermost Hythe Beds. The Bargate Beds, quarried since Roman times mainly around Godalming just outside the region, are grey to brown, commonly shelly, slightly glauconitic, medium- to very coarse-grained and pebbly, locally cherty, quartz sandstones (Chapman 1894; Osborne White 1910; Dines & Edmunds 1929; Thurrell et al. 1968). Thirteen churches scattered over the region, but mainly found in east Hampshire, are faced partly or wholly with Bargate stone (Fig. 3), typically in simple or snecked, rock-faced courses, at Basingstoke (1770), Cove (1844), Sandhurst (1852), Wokingham (1864), Sheet (1869), Ewhurst (1875), Aldershot (1875), and Church Crookham (1876). The last are Liss (1891), Caversham (1910) and Grayshott (1911). Some stone strayed westward, forming impressive churches at Itchen Stoke (1866) and South Tidworth (1879). The incumbent paid for richly-decorated Itchen Stoke, with its snecked fabric (Fig. 8D), high nave, tall lancets, huge wheel window and gabled polygonal chancel (Fig. 9A–C) possibly inspired by Sainte Chapelle in Paris.

The Hythe Beds become finer grained and calcareous as they range eastwards below the North Downs into Kent. Around Maidstone on the R. Medway occurs the much-quarried, occasionally cherty ‘rag and hussock’ facies (Middlemiss 1978; Worssam & Tatton-Brown 1994), yielding the Kentish rag familiar in London since Roman times (e.g. Marsden 1994). The typical rock is a near-white, quartzose, sponge-rich limestone. In the present region (Fig. 3), rag churches are restricted to places on the Thames, namely, Windsor (1867, simply coursed) and Reading (1872, snecked).

The Upper Greensand Formation (Osborne White 1910; Dines & Edmunds 1929), a minor building stone (malmstone), is a variable series of greenish grey to brown, silty to very fine-grained, micaceous, glauconitic, calcareo-siliceous deposits. Malmstone ashlar was used in Hampshire for the tower (1909) at Overton, far from the main outcrop (Fig. 3). It may have been used elsewhere (?Dogmersfield, 1843), as it is not easily distinguished from beds mapped among the basal measures of the Chalk Group in the east of the region.

UPPER CRETACEOUS STONE

Beneath the downlands that typify the region lies the Upper Cretaceous Chalk Group (Blake 1903; Osborne White 1907, 1909, 1910, 1912; Jukes-Browne 1908; Dines & Edmunds 1929; Hancock 1975, Woods & Aldiss 2004), a thick sequence of very fine-grained biogenic limestones divisible into the Lower Chalk (c. 55 m, white, grey, greenish, granular, marly), the Middle Chalk (c. 45 m, white, some flint bands) and the Upper Chalk (c. 275 m, white, numerous flint bands). Chalk rock from these beds was one of the traditional construction materials generated within the region, as may be judged from vernacular buildings, for example, in the Vale of White Horse, and its widespread re-use (e.g. Allen 2009), but figured little as a nineteenth-century building stone. It is easily worked and moulded, but has limited weathering characteristics.

The churches in question are the cluster in east Hampshire (Fig. 3) at Dogmersfield (1843), East Tisted (1846), Hawkley (1865, Romanesque), Blackmoor (1868), Alton (1873), Greatham (1875) and Kingsley (1876). St. John the Baptist at Geatham is representative (Fig. 10A). At some the chalk is randomized (Fig. 10B) but at others either squared and neatly coursed or in the shape of tooled ashlar (Fig. 10C). The chalk used at Alton came from
the builder's own quarry near Selborne (Dyer 1998).

The other traditional downland building stone is flint, much preferred by Ecclesiological architects and their followers over 'mean' brick. It consequently strays well outside its geological zone (Fig. 11), and is recognized in 147 churches, somewhat over half the total examined. The churches at Bossington (Fig. 10D) and Newtown (Fig. 12), of 1839 and 1865
Fig 12 St. Mary and St. John the Baptist (1865), Newtown, faced with dressed and coursed flint with Bathstone dressings, from the northeast.
Fig 13 Varieties of flint facings in chalkland churches. A – Coursed, dressed flint, St. Peter (1845), Brown Candover. B – Shingled, flint nodules, St. Lawrence (1864), Wootton St. Lawrence. C – Roughly coursed, broken and split flint nodules, St. Mary (1866), Lasham. D – Roughly coursed, mainly broken flint nodules, St. Michael (1869-70), Hichclere.
Fig 14. St. Mary (1867), Beech Hill, built with a variety of decorative brick in chequers and bands.
Fig 15 Flint facing with chequers and flushwork, south transept, St. John the Evangelist (1887–90), Northington
Fig 16 Chalkland churches. A-St. Mary (1768-71), Avington, red brick with Portland limestone dressings, from the southwest. B-St. Michael (1779), Cuxton, blue and red brick from the southeast. C-All Saints (1863), Aldershot, red brick with Bathstone dressings, from the southeast. D-St. Michael (1912), South Tidworth, faced wholly in terracotta, from the southwest.
Fig 17  St. Joseph (1912-13), Aldershot, built for the Roman Catholics in polychrome brickwork with dressings of Portland stone, red sandstone and terracotta on an arcaded site, from the east.
Flint respectively, are perhaps representative of what has been achieved in Hampshire. Flint is a hard, brittle, early diagenetic precipitate of translucent brown, grey or black, commonly mottled, cryptocrystalline to microcrystalline silica that occurs mainly in the Upper Chalk, as horizons of smoothly irregular nodules or even bands. Flint for church building can be acquired as fresh nodules dug from the Chalk Group, as deliberately split fresh nodules displaying cortex, as nodules broken naturally by Pleistocene freeze-thaw (fractured surfaces usually patinated) collected from local fields (e.g. Allen 2009) or from soliflucted concentrations on the floors of now-dry valleys (e.g. Allen 2007), and as water-worn pebbles and cobbles from Quaternary gravel deposits (typically East Anglian). Nodules can also be knapped and squared for regular coursing, but this is an expensive process calling for some skill.

Flint as a facing has been treated architecturally in many ways (Clifton-Taylor & Ireson 1983; Hart 2000, 2003, 2008; Allen 2007, 2009; Potter 2008). Except for water-worn flints, restricted to Winchester (1853), all are widely represented in the late churches of the region. At West Meon (1843), Brown Candover (1845), Wickham (1845) and Newtown (1865) nodules knapped to cuboidal or rectangular form are neatly coursed (Fig. 13A). Wootton St. Lawrence (1864), and Blomfield’s Privett (1876) and Froxfield (1887), exemplify the use of partly to fully randomized whole nodules (Fig. 13B). Split nodules (Fig. 13C) are randomized at Sulham (1836) and Kidmore End (1852) but very roughly coursed at Compton (1849) and Chieveley (1873). At Over Wallop (1866, chancel) nodules split longitudinally are uniquely laid in swirling, subvertical patterns. Hatherden (1857) and Chawton (1871) typify the use of broken nodules. Split and broken nodules (Fig. 13D) were very commonly used separately or together, either randomized or, less commonly, very roughly coursed, as in 1855 at Mortimer West End (Allen 2011) and Lasham (1866). External decoration involving flint is common. In the facings at Elvetham (1840), and to some extent at Northtinton (1887), flints differing in colour and size were laid in contrasting bands; at Charlton (1908) contrasting flints form large chequers. Flint is more commonly chequered with brick or a contrasting stone, as at Sunningdale (1860), Aldershot (1865), Twyford (1876), East Stratton (1885) and Caversham (1887). Butterfield’s St. Mary (1867) at Beech Hill in Berkshire is an especially attractive example (Fig. 14). At Jackson’s grand church at Northtinton (1887), but less so at his East Stratton (1885), it contributes with Chilmark-Tisbury stone to flushwork (Fig. 15), recalling late medieval wool churches in East Anglia (Hart 2008). Very occasionally, a flint facing is galleted (Clifton-Taylor & Ireson 1983), as at Rowlands Castle (1838). Nonetheless, as Clifton-Taylor (1972) has remarked, a flint wall can be dull and unappealing and, if there is no formal decoration of the sort just described, it is common to find the facing dotted with pieces of some contrasting stone, either re-used or imported.

