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Of Saints, Sows or Smiths?

Copper-Brazed Iron Handbells in Early Medieval England

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Copper-brazed iron handbells[3] were a distinctive feature of monastic life in Early Medieval Ireland, Scotland and Wales. Handbells were used in liturgy, prayer, worship, and later as reliquaries. In England, brazed bells of the 7th to 9th centuries take on a greater range of sizes and forms and are found on a wider variety of sites. As a consequence, their roles within Christianity have been questioned, and associations with animals and itinerant smiths have been emphasised instead. Recent archaeological investigation of an Anglo-Saxon marsh-island at Little Carlton, Lincolnshire has resulted in one of the largest assemblages of copper-brazed iron bells from any site in England, comparable to similar collections from Flixborough and Brandon. Taking into consideration the inclusion of brazen bells in some ritualistic 'closure hoards', this paper argues that whilst Anglo-Saxon plain iron bells may have fulfilled a range of profane functions, those that were copper-brazed, regardless of their size, were important objects amongst early Christian communities in England, and the Northumbrian church in particular.

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[3] The term 'handbell' is used throughout this paper for any portable bell made from folded and riveted iron sheeting. Whilst it is argued many were intended to be held in the hand and rung, this is not to say others were not used for other purposes, dependent on context. However, all of the so-called handbells discussed here differ markedly from 'hanging bells' that were cast from copper alloys, were generally of a much larger size, and were designed to be hung and rung within fixed wooden frames or towers.

INTRODUCTION

Handbells are a relatively overlooked class of Early Medieval material culture in England, largely due to their relative scarcity in the archaeological record. However, significant assemblages of iron bells decorated with copper brazing have started to be recognised at Flixborough (Ottaway 2009), Brandon (Riddler 2014; Rogers 2014), and most recently Little Carlton (Willmott et al. in prep.), as well as individual finds in tool hoards (e.g. Ottaway & Cowgill 2009), and the putative smith's grave at Tattershall (Hinton 2000). Discussions of brazen bells have often focused around the technology behind their production (Corfield 1993; Stevens 2009), and in England there has been some limited debate as to their function and wider significance (e.g. Ottaway 1992, 558).

However, thus far there has been no attempt to review archaeological evidence for the English corpus as a whole, and place them within their wider historical, contextual and landscape setting so that their purpose may be better understood. Indeed, Bourke's seminal work on Irish and Scottish brazen bells have located them as active agents firmly at the heart of an early Insular Christian ritual tradition (Bourke 1980; Bourke 1983; Bourke 2013). Although clearly deriving from a different cultural context, brazen bells found in England can be argued to be imbued with similar symbolic meaning.

Whilst in England such ecclesiastical connections might be less explicit than in Ireland, Scotland and Wales, this paper aims to demonstrate that through the careful and considered examination their context of use and deposition, brazen handbells played an equally important role within the English church, and they were not simply functional items for necks of beasts or the hands of smiths.

HANDBELLS AND THE WESTERN CHURCH

Early Medieval handbells are known to have played an important role in life within the Western Church, where documentary evidence for their use is plentiful (see Bourke 1980). The Irish *Alphabet of Devotion* (*c*. AD 600) gives us a clear impression that bells were an essential part of monastic life (Clancy & Márkus 1995, 201), and in summarising the wider literature from Ireland, Scotland and Wales, Bourke notes that the primary purpose of insular handbells was threefold: to regulate monastic time, to punctuate the liturgy, and to animate religious ritual (Bourke 2013). Their use was not just restricted to monastic life; although writing several centuries later, Gerald of Wales (*c*. AD 1146-1223) noted their continued importance when he stated;

> *Both the laity and clergy in Ireland, Scotland, and Wales held in such veneration portable bells...that they were much more afraid of swearing falsely by them than the gospels; because some from some hidden and miraculous power with which they are gifted, and the vengeance of the saint to whom they are particularly pleasing, their despisers and transgressors are severely punished* (Rhys 1908, 24).

As demonstrated here, the association, perceived or otherwise, of extant bells with specific saints stimulated the particular reverence for bells. The now lost Book of Cuanu recorded that in AD 553, sixty years after his death, the bell, goblet, and gospel of St Patrick were found in his tomb and placed in a shrine (Mac Airt & Mac Niocaill 1983, 78-9), and the alleged handbell has remained an object of veneration until the present day. Likewise, the 6th- and 7th-century Welsh saints Teilo and Illtyd were both said to possess handbells with miraculous and curative powers, as was the Scottish St. Fillian in the 8th century (Walters 1912, 6). Such veneration of saints' handbells continued into the later Middle Ages, for example at Kilmichael, Scotland where an Early Medieval bell associated with Moloag or Columba was used a reliquary in the 12th century (Caldwell et al. 2012).

The power imbued within handbells no doubt came from their close physical association with those regarded as holy, but it could also have derived from the saint's direct role in their manufacture. Most famously, St. Gildas in the 6th century was recognised as a prodigious bell maker; as well as his own he is accredited as making a bell for St. Bridget and donating another to St. Caradoc (Williams 1899, 29 & 95). The saint as the forger of that which gave voice to worship was clearly a powerful metaphor in the Western church, and one that seemed to have held resonance in other Christian contexts (see below).

The strong association between bells and the Irish church in the Early Middle Ages is further emphasised by the archaeological evidence. Ranging in size from 140mm to 310mm tall, Bourke has highlighted the clear connection between find spots of bells and early Christian sites in Ireland (Bourke 1980), and this correlation strongly suggests that handbells had a 'limited and exclusive patronage' (Stevens 2009, 98). This link between handbells and Christianity also continues in Scotland, where examples are of similar form but have a greater range in size when compared to those in Ireland, from 60mm to 326mm tall (Bourke 1983, 464).

