

CHADWELL CHURCH
Daisy Wheel Stars of David



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BUILDING
GEOMETRY
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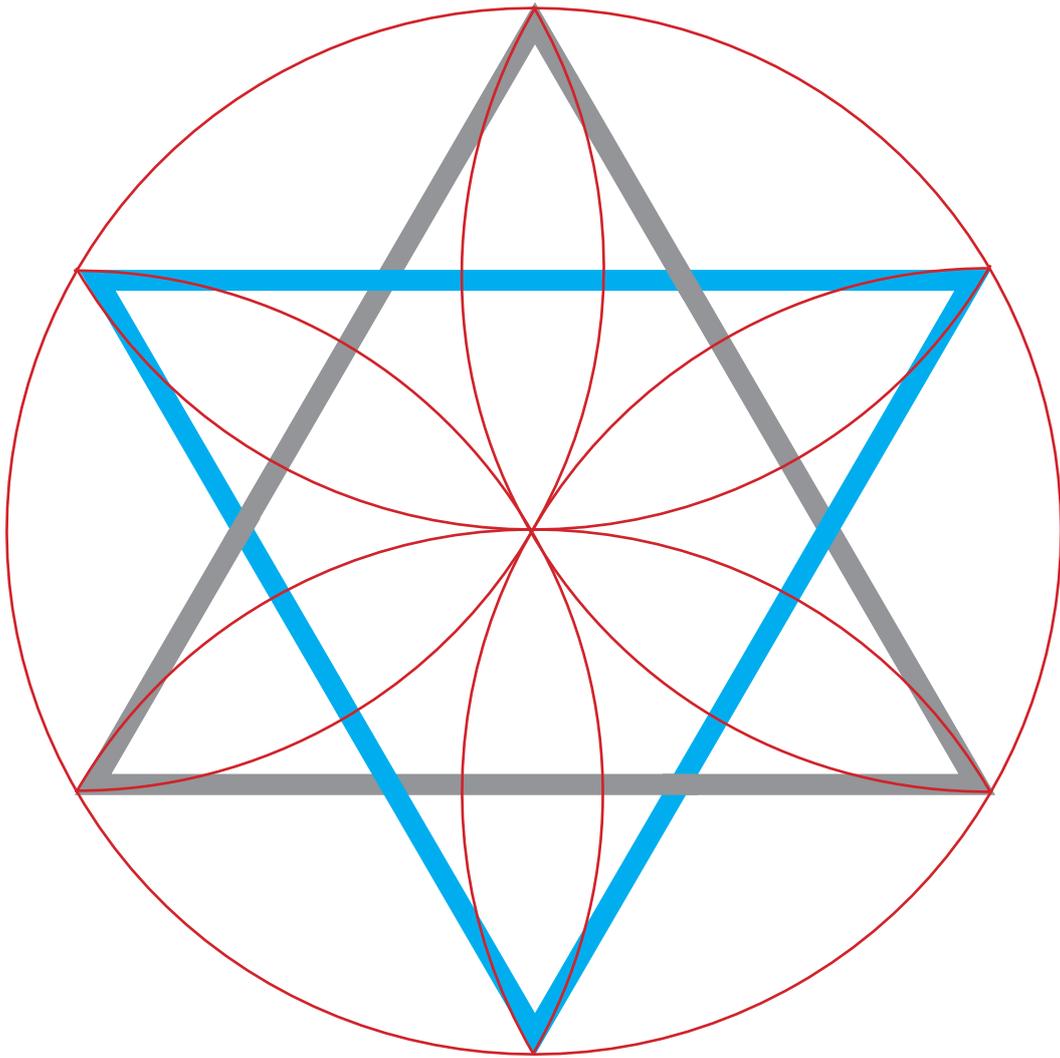


Chadwell Church Daisy Wheel Stars of David

I lived for seven years at Corner House in the Leicester village of Chadwell where the little church of Saint Mary, of Norman origin, was shared with the neighbouring hamlet of Wycomb.

Passing the church one Spring day I saw a bonfire smoking in the graveyard and, being inquisitive, went to see what was being burnt. The church was being cleared of 'rubbish' and on the ground waiting to go on the fire were two stars of David made from thin wooden laths. The laths were slender, just $\frac{7}{8}$ of an inch wide. The stars were 42 inches across, 21 inches in radius and the same between stellations. The laths were held together by flat-headed nails and there was a small drill hole at one stellation. One star was raw wood, the other painted red ochre. I rescued them from the fire.

Later, in conversation with older local people I discovered that in the Victorian period the stars were decorated with foliage and flowers and tied to the tops of poles by a string through the drill hole. With the poles supported in leather sheaths fixed to belts around their waists, they were then carried by two children, at the head and tail of a crocodile of children parading up the hill to the church. This was done for special events such as Easter and Harvest Festival.

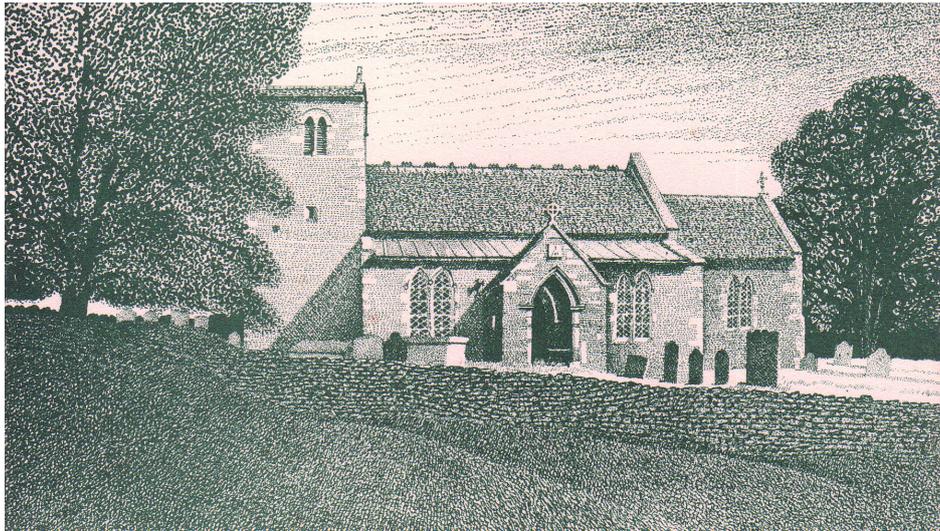


Chadwell Church Daisy Wheel Stars of David geometry

The stars are stars of David, formed by connecting three alternate petals of the daisy wheel to generate an equilateral triangle (in blue line) and a second equilateral from the remaining three petals (in grey). The triangles, which are equilateral, automatically face in opposite directions.

The daisy wheel is drawn by compass geometry, first the primary circle and then the arcs that cross it. The first arc is drawn from the primary circle's north pole, the second from where the first cuts the circle, the third from this cut and so on. Because the compass is used for the complete construction it follows that each cut is exactly a radius apart from the neighbouring cuts (or petal tips).

The laths were woven under and over each other, as indicated above, prior to being held permanently by flat headed nails.



Saint Mary's Church, Chadwell, Leicestershire

The village of Chadwell had just eleven houses in a shallow valley at the end of a dead end lane. The church was shared with the neighbouring hamlet of Wycomb which was equally small. The cost of upkeep was shared between the villages and the residents decided that, instead of putting money passively into the Sunday collecting plate, they would put on an evening of theatre, poetry and music and other entertainments to actively raise money before a local audience. My contribution to the fund raising was to make a drawing of the church, have it photographed, converted into a printing plate and printed as an edition of 500 cards to be sold in the church. When they sold out we were able to print another 500.

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