SARSEN STONE

Early in the Cenozoic, the sands and gravels that underlay a level, stabilized, richly vegetated landscape stretching across much of southern England were silicified under subtropical conditions. The widely scattered sarsen stones, or grey wethers, seen today (Davies & Baines 1953; Bowen & Smith 1977; Summerfield & Goudie 1980; Potter 1998, Ullyott et al. 2004; Scrivenor et al. 2011), especially on the downlands, are the residuum after renewed erosion of this episode of duricrusting (Goudie 1973). Sarsen stone (silcrete) is an exceptionally hard and tough, near-white, fine- to medium-grained, pure quartz sandstone with a secondary quartz or flint-like cement and typically a saccharoidal texture. Root channels are commonly present, ranging from arm-thick main roots, as at Avebury Ring, to delicate, thread-like rootlets (Carruthers 1885; Clark et al. 1967). It is perhaps the most difficult of all building stones to work and calls for great skill.

Worked sarsen is a rare facing (Fig. 3), although occasional fragments turn up in church walls, representing field collecting or perhaps re-use. In Hampshire it appears at the severely Romanesque Cove (1844), and at Windsor (1869, chancel) and Sotwell (1884).
to the north, in all three as neatly coursed, squared blocks with a rough to rock-faced finish. The stone has three possible sources, the High Wycombe area up to the 1850s (King 1968; Hepworth 1998), the upper Kennet Valley from the 1850s (King 1968; Stanier 2000), and the wider Bagshot heathlands (Dewey & Bromhead 1915; Dines et al. 1929), where a substantial but now defunct industry arose.

BRICK AND OTHER CERAMIC BUILDING MATERIAL

Brick has long been a cheap, convenient, versatile and, to a degree, standardized building material, made by burning such clay-rich deposits (Clifton-Taylor 1972; Brunskill 1990; Campbell & Price 2003) as the Cenozoic Reading Beds and London Clay Formations, Pleistocene brickearths, and fine-grained river alluvium. It takes many colours - red, orange, brown, yellow, blue, grey and black—depending on the clay dug, the additives and surface treatments used, and the kiln atmosphere. It is thus eminently suitable for structural polychromy and external decoration (Barnard 1973), as may be seen in the work of G.G. Scott, Butterfield, Street and Teulon. Outstanding examples of internal decorative brickwork can be found at Leckhampstead (Teulon) and Beech Hill (Butterfield) in Berkshire. In parts of the present region brick is much seen as a facing (Fig. 11), and to some extent as a dressing (Fig. 7). As wall-core it probably abounds. The appeal of brick to architects has varied greatly since the mid-eighteenth century, but the issue of costs has commonly won out, especially when Non-conformists were building.

A significant proportion of the earlier churches — those built up to the 1830s and early 1840s, chiefly in the Classical or Early Gothic Revival manner — are of brick, such as Old Alresford (1753), Stratfield Saye (1754), Avington (1768), Crux Easton (1775), East Woodhay (1823), Marlow (1832), West Tytherley (1833) and Stockcross (1839). Avington (Fig. 16A) and Crux Easton (Fig. 16B) in Hampshire are representative. By the late 1840s the Ecclesiological preference for flint facings had taken a firm hold and brick was largely eschewed until late in the century, even where it was locally available and cheap. Representative of these later buildings are Church Crookham (1841), Reading (1844, 1882, 1902), Maidenhead (1854), Braishfield (1855), Aldershot (1863), Hartley Wintney (1869), Farnborough (1881) and New Hinksey (1900). All Saints at Aldershot (Fig. 16C) is a good example of a garrison or large town church. Also in brick are two Italianate town churches (Fig. 17), erected late by the Roman Catholics in Petersfield (1890) and Aldershot (1912).

Brick had many sources in the region of the nineteenth and earliest twentieth centuries. Going by Norfolk experience (Lucas 2000), most parishes had a brickyard or two able to cover local needs (see Shore 1890; Blake 1903; Osborne White 1907, 1909, 1910, 1912; Jukes-Browne 1908; Dewey & Bromhead 1915; Pringle 1926; Dines & Edmunds 1929; Richardson et al. 1946; White 1971). Witness to this is St Saviour’s (1855) at Mortimer West End (Allen 2011). Some churches, however, could have been built using bricks from nearby yards specially opened for the purpose. There were also substantial industries, exploiting the Cenozoic clays of the Reading-Wokingham-Bracknell area (Dumbleton 1990, 1998), which serviced large districts in the Thames valley. In terms of distribution, the churches faced or dressed with brick are heavily concentrated on this Cenozoic outcrop but the earlier ones are scattered more widely (Figs 7 & 11). Some London brick may reached the north along the Thames (PWindsor, Marlow).

Other ceramics occasionally appeared (Figs 5 & 11). Peachy beige terracotta faces a large garrison church in South Tidworth (1912), apparently a unique occurrence in the Hampshire downlands (Fig. 16D); there are several possible suppliers (Hamilton 1978; Stratton 1993; Van Lemmen 2002). Attested both by documents (Ruch 1968) and a stamped window sill, the Early Gothic Revival church at Deane (1818) in the upper Test valley is dressed throughout in Coade ‘stone’ (Clifton-Taylor & Ireson 1983; Van Lemmen 2006), including the large, elaborate tower pinnacles (an abandoned example stands in the churchyard). Before being carted to Deane, this artificial stone was
DISCUSSION

The process of church-building/rebuilding has been a continuous one since the arrival of Christianity in southern Britain, but the rate, influenced by economic, social and other factors, has been far from steady. Setting aside London — a special case because of the effects of the Great Fire of 1666 — three main phases of church-building/rebuilding can be recognized: Saxo-Norman, late medieval, especially fourteenth and fifteenth century, and nineteenth century (reconstruction and development after the Second World War perhaps constitutes a fourth phase). The flurry of activity in the nineteenth century was underpinned by a national revival of religious feeling and an economic boom, and facilitated by an expanding profession of architecture and new and efficient systems of communication created by turnpikes, navigations, canals and railways. While drawing inspiration from classical and especially medieval models, architects became free to experiment with materials not available to the builders of earlier periods. Geology, infrastructure and economics nonetheless constrained the use of these materials, as is reflected in the fabrics of churches built or rebuilt during the period in the Hampshire-Berkshire chalklands.

A large number of architects, including some of the most important in the country, were involved in erecting these churches (Fig. 2A). There is in the main a marked localism about their spheres of activity (Fig. 1), however, which while perhaps not unexpected is difficult convincingly to explain. Whereas clerks and foremen of works were left to exercise close, day-to-day management of building sites, architects were nevertheless expected to attend regularly and frequently, to ensure that procurement and construction went according to plan and the wishes of the client. Ease and convenience of access from head office is therefore one possible explanation for the localism observed. The structure of the railway system is therefore likely to have exercised a strong influence on the choice of commissions, a question that could be explored using office records of day-to-day activities, should any such have survived. Although there was much business to be had, architects were nonetheless in competition, and there arises the possibility that territory was divided up by means of hard to prove, informal gentlemen’s agreements. If any were made, such agreements are most likely to have been reached by architects with offices in London, where clubs and the premises of the new architectural professional bodies (1837, 1847) provided convenient meeting places. It may be noted that Henry Woodyer, who built widely over the region, had an office not in London but in Guildford, and that John Colson, practicing from Winchester, built mainly in the southwest of the area.