The Scottish series of brazen bells have been interpreted as evidence for the presence of Columban monks, and the influence of the Insular church (Bourke 1983, 466). Caldwell et al. (2012, 227) note that "bells appear in some of the earliest surviving literature on the Insular Church, and that by about AD600 the bell appears to have become such an accepted part of the Christian landscape that a monk's response to its sound can be regarded as one of the distinguishing features of a life of holiness". The use to which such bells might have been put to use were as varied as calling the faithful to prayer, highlighting points of the liturgy,

and to mark the religious hours (see Arnold & Goodson 2012 for a more extensive discussion of the potential ecclesiastical uses for handbells).

Brazen handbells are also found in small numbers on the Continent, in areas also under the influence of the Insular church. Bourke (1983) has identified a cluster of six such bells in Brittany, a region known to have had close contacts with Ireland. Furthermore, he points to other occasional isolated examples further afield in Ramsach, Noyon, St Gall and Cologne (Bourke 1983, 3), and it is not unreasonable to see these as representing the ecclesiastical influence of the well-documented evangelising missions lead by Northumbrian monks such as St Willehad to Germany and Central Europe (Wood 2001, 11).

HANDBELLS IN EARLY MEDIEVAL ENGLAND

Quite whether the iron handbells found in England share the same ecclesiastical connections as seen in Ireland, Scotland, and to some extent Wales, is unclear. English iron handbells take on a much greater range of sizes, and the forms encountered do not share many parallels with the insular Irish type, which together with those from Scotland and Wales form a homogenous group (Bourke 1983, 464). The latter are quadrangular and were made from a single sheet of iron coated with bronze (Bourke 1980, 53). Complete examples of sheet iron bells from England are rare but demonstrate a range in size from 37mm to at least 170mm tall (see Table 1). While the quadrangular form is encountered, albeit on a reduced scale, many other examples have 'hunched' shoulders and circular mouths. Examples of both forms have been found with copper brazing.

The reduction in size of the English examples, along with the stylistic divergence from the insular Irish type, has given rise to the suggestion that many of the English examples were

used as animal bells (e.g. Ottaway 1992, 558; Hinton 2000, 45). Indeed, the lack of bells of insular Irish form has traditionally been taken to suggest that bells were not an important part of early Christian life in England apart from in Cornwall (Bourke 2013, 2-3), where documentary evidence for bells attests to handbells being used in the 9th and 11th centuries as saintly relics at Liskeard and Veryan (Jankulak 2000, 70; Doble 1931, 26). The fact that the English series of brazen bells *might* have been used within animal husbandry cannot be totally ruled out. Most of those recovered from English contexts were certainly small enough to have been carried by an animal, but whether such a complex and potentially expensive items would have been used in an everyday agricultural context must be open to question. Furthermore, animal bells by the very nature of their use would likely to have been subject to very high rates of loss, and yet as this paper demonstrates their overall numbers are very low and limited in geographical scope during the Early Middle Ages. This is in stark contrast to the medieval and early modern 'crotal', or rumbler, bell which is generally thought to have been worn by animals, but could also be a dress accessory especially when found in urban contexts (Egan & Pritchard 1991, 336-41; Egan 2005, 57-8). One of the most commonly encountered finds during metal detecting, to date the Portable Antiquities Scheme has recorded well in excess of 600 such bells, confirming their ubiquitous and utilitarian function.

The general scarcity of handbells in Early Medieval England does appear to be a genuine trend when compared to Ireland and Scotland; in spite of over 20 years of recording metal detector finds, and in contrast to the later rumbler bells already discussed, the corpus is exceptionally limited (see Table 1). This paucity of handbells in Early Medieval England is also supported by their general absence from archaeological excavation, which has failed to contribute to the corpus significantly except at certain specific sites. This trend is undoubtedly over-emphasised though; fragments of handbells are difficult to identify and

date, and brazing does not always survive. Any discussion which separates out iron bells according to brazing must be treated with due caution, but this does not prevent some preliminary observations from being made.

Plain iron handbells, or those with no surviving evidence for ever having been brazed, have been found on several rural settlement sites (Fig. 1). Some of these form the earliest examples of the corpus, including a bell-case from Pakenham, Suffolk (West 1998, 87-8), and two examples from Sutton Courtenay, Oxfordshire (Leeds 1923, 181), all dating to the 5th to 6th centuries, and thus earlier than the focus of this study. Later examples of two bell clappers, probably dating to the first half of the 8th century, were found in the settlement at Shakenoak, Oxfordshire (Brown 1972, 90-1), and a further bell dated to simply the pre-Conquest period was recovered from the isolated farmstead at Gauber, North Yorkshire (King 1978, 22). A single iron bell has also been found in an urban context at Southampton, but little more is known about its context or possible use (Every et al. 2005, 118). Small iron bells also have been found in two burials at Kingston Down, Kent (Faussett 1856, pl. 10), and in two burials at Lechlade, Gloucestershire (Boyle 1998, 95 & 116), all dating to the later 7th or early 8th centuries.

The function of these bells is uncertain, but those from Lechlade, being 98mm and 108mm tall, were far too large to have been dress accessories. However, one important conclusion can be made here, from the evidence as it stands so far, and in stark contrast to brazen bells, there is no connection between the presence of plain iron bells and sites of an apparent ecclesiastical nature. Consequently, whilst plain iron bells may have served a range of domestic and agricultural purposes, none of these can be demonstrated to be religious in function.

