

Survivals from the past

Original castle gates and doors – a survey

The majority of medieval buildings still standing today will have been altered, repaired, modernised and generally changed many times throughout their lifetime. It is remarkable therefore that some medieval buildings still contain the original wooden doors or gates that were fitted when the buildings were constructed.

This survey will attempt to summarise the surviving medieval gates in fortified buildings throughout the UK and Ireland. I should state from the outset that this is only a provisional summary as many castle doors and portcullises are of unspecified date either because no accurate dating evidence can be obtained for them or, in some cases, the thorough investigation into what might appear to be original doors hasn't yet begun.

The visual appearance of remaining wooden doors *in situ* can be deceptive as the effects of weathering on timber (usually oak in the case of castle gates, but not exclusively) are highly variable. Medieval doors may not appear to be original because their condition today is remarkably fresh and well preserved and conversely, knarled and ravaged timber doors may give the impression of antiquity yet may be relatively recent being constructed using ancient techniques or exposed to severe environmental conditions.

A good case to illustrate this is the Anglo-Saxon door leading to the Pyx Chamber in Westminster Abbey, only confirmed as such in recent times. This internal door was so well preserved and still in daily use, that no attention was given to its age until a dendrochronology survey (a method of estimating age of timber by matching tree-ring growth patterns to those of known age) was undertaken by Oxford Dendrochronology Laboratory throughout the Abbey timberwork under English Heri-



Westminster Abbey. The Anglo-Saxon Pyx door.

tage guardianship. This survey revealed the date of the timber used to make this door to be A.D. 1050 and contemporary with the Abbey construction by Edward the Confessor, although reshaped for use in a later (13th century) door opening.

Our survey will consider timber gates, doors and portcullis grilles that are still performing their original function with a brief overview of construction methods.

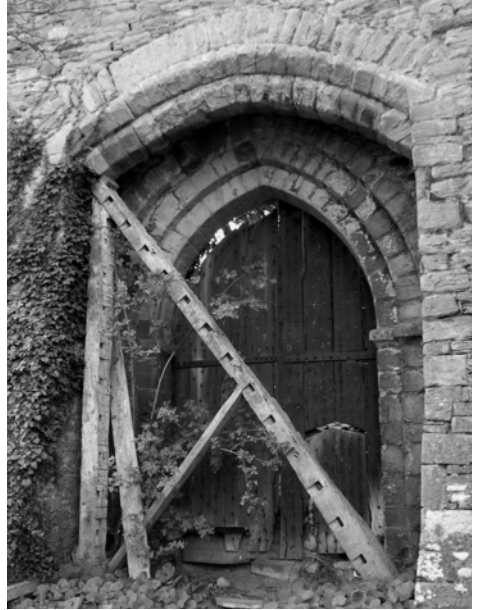
Construction Techniques

Clearly there are many designs of wooden doors and no meaningful typology can be established.

If we were to generalise though, castle doors were made of oak, with a double layer of timber forming outer and inner boards, often set in opposite directions for strength or decorative effect, e.g. one side with vertical boards the other side with the boards laid horizontally. Iron nails or roves, often decoratively finished or within metal strapwork, were applied to hold and strengthen the boards together.



Chepstow Castle. Detail. Inner side of wicket gate.



Hay on Wye Castle. Outer side of gate with wicket.

This method was used in shipbuilding of the period also.

A small wicket door is usually inserted into one of the larger doors allowing the movement of people in and out of the gates without the need to open the pair of main doors fully.

Often a latticework bracing on the inner face of the door was attached, formed with square section bars. These were known as ‘ledges’ and were either set at right angles or diagonally.