The peak of building in the 1860s recorded here from Berkshire and Hampshire is found across most of southern Britain and reflects an economic boom that affected the nation as a whole. The secondary peak in the 1840s (Fig. 2B), however, is by no means general and less easily explained. It could have been fuelled by the same urge for investment and flush of capital — the return in the case of a new church was, of course, to be enjoyed in Heaven — that underpinned the first British ‘railway mania’ (Wolmar 2007). Hence an explanation for the lack of generality could lie in the changing pattern of wealth-production and distribution from county to county. Some were more industrialized and urbanized than others, which were more rural and with substantial numbers of estates.

For Ecclesiological architects and their many sympathizers of early and mid Victorian times stone was the only ‘truthful’ material from which to build a church. Given the scale of the Upper Cretaceous outcrop, it is not surprising that flint is the dominant facing within the region, either on its own or occasionally with brick (Fig. 11). It is rare to the north of the topographic barrier presented by the Chalk Group escarpment of the Berkshire Downs and very rare to the east of the equivalent feature in southeast Hampshire. Flint churches are common within c. 10 km of the Chalk Group at the western end of the Cenozoic outcrop of the Thames Basin, but few on the widening outcrop.
to the east of Reading, where brick prevails and would have been economically more attractive. Little is known of the procurement of flint for building, but it is likely that much (other than nodules) was simply picked from local fields. This practice is documented from Hampshire (Allen 2009) at Baughurst (1845), Kinsclere Woodlands (1845) and Monxton (1854). Some flint for Monxton, however, came by rail from a builder's merchant, and the same is true of the two varieties used (Allen 2011) at Mortimer West End (1855). The expensive coursing of knapped and squared flint, found throughout the period under consideration, is most prevalent relative to other treatments in churches of the 1830–40s. Interestingly, as in the eastern Thames Basin, flint as a facing to late churches is extremely rare in the coastal conurbation on the other Cenozoic outcrop (Fig. 1). It is recorded only at Bournemouth whereas brick – typically dark red or buff – abounds (Pevsner & Lloyd 2002). It would appear that economic considerations again exerted some constraint on architects.

Brick facings were thought 'mean' by many architects but in the region as a whole are similar in prevalence to flint (Fig. 11). Later in the period they tend to dominate over other facings. The drift of the national economy from boom to depression over this time (Gregg 1973) may partly explain this, but it is also true that the Ecclesiological yoke and the insistence on stone at the same time had steadily weakened. In some churches brick and flint are combined, usually to great decorative effect. Competing with flint in the west, brick epitomizes the broad eastern portion of the Cenozoic lowlands, strays north and south from there onto the Chalk Group, and in the south ranges northward from the coastal Cenozoic belt into the Hampshire downlands. On the procurement of brick for church-building there is even less firm information than in the case of flint. The big suppliers in the Reading-Wokingham-Bracknell are likely to have been dominant in the eastern part of the Cenozoic outcrop, but a role for local yards cannot be discounted. Bricks for Mortimer West End (1855) in Hampshire are known to have come from nearby estate kilns (Allen 2011). Those for Headley (1867) in the west were procured from just a few kilometres away (Allen 2009). At Old Alresford (1769, tower) bricks were reused (Allen 2009).

What distinguishes the subordinate facing materials procured from within the region is their relative high degree of localization (Fig. 3). Corallian sandstones and limestone from the Faringdon Ridge, exploited since the eighteenth century, appear widely in the Vale of White Horse, but range no further south than the north-facing escarpment of the Berkshire Downs, a regional barrier to all means of communication. In the southeast, churches faced with Hythe Beds, dating from the 1850s to the early twentieth century, form a small cluster around main roads leading west and southwest from Hindhead. The single church with malmstone (Upper Greensand) lies within 10 km of an outcrop at Kingsclere, and could have been sourced and carried by road from there rather than from the east. Except possibly for Dogmersfield, within the Cenozoic outcrop near its southern margin, chalk-faced churches form a restricted cluster within 10 km eastward of the much-quarried, east-facing escarpment of the full sequence of the Chalk Group beneath the Hampshire Downs. As noted above, flint and brick prevail on the downlands themselves (Fig. 11).

The facing materials that architects procured from outside the region are also typified by localization (Fig. 3), but with exceptions. The singular use of Lower Carboniferous stone from the west at Hatford in the north clearly expresses some personal whim of Samuel Paynter, one of a number of Berkshire and Hampshire incumbents wealthy enough to have paid for their church (Allen 2007). The appearance in the Kennet Valley of Upper Carboniferous Pennant sandstone from the Bristol area or Forest of Dean at Theale (1820) owes itself to the existence of the nearby Kennet and Avon Canal. Its reappearance 40 years later, however, in Reading and nearby Englefield Park, represents a deliberate choice on the part of the architects Henry Woodyer and Richard Armstrong Snr. This dour and uninviting stone is seen up to the late 1880s in a restricted cluster of churches in the Reading-Wokingham-Maidenhead area, served by the Great Western Railway.
is not known as a church facing further to the west; Woodyer, by his choice, would seem to have set something of a local fashion. The use of Pennant Sandstone did not penetrate southward into Hampshire from this cluster.

Fashion and the advantageous routes provided by the Kennet and Avon Canal and the Great Western Railway also provoked in the north the use from 1816 of Bathstone facings, as seen in a string of relatively early churches (and also chapels) within a few kilometres of these arteries, from Hungerford eastward to Bracknell-Windsor (Fig. 3); the churches at Kingston Bagpuize (1799) and East Hendred (1865) are exceptions. The most southerly penetration of Bathstone as a facing is the church at Basingstoke (1915) in north Hampshire.

Sandy limestones and calcareous sandstones from inland outcrops of the Portland Group appear in both town and rural churches but are widely scattered (Fig. 3). The Swindon stone used at Stratfield Mortimer is known to have arrived by the Great Western Railway using the Basingstoke branch (Allen 2008).

In the southern Hampshire chalklands lie clustered churches dating from the 1840s onward faced with near-white Swanage stone from the Purbeck Group quarried on the Channel coast (Fig. 3). They group about the Itchen Navigation to Winchester and the railways heading northward and northwestward out of Southampton on tidewater, where the stone was probably landed. In the coastal conurbation itself, on a Cenozoic outcrop, late churches in Swanage stone are also common (Pevsner & Lloyd 2002). Swanage stone is not known to range further north than Winchester, a clear reflection of the poor connections between the southern and northern parts of the chalklands.

Bargate stone mainly from the Godalming area of Surrey is the most widespread material sourced externally. Its churches form an arcuate eastern scatter, from Caversham in the north to Liss in the south, but with distant outliers to the west at Basingstoke, Itchen Stoke (built by another rich incumbent) and South Tidworth (Fig. 3). Their locations point to the railways out of London as the chief means of transport. The Kentish rag found at Windsor and Reading lies at the western limit of its range and could have been routed along the Thames from the Medway. Sarsen is rarely seen and was probably imported into the region.