Several occasional finds of copper brazed bells are known, though collectively their contexts span several centuries. The first was found in a pond at Marden, Herefordshire in 1848 (Anon 1848). Complete when recovered (Fig. 2), it closely resembles known examples from the Western church, from where it might have originated given the find spot close to the Welsh border, but unfortunately the current whereabouts of the bell are unknown. A more recently excavated example comes from Tattershall Thorpe, Lincolnshire, where a brazed bell was found in the possible grave of a metalworker dating to the late 7th century (Hinton 2000, 44-7). An example dating to the 8th or 9th century was found at Burdale, North Yorkshire (Felter 2006; Richards & Roskams 2013), and another also from North Yorkshire at Crummack Dale (Johnson 2015, 25), while two brazed bells dating to the mid-10th century are known from Coppergate, York (Ottaway 1992, 557-8).

Significant assemblages of brazed handbells are also known from three Middle Saxon settlements (discussed below), and these finds raise the key question as to whether the English series of bells, which are frequently of much-reduced size when compared with those from Ireland or Scotland, do actually share similar, if not synchronised, ecclesiastical associations as attested in the Celtic world.

THE SIGNIFICANCE OF BRAZING

Whilst superficially a simple act of copper plating, attempts to reconstruct the technological process of copper-brazing iron have shown it is a demanding and complex task and one which appears to have a very restricted application to bells in the early Middle Ages. Although Theophilus describes a form of brazing in the 12th century that involved making an alloy from two parts silver mixed with one part copper (Hawthorne & Smith 1963, 107), the

precise method employed during the 7th-9th centuries is unknown. However, the identification of 52 fired clay fragments from amongst nearly two tonnes of ironworking debris recovered from the monastic enclosure at Clonfad, County Westmeath, Ireland has provided important indications (Young 2005, 3; Stevens 2009, 93).

Experimental work undertaken following the Clonfad find has suggested how the brazing might have been undertaken. Initially, the bell casing was formed from a single trapezoidal sheet of iron, folded so that two seams were formed on each side and riveted together (first outlined in Bourke 1980, 52-3). The fully forged bell was then wrapped in a cloth, inverted and its exterior entirely covered with a clay cover or shroud except for the rim, where copper ingots were placed (Stevens 2009, 96-7). The encased bell, still inverted, was then placed in the brazing hearth where it was heated to a temperature sufficient to fire the clay, burn away the cloth and melt the copper into the resulting void, fusing it to the surface of the bell. On removal from the hearth and once cool, the clay shroud was removed and the surface of the now brazen bell polished to remove the impression of the textile.

This was thus a highly skilled and technical process, and one only an experienced smith could have been capable of undertaking. Brazing would certainly have had several immediate practical benefits. First, the copper brazing would help to stop the iron core from corroding, and second, the brazing would enhance both the appearance and the sound of the bell (Corfield 1993). Whether the act of brazing held significance beyond its practical implication is uncertain, but there is scope for speculation. Brazing an iron bell would have been a truly transformative process and perhaps one and loaded with potential symbolism within a Christian context. As Wright (in press) reminds us, even in the early Christian world, smiths were held in esteem for their skills, and their skills appropriated by the early church. Given

this, the act of brazing might have been felt appropriate within an ecclesiastical context and used as an active Christian metaphor; through the mediation of the smith or even in the case of Gildas the saint, the iron bell was wrapped in a shroud, deposited in the destructive hearth only to be resurrected in a transmuted state. This symbolic transformation of bells was further confirmed by their spiritual blessing, which was even codified in law. In AD 789 an edict of Charlemagne drew a clear differentiation between the use of 'baptised' and 'unbaptised' bells (Price 1983, 122). The former were those blessed by the church and imbued with miraculous or spiritual properties, whilst the latter were those in profane use, and only empowered if possessed by the devil.

The power of the bell relied upon not only its spiritual transformation, or baptism, but also the purity of its construction and the honesty of its maker. Several continental sources warn against any intentional scrimping in the construction of bells, and although in these cases they are referring to hanging bells, rather than handbells, the implication is clear. First, is the tale of Tancho, who defrauded the Emperor Charlemagne around the turn of the 9th century, when making a bell from inferior materials. Devine retribution was swift, for when Tancho went to ring the bell for the first time it came tumbling out of the tower, disemboweling him on the spot (Grant 1907, 94-5). A similar, if less violent fate, met the 8th-century maker of a bell for the Abbey of St. Wandrille, who also used less than ideal materials (Loewenfeld 1886, 33). He was struck by madness and barked like a dog every time the bell was rung; demonstrating that if the uttermost care was not taken in its production, the spiritual power of the bell would turn against the hapless maker.

Despite the direct connection between the use of brazen bells and the church in Ireland both in the literary and archaeological sources, evidence for their manufacture is still limited to

Clonfad and one other site, Ballinglanna North, County Cork (Stevens 2009, 94). In England, there is even less evidence for the production of brazen bells, even though their generally smaller size suggests a slightly different, and presumably indigenous, manufacturing provenance. Exceptions are two late 9th- or early 10th-century fragments of brazen bell casing and two clappers found at Coppergate, York (Table 1). Although no fragments of clay shroud were identified, the bells came from amongst a larger collection of metalworking and smithing debris, leading to the suggestion that they were manufactured on site (Ottaway 1992, 557-8). However, this material dates firmly to the Viking Age occupation of the city, and the only tentative evidence for Anglo-Saxon brazen bell manufacture are fragments of two different bell case from Little Carlton, Lincolnshire (see below), one of which appears to be miscast or unfinished and the other which still has prominent textile impressions preserved upon its outer surface, implying that it had not been polished upon removal from the clay shroud, and thus represented an unfinished product (Fig. 4).

