

= Wells Cathedral =

The Cathedral Church of Saint Andrew , commonly known as Wells Cathedral , is an Anglican cathedral in Wells , Somerset . The cathedral , dedicated to St Andrew the Apostle , is the seat of the Bishop of Bath and Wells . It is the mother church of the diocese and contains the bishop 's throne (cathedra) . It was built between 1175 and 1490 , replacing an earlier church built on the same site in 705 . It is moderately sized among the medieval cathedrals of England , between those of massive proportion such as Lincoln and York and the smaller cathedrals in Oxford and Carlisle . With its broad west front and large central tower , it is the dominant feature of its small cathedral city and a landmark in the Somerset countryside . Wells has been described as " unquestionably one of the most beautiful " and as " the most poetic " of English cathedrals .

The cathedral 's architecture presents a harmonious whole which is entirely Gothic and mostly in the Early English style of the late 12th and early 13th centuries . In this respect Wells differs from most other English medieval cathedrals , which have parts in the earlier Romanesque style introduced to Britain by the Normans in the 11th century .

Work commenced in about 1175 at the east end with the building of the choir . The historian John Harvey considers it to be the first truly Gothic structure in Europe , having broken from the last constraints of Romanesque . The stonework of its pointed arcades and fluted piers is enriched by the complexity of pronounced mouldings and the vitality of its carved capitals in a foliate style known as " stiff leaf " . Its exterior has an Early English façade displaying more than 300 sculpted figures , described by Harvey as " the supreme triumph of the combined plastic arts in England " . The east end retains much ancient stained glass , which is rare in England .

Unlike many English cathedrals of monastic foundation , Wells has an exceptional number of surviving secular buildings associated with its chapter of secular canons , including the Bishop 's Palace and Vicars ' Close , a residential street that has remained intact since the 15th century . The cathedral is a Grade I listed building .

= = History = =

= = = Early years = = =

The earliest remains of a building on the site are of a late @-@ Roman mausoleum , identified during excavations in 1980 . An abbey church was built in Wells in 705 by Aldhelm , first bishop of the newly established Diocese of Sherborne during the reign of King Ine of Wessex . It was dedicated to Saint Andrew and stood at the site of the cathedral 's cloisters , where some excavated remains can be seen . The font in the cathedral 's south transept is from this church and is the oldest part of the present building . In 766 Cynewulf , King of Wessex , signed a charter endowing the church with eleven hides of land . In 909 the seat of the diocese was moved from Sherborne to Wells .

The first Bishop of Wells was Athelm (909) , who crowned King Æthelstan . Athelm and his nephew Dunstan both became Archbishops of Canterbury . During this period a choir of boys was established to sing the liturgy . Wells Cathedral School , which was established to educate these choirboys , dates its foundation to this point . There is , however , some controversy over this . Following the Norman Conquest , Bishop John de Villula moved the seat of the bishop from Wells to Bath in 1090 . The church at Wells , no longer a cathedral , had a college of secular clergy .

= = = Seat of the bishop = = =

The cathedral is thought to have been conceived and commenced in about 1175 by Bishop Reginald Fitz Jocelin , who died in 1191 . Although it is clear from its size that from the outset , the church was planned to be the cathedral of the diocese , the seat of the bishop moved between Wells and the abbeys of Glastonbury and Bath , before settling at Wells . In 1197 Bishop Reginald 's

successor , Bishop Savaric FitzGeldewin , with the approval of Pope Celestine III , officially moved his seat to Glastonbury Abbey . The title of Bishop of Bath and Glastonbury was used until the Glastonbury claim was abandoned in 1219 .

Bishop Savaric 's successor , Jocelin of Wells , again moved the bishop 's seat to Bath Abbey , with the title Bishop of Bath . Jocelin was a brother of Bishop Hugh II of Lincoln and was present at the signing of the Magna Carta . Bishop Jocelin continued the building campaign begun by Bishop Reginald and was responsible for the Bishop 's Palace , the choristers ' school , a grammar school , a hospital for travellers and a chapel . He also had a manor house built at Wookey , near Wells . Jocelin saw the church dedicated in 1239 but , despite much lobbying of the Pope by Jocelin 's representatives in Rome , did not live to see cathedral status granted . The delay may have been a result of inaction by Pandulf Verraccio , a Roman ecclesiastical politician , papal legate to England and Bishop of Norwich , who was asked by the Pope to investigate the situation but did not respond . Jocelin died at Wells on 19 November 1242 and was buried in the choir of the cathedral ; the memorial brass on his tomb is one of the earliest brasses in England . Following his death the monks of Bath unsuccessfully attempted to regain authority over Wells .

In 1245 the ongoing dispute over the title of the bishop was resolved by a ruling of Pope Innocent IV who established the title as the " Bishop of Bath and Wells " , as it has remained until this day , with Wells as the principal seat of the bishop . Since the 11th century the church has had a chapter of secular clergy , like the cathedrals of Chichester , Hereford , Lincoln and York . The chapter was endowed with 22 prebends (lands from which finance was drawn) and a provost to manage them . On acquiring cathedral status , in common with other such cathedrals , it had four chief clergy , the dean , precentor , chancellor and sacristan , who were responsible for the spiritual and material care of the cathedral .

= = = Building the cathedral = = =

The building programme , begun by Bishop Reginald Fitz Jocelin in the 12th century , continued under Jocelin of Wells , who was a canon from 1200 , then bishop from 1206 . Adam Locke was master mason from about 1192 until 1230 . It was designed in the new style with pointed arches , later known as Gothic , which was introduced at about the same time at Canterbury Cathedral . Work was halted between 1209 and 1213 when King John was excommunicated and Bishop Jocelin was in exile , but the main parts of the church were complete by the time of the dedication by Bishop Jocelin in 1239 .