A strong material that would normally contrast with the general facing was desirable for the quoins, buttresses, doorways and windows of a nineteenth-century church. Dressings are, of course, decorative as well as structurally significant. For a large and elaborate church they can be shaped on-site by banker masons from blocks of as-quarried stone, but are more likely to be acquired in an incomplete or finished state from mason’s yards or stone-merchants, as seems to have been partly the case for the small church at Mortimer West End (Allen 2011). As the stone for dressing a church weighed two to three orders of magnitude less than the same material used overall for the facing, it was worth contemplating the cost of transporting it from a relatively distant source. This economic consideration backed by fashion (Hudson 1971) probably explains the much wider distribution of externally-procured Bathstone as a dressing (Fig. 7) than as a facing (Fig 3). The distribution is independent of geology and topography, and overall shows little reliance on the transport network. Bathstone dressings noticeably thin off southward, however, in the face of competition from other materials. In the case of other stone, however, ease of procurement and perhaps fashion may explain the choice of dressing. Although much less common, and apparently never used for facing, Caenstone from Normandy is the only other dressing stone with a comparably extensive distribution (Fig. 5). It occurs mainly in the south, closest to the ports, chiefly Southampton and Portsmouth, through which it was imported. The quality was often poor, as time has revealed at Andover (1840), Winchester (1845) and elsewhere, the better material presumably having been worked out. The stone that reached St. Mary’s at Andover is recorded as coming on the Andover Canal (Fig. 1). An alternative material – Chilmark-Tisbury stone, much stronger and more weather-resistant, but more difficult of access – was little used (Fig. 5), despite the example of medieval buildings and being closer at hand to the west. Swindon stone, another good alternative, was very little used, perhaps for similar reasons.
The numerous churches discussed above were erected for worship by sponsors that ranged from poor parishes accumulating funds by pennies at a time to wealthy estate-holders, industrialists, incumbents and even the military. As Morris (1989) noted of their medieval predecessors nationally, as buildings they significantly embellish the chalkland landscape of Hampshire and Berkshire and are highly diverse in style and materials. The new means of transport that appeared in the late eighteenth and nineteenth centuries allowed architects to experiment with building materials hitherto unavailable in a locality, but the disposition of those means—east-west in the north but southwestward and northward in the south—exercised along with fashion and theory a constraint on the actual choices made.

REFERENCES


Bonnett, H 1985 Traction Engines, Prince’s Risborough.


Brunkill, R Q W 1990 Brick Building in Britain, London.


Carruthers, W 1885 Notes on Fossil Roots in the Sarsen Stones of Wiltshire, Geol Mag 22 361–362.

Chapman, F 1894 The Bargate Beds of Surrey and their Microscopic Contents, Quart Jour Geol Soc 50 677–729.


Clark, R H 1960 The Development of the English Traction Engine, Goose & Son.


Dalby, L J 1986 The Wiltshire and Berks Canal, Oxford.


Durman, R 2006 Ham Hill: portrait of a building stone, Reading.


Friedman, T 2011 The Eighteenth Century Church in Britain, New Haven & London.


Hart, C E 1971 The Industrial History of Dean, Newton Abbot.


Hughes, W J 1968 A Century of Traction Engines, Newton Abbot.


Karau, P & Turner, C 1982 The Wallingford Branch, Upper Bucklebury.


Middlemiss, F A & Knowles, L 1959 *The Lower Greensand of the Hindhead area of Surrey and Hampshire*, *Proc Geol Ass* 69: 205-238.

Mitchell, V & Smith, K 1994 Reading to Basingstoke, Midhurst.


For the sake of brevity, churches are mainly identified in the text simply by location and the starting date of construction, e.g. Winchester (1845) (i.e. St. Thomas and St. Clement, Southgate Street, 1845–6, 1857). Note that the coastal conurbation and its late churches was not included in the survey but is mentioned in places.

Author: J.R.L. Allen, Department of Archaeology, School of Archaeology, Geography and Environmental Science, Wayer Building, The University of Reading, PO Box 227 Whiteknights, Reading RG6 6AB. Email: j.r.allen@reading.ac.uk

© Hampshire Field Club and Archaeological Society

GAZETTEER OF CHURCHES

ABINGDON, St. Mary and St. Edmund (for RCs) (SU 501975), 1857 G. Colditz, Corallian sandstone, Bathstone dr.

Abingdon, St. Michael and All Saints (SU 491972), 1864–7 Sir G.G. Scott; Corallian sandstone, Bathstone dr.

Aldershot, All Saints (SU 863510), 1863 P.C. Hardwick; red brick, Bathstone dr.
Aldershott, St. Augustine (SU 879504), 1907 Sir T.G. Jackson; red brick, some Bathstone dr.,
Aldershott, St. George (SU 865519), 1892 Major Pitt & Lt. Mitchell; red brick, Bathstone dr.
Aldershott, Holy Trinity (SU 867505), 1875–9 Sydney Stapley; Bargate stone, Bathstone dr.
Aldershott, St. Joseph (for RCs) (SU 860506), 1912–13 George Drysdale; Italianate polychrome brick, Portland limestone dr.
Aldershott, St. Michael (SU 869499), south aisle 1865, nave and north aisle 1910–11 Sir T.G. Jackson; flint with Bathstone dr., later yellow brick with Bathstone dr.
Alton, All Saints (SU 717996), 1873–4 F.C. Dyer, tower and spire 1881; random chalk, flint, Bathstone and ironstone dr.
Andover, St. Mary (SU 366467), 1840–44 Augustus F. L瀛ecox; squared flint, Caenstone and some Bathstone dr.
Arborfield, St. Bartholomew (SU 748678), 1863 J.A. Picton; flint, Bathstone dr.
Ardington, Holy Trinity (SU 439883), steepie 1856 Joseph Clarke, nave extended 1887 G.S. Clarke and A.B. Allin; Corallian sandstone and some limestone, Bathstone dr.
Ascot, All Saints (SU 912688), 1864 T.H. Rushforth; red brick, Bathstone dr.
Ascot, St Francis (for RCs) (SU 924673), 1889 Canon A.J.C. Scoles; red brick
Ascot Heath, All Saints (SU 912688), 1864 T.H. Rushforth; red brick
Ashe, Holy Trinity and St. Andrew (SU 535500), 1877–8 G.C. Scott jun.; flint, Swindon stone dr.
Avington, St. Mary (SU 553323), 1768–71 architect unknown; red brick, Portland limestone dr.
Awbridge, All Saints (SU 923234), 1876 John Colson; Swanage stone, Bathstone dr.
BARKHAM, St. James (SU 783664), tower and nave 1860–1 J.B. Clary & Son, chancel and transepts 1887; early flint and Bathstone dr., later Pennant sandstone and Bathstone dr.
Basingstoke, All Saints (SU 636517), 1915 Temple Moore, mixed Bathstone ashlar and dr.
Basingstoke, Holy Ghost (for RCs) (SU 634527), 1902 Canon A.J. Scobie; flint, Bathstone dr.
Basingstoke, St. Mary (SU 641522), chancel 1770, chancel extension 1880, nave 1912 Sir T.G. Jackson; nave and first chancel flint and some Bargate stone, chancel extension red brick, Bathstone dr.
Basingstoke, chapel St. Thomas's Home (SU 634531), 1884–5 Henry Woodyer; red brick, Mansfield stone dr.
Baughurst, St. Stephen (SU 582600), 1845 Benjamin Ferrey; flint with re-used oolite, chalk, sarsen and ironstone, Bathstone dr
Bear Wood, St. Catherine (SU 780692), 1846 J.H. Good; Bathstone ashlar
Beech Hill, St. Mary (SU 697644), 1867 William Butterfield; exuberant brick and squared flint, Bathstone dr.
Beenham, St. Mary (SU 590684), 1793 tower, nave and aisles 1859–60 Henry Woodyer, chancel 1871; flint, Bathstone dr.
Benson, St. Helen (SU 614916), 1862 Charles Buckridge, tower 1765–81; chancel 1862 flint with Bathstone dr.; tower shelly limestone
Binfield, St. Mark (SU 845722), 1866 Sir A. Blomfield; red and black brick, Bathstone dr.
Bix, St. James (SU 728852), 1874 J. Gibson; flint, Bathstone dr.
Blackmoor, St. Matthew (SU 780355), 1868 Alfred Waterhouse; chalk ashlar, Bathstone dr.
Blendworth, Holy Trinity (SU 711136), 1851–2 W.G. & E. Habershon; flint, Caenstone and Bathstone dr.
Bourton, St. James (SU 231871), 1860 J.W. Huggall; Portland Group limestone, Bathstone dr.
Bosshingst, St. James (SU 336309), 1890 architect unknown; flint, Caenstone dr.
Bracknell, Holy Trinity (SU 875693), 1851, 1859 Coe & Goodman; flint, Bathstone dr.
Bracknell, St Michael and St. Mary Magdalene (SU 863676), 1866–7 J.W. Huggall; Bathstone ashlar and dr.
Bradfield, St. Andrew (SU 603726), 1847–8 Thomas Stevens and Sir G.G. Scott; flint, Bathstone dr.
Bradley, All Saints (SU 636418), 1877 John Colson; flint, Bathstone dr.
Brisfield, All Saints (SU 372524), 1855 William Butterfield; red and grey brick, Bathstone dr.
Brandean, St. Simon and St. Jude (SU 609277), mostly C19 architect unknown; rendered brick, flint, Caenstone dr.
Bramshott, St. Mary (SU 843328), 1872 S.S. Capes; Hythe Beds, Bathstone dr
Bramshott, Immaculate Conception (for RCs) (SU 838322), 1911 Canon A.J. Scobie & G. Raymond; Hythe Beds, Bathstone dr.
Brightwalton, All Saints (SU 426793), 1862–3 G.E. Street; Bisley Common stone, Bathstone dr.
Brinptom, St. Peter (SU 557646), tower 1748, 1869–72 John Johnson; flint-faced brick tower, flint, Bathstone dr.
Brown Candover, St. Peter (SU 582997), 1845 T.H. Wyatt; squared flint, Bathstone dr.
Buckland, St. George (for RCs) (SU 349281), 1846–8 Charles Hanham; Corallian limestone
Burghclere, Ascension (SU 469610), 1838 G. Guillaume, remodelled with chancel 1875 W.G. Adey
& M. Shaw; flint (early squared), Bathstone dr. with panels of assorted slates on later walls
Burghfield, St. Mary (SU 671684), 1843 J.B. Clacy
chancel 1892 G.F. Bodley & Carner; Romanesque, early grey and red brick, later Bathstone ashlar, Bathstone dr.
Caversham, St. Andrew (SU 706757), 1910 J. Haslam & F.E. Rawnsryth; Bargate stone, Bathstone dr.