BELLS IN THE ENGLISH CHURCH

That handbells might have spiritual resonance in Anglo-Saxon England should come as no surprise. Small bells have been found in caves inhabited by the early Christian hermits in Egypt, where they are presumed to have been used to drive away evil spirits (Price 1983, 79); St. Anthony of Egypt (d. AD 356), the most important of the Desert Fathers, had as his symbol such a bell. Indeed it has been suggested that it was missionaries carrying handbells from Egypt who first brought Christianity not only to Ireland but also Brittany and Cornwall (Price 1983, 83), and it is likely that their use would have been recognised outside of these areas.

Stocker and Everson (2006) have rightly emphasised the increasing importance placed upon hanging bells in England following the liturgical reforms of Lanfranc between AD 1070-86. However, these reforms suggest that bells may have had a much earlier precedence in the English Church. By at least the start of the 11th century, small bells are recorded as having been used in churches to signal the sacred parts of the service (Price 1983, 108). In the latter 10th century, St. Æhelwold gave Peterborough Abbey seven handbells, and to the monastery at Abingdon two bells that he himself had made (Kemble 1863, 359). Whilst it is not specified what kind of bells were donated to Abingdon, Stocker and Everson (2006, 81) presume these to have been cast hanging bells, this might not necessarily be the case as the same text also describes the donation by Æthelwold of two 'larger' bells made by St. Dunstan (Kemble 1863, 359). Whatever the case might be, what is of particular significance is that here we see clearly recorded the survival of the early British tradition of the 'saintly bell maker', as first exemplified by Gildas in the 6th century, still firmly established within the Anglo-Saxon church during the 10th century.

The function of the handbells Æthelwold gave to Peterborough is perhaps alluded to in the depiction of the funeral cortege of Edward the Confessor in the Bayeux Tapestry (Grape 1994, 121). Here two attendants, each ringing a pair of handbells, flank the bier, probably to ward evil spirits from the corpse, in a clear continuation of an earlier apotropaic tradition. Certainly, the association between the ringing of bells and the death of an individual was well rooted in Anglo-Saxon England. As Bede recorded, on the death of Saint Hilda at Whitby, Saint Begu, then a nun at Hackness, had a vision of "the well-known sound in the air of a bell, which used to awake and call them to prayers when any one of them was taken out of this world" (Sellar 1907, 330). Whether Begu heard a handbell or hanging bell is not

recorded, but the symbolic association between the audible tone of a bell passing into the night and the departure of the soul is clear.

The use of small handbells persisted into the later Middle Ages in the English church. Ingulph's Chronicle recorded the gift of two handbells to Crowland Abbey by Fergus 'brasiarus' from Boston, following its destruction by fire in 1091 (Riley 1893, 208). Although this chronicle is now recognised to be a later 14th-century forgery and not a contemporary account (Colgrave 1953, 7), it nonetheless illustrates the later medieval appreciation of the important role that handbells played in liturgical practice. The use of handbells is more reliably recorded in rogation processions and during the blessing of crops, as well as to accompany the carrying of the Eucharist to the homes of the sick and dying (Walters 1912, 153, 169-70). As late as 1536, Cromwell's commissioners were caused to note that pilgrims to the shrine at Repton Priory would cure headaches by placing the sacred handbell of St Guthlac upon their heads (Gardiner 1887, 137-8). In all these actions, the English belief in both the apotropaic and liturgical properties of the handbell was clearly deeply ingrained.

BRAZEN BELLS ON MIDDLE-SAXON ECCLESIASTICAL SITES

The relatively scant evidence for occasional finds of Early Medieval brazed handbells in general, stands in sharp contrast to the significant quantity of brazen bells recovered from just three sites: Little Carlton, Flixborough and Brandon. These sites can be argued to be monastic in nature, or at least contain a significant ecclesiastical presence, and date to the conversion period of the 7th and 8th centuries.

During recent archaeological investigations at a marsh-island settlement at Little Carlton, Lincolnshire, 22 fragments of bell cases and one large clapper were recovered (Table 2; Fig.

3). The site was discovered by a metal detectorist, all the bells were discovered in the plough-soil and were reported to the Portable Antiquities Scheme, along with over 1,000 other objects of 7th- to 8th-century date also disturbed by ploughing or found through subsequent professional archaeological excavation (Daubney 2016, 249-68). The argument that Little Carlton was an important ecclesiastical centre will be made more extensively elsewhere (Willmott et al., in prep.), but it is within this broader context that the assemblage of 23 brazen handbells is important on two accounts: first, the associated material culture from the site, which includes 24 styli and an inscribed lead plaque, suggests the bells derive from an early Christian community, and second, there are hints of the evidence for their production on-site, in the form of textile impressions surviving on at least two of the recovered fragments (Fig. 4).

Parallels to the site and assemblage at Little Carlton can be drawn with Flixborough, (Table 3) which revealed fragments from at least 11 bell cases, in addition to seven clappers (Ottaway 2009). Although highly fragmented and corroded, all the bell cases exhibited evidence for copper brazing on their seams or over their entire surface. As at Little Carlton, a number of these fragments came from unstratified contexts, and those that came from secure contexts dated to the 9th to 11th centuries, thus spanning both the putative monastic and secular phases of the site. However, given the fragmentary nature of the thin iron cases, it is possible that at least some of the bells deriving from later contexts might have been residual finds.

Finally, brazen handbells have also been found on the Middle Saxon settlement at Brandon, and although two separate specialist reports deal with what is clearly the same category of material culture (Rogers 2014; Riddler 2014), they are of relevance to this study. Of the 28

fragments of bell case noted to have been found during the excavations, only six are discussed in any detail (Table 4). They are all of the copper-brazed form, and whilst four are unstratified, two come from contexts datable to the mid to late 9th century.

