

## Arrow-loops in the Great Tower of Kenilworth castle: Symbolism vs Active/Passive 'Defence'

Derek Renn

It is surprising how few Norman castles exhibit arrow-loops (that is, tall vertical slits, cut through walls, widening internally (embrasure), sometimes with ancillary features such as a wider and higher casemate. Even if their everyday purpose was to simply to admit light and air, such loops could be used profitably by archers defending the castle. The earliest examples surviving in England seem to be those (of uncommon forms) in the square wall towers of Dover castle (1185-90), and in the walls and towers of Framlingham castle, although there may once have been slightly older (and simpler) ones at Windsor.<sup>1</sup>

Within a quarter of a century the arrow-loop had blossomed into the classic form seen in round towers at Corfe and Dover. Where do those in the Great Tower of Kenilworth castle fit in? The date of the Great Tower at Kenilworth is uncertain. The castle was begun by Geoffrey de Clinton I in the 1120s and it was seized by the Crown in 1173. £46. 8s was paid for repairs to the castle, including the *turris*, in 1189-90 while over £1,000 was spent on the castle between 1210-15.<sup>2</sup> Over £150 was spent in 1219 to rebuild a fallen tower and further work was authorised on a *turrell* in 1220.<sup>3</sup> Brown and Colvin suggested that the resemblances between the arrow-slits and their embrasures at the top of the Great Tower and those of Lunn's Tower meant that both were built in the early thirteenth century.<sup>4</sup>

In 1931, Sidney Toy measured and drew arrow-loops in the top gallery of the Great Tower at Kenilworth and his drawings are reproduced here (Figs. 1 - 6), by permission of the Society of Antiquaries of London.<sup>5</sup> Later he published a description of the loops, with drawings reconstructing a sloping roof over the firing gallery and an upper battlemented wallwalk over the casemates.<sup>6</sup> The loops are broadly similar, with a broad shallow double-chamfer recessed frame 12 inches wide externally which enhances their appearance (and would deflect many incoming arrows) and a widened base to the slit. Those on the south side have a triangular base to the slit and triangular seats in the internal angles between the casemate and the embrasure. The sill of the embrasure slopes down, terminating in a shallow square pit behind the wider part of the external opening, giving a view of quite a large area of

ground below (Fig. 7, for which I am indebted to Dr. Richard K Morris). Those on the west side have hatchet-shaped bases, a cross-slit and no internal seats. Lunn's Tower, at the north-east angle of the outer curtain wall, is roughly octagonal, with shallow angle buttresses tapering into a broad plinth. It has arrow-loops at three levels, some with cross-slits and badly-cut splayed bases.

Toy attributed the widening at the foot of each loop to later re-cutting. When were these alterations (if alterations they be)<sup>7</sup> carried out, and for what reason? He suggested 'in the thirteenth century, to give crossbows [...] greater play from side to side', but this must be challenged. Greater play would need a widening of the embrasure behind the slit. Cross-slits substantially improved the field of view, but gave little advantage in the field of fire from any sort of bow. Even a cross-slit did not provide a view close up from plunging loops like these.<sup>8</sup>

Toy shows the Great Tower slits as from ½ inch to ¾ inches wide, remarkably narrow, but Dr Morris has confirmed this, telling me also that the east-facing slit in the SW turret is 1⅜ inches across, while the one original slit in Lunn's Tower is 1¾ in wide. Most castle arrow-slits are at least 2 inches wide, to give free passage of a fletched arrow or crossbow bolt. When an arrow is loosed, it flexes and 'snakes' from side to side at first. (The rigid crossbow bolt does not have this problem, but can fall off the stock when shooting downwards.) The experiments at White Castle demonstrated that, with practice, a long-bow archer can avoid his arrows striking the sides of the arrow-slit, most easily by standing back from the embrasure. Nevertheless, the narrowness of the Kenilworth slits does call in question their use by archers. The larger space behind the bottom of the opening might have allowed some archers to cover the wide plinth and bigger missiles to be dropped.