Caversham, Our Lady and St. Anne (for RCs) (SU 717874), 1902 G. Raymond; red brick, Bathstone dr.

Caversham, St. John the Baptist (SU 722745), 1887 F.P. Warren; flint, chequered with Bathstone, Bathstone dr.

Charlton, St. Thomas (SU 351470), 1908 H.C. Benson; squared flint, Bathstone dr.

Chawton, St. Nicholas (SU 707370), 1871 Sir A. Blomfield; flint with inset blocks of brown sandstone, Bathstone dr.

Chieveley, St. Mary (SU 477471), nave 1873 J.W. Huggins; flint and assorted re-used stone, Bathstone dr.

Christmas Common, The Nativity (SU 714930), 1889 Walter Caver; red and grey brick

Church Crookham, Christ Church (SU 808508), 1841 James Harding; chancel 1876–7 Henry Woodyer; early red brick with artificial sandstone dr., chancel Bargate stone with Bathstone dr.

Clapham, St. James (SU 697168), 1875 R.R. Jones; flint, Caenstone and Bathstone dr.

Cliddesden, St. Leonard (SU 653941), 1889 W.S. Hicks; flint, Bathstone and some Swindon stone dr.

Cold Ash, St. Mark (SU 505711), 1864–5 C.N. Beazley; red brick, Bathstone dr.

Compton, St. Mary and St. Nicholas (SU 526796), 1849–50 William Brown north aisle 1904–6 J.O. & C.M.O. Scott; flint with inset Bathstone blocks, Bathstone dr.

Cookham Dean, St. John the Baptist (SU 871851), 1844 R.C. Carpenter; flint, Bathstone dr.

Cove, St. John the Baptist (SU 850611), 1844 G. Alexander; Romanesque sarsen with ironstone, Bathstone dr.

Cranbourne, St. Peter (SU 926722), 1849 Benjamin Ferreyouth chapel c. 1866; flint Bathstone dr., chapel with red brick bands

Crowthorne, St. John the Baptist (SU 841642), 1873 Sir A. Blomfield; red brick, Bathstone dr.

Crux Easton, St. Michael (SU 425569), 1775 architect unknown; red and blue brick, Portland limestone dr.

Deane, All Saints (SU 546503), 1818 architect unknown; trompe l'oeil render on yellow brick, Coade stone dr.

Denmead, All Saints (SU 658122), 1889 C.R. Fink & S. Finsler; flint with Bathstone and red brick dr.

Didcot, St. Peter (SU 529899), 1890–7 G.W. Bourn; tower Alfred Waterhouse; Corallian sandstone, Bathstone dr.

Dogmersfield, old church? All Saints (SU 776515), 1866 architect unknown; red brick, wooden dr.

Dogmersfield, All Saints (SU 781526), 1845 Benjamin Ferrey; chalk ashlar, Caenstone dr.

Dry Sandford, St. Helen (SU 467004), 1855 J.B. Clacy; Corallian sandstone, Bathstone dr.

Dunsden and Eye, All Saints (SU 732774), 1842 J. Turner; grey brick, Bathstone dr.

Eastbury, St. James the Greater (SU 345772), 1851–3 G.E. Street; flint with scattered blocks of calcareous sandstone, Bathstone dr.

East Dean, St. Winifred (SU 279267), mostly Victorian architect unknown; red and grey brick, wooden dr.

East Hanney, St. James the Less (SU 419930), 1856 G.E. Street; Corallian sandstone Bathstone dr.

East Hendred, St. Mary (for RCs) (SU 461885), 1865 C.A. Buckler; Bathstone ashlar and dr.

East Stratton, All Saints (SU 541401), 1885–90 Sir T.G. Jackson; flint, Chilmark-Tisbury stone dr.

East Tisted, St. James (SU 701323), 1846 architect unknown; squared flint, Bathstone with some chalk and Caenstone dr.

East Tytherley, St. Peter (SU 292289), mostly Victorian externally architect unknown, tower 1897–8; flint and some re-used oolite, greensand and Chilmark-Tisbury stone, Bathstone dr.

Elstead, St. Mary (SU 583564), 1810–12 architect unknown; wooden dr.

Eton, St. Mary (SU 816498), 1873 architect unknown; tower flint and Bargate stone, Bathstone dr.

Farleigh Wallop, St. Andrew (SU 625475), mostly 1871–2 architect unknown, tower 1873; tower flint
with Chilmark-Tisbury stone dr., otherwise squared flint with mixed brick and Bathstone dr.  

**Farnborough (North Camp),** St. Mark (SU 873542), 1881–93 J.E.K. & J.P. Cutts; red brick, Bathstone dr.  

**Fawley,** St. Mary (SU 753867), chancel 1748 William Fawley, transept 1885; flint, Bathstone dr.  

**Fernham,** St. John (SU 309919), 1861 J.W. Woodall; flint with mixed brick and Bathstone dr., otherwise squared flint with mixed brick and Bathstone dr.  

**Ferrieh,** St. John the Evangelist (SU 797902), 1849 J.P. Harrison, south aisle 1872 H. Woodyer; flint, Bathstone and Caenstone dr.  

**Foxfield,** St. Peter-on-the-Green (SU 703288), 1887 Sir A. Blomfield; flint, Bathstone dr., Bathstone and Caenstone dr. lined.  

**Fyfield,** St. Nicholas (SU 295464), 1846–7, architect unknown; flint with brick bands, Chilmark-Tisbury stone dr.  

**Goring,** Our Lady and St. John (for RCs) (SU 879780), 1898 William Ransome; red brick, Bathstone dr.  

**Grayshott,** St. Joseph (for RCs) (SU 864354), 1911 F.A. Water; Bargate stone (Hythe Beds), Bathstone dr.  

**Grayshott,** St. Luke (SU 873853), 1901 J’Anson & Son; Hythe Beds and dr.  

**Grazley,** Holy Trinity (SU 696669), 1850 B. Ferney; flint, Bathstone dr.  

**Greatham,** St. John the Baptist (SU 773904), 1875 H. & A.P. Fry; spire 1897; random chalk, Bathstone dr.  

**Greatley,** St. Mary (SU 391814), 1866 G.E. Street; Bisley Common stone, Bathstone dr.  

**Greenham,** St. Mary (SU 485646), 1875–6 Henry Woodyer; squared flint, Bathstone dr.  

**Hartford Bridge,** All Souls (SU 777578), 1876 George Birch; painted clapboard.  

**Hartley Westrall,** St. Mary (SU 698583), 1868–9 G.G. Scott jnr; flint, Bathstone dr.  

**Hartley Wintney,** St. John Evangelist (SU 767565), 1869–70 E.A. Laxton; chancel enlarged 1897; red brick, polychrome brick dr.  