These three sites provide a clear evidence for the presence of brazen handbells at a particular type of high-status settlement. Furthermore, at all three sites, they are found in association with a particular material culture set: styli, continental imported goods, and artefacts with clear Christian symbols or functions. Whether such sites can be described as monasteries is beyond the scope of this paper. However, each of these three sites displays ample evidence for an overt Christian presence, even if this was more interwoven within lay society than the traditional polarised definitions of 'monastery' versus 'secular estate' normally accepted by modern scholarship. Given this, in the light of the production of bells on monastic sites in Ireland around the same time as the evidence from England, and especially the possible production of these bells at Little Carlton, an ecclesiastical consideration for their use must be given due attention at all three sites.

Furthermore, the position of these sites is significant. Flixborough and Little Carlton were situated in the kingdom of Lindsey, a polity that, despite Mercian overlordship from the later 7th century, had previously been within the Northumbrian sphere, and with pre-existing connections with Irish institutions in Bernicia that continued unaffected into the 8th century (Yorke 1993, 144). Although some distance from Northumbria or even Lindsey, the presence of possible Irish Christian influences at Brandon is not unexpected. Occupying a marsh edge location like Little Carlton, it lay on the periphery of East Anglia, which itself was the focus of an early mission by the Irish monk Saint Fursey in the 630s, and who is documented as having founded at least one monastery within the kingdom (Hoggett 2010, 44-5).

This distribution may have significance; despite the traditional association between iron bells and animal husbandry in England, what those who have advocated this function have thus far failed to note is that, with the exceptions of the find from Gauber North Yorkshire, all the aforementioned unbrazed iron bells from burials and settlement sites have come from the kingdoms of Mercia, Wessex, and Kent, kingdoms that were under the influence of the continental church (Fig. 1). In contrast, those that were brazen are all located within the western or insular liturgical sphere.

BRAZEN BELLS AND CLOSURE HOARDS

Whilst it might be argued that there was a strong association between the presence of brazen bells and sites with an ecclesiastical presence, they are also found in tool hoards more broadly associated with the closure of buildings in explicitly Christian contexts, and in Northumbria in particular. Thomas and Ottaway (2008, 383-93) have eloquently articulated the notion that tool hoards might form a significant part of 'closure rituals', with reference to a 9th-century deposit found in the posthole of a possible episcopal bell tower that had been intentionally dismantled at Bishopstone, East Sussex. Such practices seem to have a pre-Christian origin, as Hamerow (2006) has highlighted a significant number of sunken feature buildings show evidence for ritual closure deposits, which contrasts significantly with the continent, suggesting that this might be an insular tradition (Thomas and Ottaway 2008, 385). The hoard from Bishopstone in East Sussex does not contain a bell, but other similar examples within the Northumbrian sphere of influence do.

Perhaps the clearest evidence for this can be seen in the large brazen handbell from the tool hoard at Flixborough, Lincolnshire (Ottoway & Cowgill 2009, 259-60). The bell, measuring

160mm tall, was deposited in a single episode along with iron carpentry tools within two lead tanks, or cisterns, sometime between the 8th and 10th centuries, perhaps after the demolition of a sacred building in which the tools were employed; an act which it has been suggested prevented them from being defiled by further use (Ottoway & Cowgill 2009, 261). Further associations with Christian ritual can be seen on the casing of the bell, which bears a Greek cross over an X monograph, similar to a Chi-Rho monogram.

Hints of ritual significance can also be seen in four brazen bells found in a deposit of tools at Asby Winderwath, Cumbria; the tallest measures 11cm in height, two others stand around 5.5cm tall (Edwards 2002, 117). The bells were discovered by a metal detectorist along with a wide array of other iron tools, iron building fixtures and bronze work of 9th-century date. While the circumstances of discovery are somewhat unclear, it is known that the items were found within a small dry-stone building of uncertain function. Indeed, in the most comprehensive analysis of the assemblage, Edwards (2002, 129) has suggested that the concealment was intentionally placed within the building, quite possibly while it was still in use, thus recalling the circumstances of deposition of the closure hoard at Bishopstone.

A third instance in which an association can be seen between bells and iron tool hoards is at Lea Green, Grassington, North Yorkshire. The assemblage contains 37 iron items, including agricultural and carpentry tools, in addition to two bells and a lead tank of similar form to those found at Flixborough. Although another scattered hoard found by metal detecting, the objects had clearly all been deposited together and it is believed they were originally in association with building remains (Leahy 2013, 232), although this has yet to be verified through excavation. Given the close similarity of the finds, and the lead tanks in particular, to

those from Flixborough, if this were indeed a closure hoard associated with a building, it would not be inconceivable for it to have been ecclesiastical in nature.

A range of other mid- to late-Anglo-Saxon hoards have been identified that might also be related to the process of 'closure' (most recently summarised by Leahy 2013), and whilst none of these specifically contains a bell, two are worthy of note due to their possible northern ecclesiastical links. A mid-late Anglo-Saxon hoard from Crayke, East Yorkshire, contained tools, weapon fragments and other iron items (Sheppard 1939, 273-81), and although the original excavation failed to identify its context adequately, the site seems to have had monastic associations, being connected to the See of Lindisfarne (Adams 1990; Thomas & Ottaway, 2008, 386). At Stidriggs, Dumfriesshire, a hoard consisting of woodworking and agricultural tools, radiocarbon dated to the very late 8th or 9th centuries, was found contained within a lead tank in moorland close to an undefined settlement (Leahy 2013, 232). Although there is limited archaeological evidence for its context of deposition, an ecclesiastical-connected interpretation of the Stidriggs hoard might be found in the use of the lead tank as a container, as seen at Flixborough and Grassington. Although Petts (2003) has argued against the interpretation of earlier late Roman lead tanks used to contain hoards as originally being as fonts, he suggests their use still indicated a ritual of conspicuous votive display that continued into the Christian period. Likewise, in her analysis of the lead tanks from the Flixborough hoard, Cowgill (2009, 274) rejects the notion they might have been directly involved in Christian rituals due to their poor construction, but does concede that they might still have had ecclesiastical connotations as containers for collecting grain or estate renders.