By the time the cathedral , including the chapter house , was finished in 1306 , it was already too small for the developing liturgy , and unable to accommodate increasingly grand processions of clergy . Bishop John Droxford initiated another phase of building under master mason Thomas of Whitney , during which the central tower was heightened and an eight @-@ sided Lady chapel was added at the east end by 1326 . Bishop Ralph of Shrewsbury followed , continuing the eastward extension of the choir and retrochoir beyond . He oversaw the building of Vicars ' Close and the Vicars ' Hall , to give the men who were employed to sing in the choir a secure place to live and dine , away from the town and its temptations . He had an uneasy relationship with the citizens of Wells , partly because of his imposition of taxes , and he surrounded his palace with crenellated walls , a moat and a drawbridge .

Bishop John Harewell raised money for the completion of the west front by William Wynford , who was appointed as master mason in 1365 . One of the foremost architects of his time , Wynford worked for the king at Windsor , Winchester Cathedral and New College , Oxford . At Wells , he designed the western towers of which north @-@ west was not built until the following century . In the 14th century , the central piers of the crossing were found to be sinking under the weight of the crossing tower which had been damaged by an earthquake in the previous century . Strainer arches , sometimes described as scissor arches , were inserted by master mason William Joy to brace and stabilise the piers as a unit .

= = = Tudors and Civil War = = =

By the reign of Henry VII the cathedral was complete , appearing much as it does today (though the fittings have changed) . From 1508 to 1546 , the eminent Italian humanist scholar Polydore Vergil was active as the chapter 's representative in London . He donated a set of hangings for the choir of the cathedral . While Wells survived the Dissolution of the Monasteries better than the cathedrals of monastic foundation , the abolition of chantries in 1547 resulted in a reduction in its income . Medieval brasses were sold , and a pulpit was placed in the nave for the first time . Between 1551 and 1568 , in two periods as dean , William Turner established a herb garden , which was recreated between 2003 and 2010 .

Elizabeth I gave the chapter and the Vicars Choral a new charter in 1591 , creating a new governing body , consisting of a dean and eight residentiary canons with control over the church estates and authority over its affairs , but no longer entitled to elect the dean (that entitlement thenceforward belonged ultimately to the Crown) . The stability brought by the new charter ended with the onset of the Civil War and the execution of Charles I. Local fighting damaged the cathedral 's stonework , furniture and windows . The dean , Walter Raleigh , a nephew of the explorer Sir Walter Raleigh , was placed under house arrest after the fall of Bridgwater to the Parliamentarians in 1645 , first in the rectory at Chedzoy and then in the deanery at Wells . His jailer , the shoe maker and city constable , David Barrett , caught him writing a letter to his wife . When he refused to surrender it , Barrett ran him through with a sword and he died six weeks later , on 10 October 1646 . He was buried in an unmarked grave in the choir before the dean 's stall . During the Commonwealth of England under Oliver Cromwell no dean was appointed and the cathedral fell into disrepair . The bishop went into retirement and some of the clerics were reduced to performing menial tasks .

= = = 1660 ? 1800 = = =

In 1661 , after Charles II was restored to the throne , Robert Creighton , the king 's chaplain in exile , was appointed dean and was bishop for two years before his death in 1672 . His brass lectern , given in thanksgiving , can be seen in the cathedral . He donated the nave 's great west window at a cost of £ 140 . Following Creighton 's appointment as bishop , the post of dean went to Ralph Bathurst , who had been chaplain to the king , president of Trinity College , Oxford and fellow of the Royal Society . During Bathurst 's long tenure the cathedral was restored , but in the Monmouth Rebellion of 1685 , Puritan soldiers damaged the west front , tore lead from the roof to make bullets , broke the windows , smashed the organ and furnishings , and for a time stabled their horses in the nave .

Restoration began again under Bishop Thomas Ken who was appointed by the Crown in 1685 and served until 1691 . He was one of seven bishops imprisoned for refusing to sign King James II 's " Declaration of Indulgence " , which would have enabled Catholics to resume positions of political power , but popular support led to their acquittal . Ken refused to take the oath of allegiance to William and Mary because James II had not abdicated and with others , known as the Nonjurors , was put out of office . His successor , Bishop Kidder , was killed in the Great Storm of 1703 when two chimney stacks on the palace fell on him and his wife , while they were asleep in bed .

= = = Victorian era to present = = =

By the middle of the 19th century , a major restoration programme was needed . Under Dean Goodenough , the monuments were moved to the cloisters and the remaining medieval paint and whitewash removed in an operation known as " the great scrape " . Anthony Salvin took charge of the extensive restoration of the choir . Wooden galleries installed in the 16th century were removed and the stalls were given stone canopies and placed further back within the line of the arcade . The medieval stone pulpitum screen was extended in the centre to support a new organ .

In 1933 the Friends of Wells Cathedral were formed to support the cathedral 's chapter in the maintenance of the fabric , life and work of the cathedral .

The late 20th century saw an extensive restoration programme , particularly of the west front . The stained glass is currently under restoration , with a programme underway to conserve the large 14th @-@ century Jesse Tree window at the eastern terminal of the choir .

= = Ministry = =

Since the 13th century , Wells Cathedral has been the seat of the Bishop of Bath and Wells . Its governing body , the chapter , is made up of five clerical canons (the dean , the precentor , the canon chancellor , the canon treasurer , and the archdeacon of Wells) and four lay members : the administrator (chief executive) , Keeper of the Fabric , Overseer of the Estate and the chairman of the cathedral shop and catering boards . The current Bishop of Bath and Wells is Peter Hancock , who was installed in a service in the Cathedral on 7 June 2014 . The present dean is John Clarke .

