

version of the name, the female equivalent of which is Etheldreda but all references to her give the male version.)

A paper by Spamer and Bogan (1993 p156-157) perhaps helps illustrate why her work had not been more widely recognised and celebrated. The paper, 'Where is *Polypothecia bennet* 1831?' recognises some of the various factors that have bedevilled her collection and her reputation: she was a woman, her collection went abroad and was therefore of less interest and less examined than local examples, she did not publish all her finds, she named some species after others who did not always use her term so it became a 'nomen nudum' (a mere name published without a description), the problems of communication of the day could lead to duplicate names for some taxa and, most importantly, the collection remained 'lost' for over one hundred years.

At last Miss Benett now receives the recognition due to a great pioneer geologist. In November 2005 her silhouette was the emblem for a conference on the role of women in the history of geology held at the Geological Society in London. Etheldred Benett is a rare female example of an enthusiastic amateur who contributed so much to the founding of the science of geology which today impacts on our everyday lives in so many ways. The local area of South Wiltshire would have been much travelled by her and very well-known as she pursued her lifelong love of fossils.

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PENNANT STONE IN BATH AND BRISTOL

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Bath is, of course, famous for being built largely with its own, eponymous stone, but there is another local stone widely used in the city which goes largely unremarked. This is Pennant, a Carboniferous sandstone used for much of the 19th century expansion of the city, obtained from the Bristol and Somerset coalfields. In the 1850s there were something like sixteen Pennant Stone quarries in north east Bristol, with a combined production of more than 24,000 tons a year. Today, a much reduced output of Pennant comes entirely from the Forest of Dean and South Wales; there are no quarries left in Bristol and none that I know of in Somerset.

The Pennant Series (geological term) is a succession of fluvial and deltaic sediments deposited across southern Britain in the late Carboniferous. It divides the Coal Measures into upper and lower parts and consists largely of sandstone, some 200m thick in the Bristol area but exceeding 1500m in South Wales. Variations in depositional conditions through time, and from place to place, means there are rocks of many different kinds, according to grain size, hardness, colour, thickness of bedding and so on. Some beds are suitable for masonry, others for paving or roof tiles. So there is no typical Pennant, it comes in a wide range of textures and tones.

In Bristol, Pennant stone is one of the most prominent building materials; it gives the city's character what Andrew Foyle (in the new *Pevsner*) calls '*...the subtle underpinning of....its grey colour.... often cast with slate blue, moss green or ochre (with) splashes of rich orange staining.....*'. He could have added brown, plum red and pink. Walls are commonly made with randomly mixed blocks of different colours. Whether by accident or design, this avoids monotony and gives a pleasing appearance. Pennant Stone has been used in many important Bristol buildings; striking examples are the towers of Clifton Suspension Bridge, completed in 1843 (the towers that is, not the bridge) and the Arnolfini Arts Centre, a beautiful example of Pennant stonework which was originally an iron foundry warehouse (1830). Also churches such as the well-known landmark of St Peter's in Castle Park (blitzed in 1940, walls and tower still standing), the Lord Mayor's Chapel (St Mark's) in College Lane (built in 1299, restored in 1899) and Holy Trinity, Stapleton, rebuilt in 1854 with a tall Pennant spire.

In Bath almost no Pennant stone has been used in buildings in the city centre, for obvious reasons. But to keep pace with the 19th/20th century industrialization of the city thousands of terraced homes were built for the rapidly growing workforce in what are now the inner suburbs, such as Oldfield Park and Lower Weston. Very many of these terraces were built of coarse, rough-hewn Pennant, commonly with string courses, quoins and door/window surrounds of dressed Bath Stone - to give just one example, practically the entire length of



Figure 1: Section of front wall of Bellotts Hospital.
Photo: Jane Browning

Bridge Street/ Claude Avenue/ Coronation Avenue, half a mile of about 250 houses. There are also free-standing buildings, for example the old Weston station in Ashley Avenue and the Locksbrook Cemetery entrance lodge and walls in Upper Bristol Road.

As noted, in the centre of Bath there is very little Pennant stone to be seen above pavement level, but there are some column bases. At Bellott's Hospital in Beau Street, rebuilt in 1859, the lower five visible stone courses are of grey Pennant, which can also be seen in the flush supporting arches over the windows (Figure 1). At the Hope Chapel building facing the public garden in Lower Borough Walls there is a shaft and pedestal in the old doorway made of dark grey Pennant where some of the weathered skin has worn off and you can see what the unweathered stone looks like (Figure 2).



Figure 2: Shaft and pedestal at Hope's Chapel.
Photo: Jane Browning

Underfoot it's a very different story. Pennant paving, kerbstones and steps are everywhere. The paving slabs come in various shades of grey often with brown, orange and yellow tints. A major recent use is at South Gate, which with the sole exception of Philip Street is entirely laid with Pennant.

Finally, roof tiling. This goes back to the Romans. Pennant roof tile fragments have been identified in the excavation of Roman villas at Box and Atworth. Medieval Bristol was largely roofed with Pennant tiles (*Clifton-Taylor: The Pattern of English Building*) although I don't know of any examples in Bath.