If the interpretation of hoards forming a key element in the ritualised closure of buildings is accepted, then the presence of bells provides added significance, especially in light of the fact they appear to be restricted to northern England and the sphere of influence of the Irish church. It is entirely possible that the bells were used during the construction or, more likely, the active dismantling of the building, resonating with the prayers that may have accompanied these actions. Indeed, given Gerald of Wales' observation that bells were central to transactions such as the swearing of oaths (Rhys 1908, 24), it is not unreasonable to interpret their presence in such deposits as symbolic solemnisation of the ritual 'contract' of destruction.

Such practices are, of course, hard to rectify with Biblical principles and do not sit comfortably within New Testament theology or exegesis. Such 'blended' practices are, nonetheless, increasingly being identified on conversion-period sites in the East Midlands, particularly in the Witham Valley in Lincolnshire, where pre-Christian water-based rituals are now well known to have been augmented into early expressions of Christian faith (Stocker 2003; Daubney 2016).

SYMBOL OF THE ITINERANT SMITH?

In his examination of the hoard from the supposed smith's grave at Tattershall, Hinton (2000, 47) explains the presence of a copper-brazed handbell as being a symbolic, or even practical, tool of the profession. He points to the law of King Wihtred of Kent (*c.* AD 695) that required strangers to make their presence clearly known or risk death as a suspected thief (Oliver 2002, 179-80), and notes that the smith, as an itinerant craftsperson, might have been particularly at risk. Whether a Kentish law code, which actually instructs the stranger to blow a horn rather than sound a bell, would have been applicable to a smith travelling in Lindsey

might be questioned. So too, can be the argument that the inclusion of a bell in a burial was symbolic of the occupant's profession in life. The Tattershall burial is virtually unique amongst the broad grouping of what are termed 'smiths burials' (both Christian and pagan) from across northern Europe, for its inclusion of a brazen bell. For example, of the 37 graves in Norway recently identified as containing blacksmithing tools, not one contained a bell (Jørgensen, 2012, 8-9). If bells are argued to be part of the working repertoire of the smith, this is better demonstrated by their presence in tool hoards rather than the grave. Indeed, given the rather ambiguous nature of the Tattershall burial, no skeletal remains were actually recovered from the feature identified as a grave cut (Hinton 2000), it might actually represent a depositional hoard rather than a mortuary assemblage.

In Southern Scandinavia, finds of tool hoards associated with metalworking are not uncommon, and are often located on the edges of 'watery' features such as lakes or rivers (Lund 2010, 58). The best-known example is the Mästermyr tool chest, found in Gotland, and this example is particularly notable as it did unusually contain three bells, all of which were brazen, as well as a wide range of tools (Arwidsson & Berg 1983, 11-2). Yet here too lies a problem; in England such finds are far less common, and even where tools associated with iron working are present in hoards, they are mixed with those of other crafts and those connected to carpentry in particular, as well as structural elements from buildings.

Yet to totally dismiss the association between smiths and brazen bells would be hasty. As already stated, the purpose behind the brazing of the bell was probably more symbolic than practical, and the smith as the enactor of this transformation performed a ritual as well as a physical role. Wright (in press) argues for the often liminal but pivotal part smiths played in both the pre-Christian and post-conversion Anglo-Saxon England; as in many pre-industrial

societies the transformative nature of smithing took on almost magical significance, all the more so in the case of brazing where one material was visibly converted into another through the smith's skill. Consequently, whilst smiths would, without doubt, have held a vital and esteemed role in the production of brazen bells, it is rather less certain that they were associated with their day-to-day use. This appears to be borne out by the archaeological evidence where the direct association between brazen bells and the smith is at best scant.

CONCLUSION

Although clearly recognised as having a liturgical function in areas where the Western church held influence, when found in England copper-brazed handbells have usually been dismissed as having been for the necks of beasts rather than the hands of priests (e.g. Edwards 2002, 116; Ottaway 1992, 558). This is usually on the basis that those found in England are generally smaller than those found in Ireland, Scotland or Wales. Whilst a handful of simple, plain iron bells that might have fulfilled this function have been found either on domestic settlement sites or in graves, this paper has argued that it is the transformative act of copper-brazing that turned the humble iron bell into an object of ritual and ecclesiastical significance. Although it has been suggested that larger brazen bells might have been a symbolic marker in the construction of the identity of the early medieval smith (Hinton 2000; Wright in press), it is argued here that the importance of the smith lay in the creation rather than the use of the brazen bell. During the 7th and 8th centuries, brazen bells in England have only been found in two types of context that are restricted to northern areas of the country: ‘closure hoards’ possibly associated with the ritual dismantling of buildings, and productive Middle Saxon sites that appear to have a strong ecclesiastical presence.

Finally, that such clear divisions existed in the medieval mind between the different classes and appropriate uses of handbells, is ably demonstrated by the apocryphal story of the supposed fate of the Saxon King Edgar. Although first recorded by John Capgrave in the 15th century, the tale appears to be drawing on a much earlier folk tradition. Following a military foray into Wales, Edgar captured the miraculous brazen handbell of St. Illtyd and put it to profane use around the neck of a horse (Horstman 1901, 55-66). Immediately after Edgar was plagued by a vision of his own death, which actually occurred nine days later. Although entirely without historical basis, and perhaps originating many decades or even centuries after the supposed event, the power and the specific role of the of the ecclesiastical handbell, and what could happen if this was subverted, was clearly remembered in the tale. Consequently, following both the historical and archaeological re-evaluation presented here, brazen handbells can now be viewed as having played an equally important role in the early church in England, and in the north in particular. Furthermore, when found, handbells should now be recognised as a distinctive 'marker' of an early Christian presence, just as has been argued for styli and other types of ecclesiastical material culture.