Employed staff include the organist and master of choristers , head virger , archivist , librarian and the staff of the shop , café and restaurant . The chapter is advised by specialists such as architects , archaeologists and financial experts .

More than a thousand services are held every year . There are daily services of Matins , Holy Communion and Choral Evensong , as well as major celebrations of Christian festivals such as Christmas , Easter , Pentecost and saints ' days . The cathedral is also used for the baptisms , weddings and funerals of those with close connections to it . In July 2009 the cathedral undertook the funeral of Harry Patch , the last British Army veteran of World War I , who died at the age of 111 .

Three Sunday services are led by the resident choir (during the school terms) and choral services are sung on weekdays . The cathedral hosts visiting choirs and is involved in outreach work with local schools as part of its Chorister Outreach Project . It is also the venue for musical events such as an annual concert by the Somerset Chamber Choir .

Each year about 150 @,@ 000 people attend services and another 300 @,@ 000 visit as tourists . Entry is free , but visitors are encouraged to make a donation towards the annual running costs which were around £ 2 million (approx . US \$ 3 @.@ 3 million) in 2010 .

= = Architecture = =

= = = Dates , styles and architects = = =

Construction of the cathedral began in about 1175 , to the design of an unknown architect . Wells is the first cathedral in England to be , from its foundation , built in the Gothic style . According to art historian John Harvey , it is the first truly Gothic cathedral in the world , its architects having entirely dispensed with all the features that bound the contemporary east end of Canterbury Cathedral and the earlier buildings of France , such as the east end of the Abbey of Saint Denis , to the Romanesque . Unlike these churches , Wells has clustered piers rather than columns and has a gallery of identical pointed arches rather than the typically Romanesque form of paired openings . The style , with its simple untracied lancet arches and convoluted mouldings , is known as Early English Gothic .

From about 1192 to 1230 , Adam Lock , the earliest architect at Wells for whom a name is known , continued the transept and nave in the same manner as his predecessor . Lock was also the builder of the north porch , to his own design .

The Early English west front was commenced around 1230 by Thomas Norreys , with building and sculpture continuing for thirty years . Its south @-@ west tower was begun 100 years later and constructed between 1365 and 1395 , and the north @-@ west tower between 1425 and 1435 , both in the Perpendicular Gothic style to the design of William Wynford , who also filled many of the cathedral 's early English lancet windows with delicate tracery .

Between 1275 and 1310 the undercroft and chapter house were built by unknown architects , the undercroft in the Early English and the chapter house in the Geometric style of Decorated Gothic

architecture . In about 1310 work commenced on the Lady Chapel , to the design of Thomas Witney , who also built the central tower from 1315 to 1322 in the Decorated Gothic style . The tower was later braced internally with arches by William Joy . Concurrent with this work , in 1329 ? 45 Joy made alterations and extensions to the choir , joining it to the Lady Chapel with the retrochoir , the latter in the Flowing Decorated style .

Later changes include the Perpendicular vault of the tower and construction of Sugar 's Chapel , 1475 ? 90 by William Smyth . Also , Gothic Revival renovations were made to the choir and pulpitum by Benjamin Ferrey and Anthony Salvin , 1842 ? 57 .

= = = Plan = = =

Wells has a total length of 415 feet (126 m) . In common with Canterbury , Lincoln and Salisbury cathedrals , it has the distinctly English arrangement of two transepts , with the body of the church divided into distinct parts : nave , choir , and retro @-@ choir , beyond which extends the Lady Chapel . The façade is wide , with its towers extending beyond the transepts on either side . There is a large projecting porch on the north side of the nave forming an entry into the cathedral . To the north @-@ east is the large octagonal chapter house , entered from the north choir aisle by a passage and staircase . To the south of the nave is a large cloister , unusual in that the northern range , that adjacent the cathedral , was never built .

= = = Elevation = = =

In section , the cathedral has the usual arrangement of a large church : a central nave with an aisle on each side , separated by two arcades . The elevation is in three stages , arcade , triforium gallery and clerestory . The nave is 67 feet (20 m) in height , very low compared to the Gothic cathedrals of France . It has a markedly horizontal emphasis , caused by the triforium having a unique form , a series of identical narrow openings , lacking the usual definition of the bays . The triforium is separated from the arcade by a single horizontal string course that runs unbroken the length of the nave . There are no vertical lines linking the three stages , as the shafts supporting the vault rise above the triforium .

= = = Exterior = = =

The exterior of Wells Cathedral presents a relatively tidy and harmonious appearance since the greater part of the building was executed in a single style , Early English Gothic . This is uncommon among English cathedrals where the exterior usually exhibits a plethora of styles . At Wells , later changes in the Perpendicular style were universally applied , such as filling the Early English lancet windows with simple tracery , the construction of a parapet that encircles the roof , and the addition of pinnacles framing each gable , similar to those around the chapter house and on the west front . At the eastern end there is a proliferation of tracery with repeated motifs in the Reticulated style , a stage between Geometric and Flowing Decorated tracery .

= = = West front = = =

The west front is 100 feet (30 m) high and 147 feet (45 m) wide , and built of Inferior Oolite of the Middle Jurassic period , which came from the Doulting Stone Quarry , about 8 miles (13 km) to the east . According to the architectural historian Alec Clifton @-@ Taylor , it is " one of the great sights of England " .

West fronts in general take three distinct forms : those that follow the elevation of the nave and aisles , those that have paired towers at the end of each aisle , framing the nave , and those that screen the form of the building . The west front at Wells has the paired @-@ tower form , unusual in that the towers do not indicate the location of the aisles , but extend well beyond them , screening the dimensions and profile of the building .

The west front rises in three distinct stages , each clearly defined by a horizontal course . This horizontal emphasis is counteracted by six strongly projecting buttresses defining the cross sectional divisions of nave , aisles and towers , and are highly decorated , each having canopied niches containing the largest statues on the façade .

