

THE ROTARY QUERN IN WALES : PART TWO

Sue Watts

In 410AD the Roman legions left Britain for good and the people were left to fend for themselves against increasing attacks from Jutes, Angles, Saxons, Picts and Scots. With the breakdown of central government the time was ripe for personal advancement and in Wales separate kingdoms began to develop as local leaders vied for supremacy. In the early years of the fifth century Cunedda arrived from Scotland to settle on Anglesey and drive out the Irish immigrants. His descendants were to found the kingdom of Gwynedd. However, despite the upheavals of the fifth and sixth centuries, there would still have been animals to tend and crops to sow and harvest. It is likely that those sites where archaeology has produced plentiful evidence of fourth century occupation, such as Din Lligwy on Anglesey and Cae'r Mynydd, Caernarfonshire, continued to be occupied well into the post Roman period. In the majority of homesteads grain would have continued to be ground using a rotary quern, which had developed from the beehive form of the iron age to a flatter, wider quern in later Roman times. However, it would seem that in some places the saddle quern was still in use.

At Pant-y-Saer on Anglesey, for example, which was occupied sometime between the fourth and sixth centuries a large saddle quern, 635mm long by 406mm wide and 241mm thick, was found on the floor of one of the huts with its rubber close by and next to it a large round mortar. Several fragments of rotary quern were also found, including a piece of flattened beehive, with a collar around the eye and two lines etched around the shoulder. They had

been reused as building material, demonstrating that stone was an important commodity and reused wherever possible, not simply discarded.¹

Further evidence that the saddle quern was still in use in the late/post Roman period comes from Llwyn du Bach, Caernarfonshire, where a saddle quern of coarse-grained igneous rock, 560mm long, was utilised during repairs to a wall of the central dwelling.² It is thought that Llwyn du Bach was the home of the successor of one of the chieftains who followed Cunedda to Wales. It is interesting to note that both saddle querns from Llwyn du Bach and Pant-y-Saer are larger than those of earlier times.

Although in many places, particularly those least touched by Roman influence, life would have continued much as it had done for centuries, in other areas old hillforts were reoccupied as a defensive measure. Dinas Powys, near Penarth in south Wales was, in the fifth and sixth century, the dwelling of a local ruler who maintained a Roman lifestyle. He was wealthy enough to import wine and pottery from the Mediterranean and to patronise jewellers, blacksmiths and other craftsmen. Amongst the many finds was about a quarter of a lower stone of a sandstone rotary quern, originally some 600mm in diameter, which still retained evidence of its anti-clockwise dressing. The stone had an eye rather than a socket implying that the quern was supported on a wooden frame, the spindle passing right through the stone and possibly pivoting in a stone bearing beneath.³ Perhaps the complete quern looked not unlike that reconstructed from evidence found at Gwithian in Cornwall (figure 1).

A flat rotary quern found in the nineteenth century by a farmer at Buarthberan, a small mountain farm in the parish of Llanddeiniolen, Caernarfonshire, apparently had 'around the perforating hole a groove, and branching therefrom at right angles to each other, four others into which small bars of iron might have been fitted to move the stone with greater ease and rapidity when

grinding'.⁴ The description of the decoration suggests that the quern may have had a cruciform pattern, perhaps similar to the upper stone illustrated by Bennett and Elton, which was apparently found while cutting the Manchester Ship Canal (figure 2). The style of decoration is very similar to the crosses found on grave slabs such as that at St Dogmael's abbey, dated to the ninth or tenth century and St Non's chapel near St Davids dated to the seventh century (figure 3). Buarthberan is very close to Cae'r Mynydd, which, as mentioned above, was occupied into the post Roman period and it is possible the quern came from here. The upper stone from Bryn Howell (mentioned in part one of this article), which is just a few miles from Buarthberan, also has basically cruciform decoration with embellishments (figure 4) and in the absence of any other evidence it is tempting to date both querns to the early medieval period.