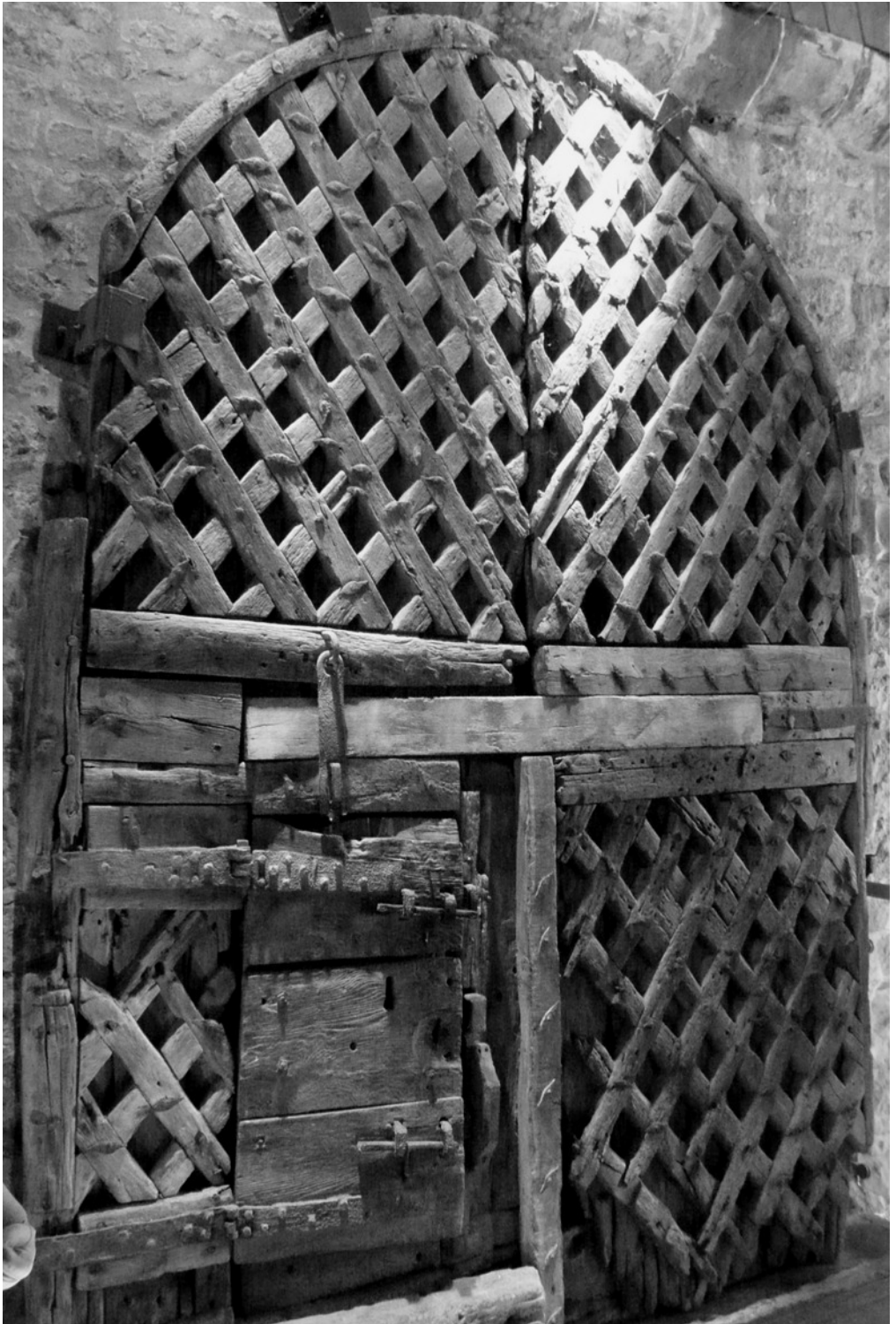
The remarkable late 12th century castle gates from Chepstow are made from oak boards assembled in vertical lengths on the outer face, originally sheathed with wrought iron cladding and iron straps, and the inner face made from sophisticated lattice work. The latticework on the inner face used advanced mortise and tenon joints providing a strong yet decorative bracing.

The oak used on the Chepstow doors was of a different type on the outer and inner faces. The outer boards and the

hanging styles were made from fast grown trees whilst the timber of the inner lattice work was from slow grown trees. This was deliberate and no evidence for reused timber has been found and demonstrates the carpenters knowledge of his materials.

The gates at Hay-on-Wye have two layers of oak planks, each about 1½ inches thick held together with strong iron nails with decorative heads, passed through the timber from the exterior and bent over on the inner face to hold tightly. The outer boards were vertical and the inner ones horizontal.