**Hatfield,** Holy Trinity (SU 399949), 1873–4 W. Wigginton; Lower Carboniferous limestone, Bathstone dr.  

**Hatherden,** Christ Church (SU 344503), 1857 William White; flint with brick bands, brick and Bathstone dr.  

**Hawley,** St. Peter and St. Paul (SU 746299), 1865 S.S. Teulon; Romanesque, Sampson’s tower, random chalk, Bathstone dr.  

**Hawley,** Holy Trinity (SU 853594), 1857 J.B. Clacy; 1883 C. Bucheridge; red and blue brick, Bathstone dr.  

**Headley,** St. John the Baptist (SU 515626), 1867–8 Edwin Dolby; red and blue brick, Bathstone dr.  

**Headley,** St. Mark (SU 829263), 1859 Fleeton of Sheffield; Hythe Beds, malmstone (Upper Greensand) dr.  

**Heathlands,** St. Sebastian U (SU 825654), 1864 William Butterfield; red and blue brick, Bathstone malmstone (Upper Greensand) dr.  

**Henley-on-Thames,** Holy Trinity (SU 758923), 1848 Benjamin Ferrey, 1891 W.T. Loudell; aisles, vestry and baptistry; flint, Bathstone dr.  

**Hermitage,** Holy Trinity (SU 507729), Adelaide Chapel 1835 William Elliott, chancel and vestry 1887 Maurice Hulbert; Romanesque, whitewashed brick and render.  

**High Cross,** St. Peter (SU 712266), 1862 E.H. Martin; flint, Bathstone dr.  

**Highclere,** St. Michael (SU 440603), 1869–70 Sir G.G. Scott; flint, Bathstone dr.  

**Highmoor,** St. Paul (SU 700845) 1859 Joseph Morris; flint, Bathstone dr.  

**Hungerford,** St. Lawrence (SU 334686), c. 1816 J. Pinn; Bathstone ashlar and dr.  

**Hursley,** All Saints (SU 492852), 1846–7 J.P. Harrison; Swanage stone, flint (tower), Bathstone and Caenstone dr.  

**Itchen Abbas,** St. John the Baptist (SU 534307), 1863, 1867, 1883 William Coles; Romanesque flint, dr. of Bathstone, Caenstone, some Portland limestone.  

**Itchen Stoke,** St. Mary (SU 561316), 1856 Henry Compton; Bargate stone, Bathstone dr., nook shafts Uttoxeter/Mansfield stone, rich interior.  

**Kennington,** St. Swithin (SP 523023), 1828 D. Robinson; Corallian sandstone, shelly limestone dr.  

**Kidmore End,** St. John the Baptist (SU 698753), 1852, Arthur Billing; split flint nodules, Bathstone dr.  

**Kingsclere Woodlands,** St. Paul (SU 549621), 1845 Thomas Hellyer; tower and spire 1860; squared flint, Bathstone dr.  

**Kingsley,** All Saints (SU 788985), 1876 architect unknown; random flint with ironstone bands, Bathstone with ironstone panels.  

**Kingsley,** St. Nicholas (SU 770364), 1778 architect unknown; red brick, some ironstone.  

**Kingston Bagpuize,** St. John the Baptist (SU 407981), 1799–1800 John Fide; Corallian sandstone and Bathstone.  

**Kings Worthy,** St. Mary (SU 493293), 1864 mostly John Colson, south aisle 1884; flint, Caenstone dr. early, Bathstone later.  

**Knowl Hill,** St. Peter (SU 824795), 1839–41 J.C. &
C. Buckler, chancel 1870; W. Scott Champion, carly red brick, chancel flint, Bathstone dr.

LANE END, Holy Trinity (SU 806916), 1877, John Oldrid Scott, Bathstone dr.

Lasham, St. Mary (SU 676426), 1866, Henry Woodyer, Bathstone dr.

Laverstoke, St. Mary (SU 487488), 1896, J.L. Pearson, Bathstone dr.

Leckhamstead, St. James (SU 429769), 1858-60, S.S. Teulon, Bathstone dr.

Linkenholt, St. Peter (SU 363580), 1871, William White, Bathstone dr.

Littlewick Green, St. John the Evangelist (SU 841812), 1893, E.J. Shrewsbury, Bathstone dr.


Little Wittenham, St. Peter (SU 566935), 1863, C. Buckleridge, Bathstone dr.

Lockley, St. John the Evangelist, 1889-90, John Colson, Bathstone dr.

Longstock, St. Mary (SU 359371), 1880, William White, Bathstone dr.

MAIDENHEAD, All Saints (SU 877808), 1854-7, flint with red brick bands, Bathstone dr.

Maidenhead, St. Joseph (for R.Cs) (SU 887816), 1884, L. Stokes, Bathstone dr.

Maidenhead, St. Luke (SU 886816), 1866-70, G.R. Clarke, Bathstone dr.

Maidenhead, St. Mark (SU 878148), 1875, C. Cooper, Bathstone dr.

Maidenhead, St. Paul (SU 885810), 1887-9, E.J. Shrewsbury, red and yellow brick.

Maidenhead, St. Peter (SU 876826), 1897, E.J. Shrewsbury, Bathstone dr.

Marcham, All Saints (SU 452968), 1837, W. Fisher, Bathstone dr.

Marlow, All Saints (SU 851862), 1832-5, G.F. Inwood, Bathstone dr.

Marlow, Holy Trinity (SU 849869), 1852, Sir G.G. Scott, Bathstone dr.

Marlow, St. Peter (SU 852863), 1845-8, A.W.N. Pugin, Bathstone dr.

Marlston, dedication unknown (SU 529719), 1855, William Butterfield, Bathstone dr.

Midgham, St. Matthew (SU 555672), 1867, John Johnson, Bathstone dr.

Milton, St. Blaise (SU 485824), 1849-51, Henry Woodyer, Bathstone dr.

Minley, St. Andrew (SU 825580), c. 1871, Henry Clutton, Bathstone dr.

Monkton, St. Mary (SU 313445), 1854, Henry Woodyer, Bathstone dr.

Mortimer West End, St. Saviour (SU 633666), 1855-6, Richard Armstrong Swr, Bathstone dr.

Moulsoford, St. John the Baptist (SU 591842), 1846, Sir G.G. Scott, Bathstone dr.

NETTLEBED, St. Bartholomew (SU 608867), 1845-6, Henry Hakeswell, Bathstone dr.

Newbury, Old St. Joseph and the Sacred Heart (for R.Cs) (SU 475677), 1864, architect unknown, Bathstone dr.

Newnham, St. Nicholas (SU 703559), 1847, architect unknown, Bathstone dr.

Newtown, St. Mary and St. John the Baptist (SU 477637), 1865, Henry Woodyer, Bathstone dr.

New Winkley, St. John the Evangelist (SU 515046), 1900, Bucknell & Comper, Bathstone dr.

North Waltham, St. Michael (SU 560464), 1865-6, John Colson, Bathstone dr.

Northington, St. John Evangelist (SU 56374), 1887-8, Richard Jackson, Bathstone dr.

Old Alresford, St. Mary (SU 588397), 1753, John Colson, Bathstone dr.

Old Windsor, St. John the Evangelist (SU 567504), 1860, T.H. Wyatt, Bathstone dr.