There are the lower part of six loops at the top of the South-West turret: one facing north, two facing west, two south and one east, at a higher level than their neighbours in the main walls to north (2) and east (3). The South-East turret exhibits no positive evidence for arrow-loops level with those in the South-West turret, and, the gallery at loophole level along the west and south sides is reduced to a narrow ledge along the east side, both perhaps due to the planned remodelling of the east facade in 1568-71.<sup>9</sup> The North-East turret does not survive to the same height as the

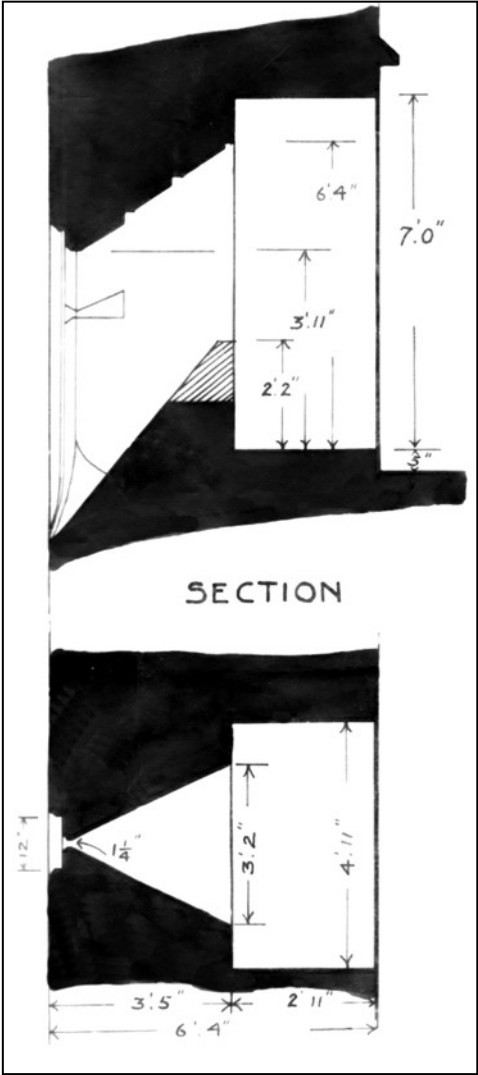


Fig. 1

*Figs. 1-3 Kenilworth Castle Great Tower.*

*Section, plan and elevations of one of the two arrow loops in the top gallery in the west wall of the great tower.*

*From previously unpublished drawings by Sidney Toy held in the Harold Sand's drawings archive MS 475 at the Society of Antiquaries and reproduced with their kind permission.*