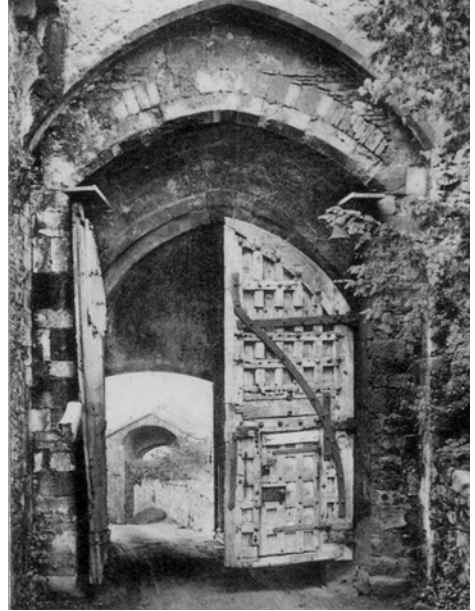
The iron bars attached to the outer face of Dunster castle gateway doors are fastened with huge diamond headed iron nails closely spaced all along the horizontal iron bars that themselves are some 4 – 6 inches apart that cover the faces of each door. Set at 4 inch intervals are vertical iron bars, held in place below the horizontal ones, forming an iron grid pattern of immense strength.



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Bodiam Castle. Outer side. Portcullis c. 1385.



Carisbrooke Castle. Inner side. 14th or 15th century.

The terminology of doors and door hangings in medieval accounts is often varied and unfamiliar to us today. A door was sometimes termed a ‘leaf’ or the Latin *folium* in contemporary documents. Door jambs have been called ‘doorsteads’ or ‘durnes’, possibly reflecting local or dialect terms. The range of terms for all parts of the door furniture are a subject for further study in their own right.

SURVEY

Bodiam Castle, East Sussex

Bodiam Castle, subject to much discussion on its military credentials, contains an original, wooden portcullis, positioned in front of the outer gates of the main twin towered gatehouse to the castle.

The castle was built by Sir Edward Dalyngrigge in the late 14th century. The wooden portcullis is encased in iron with iron spikes at the bottom and these days is permanently raised above the entrance. The owners of Bodiam Castle since 1926, the National Trust, were not able to have the

oak of the portcullis dendro-dated as there were insufficient tree rings available to accurately sample. Instead they have had a radiocarbon dating conducted within recent years that gave a 95% probability that the timber was late 14th century.

This date places the timber portcullis at the 1385 foundation date of the castle and makes Bodiam the only accurately dated, original timber portcullis left *in situ* in the UK.

Carisbrooke Castle, Isle of Wight

The gatehouse at Carisbrooke Castle was built between 1335-41 and has a pair of wooden medieval doors hanging *in situ*. These gates are likely to be the original 14th century gates but some historians (e.g. the old Ministry of Works Guidebook by C R Peers) considers them from the following century - i.e. 15th. As far as I am aware, no dendro-dating has been carried out on the doors. We are left therefore to consider dating on stylistic evidence alone, and this as we have seen is dangerous.



Chepstow Castle. Inner side. Late 12th century.



Hay on Wye Castle. Inner side in situ. Image © RCAHMS, and reproduced with thanks.

The gates have been removed from the gateway on several occasions over the last century and taken for safekeeping into storage. The originals are now back *in situ* although the original drawbar, shown attached in old photographs, is no longer with the doors.

The doors are of oak in vertical boards to the outer face and braced on the inside with square sectioned wooden bars set at right angles to each other forming a lattice of squares. A wicket gate is inserted into one of the doors.

Chepstow Castle, Gwent

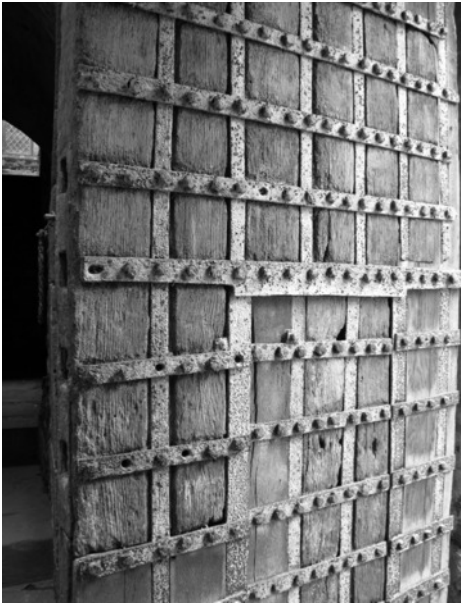
The main outer gatehouse doors at Chepstow were taken down from their original position in 1964 and brought inside to display in the museum on site to be replaced by replicas. These original doors have recently been dendro-dated to give a felling date of the timber used of between 1159 – 1189. This remarkable survival puts these original gates amongst the oldest surviving

castle gates in Europe and significantly altered the dating of the construction of the main gatehouse itself, which until this dating evidence was believed to have been constructed between 1219 and 1245.