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FIGURE CAPTIONS

1- Distribution of Early Medieval handbells in England (Authors)

2- Brazen handbell discovered at Marden, Herefordshire in 1848 (© Royal Archaeological Institute)

3- Clapper and brazen handbell case fragments from Little Carlton, Lincolnshire (Authors)

4- Detail of a bell-case from Little Carlton, showing the remains of an organic substance fused to its surface (Authors)

TABLE 1 Occasional finds of handbells

Site	No.	Part	Brazen?	Height(s) Exc. handle	Date	Context	Reference
Asby Winderwath, Cumbria	1	Complete	Yes	110mm	9th century?	Hoard	Edwards 2002, 131-2.
	1	Case	Yes	55mm			
	1	Case	Uncertain	Uncertain			
	1	Case	Uncertain	Uncertain			
Burdale, North Yorks	1	Case	Yes	Uncertain	Early Medieval	Rural	Felter 2006; Richards and Roskams 2013.
Crummack Dale, North Yorks	1	Case	Yes	70mm	Early Medieval	Rural	Johnson 2015
Flixborough, Lincs.	1	Complete	Yes	150mm	8th-10th century	Hoard	Ottaway 2009, 256-67.
Gauber, North Yorks.	1	Complete	No	50mm	Early Medieval	Rural	King 1978, 22.
Kingston Down, Kent	1	Complete	Uncertain	Uncertain	Late 7th-early 8th century	Burial	Faussett 1856, pl 10.
	1	Case	Uncertain		Mid 7th century	Burial	
Lea Green, North Yorks	1	Case	Uncertain	55mm	8th century?	Hoard	PAS LANCUM-0898F4
	1	Case	Uncertain	Approx. 55mm			PAS LANCUM-0888B1
Lechlade, Glos.	1	Complete	No	98mm	7th century	Burial	Boyle 1998, 95 & 116.
	1	Complete	No	108mm	Late 7th-early 8th century	Burial	
Marden, Herefordshire	1	Complete	Yes	Large	Early medieval	Uncertain	Anon 1848
Pakenham, Suffolk	1	Case	No	70mm	5th-6th century	Rural	West 1998, 87-8.
Shakenoak, Oxon.	1	Clapper	-	Approx. 150mm	Pre- mid 8th century	Rural	Brown 1972, 90-91
	1	Clapper	-	Approx. 80mm	Pre- mid 8th century		
Southampton, Hants.	1	Case	No	32mm	Early Medieval	Urban	Every et al. 2005, 118.
Sutton Courtenay, Berks	1	Case	No	Approx. 75mm	5th-6th century?	Rural	Leeds 1923, 181.
	1	Case	No	Large			
Tattershall	1	Case	Yes	90mm	Late 7th century	Grave? Tool hoard?	Hinton 2000, 44-7.
York	1	Case	Yes	25mm	Mid 10th century	Urban	Ottaway 1992, 557-8.
	1	Case	Yes	Approx. 30mm	Mid 10th century	Urban	
	1	Clapper	-	95mm	Mid 10th century	Urban	
	1	Clapper	-	55mm	Mid 10th century	Urban	

TABLE 2 Brazen bells from Little Carlton

No.	Part	Height (surviving)	PAS Ref
1	Case	42mm (shoulder fragment)	LIN-D7BED6
1	Case	98mm (shoulder fragment)	LIN-EDB683
1	Case	81mm (shoulder fragment)	LIN-E97BD1
1	Case	19mm (shoulder fragment)	LIN-E86CFC
1	Case	59mm (shoulder fragment)	LIN-D8FC8C
1	Case	54mm (shoulder fragment)	LIN-D87B7D
1	Case	39mm (shoulder fragment)	LIN-4B37F8
1	Case	35mm (shoulder fragment)	LIN-4B30F1
1	Case	37mm (shoulder fragment)	LIN-B17DA7
1	Case	23mm (shoulder fragment)	LIN-B4CBE1
1	Case	43mm (shoulder fragment)	LIN-B52196
1	Case	30mm (shoulder fragment)	LIN-86871E
1	Case	35mm (shoulder fragment)	LIN-869053
1	Case	19mm (shoulder fragment)	LIN-86968E
1	Case	35mm (shoulder fragment)	LIN-9AB7E4
1	Case	55mm (shoulder fragment)	LIN-9AC144
1	Case	38mm (shoulder fragment)	LIN-D766DB
1	Case	22mm (shoulder fragment)	LIN-D75FAB
1	Case	37mm (rim fragment)	LIN-D73857
1	Case	22mm (shoulder fragment)	LIN-D72932
1	Case	12mm (crown fragment)	LIN-D721A9
1	Case	44mm (shoulder fragment)	LIN-D59DE6
1	Clapper	142mm (complete)	LIN-19FE66