Old Watlington, St. Mary (SU 588397), 1753, John Colson, Bathstone dr.

Old Windsor, St. John the Evangelist (SU 567504), 1860, T.H. Wyatt, Bathstone dr.

Over Wallop, St. Peter (SU 284388), 1866, chancel and tower, J.L. Pearson, Bathstone dr.

Oxon, St. Barnabus (SU 458770), 1843, W.
Cowder, chancel 1865 G.E. Street; blue-grey and some reddish brick, Bathstone dr.
Petersfield, St. Laurence (for RCs) (SU 745296), 1890–1 Kelly; Italianate, dark red brick
Fisheal, dedication unknown (SU 727898), 1854 architect unknown; flint and re-used stone (oolite, sarsen, ironstone), Bathstone dr.
Preston Candover, St. Mary (SU 607416), 1884 Sir A Blomfield; flint with red brick bands, red brick and Bathstone dr.
Privett, Holy Trinity (SU 676269), 1876–8 Sir A. Blomfield; flint, Bathstone dr., internally lined
Bathstone and Uttoxeter/Mansfield stone, mosaic floors
Purley, St. Mary (SU 667761), 1870 G.E. Street; flint, Bathstone dr.
Ramsdele, Christ Church (SU 589574), 1867 John Colson; flint with bands red and blue brick; Bathstone and some brick dr.
Reading, All Saints (SU 705729), 1865–74 J.P. St Aubyn, chancel 1889–90, vestry 1896; Pennant sandstone, Uttoxeter sandstone nook shafts, Bathstone dr
Reading, Christ Church (SU 722722), 1861–2 Henry Woodyer, 1874; Pennant sandstone, Bathstone dr.
Reading, Holy Trinity (SU 708754), 1845–6 J.J. Billing; Bathstone and red brick
Reading, St Bartholomew (SU 736733), 1877–80 Alfred Waterhouse, 1881 chancel G.F. Bodley, 1897; blue and red brick
Reading, St. Giles (SU 716729), 1875 J.P. St Aubyn; flint, Bathstone dr.
Reading, St. James (SU 720736), 1857–40 A.W.N. Pugin; flint, Bathstone dr.
Reading, St. John the Evangelist (now Polish Catholic Church of the Sacred Heart of Jesus) (SU 723792), 1879–2 W.A. Dixon; Kentish rag, Bathstone and Mansfield stone dr.
Reading, (Old) St. John the Evangelist (SU 723792), 1857 R. Ebbels; Bathstone ashlar
Reading, St. Luke (SU 729728), 1882 J.P. St Aubyn; red brick
Reading, St. Mark (SU 696733), 1902–4 E.B. Hoare & M. Wheeler; red brick, Bathstone dr.
Reading, St. Peter (SU 745722), 1844 J. Turner, aisles and south porch Henry Woodyer c. 1863, transepts 1882–3 Francis Bacon; grey brick, Bathstone dr.
Reading, St. Saviour (SU 710726), 1887 F.W. Albury; red brick, Bathstone dr.
Reading, St. Stephen (SU 729734), 1864–6 W. White, red and yellow brick
Reading, St. William of York (SU 738793), 1905 G. Raymond & Canon A.J.C. Scales; red brick, Bathstone dr.
Ropley, St. Peter (SU 646320), mostly 1896 J. Oldrid Scott; flint, Bathstone some Caenstone dr.
Rotherfield Greys, dedication unknown (SU 726823), 1865 W. Woodman; flint, Bathstone dr.
Rotherfield Peppard, All Saints (SU 713817), 1874 W.S. Champions; flint, Bathstone dr., tower with flint and stone chequers
Rowlands Castle, St. John (SU 726100), 1838 Jacob Owen, aisles and new chancel 1853; flint, Caenstone, Bathstone and some brick dr.
Sandhurst, St. Mary (SU 836317), 1889 architect unknown; red brick
Sandhurst, St. Michael and All Angels (SU 825619), 1892–4 G.E. Street, north aisle and enlarged chancel 1885 W. Woodman, vestry and north porch 1887 W. Ravenscroft; Bargate stone, Bathstone dr.
Sandhurst, Chapel, Royal Military Academy (SU 857609), Lt. Henry Cole 1879; (broadly) Romanesque, red and blue brick
Shalden, St. Peter and St. Paul (SU 693417), 1865 John Colson; flint, Bathstone dr.
Shaw cum Donnington, St. Mary (SU 475685), 1840–42 J. Hanson, chancel 1878 William Butterfield; Romanesque, early Bathstone ashlar, chancel flint and Bathstone dr.
Sheff, St. Mary (SU 757246), 1869 Sir A. Blomfield; Bargate stone, Bathstone dr.
Sherfield-on-Loddon, St. Leonard (SU 672568), mostly 1866 W. Woodman steeple 1872 J.W. Hugall, squared flint, Bathstone dr.
Shippon, St. Mary Magdalen (SU 481980), 1855 Sir G.G. Scott; Corallian sandstone, Bathstone dr.
Shipston Bellinger, St. Peter (SU 234544), mostly 1879 R.J. Wakers; flint, Chilmark-Tisbury stone dr.
Shilrowe Row, All Saints (SU 837492), 1870 John Sharp; red and black brick, Bathstone dr.
Smithson, Christ Church (SU 380489), 1857 William White; flint, red brick bands, brick and Bathstone dr.
Sotwell, St. James (SU 586906), 1884 S.R. Stephenson; sarsen, Bathstone dr.
South Tidworth, St. George and St. Patrick (for RCs) (SU 253484), 1912 G.L.W. Blount; flint, Bathstone dr.
South Tidworth, St. Mary (SU 235747), 1879–80 John Johnson; Bargate stone, Bathstone dr.
South Tidworth, St. Michael (SU 234245), 1912 Douglas Heyland; peachy beige terracotta
Speen, St. Mary the Virgin (SU 455677), 1860 T. Thomas Helyer; flint with inserted blocks of Pennant sandstone and Bathstone, Bathstone dr.
Spencers Wood, St. Michael (SU 714666), 1908 S. Slingsby Stallwood; red brick, Bathstone dr.
Stockbridge, St. Peter (SU 356358), 1866 John Colson, steeple 1877; flint, Bathstone dr.
Stockcross, St. John (SU 439685), 1839 architect unknown, chancel lengthened 1864; blue brick, Bathstone dr.

Stoke Row, St. John Evangelist (SU 678840), 1846 R.C. Hussey; flint, Bathstone dr.

Stratfield Mortimer, St. Mary the Virgin (SU 668641), 1866–9 Richard Armstrong Sr.; Swindon stone, Bathstone dr.

Stratfield Mortimer, St. John the Evangelist (SU 654646), 1882 Richard Armstrong Jr., nave chancel tower 1896 S. Harris; red brick, Bathstone dr.

Stratfield Saye, St. Mary (SU 695613), 1754–8 architect unknown; red brick, brick and Bathstone dr.

Stratfield Turgis, All Saints (SU 690599), chancel 1790 architect unknown; red brick.

Streatley, St. Mary (SU 594809), 1865 C. Buckridge, flint, Bathstone dr.

Stubbings, St. James the Less (SU 850807), 1850–4 R.C. Carpenter; flint, Bathstone dr.

Sulham, St. Nicholas (SU 646743), 1836–8 John Wilder, 1875; flint, Caenstone dr.

Sunningdale, Holy Trinity (SU 958765), chancel 1860 G.E. Street, 1897–8 J. Oldrid Scott; exuberant red and blue brick with Bathstone, Bathstone dr.

Sunninghill, St. Michael and All Angels (SU 943576), north aisle 1808, 1826–7 Richard Hayter & James Pither; yellow and red brick, Bathstone dr.

Swanmore, St. Barnabas (SU 576164), 1846 Benjamin Ferrey, south aisle and tower 1875–7; Romanesque (1846), flint, Bathstone dr.