The carpentry techniques (see above) used to make the doors are also early and push back the provenance of the sophisticated carpentry methods to be amongst the earliest examples of these techniques known in northern Europe.

Chepstow doors show the earliest use of lattice bracing in their construction, a type known previously only from ecclesiastical buildings such as the west doors of Peterborough cathedral.

The significance of the early date of the wooden doors is such that it brings the construction of the advanced design of William Marshal's twin towered gatehouse into the late 12th century, making it the earliest example of the type in the UK, Ireland and the Continent.



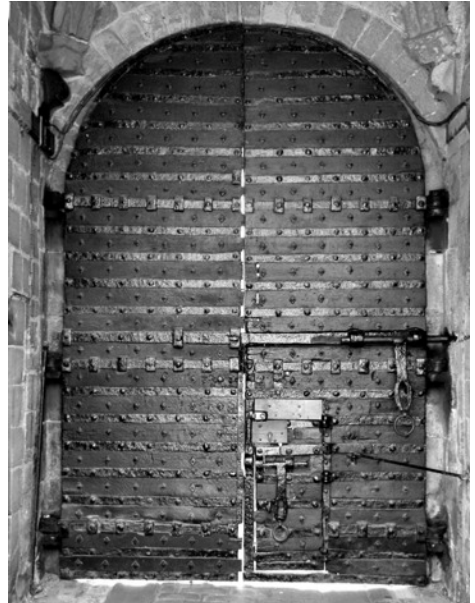
Dunster Castle. RH leaf - outer side, in situ.

Dunster Castle Gatehouse, Somerset

The oldest surviving feature of Dunster castle is its twin semi-circular towered gateway of the early 13th century. The upper parts of this gateway have been much remodelled and partially obscured by the later gatehouse of 1420 built by Sir Hugh Luttrell and positioned in front of and at right angles to the original gate.

The lower part of the 13th century gateway survives well and the doors hanging to this day in the gateway are certainly medieval and might be the originals. The design of these doors is unusual and has the normal oak boards some 1½ inches thick laid vertically but these doors are covered with iron bars nailed to the outer surface to form a grid of 4 inch squares all over the doors, essentially cladding them in iron. The right hand door as we look from outside the gate, has a small wicket gate inserted into the larger door and this wicket is contemporary with the main construction.

The exact dating of these doors has not been done but a record exists of



Durham Castle. Outer Gatehouse, inner side, in situ.

work to these doors in the accounts for 1417 which show that extensive repairs were carried out to the gates by Sir Hugh Luttrell. - “To a carpenter on the repair of the gates of the lower castle, for 7 days at 3d a day: - 21d. Also for ironwork for the same gates: 87lbs at 1¼d by the pound, in nails, plates and bands: - 9s ¾d”

It can be speculated that if these doors required extensive renovation in the early 15th century as described above the origins of the doors may well be a century or two older bringing them close to the construction date of the gateway. See also CSG Journal pp. 134-136.

Durham Castle

16th century oak doors still hanging in the gatehouse leading to the inner bailey of Durham Castle - the palace for a long line of Prince Bishops. The gateway and barbican was then remodelled and widened by Bishop Tunstall (1530 – 1539). The new, widened doorway, was fitted with a pair of new doors at this time and these are likely to be the ones still hanging *in situ* today.



Kilrush Castle. Outer side in situ. Late 16th century. Image © Rory Sherlock.



Kilrush Castle. Inner side in situ. © Image Rory Sherlock.

They are made of oak boards and iron bound with a wicket gate inserted into the left hand door. To the outside face there are vertical iron strips applied to the wooden surface some 10 inches apart and riveted to the door with large round-headed rivets. The original iron bolts of massive proportions on the inner face are still in operation.

Hay-on-Wye Castle, Hereford

The original gateway of Hay-on-Wye castle fell into disuse in the 17th century when the castle was remodelled into a fine palatial manor house and much of the medieval work was incorporated into this new structure. The gateway, and the wooden gates within, were essentially closed for good and stayed unused until the present day.

The remaining timber gates appear to be medieval and each door is of a different construction, suggesting one of the pair of doors was replaced at a later time. Externally both doors show vertical oak timber planks with original iron hinges and metal nails. Internally the rear of each

door has a different construction. The left hand door has a lattice work construction to the rear and the other door has plain horizontal boards.

Recent dendro-dating has been unable to establish a felling date of the left hand door (when looked at from outside the castle) and it has been proposed on stylistic grounds to be of c.1300. The right hand door, containing a small wicket gate, has produced a dendro date of between 1610-1640 – around the time of the Civil Wars.