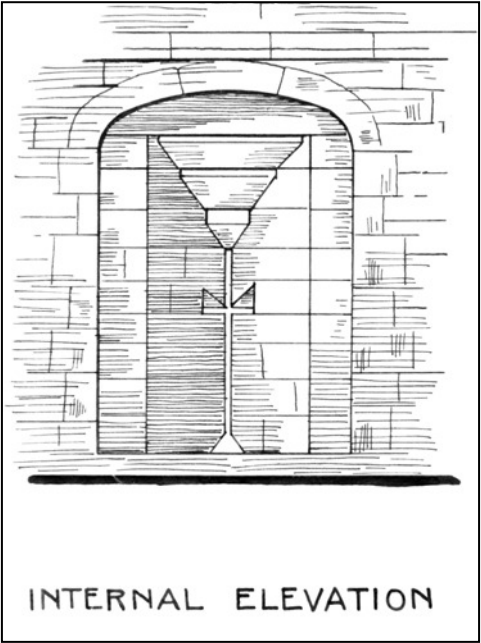


Fig. 2

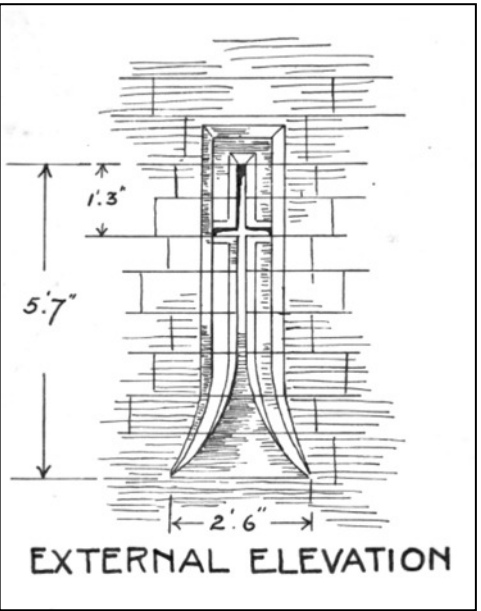


Fig. 3

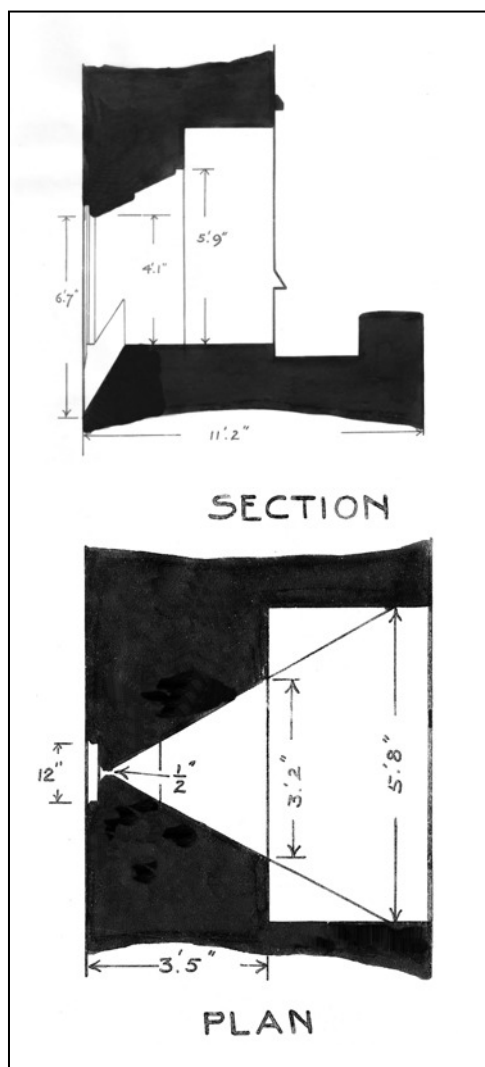


Fig. 4.

Figs. 4-6 Kenilworth Castle Great Tower.

Section, plan and elevations of one of the three arrow loops in the top gallery in the south wall of the great tower.

From drawings by Sidney Toy held in the Harold Sand's drawings archive MS 475 at the Society of Antiquaries and reproduced with their permission.

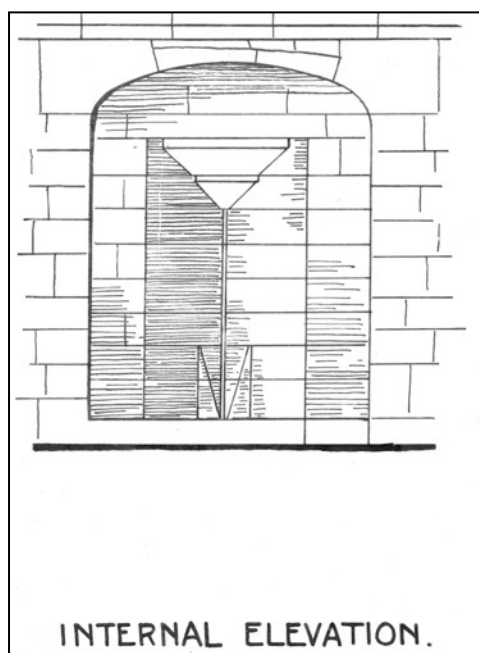


Fig. 5.