Sydmonton, St. Mary the Virgin (SU 485578), 1855 architect unknown; flint, Bathstone dr.

Tangleay, St. Thomas (SU 394524), 1875 William White 1898 steeple; early flint with tile bands and Chilmark-Tisbury stone dr., later ashlar of Chilmark-Tisbury stone.

Theale, Most Holy Trinity (SU 640713), 1820–2 E.W. Garbett, tower 1827–32 J. Buckler; Bathstone ashlar, Pennant sandstone plinth and some dr.

Tilehurst, St. George (SU 691756), 1855–6 S.G. Parry, chancel 1893, red and blue-grey brick, Bathstone dr.

Tilehurst, St. Michael (SU 674729), 1856 G.E. Street, flint with brick bands, Bathstone dr.

Touchen End, Holy Trinity (SU 870762), 1862 J. Turner; red brick, Bathstone dr.

Tubney, St. Lawrence (SU 436992), 1844–7 A.W.N. Pugin; Corallian sandstone, Bathstone dr.

Tunworth, All Saints (SU 673484), 1854–5 Henry Woodyer; flint, Bathstone dr.

Turl, St. Mary (SU 767911), Victorian externally architect unknown; flint with Bathstone and Chilmark-Tisbury stone dr.

Twyford (Berks), St. Mary (SU 788759), 1848 Benjamin Ferrey, north aisle transept porch 1882–4, chancel and nave extended 1908–20 S. Stingly Stallwood; flint, Bathstone dr.

Twyford (Hants), St. Mary (SU 482251), 1876–7 Alfred Waterhouse; flint and red brick, chequered in tower, Bathstone dr.

Upton Nervet, St. Peter (SU 685674), 1861–2 Richard Armstrong Sr.; Pennant sandstone, Bathstone dr.

Upham, St. Mary (SU 558206), C18 tower, 1881 G.E. Street; tower blue and red brick with Caenstone dr., later flint with Bathstone dr.

Upnately, St. Stephen (SU 700319), 1844 architect unknown; red and blue brick, flint panels, Bathstone dr.

Vernham Dean, St. Mary (SU 349569), 1851 A. Ashpitel/J.M. Rawlins; flint blue brick bands, Bathstone dr.

Wallingford, St. Leonard (SU 609891), 1849 Henry Hakewell; Corallian sandstone, Bathstone dr.

Wallingford, St. Mary the More (SU 606894), 1854 D. Brandon; flint, Bathstone dr.

Wallington, St. Leonard (SU 684947), 1877 H.J. Tollit & E. Dobly; flint, Bathstone dr.

Watchfield, St. Thomas (SU 245903), 1858 G.E. Street; Coral Rag, Bathstone dr.

Welford, St. Gregory (SU 409781), 1852–5 T. Talbot Bury; flint some squared, Bathstone dr.

West Meon, St. John the Evangelist (SU 639240), 1843–6 Sir G. G. Scott; squared flint with Caenstone dr.

West Tytherley, dedication unknown (SU 277297), 1833 G. Gathro, chancel 1877; red and grey brick with flint in tower, chancel Swanage stone, Bathstone dr throughout

West Woodhay, St. Laurence (SU 391631), 1883 Sir A. Blomfield, nave lengthened 1894; flint, squared flint and Bathstone dr.

Weston Patrick, St. Laurence (SU 691468), 1868 T.H. Wyatt; flint, Bathstone dr.

Weyhill, St. Michael (SU 527466), mostly 1864 Henry Hakewell; flint brick bands Bathstone dr.

Wetherell, St. Peter and the Holy Cross (SU 391408), 1856–8 Henry Woodyer; flint, Bathstone dr.

Whitchurch (nr. Pangbourne), St. Mary (SU 635770), 1858 Henry Woodyer; flint, Bathstone dr.

Whitechurch (nr. Andover), All Hallow (SU 460477), 1866 Benjamin Ferrey; flint, Bathstone dr.

Whitchurch Hill, St. John the Baptist (SU 638789), 1883 Francis Bacon; flint, Bathstone dr.

Wickham, St. Swithin (SU 394716), nave chancel 1845–9 Benjamin Ferrey; squared flint, Bathstone dr.

Wield, St. James the Apostle (SU 629827), mostly 1884–5 architect unknown; flint, much render
Winchester, All Saints (SU 489289), 1890–8 J.L. Pearson; flint, Bathstone dr.
Winchester, Christ Church (SU 476292), 1861 E. Christian; Swanage stone, Bathstone dr.
Winchester, Holy Trinity (SU 484297), 1853–4 Henry Woodyer; flint, Bathstone dr.
Winchester, St. Maurice (SU SU479306), 1842 W. Gover; grey brick
Winchester, St. Michael (SU 481291), 1881–90 mostly William Butterfield; flint, Bathstone dr.
Winchester, St. Paul (SU 479297), chancel 1872, nave and transepts 1889 all John Colson; aisles 1902 1910 J.B. Cobson; flint, Bathstone dr.
Winchester, (Old) St. Peter (for RCs) (SU 482297), 1792 J. Carrier; red brick and render, Bathstone dr.
Winchester, St. Thomas and St. Clement (SU 478299), 1845–6 steeple 1857 E.W. Elmslie; Swanage stone, Caenstone dr.
Windsor, All Saints (SU 976762), 1862–4 Sir A. Blomfield; red and blue brick, Bathstone dr.
Windsor, Chapel House of Mercy (SU 952762), 1878–81 Henry Woodyer; red brick, dr. Uttoxeter sandstone and terracotta
Windsor, Holy Trinity (SU 963764), 1842–4 E. Blore; yellow brick, Bathstone dr.
Windsor, St. Agnes (SU 956759), 1874 architect unknown; brick
Windsor, St. Edward (for RCs) (SU 962764), 1867–8 C.A. Buckler; Kentish rag, Bathstone dr.
Windsor, St. John the Baptist (SU 969768), 1820–2 C. Holid, chancel 1869–73 S.S. Teulon; Bathstone ashlar, chancel sarsen
Windsor, St. Saviour (SU 968771), 1876 S. Wyborn; brick
Windsor, St. Stephen (SU 959769), 1874 Henry Woodyer; yellow brick, Bathstone dr.
Winall, St.Martin (SU 489307), 1858 William Coles; flint
Winlade, St. Mary tower (SU 654481), c. 1850, architect unknown; red and yellow brick, render, artificial stone dr.
Wokingham, All Saints (SU 814688), aisles and chancel 1864–6 Henry Woodyer; Bargate stone, Bathstone dr.
Wokingham, St. Paul (SU 805690), 1862–4 Henry Woodyer; aisles 1874; Pennant sandstone, Bathstone dr.
Woodcote, St. Leonard (SU 645822), 1846 H.J. Underwood; Romanesque, flint, Bathstone dr.
Woodcott, St. James (SU 435348), 1853 architect unknown; squared flint, Bathstone and some Portland limestone dr.
Woodley and Sandford, St. John the Evangelist (SU 768737), 1871–3 Henry Woodyer; flint, Bathstone dr.
Woodlands St. Mary, St. Mary the Virgin (SU 335349), 1851 T. Talbot Bury; flint with inset Pennant blocks, Bathstone dr.
Woodmancott, St. James (SU 562424), 1855 John Colson; flint, Caenstone dr.
Woollampton, St. Peter (SU 577677), 1861 John Johnson; flint, Bathstone dr.
Wootton Hill, St. Thomas (SU 429616), 1849 T.H. Wyatt; flint, Bathstone dr.
Wootton St. Lawrence, St. Lawrence (SU 592532), 1864 John Colson; flint, Bathstone dr.
Worning, St. Thomas of Canterbury (SU 600518), 1848 Henry Woodyer; flint, Caenstone dr.
Wytham, All Saints (SP 474086), 1811–12; Coral rag and Corallian limestone re-used from Cumnor Place