

THE SUNDIAL PAGE The Merchant adventurers!

Adventurers of the City of York is a similar body to the great livery companies of the City of London, originally being a religious fraternity of influential men and women, founded as a guild in 1357. Such guilds were established in many towns and cities soon after the Norman Conquest in 1066, to provide mutual benefit for their members and to support a Christian way of life.

They were social organisations in many respects, giving charity to the poor as well as to their own members, who may have fallen on hard times. Yet they were also concerned with regulating commerce and with maintaining standards, the quality of

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goods and the honesty of those involved. They endeavoured to make their members prosperous through a system of mutual government and fair trading.

The Merchant Adventurers of York was a guild that embraced most of the richer traders of the city, whose principal source of wealth would have been derived from the export of wool to the continent. In addition to wool, their main exports at that time were cloth, hides, butter and lead, whilst typical imports included salt, fish, iron, spices and wine.

In the Middle Ages, wool was Britain's most important export, a reminder of which is the Woolsack, which is the seat of the Lord Chancellor, the highest judge of England, in the House of Lords. Yorkshire was and still is an area that is central to the British wool industry. The founding of the Company of Merchant Adventurers in 1357 and the immediate building of their Hall, with its own quay on the River Foss, a tributary of the River Ouse, in 1357-1361, can only have been achieved by wealth already accumulated.

Technological developments in the mathematical art of navigation and in hydrography in the latter part of the 13th century brought about an expansion of seatrading in the Mediterranean, particularly by Genoese pilots and Genoese merchants. They too were first to pioneer the Atlantic sea-borne trade routes. Genoese merchants were quick to exploit and develop a new and profitable trade with England, shipping alum in bulk to this country for processing

the cleaning of wool.

The Ouse was a navigable river for seagoing ships as far up as York, which was then a recognised sea-port. Indeed, most York trade was water-borne at that period. It can hardly have been a coincidence that the Merchant Adventurers Company was founded at such a time and that they were able to build such a splendid establishment on such a prime site. This expansion in trade and consequent increase in wealth and power must have been due in no small measure to this new-found technical knowledge of oceanic navigation, that enabled ships to venture out of sight of land for many days with confidence and the ability to safely reach their destination.

The Hall is one of the largest buildings of its date in Britain, other than castles, churches and barns. It is also the only mediaeval guildhall in Europe that survives with its business room, hospital and chapel intact and which is still in the ownership of the Company. The *Great Hall*, where meetings and banquets were held, is still in its original state, a magnificent room framed in timbers of English oak.

The Undercroft, used as a hospital and for the charitable care of the poor, is brick-walled, the oldest known use of brick in York since the departure of the Romans. The Chapel, at the southern end of the undercroft, used for the religious functions of the Company was rebuilt in 1411, many of the stones coming from buildings of the Norman period. It is known that, before the Reformation, the chapel was very richly decorated with stained-glass windows, fine stone carvings and beautiful tapestries. All these seem to have been swept away, as was so often the case in those turbulent times

Most of the present furnishings of the chapel date from 1661, with the stained-glass panels depicting the Company's mediaeval seals dating from about 1910. However, due to the generosity of particular benefactors, the Company recently decided to put some colour back into the lights of the Chapel's great south window, in a 17th century style. To this end, they commissioned the York Glaziers Trust to design and produce a monumental window. In turn, I was commissioned by the Trust to design an appropriate stained-glass sundial as a 'centre-piece' for the window.

Somewhat akin to that of the church at Lullingstone in Kent, the dial is set in a panel portraying a 17^{th} century vessel under sail. The sundial itself measures just 10 in (254mm) in diameter and declines 35° to the East. It features an image of a



Figure 1: The stained-glass panel in the window of the Chapel of the Merchant Adventurers' Hall, stained and painted by Dav Bonham, The York Glaziers Trust, in 1998.

young gentleman, dressed in a blue coat and green breeches, holding a cross-staff to his eye. He is depicted taking a meridian altitude observation of the sun at the equinox, the angle being 36°03', giving a direct indication of the latitude 53°57'N, ie the latitude of the position of the sundial in the City of York. The hour-lines create an impression of deck-planking. The spidery '17th century' hand-written inscriptions around the crown of the yellow stained border give the signatures 'Christopher St J H Daniel: Delineavit, 'Dav Bonham: Pinxit' and 'York Glaziers Trust: Fecit', with the date '1998', just below the shield of the Trust. Also around the border are given the various relevant technical values relating to the calculations for the sundial: 'Aeq Mer Alt 36°03'' 'Lat $53^\circ57'N'$ 'Long $01^\circ05'W'$ and 'Dec S $35^\circE'$.

It is, of course, entirely appropriate that the young gentleman using the cross-staff should be the principal feature of the sundial. The cross-staff was a navigational instrument that was used by seamen for measuring the meridian altitude of the sun, or of the pole-star, to determine the latitude of their ship at sea (*The Sundial Page*, 'A Related Instrument', CLOCKS Vol 17 № 12, May 1995, p29). As such, it would almost certainly have been familiar to members of the Merchant Adventurers Company of the City of York and may well have been used by those members who took their own ships