At the lowest level of the façade is a plain base , contrasting with and stabilising the ornate arcades that rise above it . The base is penetrated by three doors , which are in stark contrast to the often imposing portals of French Gothic cathedrals . The outer two are of domestic proportion and the central door is ornamented only by a central post , quatrefoil and the fine mouldings of the arch .

Above the basement rise two storeys , ornamented with quatrefoils and niches originally holding about four hundred statues , with three hundred surviving until the mid 20th century . Since then , some have been restored or replaced , including the ruined figure of Christ in the gable .

The third stages of the flanking towers were both built in the Perpendicular style of the late 14th century , to the design of William Wynford ; that on the north west was not begun until about 1425 . The design maintains the general proportions , and continues the strong projection of the buttresses .

The finished product has been criticised for its lack of pinnacles , and it is probable that the towers were intended to carry spires which were never built . Despite its lack of spires or pinnacles , the architectural historian Banister Fletcher describes it as " the highest development in English Gothic of this type of façade . "

===== Iconography of the west front =====

The sculptures on the west front at Wells include standing figures , seated figures , half length angels and narratives in high relief . Many of the figures are life sized or larger , and together they constitute the finest display of medieval carving in England . The figures and many of the architectural details were painted in bright colours , and the colouring scheme has been deduced from flakes of paint still adhering to some surfaces . The sculptures occupy nine architectural zones stretching horizontally across the entire west front and around the sides and the eastern returns of the towers which extend beyond the aisles . The strongly projecting buttresses have tiers of niches which contain many of the largest figures . Other large figures , including that of Christ , occupy the gable . A single figure stands in one of two later niches high on the northern tower .

In 1851 the archaeologist Charles Robert Cockerell published his analysis of the iconography , numbering the nine sculptural divisions from the lowest to the highest . He defined the theme as " a calendar for unlearned men " illustrating the doctrines and history of the Christian faith , its introduction to Britain and its protection by princes and bishops . He likens the arrangement and iconography to the Te Deum .

According to Cockerell , the side of the façade that is to the south of the central door is the more sacred and the scheme is divided accordingly . The lowest range of niches each contained a standing figure , of which all but four figures on the west front , two on each side , have been destroyed . More have survived on the northern and eastern sides of the north tower . Cockerell speculates that those to the south of the portal represented prophets and patriarchs of the Old Testament while those to the north represented early missionaries to Britain , of which Augustine of Canterbury , St Birinus , and Benedict Biscop are identifiable by their attributes . In the second zone , above each pair of standing figures , is a quatrefoil containing a half length angel in relief , some of which have survived . Between the gables of the niches are quatrefoils that contain a series of narratives from the Bible , with the Old Testament stories to the south , above the prophets and patriarchs , and those from the New Testament to the north . A horizontal course runs around the west front dividing the architectural storeys at this point .

Above the course , zones four and five , as identified by Cockerell , contain figures which represent the Christian Church in Britain , with the spiritual lords such as bishops , abbots , abbesses and saintly founders of monasteries on the south , while kings , queens and princes occupy the north . Many of the figures survive and many have been identified in the light of their various attributes . There is a hierarchy of size , with the more significant figures larger and enthroned in their niches

rather than standing . Immediately beneath the upper course are a series of small niches containing dynamic sculptures of the dead coming forth from their tombs on the Day of Judgement . Although naked , some of the dead are defined as royalty by their crowns and others as bishops by their mitres . Some emerge from their graves with joy and hope , and others with despair .

The niches in the lowest zone of the gable contain nine angels , of which Cockerell identifies Michael , Gabriel , Raphael and Uriel . In the next zone are the taller figures of the twelve apostles , some , such as John , Andrew and Bartholomew , clearly identifiable by the attributes that they carry . The uppermost niches of the gable contained the figure of Christ the Judge at the centre , with the Virgin Mary on his right and John the Baptist on his left . The figures all suffered from iconoclasm . A new statue of Jesus was carved for the central niche , but the two side niches now contain cherubim . Christ and the Virgin Mary are also represented by now headless figures in a Coronation of the Virgin in a niche above the central portal . A damaged figure of the Virgin and Christ Child occupies a quatrefoil in the spandrel of the door .

===== Crossing tower =====

The central tower appears to date from the early 13th century . It was substantially reconstructed in the early 14th century during the remodelling of the east end , necessitating the internal bracing of the piers a decade or so later . In the 14th century the tower was given a timber and lead spire which burnt down in 1439 . The exterior was then reworked in the Perpendicular style and given the present parapet and pinnacles . Alec Clifton @-@ Taylor describes it as " outstanding even in Somerset , a county famed for the splendour of its church towers " .

===== North porch =====

The north porch is described by art historian Nikolaus Pevsner as " sumptuously decorated " , and intended to be the main entrance . Externally it is simple and rectangular with plain side walls . The entrance is a steeply arched portal framed by rich mouldings of eight shafts with stiff @-@ leaf capitals each encircled by an annular moulding at middle height . Those on the left are figurative , containing images representing the martyrdom of St Edmund the Martyr . The walls are lined with deep niches framed by narrow shafts with capitals and annulets like those of the portal .

===== Cloisters =====

The cloisters were built in the late 13th century and largely rebuilt from 1430 to 1508 and have wide openings divided by mullions and transoms , and tracery in the Perpendicular Gothic style . The vault has lierne ribs that form octagons at the centre of each compartment , the joints of each rib having decorative bosses . The eastern range is of two storeys , of which the upper is the library built in the 15th century .