Kilrush Castle, Co. Kilkenny, Ireland

Possibly the only surviving example in the country of original wooden castle doors. The doors hanging in the ground floor entrance of the late 16th century Tower House at Kilrush are thought to be original and contemporary with its construction.

The doors are of three wide oak boards fitted vertically with applied decorative bracing to the outer face. The bracing comprises of broad chamfered horizontal and vertical pieces and curved bracing to



Byward Tower. Upper room winding gear.



Thornton Abbey. Inner side in situ.

the upper part of the door forming a rebate for the curved outer stone doorway. The whole outer oak face is further decorated with a pattern of large square-headed iron nails forming both a decorative pattern and securing the timberwork in place. Clearly this door was as much a display of prestigious carpentry as a barrier to entry.

Tower of London or White Tower - Byward Tower

The outer defences added to the White Tower by Edward I in the late 13th century included the twin-towered fortified gatehouse called the Byward Tower. Although the original doors have long since gone the portcullis still in situ is likely to be original.

During maintenance work in 2001 the portcullis was lowered and examined in detail by historians. The timberwork had received some post-medieval restoration but it was felt that much original medieval timber remained within its carpentry.

Thornton Abbey Gatehouse, Lincolnshire

The gatehouse at Thornton Abbey is the largest monastic gatehouse in England. The massive gatehouse was the main entrance to the precincts and were designed to impress the visitor with the wealth and prestige of the Abbey and provide at the very least an impression of defence and possibly actual serious defence with its circuit of walls and ditches, loopholes and machicolations.

The gatehouse was built between 1377 and 1389 and made from brick and stone. The gates that still hang today in the entrance passage are the original oak doors of the late 14th century. The design of these doors is very decorative with fine applied timber detailing representing the gothic tracery of the contemporary windows in the church over the usual oak boards.

The two doors are in a particularly distressed condition although remaining *in situ*. It is said the gates were attacked by the



Walmgate Bar. Outer side in situ.



Walmgate Bar. Detail of RH leaf.

forces of Oliver Cromwell during the English Civil war of the 1640's and Thornton Abbey Gatehouse was attacked and burned. The damage to the wooden doors being inflicted during that attack it is claimed.

Walmgate Bar, York

The only complete barbican gate remaining on the circuit of walls at York, Walmgate Bar also preserves a pair of medieval wooden gates still hanging *in situ*. The gates date from the 15th century and hang open at normal times in the 12th century archway. The barbican and gateway is now a pedestrian route with the traffic, that until recently passed right through this remarkable medieval survival, redirected around it, so a close and leisurely inspection of the timberwork can be made.

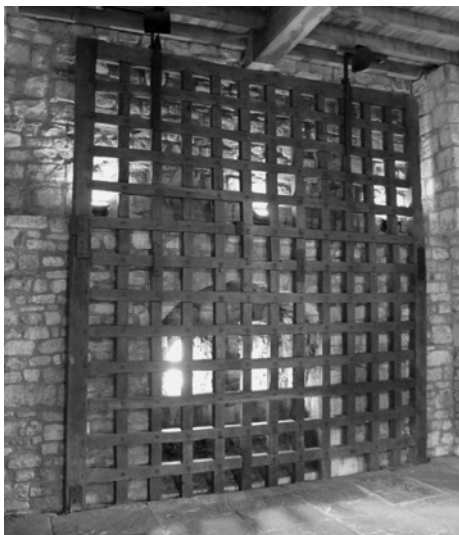
‘The surviving gates, of timber, are mounted in the inner arch of Walmgate Bar and are now kept permanently open. Each leaf is 12¾ ft. high, 6 ft. wide, and

about 4 ins. thick and is studded with broad-headed nails; the outer face is made of vertical oak boards with the joints concealed by cover-mouldings; on the inner face the boards are horizontal and conceal the set of three hinges. A small wicket 4½ ft. high and 1¾ ft. wide is let into the N. leaf. These gates are probably 15th century’ [ref: RCHME: City of York, Volume 2, The Defences, p. 42. 1972.]

York, City Gates, Portcullises.

Wooden portcullises survive at all four of the main city gates (or Bars as they are known) on the city walls of York and are likely to contain at least some timbers of medieval date although they have all been to some degree restored over the years.