Sometimes the carving did not encompass the whole quern but was simply a small incised cross. Possibly the carving was a sign of prestige or perhaps the cross was thought to give the stone special powers, to make the task of grinding easier. St Columba is reputed to have worked a quern while studying with St Finian in the sixth century and so quickly was his task accomplished that his companions alleged he had an angel's help.⁵

According to the laws of Hywel Dda, under whom the kingdom of Wales was briefly united in the tenth century, the upper and lower stones of a quern were valued at 2d each (a king's robe was valued at £1) and a quern shed, which probably refers to the wooden frame on which the quern stood, was valued at 4d. The same laws also stated that in the event of a divorce the wife was to have the lower stone and the husband the upper, thus rendering the quern useless.⁶

Under the medieval feudal system tenants were obliged to have their corn ground at the manorial mill for which a toll was exacted. The tenth century laws of Wales stated that a manorial lord owned 'the toll of his mills'.⁷ This, of course, was extremely profitable for

the lord of the manor (and the miller) and although special dispensations were made, such as to the burgesses of Cardiff who, in the twelfth century, were allowed by their lord to use handmills, the use of querns or handmills was widely prohibited.⁸ According to the Rev Barnwell, writing in the late nineteenth century, the inhabitants of Anglesey apparently had their upper stones taken and destroyed.⁹ It was, of course, much easier, not to mention cheaper, for the tenants to grind their corn at home and these prohibitions were to provoke several assaults against manorial mills during time of crop failure and famine.

The large number of quern fragments incorporated into the floor of a cottage in the shrunken medieval village of Barry are thought to be confiscations and that this particular dwelling belonged to a manorial official.¹⁰ This certainly was the case at St Albans abbey in Hertfordshire where in 1331 the abbot paved the monk's parlour floor with confiscated querns. During the peasants revolt the townspeople, who held a long-running battle with the abbey over milling rights, broke in and smashed up the offending floor, carrying pieces away as souvenirs. However, quern fragments found in other cottages in the Barry village suggests that nevertheless milling continued in the home, whether in secret or allowed. The pieces were from simple flat querns, probably all of local stone, dating from the twelfth to fourteenth centuries.

Two flat querns of Anglesey grit, of thirteenth or fourteenth century date, were found at Criccieth castle. One was about 508mm in diameter, the other 533mm, both around 76mm thick at the centre, with eyes 89mm and 114mm in diameter respectively.¹¹ Built by Llywelyn the Great in the early part of the thirteenth century, Criccieth castle was occupied by soldiers of Edward I in 1283. During the uprising of Madoc ap Llywelyn in 1294-5 Criccieth, along with Harlech, seems to have been cut off and had to rely on men and supplies being delivered by sea. In April 1295 the stores landed at Criccieth included 30 quarters of wheat and 20 quarters of ordinary malt. The quern stones could have been used

for grinding malt for beer brewing or wheat for bread flour and would have been invaluable in a cliff top castle, particularly during times of siege. During Owain Glyndwr's uprising in the early fifteenth century, the castle was repaired and regarrisoned but because of the French fleet in the Irish Sea, water borne supplies as well as those by land were cut off. Harlech castle surrendered from hunger in 1404 and it is assumed that the garrison at Criccieth did likewise.¹²

A stone, 432mm in diameter and 76mm thick, with an eye 89mm in diameter with two rynd slots was found outside the south gate of the bailey at Deganwy castle. Although the construction of a horsemill was ordered in 1250 this particular stone seems rather small and could very well have come from a handmill.¹³

During the middle ages a new form of rotary quern began to appear amongst the flat querns. Called a pot quern, the upper stone fits neatly into a recessed lower stone, with a rynd set into its grinding face, pivoting on an iron spindle leaded into the centre of the base. The ground meal is ejected through a spout cut through the side of the lower stone (figure 5). The pot quern involves considerable expenditure of time and skill in its manufacture and was, therefore, the province of the wealthy and as such is generally found in manor houses and religious institutions. The base of a particularly ornate example which was found at Popton near Milford Haven is now in Tenby museum. It is quite large and basically circular, with an overall diameter of about 440mm with a projection where the spout is cut through. The spout forms the mouth of a face carved on the outside of the pot (figure 6). The heads carved on pot quern bases seen elsewhere have a definite monkish look about them whereas, the example from Popton is noble or even royal with curling hair, moustache and crown. The quern is on display with another, much plainer, base found near Fishguard, again quite large with an overall diameter of 470mm. There is also an upper stone that originally had two projecting lugs for upright handles. Another top stone from near Narbeth, not on display, also has the projecting lugs for

handles and it is noticeable that the lower part of the stone's circumference is highly polished through use, where it ran round the inside of the pot.