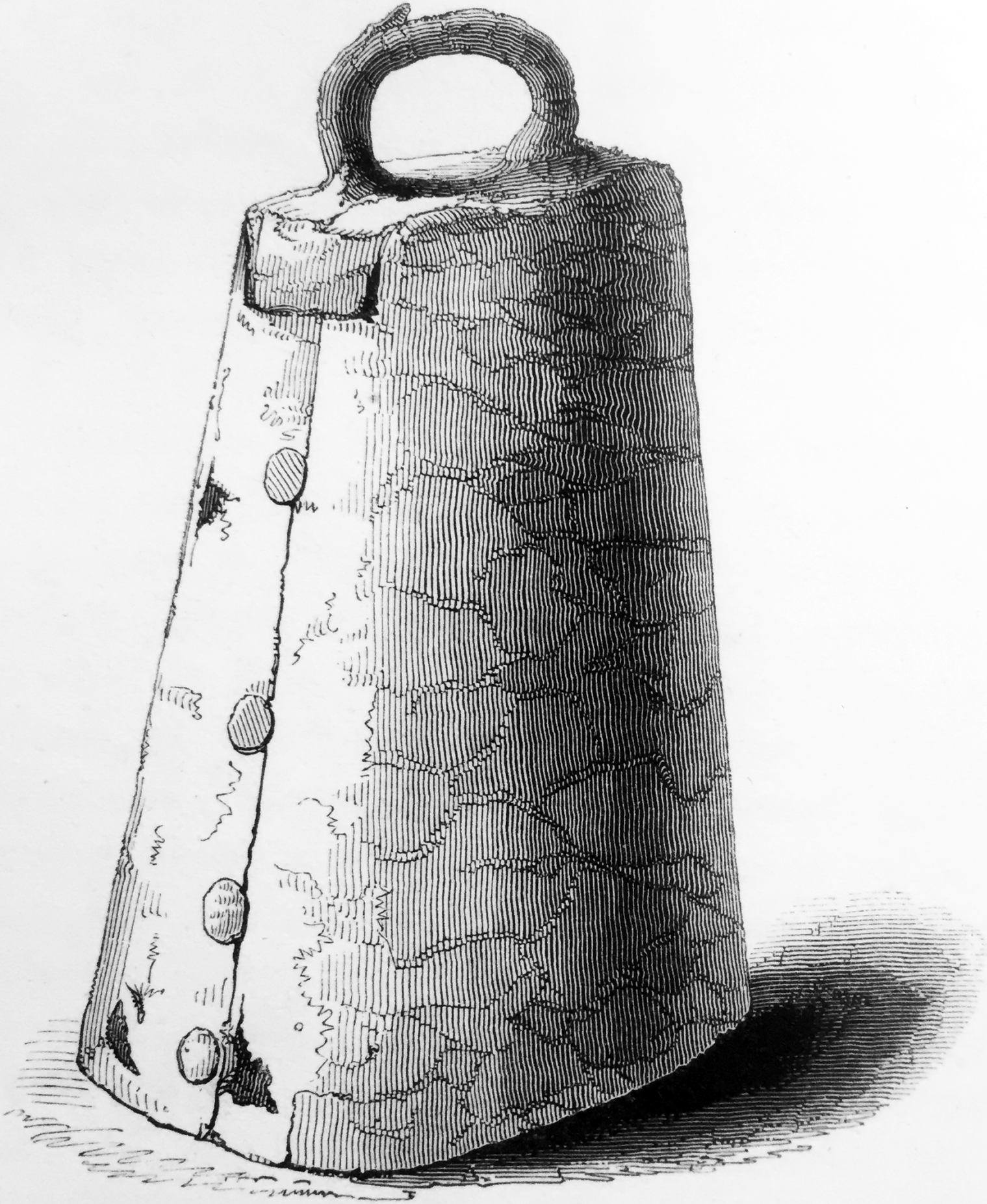
TABLE 3 Brazen bells from Flixborough (adapted from Ottaway 2009)

No.	Part	Height (surviving)	Phase	SF	Date
1	Case	48mm (complete side)	u/s	RF138	-
1	Case	42mm (fragment)	6iii	RF738	Mid 10th-early 11th century
1	Case	62mm (corner fragment)	u/s	RF1039	-
1	Case	24mm (fragment)	6iii	RF2054	Mid 10th-early 11th century
1	Case	57mm (fragment)	6iii	RF2566	Mid 10th-early 11th century
1	Case	22mm (corner and ring)	6iii	RF7174	Mid 10th-early 11th century
1	Case	84mm (complete side)	u/s	RF8114	-
2	Case	28mm (fused fragments)	u/s	RF8320	-
1	Case	62mm (complete side)	4ii	RF8937	Mid 9th century
2	Case	30mm (fragment)	u/s	RF12608	-
1	Case	43mm (fragment and ring)	u/s	RF13014	-
1	Clapper	40mm (complete)	5b	RF2527	Late 9th to early 10th century
1	Clapper	72mm (complete)	6ii	RF4295	Mid 10th century
1	Clapper	40mm (incomplete)	4ii-5	RF5152	Mid 9th to early 10th century
1	Clapper	83mm (complete)	6ii	RF6536	Mid 10th century
1	Clapper	84mm (complete)	u/s	RF9894	-
1	Clapper	41mm (complete)	u/s	RF12722	-

TABLE 4 Brazen bells from Brandon (adapted from Rogers 2014 & Riddler 2014)

No.	Part	Height (surviving)	Phase	SF	Date
4	Case	140mm (near complete side)	u/s	SF2335	-
1	Case	40mm (fragment)	unphased	SF2654	-
1	Case	52mm (fragment)	unphased	SF3555	-
1	Case	136mm (near complete side)	unphased	SF3664	-
1	Case	64mm (fragment)	Phase 2.3.1	SF5455	Mid to late 9th century
1	Case	5mm (top)	Phase 2.3.1	SF5466	Mid to late 9th century


Ecclesiastical site with brazen bells
Brazen bells
Plain iron bells
? Bells of uncertain surface treatment
Asby Winderwath
Gauber
Lea Green
?
Crummack Dale
Burdale
York
Flixborough
Little Carlton
Tattershall
Brandon
Marden
Pakenham
Shakenoak
Lechlade
?
Sutton Courtenay
Kingston Down
?
Southampton

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