September 26th

Memory Verse

The gospel of Christ is the power of God

unto salvation to everyone that believeth. Romans 1:16

A story from Welsh history

Sir Watkin Williams-Wynn 3rd Baronet (c.1692-1749), was a landowner. A very large part of North Wales belonged to him. He was also a magistrate. In this capacity he was in the habit of fining any of the Christians known as Calvinistic Methodists that he could lay hands on. At this time, under the terms of the Conventicle Act, religious meetings were only allowed in buildings licenced for the purpose. Calvinistic Methodists often did not have such buildings. If they met in a barn or some other unlicensed place they could be fined. On one occasion Sir Watkin overstepped the mark and fined some people in Wrexham for meeting when the number gathered was so small that the Conventicle Act did not cover it. The Countess of Huntingdon was a Christian lady who often helped the Calvinistic Methodists. She made representations in "high quarters" when she found out what had happened and Sir W. W. Wynn had to see that the money was returned to the poor people who had had to pay it. However, Sir Watkin did not forget this humiliating experience.

The death of Sir Watkin Williams-Wynn¹



Sir W. W. Wynn was the owner of an estate at Llanuwchllyn, near Bala, and [Calvinistic] Methodism had made considerable progress among his tenantry at that place. We have already mentioned his having been obliged to return some fines which he had illegally imposed on some of the Methodists in the neighbourhood of Wrexham, and it appears that this had roused his ire to such an extent that he expressed the resolve that not a single member of the "sect" should be allowed to reside anywhere on his estates.

Tidings of this reached the ears of the little flock at Llanuwchllyn, and great was their distress at the prospect which it held before them. They knew their master too well to entertain the least hope that any man

would be able to shake the **resolution** which was to them so **fraught** with disaster, and in their trouble they resolved to lay their sad case together before their heavenly Father. A special prayermeeting was held to ask Almighty God to open for them a way of deliverance, and especially to entreat Him for strength to be faithful to His truth whatever might happen to themselves; and they had not to separate without evidences which satisfied them that He was willing that they should thus approach Him, and that He would with the temptation also make a way to escape, that they might be able to bear it. In a few days the news reached them that [on 26th September] the great object of their dread had fallen from his horse on the hunting-field and had been killed on the spot.

¹ Welsh Calvinistic Methodism A Historical Sketch by Rev. William Williams (London 1872) pp86-7.

No doubt God does not always strike down the enemies of his poor people in such an exemplary manner. However, God orders everything for the good of his children and Sir Watkin's life, like any other, was in his hands. The heir to the estates was a mere baby and so the Calvinistic Methodists of Llanuwchllyn and elsewhere in the extensive Williams-Wynn dominions were left to worship in peace without threat of losing their homes.

I have **highlighted** some words in this story which are unusual or are often used nowadays in a slightly different way. Do you know what they mean here? If not use your dictionary to find out.

Something to listen to



William Billings (1746 – 1800) is sometimes called the first American composer. Certainly he was the father of American choral music and the first American composer to have a collection of his choral works published. Billings suffered from physical deformity, having one shorter leg and the use of only one eye. He began work in a tanning factory but

finding a gift for music he began singing schools and choirs, writing music for them and publishing his work. His music was published and carried all over America as the continent was opened up. There were no copyright laws in America at that time and he derived no benefit from most publications of his music as a result. On 26th September 1800 he died a poor man, employed as just a crossing sweeper despite all the beautiful music he had written.

Billings often chose texts from the works of Isaac Watts (1674-1748) and other sources which he did not hesitate to adapt for musical purposes. His treatment of the words, his harmonic language and his exuberant rhythmic patterns are strikingly original and do not lean on models derived from classical European music.

Billings compositions are associated with the popularisation in America of a system of musical notation known as Shape-Notes. Turn this page on its side to see how it looked. Singers trained in this system quickly became skilful sight readers and singing schools and



associations became popular all over America at this time.

Today Billings choral compositions are beloved by American choirs all over the USA. Immediately after his death, however, his style went out of fashion and younger American choral composers such as Lowell Mason² strove to, as they saw it, raise the tone of American music. They called Billings' work "crude" and began what they called the Better Music Movement to promote a more European style. However, the passage of time has vindicated Billings as a truly individual, and thoroughly American voice.

Billings' popular piece *Creation*³ is a setting of beautiful words by Watts. In the second stanza Watts in turn had borrowed some thoughts on the complexity of the body from Sir Robert Boyle (1627-1691), the Christian chemist, who compared the human frame to a clock and to a harp.

When I with pleasing wonder stand And all my frame survey Lord, 'tis thy work, I own thy hand Thus built my humble clay

Our life contains a thousand springs, And dies if one be gone. Strange that a harp of thousand strings Should keep in tune so long.

Something to make⁴

The German mathematician, August Möbius (1790-1868) also died on 26^{th} September. He is famous for his geometry discovery: the Möbius strip. The discovery of the Möbius strip in the mid-19th century launched a brand new field of mathematics: topology which is the study of the properties that are preserved when shapes are twisted and stretched. Möbius was educated at home until he was 13 - 1 like many a famous discoverer in earlier generations.

You can easily make your own Möbius strip and discover its fascinating properties.

To make a Möbius strip you need a strip of paper (cut one from the long edge of an A4 sheet of paper) and some sellotape. In order to observe the properties of a Möbius strip it is a good idea to make a plain loop of paper as well. That way you can do

the same experiments with the plain loop and observe the difference in the results.

To make a plain loop simply tape together the ends of one strip of paper so that you have a loop or circle. To make a Möbius strip do the same but before taping the ends together give the strip of paper a single twist.



You now have a plain loop and a Möbius strip. You can

carry out some experiments. First take the plain loop and using a pen or pencil, draw a continuous line down the centre roughly parallel to the long edge until you meet up with your starting point.

² See the lesson for January 6th.

³ Listen to Billings' Creation sung by an American choir here: <u>https://www.youtube.com/watch?v=F5HpEIJS2UA</u>

⁴ Illustrated instructions are here: <u>https://www.wikihow.com/Make-a-Mobius-Strip</u>. Illustration credit: By David Benbennick - Own work, CC BY-SA 3.0, <u>https://commons.wikimedia.org/w/index.php?curid=50359</u>.

You should find you have drawn a line on the outside of the loop. The inside obviously remains blank. Now repeat the experiment with the Möbius strip. What do you notice?

Now you can cut your loop in half. Follow the line you drew. You will end up with two separate narrower loops of paper. Now do the same with the Möbius strip. What do you get?

You can repeat these experiments with more twists in the strips of paper. The results will surprise you!

The Möbius strip is made in three dimensions but the surface of the paper only has two dimensions. Mathematicians have studied the properties of a three dimensional equivalent, the Klein Bottle, in which the "inside" and "outside" are the same. But no one can make one, as it would require four dimensions and God has wisely only provided us with three.