Micklegate Bar, Bootham Bar, Monk Bar and Walmgate Bar all have portcullises and some with their winding mechanisms in place but only one, Monk Bar, is in full working order. York city defences

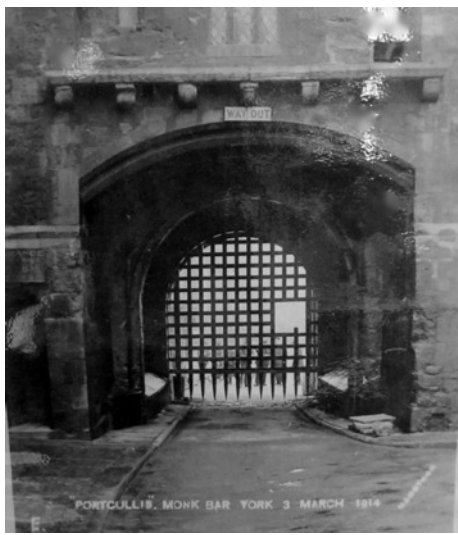


Bootham Bar. Inner side in situ.

and its gates, wallwalks and earthworks, although restored in many parts, nevertheless represent one of the most complete and impressive medieval circuits in the British Isles.

Micklegate Bar houses a museum on the upper floors and contains approximately half of the original wooden portcullis as an exhibit, although much concealed by posters and information panels attached to it. Of the four York gateway portcullises, the one here in Micklegate appears to be the most complete medieval construction and the least restored.

Bootham Bar was heightened during the 14th century to house a portcullis and a barbican. The portcullis is mentioned in documents in 1454-5 and in 1488-9 that refer to a 'great gate and a wicket'. The portcullis hanging in Bootham Bar today contains a small wicket gate on the lower section but almost out of sight within the floor in its current fixed position. It has been cut in two at some point and joined together again with metal brackets. The grating is made of timbers 4 ins. by 3 ins. in section set 7 ins apart, is now 19 ft high



Monk Bar. Inner side in situ.

and 12¼ ft. wide; it has the usual pointed ends to the upright members.

The wooden grille hanging in the upper room today is much restored but some original timber appears to be still within the structure, particularly in the upper sections.

Monk Bar portcullis, still capable of being closed using the horizontal windlass turned by wooden hand-spikes, has a wooden grate 14 ft. high and 12¼ ft. wide. It has 12 vertical members, with the bottom of each one having a shaped pointed metal spike attached.

The wooden portcullis hanging *in situ* on the first floor is likely to contain at least some original 14th century timber although much restored. It was last closed in 1953 and a picture hanging in the room shows the portcullis closed taken at the outbreak of WW1 in 1914.

The original winding gear, altered in parts, but largely of medieval date, sits above the portcullis on the upstairs floor. The rooms of Monk Bar and the portcullis can be visited as part of the Richard III Museum that is now housed in the build-



Thornton Abbey Gatehouse. Outer side in situ.. © Philip Davis.



Wells - Bishop's Castle. Outer side in situ. LH leaf.



Wells Bishop's Castle. Outer. RH leaf with wicket.

ing. Incredibly, the medieval winding mechanism is part of the museum experience and visitors are encouraged to have a go at winding the wooden handle and enjoy the loud noise made by the ancient metal ratchet and pawl as the windlass is rotated. Thankfully, the metal chains are no longer attached to the portcullis below.

Walmgate Bar has the portcullis *in situ* along with the supports for the original windlass. The wooden grille is 13½ ft. wide and 12½ ft. high, made of eleven upright and ten cross timbers 1 ft. apart. The bottom of each upright timber has a metal spike attached.

Wells, Somerset, Bishop's Palace Gatehouse

The gatehouse at the Bishop's Palace, Wells, was built during the tenure of Bishop Ralph (1329 – 63) and was granted its licence to crenellate in 1341. It is still a matter of debate if the fortifications around the palace, including this gatehouse were for serious military defence or an assertion of power – a common discussion applied to

many sites. The gatehouse appears to have been designed as an accommodation block. Within the gateway are what is very likely to be the original 14th century wooden doors of the 1340's with an inserted wicket gate of c. 1600 in one door. They are made from oak boards with applied vertical decorative strips to the exterior and studded with iron rivets to form a regular pattern.

Conclusion

This list represents the examples known or brought to the attention of the author; there could well be other examples out there. I would appreciate people making contact should they be aware of further examples for inclusion in a possible future update to this list.

Many thanks to those who have helped with information and photographs for this short article but in particular Philip Davis, Neil Guy, Paddy & Norman Jardine, Derek Renn and Rory Sherlock.

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