Because Wells Cathedral was secular rather than monastic , cloisters were not a practical necessity . They were omitted from several other secular cathedrals but were built here and at Chichester . Explanations for their construction at these two secular cathedrals range from the processional to the aesthetic . As at Chichester , there is no northern range to the cloisters . In monastic cloisters it was the north range , benefiting most from winter sunlight , that was often used as a scriptorium .

===== Restoration =====

In 1969 , when a large chunk of stone fell from a statue near the main door , it became apparent that there was an urgent need for restoration of the west front . Detailed studies of the stonework and of conservation practices were undertaken under the cathedral architect , Alban D. R. Caroe and a restoration committee formed . The methods that were selected for conservation were those devised by Eve and Robert Baker . W. A. (Bert) Wheeler , clerk of works to the cathedral 1935 ? 1978 , had previously experimented with washing and surface @-@ treatment of architectural

carvings on the building and his techniques were among those tried on the statues .

The conservation was carried out between 1974 and 1986 , wherever possible using non @-@ invasive procedures such as washing with water and a solution of lime , filling gaps and damaged surfaces with soft mortar to prevent the ingress of water and stabilising statues that were fracturing because of the corrosion of metal dowels . The surfaces were finished by painting with a thin coat of mortar and silane to resist further erosion and attack by pollutants . The restoration of the façade revealed much paint adhering to the statues and their niches , indicating that it had once been brightly coloured .

= = = Interior = = =

= = = Quire , transept and nave = = =

The particular character of this Early English interior is dependent on the proportions of the simple lancet arches . It is also dependent on the refinement of the architectural details , in particular the mouldings .

The arcade , which takes the same form in the nave , choir and transepts , is distinguished by the richness of both mouldings and carvings . Each pier of the arcade has a surface enrichment of 24 slender shafts in eight groups of three , rising beyond the capitals to form the deeply undulating mouldings of the arches . The capitals themselves are remarkable for the vitality of the stylised foliage , in a style known as " stiff @-@ leaf " . The liveliness contrasts with the formality of the moulded shafts and the smooth unbroken areas of ashlar masonry in the spandrels . Each capital is different , and some contain small figures illustrating narratives .

The vault of the nave rises steeply in a simple quadripartite form , in harmony with the nave arcade . The eastern end of the choir was extended and the whole upper part elaborated in the second quarter of the 14th century by William Joy . The vault has a multiplicity of ribs in a net @-@ like form , which is very different from that of the nave , and is perhaps a recreation in stone of a local type of compartmented wooden roof of which examples remain from the 15th century , including those at St Cuthbert 's Church , Wells . The vaults of the aisles of the choir also have a unique pattern .

Until the early 14th century , the interior of the cathedral was in a unified style , but it was to undergo two significant changes , to the tower and to the eastern end . Between 1315 and 1322 the central tower was heightened and topped by a spire , which caused the piers that supported it to show signs of stress . In 1338 the mason William Joy employed an unorthodox solution by inserting low arches topped by inverted arches of similar dimensions , forming scissors @-@ like structures . These arches brace the piers of the crossing on three sides , while the easternmost side is braced by a choir screen . The bracing arches are known as " St Andrew 's Cross arches " , in a reference to the patron saint of the cathedral . They have been described by Wim Swaan ? rightly or wrongly ? as " brutally massive " and intrusive in an otherwise restrained interior .

= = = Lady Chapel and retrochoir = = =

Wells Cathedral has a square east end to the choir and presbytery as is usual , and like several other cathedrals including Salisbury and Exeter Cathedrals has a lower Lady Chapel projecting at the eastern end , begun by Thomas Witney in about 1310 , possibly before the chapter house was completed . The date is a matter of dispute .

The Lady Chapel has a vault of complex and somewhat irregular pattern , as the chapel is not symmetrical about both axes . The main ribs are intersected by additional non @-@ supporting ribs known as " lierne ribs " and which in this case form a star @-@ shaped pattern at the apex of the vault . It is one of the earliest lierne vaults in England . There are five large windows , which are filled with fragments of medieval glass . In the east window the figures are all of the nineteenth century . The tracery of the windows is in the style known as Reticulated , having a pattern of a single repeated shape , in this case a trefoil , giving a " reticulate " or net @-@ like appearance . The

openings are also described as fish scales .

The retrochoir extends across the east end of the choir and into the east transepts . At its centre the vault is supported by a remarkable structure of angled piers . Two of these are so placed as to complete the octagonal shape of the Lady Chapel , a solution described by Francis Bond as " an intuition of Genius " . The piers have attached shafts of marble , and , with the vaults that they support , create a vista of great complexity from every angle . The windows of the retrochoir are in the Reticulated style like those of the Lady Chapel , but are fully Flowing Decorated in that the tracery mouldings form ogival curves . The plan of this area between the presbytery and the Lady Chapel is unique , and it has been suggested that the failure to procure the canonization of Bishop William of March led to a shortening of the presbytery as space was no longer needed for his shrine . There was then a consequent need to fill in the resulting extra space behind the High Altar . It was done ingeniously and beautifully . A similar situation had arisen at St Albans Abbey , where the old apse had been removed leaving space between the Lady Chapel and the shrine of St Alban . The space there , however , was not treated as imaginatively as it was at Wells .

= = = Chapter house = = =

The chapter house was begun in the late 13th century and built in two stages , completed about 1310 . It is a two @-@ storeyed structure with the main chamber raised on an undercroft . It is entered from a staircase which divides and turns , one branch leading through the upper storey of Chain Gate to Vicars ' Close . The Decorated interior is described by Alec Clifton @-@ Taylor as " architecturally the most beautiful in England " . It is octagonal , with its ribbed vault supported on a central column . The column is surrounded by shafts of Purbeck Marble , rising to a single continuous rippling foliate capital of stylised oak leaves and acorns , quite different in character from the Early English stiff @-@ leaf foliage . Above the moulding spring thirty @-@ two ribs of strong profile , giving an effect generally likened to " a great palm tree " . The windows are large with Geometric Decorated tracery that is beginning to show an elongation of form , and ogees in the lesser lights that are characteristic of Flowing Decorated tracery . The tracery lights still contain ancient glass . Beneath the windows are 51 stalls , the canopies of which are enlivened by carvings including many heads carved in a light @-@ hearted manner .