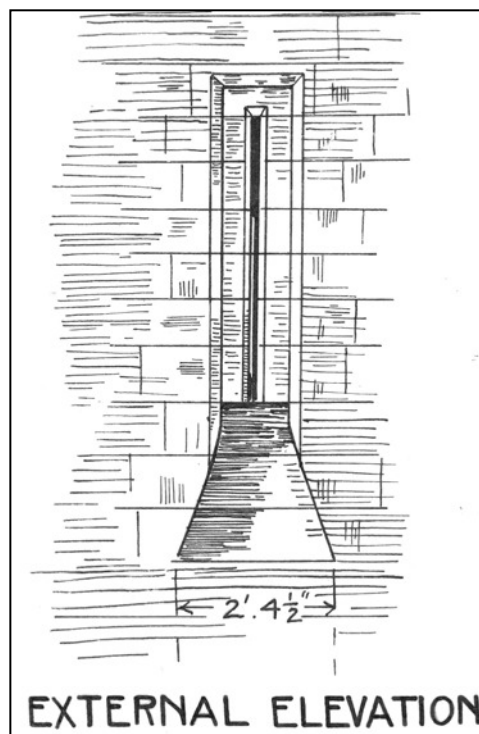
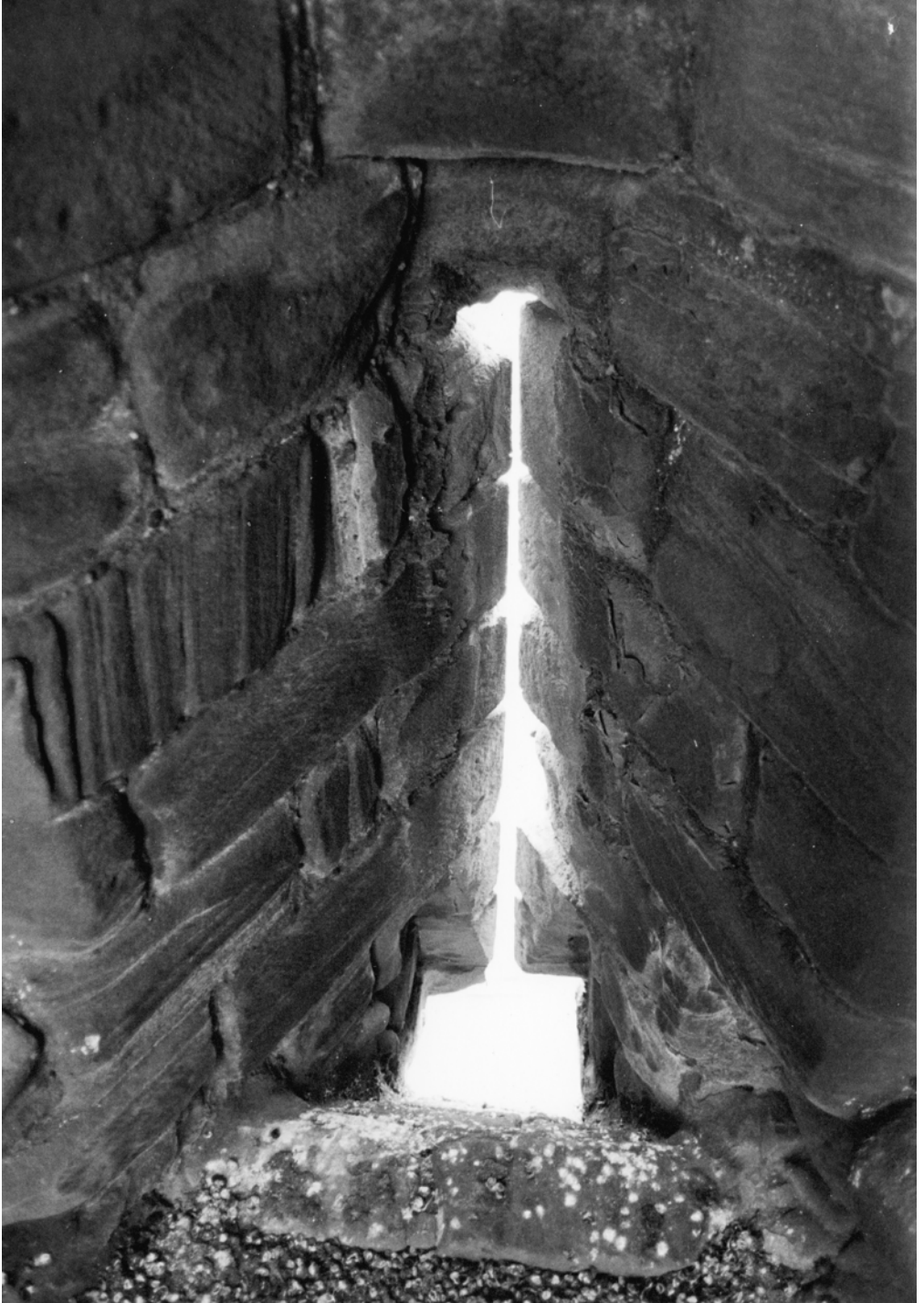


Fig. 6.



*Fig. 7. The complete loop on the south side of the Great Tower. Reproduced courtesy of the History of Art Department, University of Warwick (photo R K Morris).*

southern pair. The North-West turret has largely gone, together with the north wall of the Great Tower, so there is now only good evidence for loops on the sides facing the Inner Ward.<sup>10</sup> With one possible exception, each of these arrow-loops in the Great Tower is above one of the **window** embrasures, thus differing in purpose from the sloping chutes seen over **doorways** at Caerffili, Leybourne and Llansteffan castles. Anything dropped or shot through the loops of the Great and Lunn's Towers at Kenilworth would ricochet from their wide 'apron' plinths.