The Museum of Welsh Antiquities, Bangor, also has several examples of pot querns including one in which the top is made from the reused lower stone of a beehive quern and another where the top is shaped not just to fit inside the lower stone but also over the sides, like a lid.¹⁴

Although evidence of the rotary quern in medieval Wales is scant, especially when compared with the wealth of information available for the Roman period, it would seem that the basic medieval rotary quern was flat, usually lacking a collar around the eye as was common in late and post Roman querns. Manuscript illustrations show the stones mounted on a platform or framework and turned by means of one or two people swinging round a long upright handle, one end of which was fixed into the stone, the other end held loosely in a hole in a beam above. Although the grinding surfaces may have been pecked to roughen the surface, dressing was not a common feature, not even on pot querns which were introduced in about the thirteenth century. Welsh medieval querns tended to be made of local stone and imported querns of German lava, so common in Saxon and medieval England are not so in Wales. Wales has several excellent sources of suitable stone such as on Anglesey and in the Wye valley which were to be exploited for milling stones well into the nineteenth century.¹⁵

Illustrations

1: Reconstruction of a handmill, sixth or seventh century, from Gwithian, Cornwall. After Thomas, C., Britain and Ireland in early Christian Times, 1971, p.121

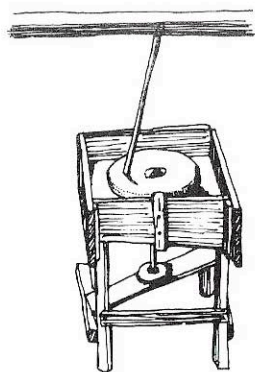


Fig.1

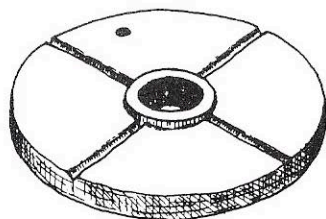


Fig.2

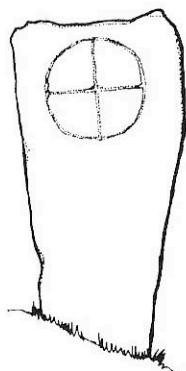


Fig.3

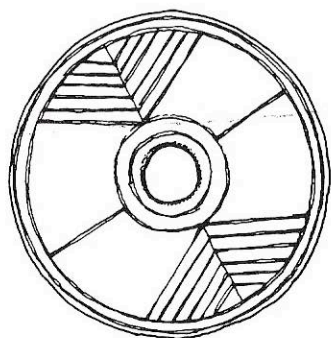


Fig.4



Fig.5

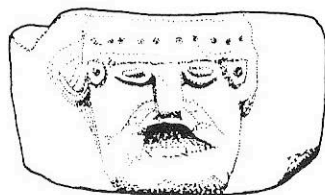


Fig.6

2: Carved quern found when cutting the Manchester Ship Canal. After Bennett, R. & Elton, J., *History of Corn Milling* vol. 1, p.142

3: Cross carved on grave slab at St Non's Chapel

4: Decorated quern from Bryn Howell

5: Pot quern. From fourteenth century manuscript. *Archaeological Journal* 1850

6: Decorated pot quern base from Popton

Acknowledgements

Once again, I would like to thank all those who have helped further my research into Welsh querns, particularly to Tenby and Bangor museums and also to Martin Watts, for his help and encouragement and for drawing the illustrations.

References

1. Phillips, C.W., 'The excavation of a hut group at Pant-y-Saer, Anglesey', *Arch. Camb.* 89 (1939), p.6,9,10.
2. Bersu, G and Griffiths, W.E., 'Concentric circles at Llwyn-du Bach, Penygroes, Caerns.', *Arch. Camb.* 100 (1948-9), p.193.
3. Alcock, L., *Dinas Powys*, 1963, p.166-8.
4. *Arch. Camb.* (1866), p.224.
5. Bennett, R., & Elton, J., *History of Corn Milling* vol.1, p.145.
6. see note 5, p.162.
7. see note 5, p.212.
8. Holt, R., *The Mills of Medieval England*, 1988, p.38.
9. Rev. Barnwell, 'Querns', *Arch. Camb.* (1881), p.37.
10. Thomas, H.Jr & Dowdell, G., 'A shrunken medieval village at Barry, South Glamorgan', *Arch. Camb.* 136 (1987), p.94.
11. O'Neil, B.H.St.J., 'Criccieth Castle, Caerns', *Arch. Camb.* 98 (1944), p.44.
12. Johns, C.N., *Criccieth Castle*, 1970, p. 9,17.
13. RCAHM Wales & Monmouthshire, *Caernarvonshire I, East*, 1956, p.154.
14. Lynch, F.M., *Museum of Welsh Antiquities Bangor: Catalogue of Archaeological material*, 1986, p.63, plate 1f.
15. Tucker, G., 'Millstone making in Anglesey', *Wind & Watermills*, 1 (1980); Ward, O., 'Welsh Millstones', *Melin* 6, (1990).