= = Artworks and treasures = =

= = = Stained glass = = =

Wells Cathedral contains one of the most substantial collections of medieval stained glass in England , despite damage by Parliamentary troops in 1642 and 1643 . The oldest surviving glass dates from the late 13th century and is in two windows on the west side of the chapter @-@ house staircase . Two windows in the south choir aisle are from 1310 ? 20 .

The Lady Chapel has five windows , of which four date from 1325 ? 30 and include images of a local saint , Dunstan . The east window was restored to a semblance of its original appearance by Thomas Willement in 1845 . The other windows have complete canopies , but the pictorial sections are fragmented .

The east window of the choir is a broad , seven @-@ light window dating from 1340 ? 45 . It depicts the Tree of Jesse (the genealogy of Christ) and demonstrates the use of silver staining , a new technique that allowed the artist to paint details on the glass in yellow , as well as black . The combination of yellow and green glass and the application of the bright yellow stain gives the window its popular name , the " Golden Window " . It is flanked by two windows each side in the clerestory , with large figures of saints , also dated to 1340 ? 45 . In 2010 a major conservation programme was undertaken on the Jesse Tree window .

The panels in the chapel of St Katherine are attributed to Arnold of Nijmegen and date from about 1520 . They were acquired from the destroyed church of Saint @-@ Jean , Rouen , with the last

panel having been purchased in 1953 .

The large triple lancet to the nave west end was glazed at the expense of Dean Creighton at a cost of £ 140 in 1664 . It was repaired in 1813 , and the central light was largely replaced to a design by Archibald Keightley Nicholson between 1925 and 1931 . The main north and south transept end windows by James Powell and Sons were erected in the early 20th century .

= = = Carvings = = =

The greater part of the stone carving of Wells Cathedral comprises foliate capitals in the stiff @-@ leaf style . They are found ornamenting the piers of the nave , choir and transepts . Stiff @-@ leaf foliage is highly abstract . Though possibly influenced by carvings of acanthus leaves or vine leaves , it cannot be easily identified with any particular plant . Here the carving of the foliage is varied and vigorous , the springing leaves and deep undercuts casting shadows that contrast with the surface of the piers . In the transepts and towards the crossing in the nave the capitals have many small figurative carvings among the leaves . These include a man with toothache and a series of four scenes depicting the " Wages of Sin " in a narrative of fruit stealers who creep into an orchard and are subsequently beaten by the farmer . Another well @-@ known carving is in the north transept aisle : a foliate corbel , on which climbs a lizard , sometimes identified as a salamander , a symbol of eternal life .

Carvings in the Decorated Gothic style may be found in the eastern end of the buildings , where there are many carved bosses . In the chapter house , the carvings of the fifty @-@ one stalls include numerous small heads of great variety , many of them smiling or laughing . A well @-@ known figure is the corbel of the dragon @-@ slaying monk in the chapter house stair . The large continuous capital that encircles the central pillar of the chapter house is markedly different in style to the stiff @-@ leaf of the Early English period . In contrast to the bold projections and undercutting of the earlier work , it has a rippling form and is clearly identifiable as grapevine .

The 15th @-@ century cloisters have many small bosses ornamenting the vault . Two of these carvings in the west cloister , near the location of the gift shop and café , have been described as sheela na gigs , i. e. female figures displaying their genitals and variously considered to be associated with depictions of the sin of lust or with ancient fertility cults .

= = = Misericords = = =

Wells Cathedral has one of the finest sets of misericords in Britain . Its clergy has a long tradition of singing or reciting from the Book of Psalms each day , along with the customary daily reading of the Holy Office . In medieval times the clergy assembled in the church eight times daily for the canonical hours . As the greater part of the services was recited while standing , many monastic or collegiate churches were fitted with stalls in which the seats tipped up to provide a convenient ledge for the monk or cleric to lean against . They were called " misericords " because their installation was an act of mercy . Misericords typically have a carved figurative bracket beneath the ledge framed by two floral motifs known , in the heraldic manner , as " supporters " .

The misericords date from 1330 to 1340 . They may have been carved under the direction of master carpenter John Strode , although his name is not recorded before 1341 . He was assisted by Bartholomew Quarter , who is documented from 1343 . They originally numbered ninety , of which sixty @-@ five have survived . Sixty @-@ one are installed in the choir , three are displayed in the cathedral and one is held by the Victoria and Albert Museum . New stalls were ordered when the eastern end of the choir was extended in the early 14th century . The canons complained that they had borne the cost of the rebuilding and ordered that the prebendary clerics should pay for their own stalls . When the newly refurbished choir opened in 1339 many misericords were left unfinished , including one @-@ fifth of the surviving 65 . Many of the clerics had not paid , and were required to contribute a total sum of £ 200 . The misericords survived better than the other sections of the stalls , which , during the Protestant Reformation , had their canopies chopped off and galleries inserted above them . One of the misericords , depicting a boy pulling a thorn from his foot , dates from the

17th century . In 1848 there was a complete rearrangement of the choir furniture , and 61 of the misericords were reused in the restructured stalls .