Anyone approaching the castle from the town would be faced by the array of arrow-loops of Lunn's Tower with the bulk of the Great Tower looming behind. If coming from the park, the only direct entrance was through the small postern tower, with the Great Tower behind presenting either a blank face or perhaps a continuation of the loop-holed gallery. From the south, the Brays outwork and dam between lakes had to be negotiated, backed by an array of towers with (different) arrow-loops in front of the Great Tower. Once inside the outer curtain wall, the visitor would have to pass through the inner gate against the south-east turret of the Great Tower and thereafter be in the field of view from its loops, especially if proceeding into the forebuilding.<sup>11</sup>

#### Some remaining questions:

- Is it just a coincidence of survival or did the loops always only overlook the inner bailey?
- Despite their quality, were the loops only decorative and psychological, threatening more than they could deliver?
- Might the change be part of Leicester's remodelling, from missiles being shot or dropped, to flowers being showered down like ticker tape?

#### Notes:

1. William St John Hope 1913, *Windsor Castle - An Architectural History*, London, Country Life, reconstructed plans of about 1790 in separate portfolio.
2. R Allen Brown 'A note on Kenilworth Castle: the Change to Royal Ownership', *The Archaeological Journal* (1954) **CX**, 120-4, esp. p.123 nn 2, 4.
3. *Pipe Roll 4 Henry III*, p. 30; *Rotuli Litterarum Clausarum I*, p. 422b.
4. *The History of the King's Works*, 1963, II, p. 683 n 4. David Crouch suggested that the keep was completed by Geoffrey de Clinton II before 1173:

'Geoffrey de Clinton and Roger, Earl of Warwick: New Men and Magnates in the Reign of Henry I' *Bulletin of the Institute for Historical Research* 1982 **LV**, pp. 111-123.

5. SAL library, MS 475 (Sands Collection).

6. Toy, *Castles - A Short History of Fortifications from 1600 B.C. to A.D. 1600*, 1939, pp. 110-111, copied in his *The Castles of Great Britain and A History of Fortification from 3000 BC to AD 1700*.

7. For example, the inverted T loops at the top of the Pembroke *donjon*, and the Kenilworth-style ones in the Warkworth gatehouse may each be original features of around 1200 AD.

8. Jones and Renn, 1982 'The military effectiveness of Arrow Loops: Some Experiments at White Castle', *Château Gaillard IX-X*, pp. 445-56. See also Viollet-le-Duc 1854, *Dictionnaire Raisoné de l'Architecture française du XIe au XVIe siècles VI*, pp. 386-98, figs.1, 2, 4, 7 for the geometry of such splayed slits.

9. R. K. Morris 2007, 'A plan for Kenilworth Castle at Longleat' *Eng. Heritage Hist. Rev.*, **2**, 22-35; R. K. Morris 2009, '[ .... ]: The Earl of Leicester's Remodelling of Kenilworth Castle for Queen Elizabeth I' *Antiquaries Journal* **89**, 241-305, esp. pp. 256-8 and 263.

10. G. T. Clark 1875, 'The Castle of Kenilworth' *The Archaeological Journal XXXII*, 55-88, at p. 62 said there were three loops in the south wall, and two in the east and west, and that each turret had one on each of the outer faces. However, he said that the keep walls were dangerous and covered in ivy, and he missed other slits visible nowadays. It is just possible that stains running down from the present eastern wall-top are due to water draining from former loops at a higher level. Hollar's engravings (Dugdale 1656, *Antiquities of Warwickshire Illustrated*, between pp.158-9) show the Great Tower as complete including the crenellations, before the demolition of the north side in September 1649: (M. Roberts, 2002, *Dugdale and Hollar - History Illustrated*, pp. 29-31, 38). The engravings are too small to show arrow-loops, but indicate the [Tudor] windows.

11. Drew, 1971 'Kenilworth castle - a discussion of its entrances', *Transactions of the Birmingham and Warwickshire Archaeological Society* **84**, pp. 148-159. Compare the close coupling at Rochester (Renn, 2004 'Refortification at Rochester in the 1220s: a public/private partnership', *Archaeologia Cantiana CXXIV*, pp 343-63).