### Newsletter

## SHERBORNE STEAM AND WATERWHEEL CENTRE



#### Trustees

Paul Belliss (Chairman)

Nigel Bartram (Vice Chairman)

John Thompson (Treasurer)

David Wilkins (Secretary)

**Geoff Ward** 

Craig Henderson

#### Find us on our website or on Facebook

https://www.sswc.co.uk



**Charity No 1099153** 

#### November 2024

#### The 2024 Season

It has been a busy and successful season with all the open days running to plan. At the AGM Paul Belliss our Chairman thanked all the many volunteers who contributed to this success. However, the number of volunteers remains small.

He noted that visitor numbers for our open days have been steady and feedback has generally been very positive.



Revenues which arise mainly from donations have covered routine running costs but future improvements and major maintenance will only be possible by obtaining external funding.

In his Chairman's report Paul highlighted a number of additional points:

Major parts of the Interpretation Project funded by Dorset Council have been completed - new displays in the Visitor Centre and new external display panels are complete. A new touch screen is now working and it has a lot of potential.

The Open Day and unveiling of the Interpretation Project on 2<sup>nd</sup> June 2024 was particularly successful.

However, the Education scope of the project has not yet progressed as hoped. Successful engagement with local schools is considered critical to the long term future of SSWC and in

communicating the values of the site and its history to younger generations. We believe the Centre and its story has great value for youngsters.

So often when we ask 'do you know of Sherborne's waterwheel' the answer is 'NO'. We want and need to make SSWC widely and favourably recognized as a significant part of the history of Sherborne.

A major event each mid-summer as successful as this year's unveiling would be great, because of the additional revenue and perhaps more so the goodwill generated.

The 'Steam Team' have ideas and plans to make Open Days more attractive for younger families.

#### Visit of Bradford Abbas History Society in July

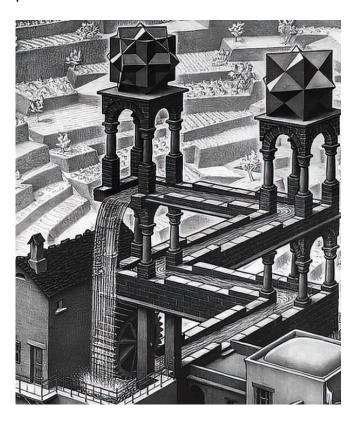
We recently welcomed members of the Bradford Abbas History Society for an evening group visit to the Centre.

An introductory illustrated talk on the history of the Castleton site was given in the Visitor Centre, resplendent with its new interpretive displays. Visitors then divided into two tour groups, led by SSWC volunteers. During the tours the important features of the site, machinery and buildings were covered, greatly assisted by the major updating of signage which had recently been installed. The evening concluded back at the "Steam Cafe" where tea, coffee and cake were available to round off the evening.

If you are involved with or know of any groups who might like to add such an event to their programme, please mention it to any of our Trustees. Although it is not practical to run our steam engines other than on our limited number of Open Days, all other exhibits can be viewed on group visits, including seeing the Waterwheel and its associated works in operation.

#### **Perpetual Motion**

With the aid of a waterwheel anything is possible!



Waterfall is a lithograph by the Dutch artist M. C. Escher, first printed in October 1961. It shows a perpetual motion machine where water from the base of a waterfall appears to run downhill along the water path before reaching the top of the waterfall. In his notes on the picture Escher points out that some water must be periodically added to this machine to compensate for evaporation!

#### **Belliss & Morcom**

From Paul Belliss, Chair of SSWC

My father's family was associated with the manufacture of steam and other types of engines and machines from 1862 until late in the 20<sup>th</sup> century.

George Edward Belliss (GEB), from a family of drapers, set out in 1855 aged 17 as an engineering apprentice in Birmingham. In 1862 he formed a mechanical engineering firm – Belliss & Seekings.

A rare narrow gauge loco built by B&S in 1874 for use at the Furzebrook clay workings near Wareham can be seen in the Swanage Railway museum at Corfe Castle station and is shown below.



In 1866 GEB went alone as G E Belliss & Co. Alfred Morcom joined as a partner in 1884 and Belliss & Morcom (B&M) was formed in 1899.

In the 1890's B&M patented steam engine lubrication systems (termed 'self-lubrication') that led to the manufacture of compact, enclosed, high-speed engines that were reliable and efficient and which formed the basis of the company's subsequent reputation and success. The principal design aspect was an 'arterial' oil system. This development has been used in virtually all types of engines and machines universally from that time. An early example of a B&M high speed 'self-lubricating' engine is on show in the Science Museum in Kensington London.

Steam engines up to 2.2 MW were subsequently manufactured. Many engines had direct coupled electrical generators used for local electricity generation which was widespread in the first half of the 20<sup>th</sup> century.

Steam engines went into rapid decline in the latter part of the 20<sup>th</sup> century. B&M went out of business as a separate company after building over 10,000 steam engines which were widely used in the UK and Commonwealth countries. Only about 1% of the engines remain in existence, mostly in steam heritage sites and museums. A couple of examples of smaller engines are regularly run under steam at Westonzoyland Engine Trust in Somerset.

The name Belliss & Morton still exists as a trading name of Ingersoll Rand and makes oil-free reciprocating compressors.

# B&M 440 bhp engine #6553 at Amberley Museum in Sussex

The engine was supplied in 1919 to WD & HO Wills of Bristol and was in service until 1984.



There is no steam in the building at Amberley in which the engine is displayed.

A *Henry* domestic vacuum cleaner connected to the exhaust line of the engine can rotate the engine at a few rpm!

#### **Volunteers**

As always if you know of anyone who would enjoy volunteering with us please don't hesitate to encourage them. They don't have to be steam buffs as there are many tasks needed to keep the Centre running.