The subject matter of the carvings of the central brackets as misericords is very varied , but with many common themes recurring in different churches . Typically , the themes are less unified and less directly related to the Bible and Christian theology than are the themes of small sculptures seen elsewhere within churches , such as those on bosses . This is much the case at Wells , where none of the misericord carvings is directly based on a Bible story . The subjects , chosen either by the woodcarver , or perhaps by the individual paying for the stall , have no over-riding theme . The sole unifying element is the roundels on each side of the pictorial subject , which are all elaborately carved foliage , in most cases formal and stylised in the later Decorated manner , but with several examples of naturalistic foliage , including roses and bindweed . Many of the subjects carry traditional interpretations . The image of the " Pelican in her Piety " (believed to feed her young on her own blood) is a recognised symbol for Christ 's love for the Church . A cat playing with a mouse may represent the Devil snaring a human soul . Other subjects illustrate popular fables or sayings such as " When the fox preaches , look to your geese " . Many of the subjects are depictions of animals , some of which may symbolise a human vice or virtue , or an aspect of faith .

Twenty-seven of the carvings depict animals : rabbits , dogs , a puppy biting a cat , a ewe feeding a lamb , monkeys , lions , bats , and the Early Christian motif of two doves drinking from a ewer . Eighteen of the misericords have mythological subjects , including mermaids , dragons and wyverns . Five of the carvings are clearly narrative , such as the Fox and the Geese , and the story of Alexander the Great being raised to Heaven by griffins . There are three heads : a bishop in a mitre , an angel and a woman wearing a veil over her hair arranged in coils over each ear . Eleven carvings are of human figures , among which are several of remarkable design , having been conceived by the artist specifically for their purpose of supporting a shelf . One figure lies beneath the seat , supporting the shelf with his cheek , one hand and one foot . Another sits in a contorted manner supporting the weight on his elbow , while another figure squats with his knees wide apart and a strained look on his face .

== Fittings and monuments ==

Some of the cathedral 's fittings and monuments are hundreds of years old . The brass lectern in the Lady Chapel dates from 1661 and has a moulded stand and foliate crest . In the north transept chapel is a 17th-century oak screen with columns , formerly used in cow stalls , with artisan Ionic capitals and cornice , set forward over the chest tomb of John Godelee . There is a bound oak chest from the 14th century , which was used to store the chapter seal and key documents . The bishop 's throne dates from 1340 , and has a panelled , canted front and stone doorway , and a deep nodding cusped ogee canopy above it , with three stepped statue niches and pinnacles . The throne was restored by Anthony Salvin around 1850 . Opposite the throne is a 19th-century octagonal pulpit on a coved base with panelled sides , and steps up from the north aisle . The round font in the south transept is from the former Saxon cathedral and has an arcade of round-headed arches , on a round plinth . The font cover was made in 1635 and is decorated with the heads of putti . The Chapel of St Martin is a memorial to every Somerset man who fell in World War I.

The monuments and tombs include : Bishop Gisa , died 1088 ; Bishop Bytton , died 1274 ; Bishop William of March , died 1302 ; John Droxford , died 1329 ; John Godelee , died 1333 ; John Middleton , died c . 1350 ; Ralph of Shrewsbury , died 1363 ; Bishop Harewell , died 1386 ; William Bykonnill , died c . 1448 ; John Bernard , died 1459 ; Bishop Bekynton , died 1464 ; John Gunthorpe , died 1498 ; John Still , died 1607 ; Robert Creighton , died 1672 ; Bishop Kidder , died 1703 ; Bishop Hooper , died 1727 and Bishop Harvey , died 1894 .

== Clock ==

In the north transept is Wells Cathedral clock , an astronomical clock from about 1325 , believed to

be the work of Peter Lightfoot , a monk of Glastonbury . Its mechanism , dated to between 1386 and 1392 , was replaced in the 19th century , and the original mechanism moved to the Science Museum in London , where it continues to operate . It is the second @-@ oldest surviving clock in England , after the Salisbury cathedral clock .

The clock has its original medieval face . As well as showing the time on a 24 @-@ hour dial , it reflects the motion of the Sun and Moon , the phases of the Moon , and the time since the last new Moon . The astronomical dial represents a geocentric or pre @-@ Copernican view of the universe , with the Sun and Moon revolving round a central fixed Earth , like that of the clock at Ottery St Mary . The quarters are chimed by a quarter jack in the form of a small automaton known as Jack Blandifers , who hits two bells with hammers and two with his heels . At the striking of the clock , jousting knights appear above the clock face .

On the outer wall of the transept , opposite Vicars ' Hall , is a second clock face of the same clock , placed there just over seventy years after the interior clock and driven by the same mechanism . The second clock face has two quarter jacks (which strike on the quarter @-@ hour) in the form of knights in armour .

In 2010 the official clock @-@ winder retired and was replaced by an electric mechanism .

= = Music = =

= = = Organ and organists = = =

The first record of an organ at this church dates from 1310 . A smaller organ , probably for the Lady Chapel , was installed in 1415 . In 1620 an organ , built by Thomas Dallam , was installed at a cost of £ 398 1s 5d . (equivalent to about £ 73 @,@ 000 as of 2014) .

The organ that was installed in 1620 was destroyed by parliamentary soldiers in 1643 . An organ built in 1662 was enlarged in 1786 and again in 1855 . In 1909 ? 10 an organ was built by Harrison & Harrison of Durham , with the best parts of the old organ retained . It has been serviced by the same company ever since .

The cathedral also has a chamber organ , built by the Scottish organ @-@ builders Lammermuir , which is normally kept in the choir but which can be moved around , for services and concerts , in other parts of the Cathedral . It is regularly used for authentic accompaniment of Tudor and baroque music .

The first recorded organist of Wells Cathedral was Walter Bagele (or Vageler) in 1416 , and the post of organist or assistant organist has been held by more than 60 individuals since then . Peter Lyons was Master of the Choristers at Wells Cathedral and Director of Music at Wells Cathedral School from 1954 to 1960 . Choral conductor James William Webb @-@ Jones , the father of Lyons 's wife , Bridget , whom Lyons married in the Cathedral , was Headmaster of Wells Cathedral School from 1955 to 1960 . Between 1996 and 2004 the appointed Organist and Master of the Choristers was Malcolm Archer . Since 2005 the organist has been Matthew Owens . Jonathan Vaughn was appointed assistant organist in 2007 , and the current organ scholars are Bryan Anderson , Alex Henshaw and Blandine Jacquet .

= = = Cathedral choir = = =

There has been a choir of boy choristers at Wells since 909 . Currently there are 18 boy choristers and 18 girl choristers , aged from eight to fourteen . The Vicars Choral was formed in the 12th century and the sung liturgy was provided by a traditional cathedral choir of men and boys until the formation of an additional choir of girls in 1994 . The boys and girls sing alternately with the Vicars Choral and are educated at Wells Cathedral School .

The Vicars Choral currently number twelve men , of whom three are choral scholars . Since 1348 the College of Vicars had its own accommodation in a quadrangle converted in the early 15th century to form Vicar 's Close . The Vicars Choral generally perform with the choristers , except on

Wednesdays , when they sing alone , allowing them to present a different repertoire , in particular plainsong .

In December 2010 Wells Cathedral Choir was rated by Gramophone magazine as " the highest ranking choir with children in the world " . It continues to provide music for the liturgy at Sunday and weekday services . The choir has made many recordings and toured frequently , including performances in Beijing and Hong Kong in 2012 . Its repertoire ranges from the choral music of the Renaissance to recently commissioned works .

= = = Voluntary Choir = = =

The Wells Cathedral Voluntary Choir is a mixed adult choir of 30 members , formed in 1986 to sing at the midnight service on Christmas Eve , and invited to sing at several other special services . The choir now sings for about 50 services a year , when the Cathedral Choir is in recess or on tour , and spends one week a year singing as the " choir in residence " at another cathedral . Although primarily liturgical , the choir 's repertoire includes other forms of music , as well as performances at engagements such as weddings and funerals .

= = Bells = =

The bells at Wells Cathedral are the heaviest ring of ten bells in the world , the tenor bell (the 10th and largest) , known as Harewell , weighing 56 @. @ 25 long hundredweight (2 @, @ 858 kg) . They are hung for full @-@ circle ringing in the English style of change ringing . These bells are now hung in the south @-@ west tower , although some were originally hung in the central tower .

= = Library = =

The library is above the eastern cloister and was built between 1430 and 1508 . Its collection is in three parts : early documents , housed in the Muniment Room ; the collection predating 1800 , housed in the Chained Library ; and the post @-@ 1800 collection , housed in the Reading Room . The chapter 's earlier collection was destroyed during the Reformation , so that the present library consists chiefly of early printed books , rather than medieval manuscripts . The earlier books , in the Chained Library , number 2 @, @ 800 volumes and give an indication of the variety of interests of the members of the cathedral chapter from the Reformation until 1800 . The focus of the collection is predominantly theology but there are volumes on science , medicine , exploration , and languages . Books of particular interest include Pliny 's Natural History printed in 1472 , an Atlas of the World by Abraham Ortelius , printed in 1606 and a set of the works of Aristotle that once belonged to Erasmus . The library is open to the public at appointed times during summer and presents a small exhibition of documents and books .

= = = Original records = = =

Three early registers of the dean and chapter of Wells ? the Liber Albus I (White Book ; R I) , Liber Albus II (R III) and Liber Ruber (Red Book ; R II , section i) ? were edited by W. H. B. Bird for the Historical Manuscripts Commissioners and published in 1907 . The books comprise , with some repetition , a cartulary of possessions of the cathedral , with grants of land dating back as early as the 8th century , well before the development of hereditary surnames in England ; they also comprise acts of the Dean and Chapter , and surveys of their estates , mostly in Somerset .

= = Precincts = =

The cathedral is situated adjacent to a large lawned area , Cathedral Green , which is approached by three ancient gateways , Brown 's Gatehouse , Penniless Porch and Chain Gate . On the green is the 12th @-@ century Old Deanery , largely rebuilt in the late 15th century by Dean Gunthorpe

and remodelled by Dean Bathurst in the late 17th century . No longer the dean 's residence , it is used as offices for the diocese .

To the south of the cathedral is the moated Bishop 's Palace , begun around 1210 by Bishop Jocelin of Wells but dating mostly from the 1230s . In the 15th century Bishop Beckington added the north wing , which is now the bishop 's residence . It was restored and extended by Benjamin Ferrey between 1846 and 1854 .

To the north of the cathedral and connected to it by the Chain Gate is Vicars ' Close , a street planned in the 14th century and claimed to be the oldest purely residential street in Europe , with all but one of its original buildings surviving intact . Buildings in the close include the Vicars Hall and gateway at the south end , and the Vicars Chapel and Library at the north end .

The Liberty of St Andrew was the historic liberty and parish that encompassed the cathedral and the surrounding lands closely associated with it .

= = In the arts and popular culture = =

The English painter J. M. W. Turner visited Wells in 1795 , making sketches of the precinct and a water colour of the west front , now in the Tate gallery . Other artists whose paintings of the cathedral are in national collections are Albert Goodwin , John Syer and Ken Howard .

The cathedral was used as an inspiration for Ken Follett 's novel *The Pillars of the Earth* and , with a heavily modified central tower , featured as the completed fictional Kingsbridge Cathedral at the end of the 2010 television adaptation of that novel . The interior of the cathedral was used for the Doctor Who episode , ' *The Lazarus Experiment* ' , while the exterior shots were filmed at Southwark Cathedral .