

## Restoration Grants, 2017

*(From the report given at the AIA Conference, August 2017)*

The AIA has great pleasure in reporting that a second anonymous donor has generously come forward to support our Restoration Grant Awards. The combined funds at our disposal (with Gift Aid) amount to over £100,000 annually and this allows us to play a significant part in conserving the nation's industrial heritage. This year's crop of 25 applications to our Restoration Awards sought some £300,000 for projects totalling some £760,000 and we were able to offer a total of £122,000 to eight projects.

Once again the Restoration Panel of judges deliberated long and hard over all the applications in 2017 narrowing them down by criteria emphasising their relevance to industrial heritage, the effect of the AIA funding, volunteer input and public appeal.



The image above conveys the range of sites and objects which were offered grants, but the year's other 17 applicants which for various reasons were unsuccessful would have greatly widened the range. The latter included an industrialist's magnificent cast iron tomb, a Boulton & Watt engine in a major museum, a set of lock gates on an East Anglian waterway and a Columbian printing press.

## The 2017 Restoration Grants in alphabetical order are:

### Beeleigh Mill Restoration Group. The Stone Floor Project



Beeleigh Steam Mill is an historically important steam-driven flour mill on the outskirts of Maldon. The Grade 2\* building is listed was originally a large water mill with 2 water wheels and eventually, 12 sets of stones, built in 1795. In 1845 the miller installed a Wentworth 12hp beam engine to drive 5 sets of stones located in an existing building that had been used as a drying kiln. In 1875 the water mill was burnt to the ground and only the steam mill survived.

The site contains features of exceptional interest. The boiler is an 'Elephant Boiler' possibly made by John Hall and Sons (later J&E Hall) of Dartford. It is believed to be the only remaining example of this type left in situ in the country. The Wentworth engine is one of only three surviving beam engines made by this manufacturer. The Hurst is of cast iron construction and shows how developing 19th century technologies were applied to traditional flour milling processes.

The first phase of fundraising for the restoration project is to raise £23,450 for the repair of the stone floor. Before the building roof was reinstated this floor suffered from water damage, wet rot and woodworm leaving a large hole (see photos). The Steam Mill consists of three rooms, one containing the boiler and steam engine, the second containing the mill 'Hurst', the machinery that drove the mill stones, and the third above this where the mill stones were originally located. No mill stones remain in situ.

A maximum grant of £20,000 was offered to kick-start the restoration project.

### Britannia Sailing Trust



'Britannia' is a 60 foot gaff rigged cutter and the last of her kind. She is registered with National Historic Ships UK, has a rich well-documented history and is a magnificent example of Britain's Maritime Industrial Heritage.

Built in 1915 as a sailing vessel without an engine, she was fished initially as part of the whelking industry, out of Kings Lynn, her home port and where she was constructed.

She was built the Norfolk Brothers of Kings Lynn from Russian redwood for her planking and her frames were fashioned from grown oak crooks, especially chosen by the builders who had rights to timber from Sandringham forest.

The Britannia Sailing Trust was set up as a registered charity in 2014 and owns the vessel which was rescued in 2013, after she had been neglected and left on a mooring for 6 years. Four years later she has been stabilised, and is safely under cover in a boatyard in Gweek, Cornwall. The Trust's purpose is to save, restore and preserve the unique hundred year old vessel for future generations.

The AIA grant of £18,700 will contribute to her restoration by investing in a new rig. This comprises of a new main mast, all wire rope for standing rigging, dead-eyes and rope for her running rigging.

## Ferryhill Railway Turntable Trust

Past Glory: No. 4472 *Flying Scotsman* on the Aberdeen Ferryhill Turntable (16-5-64) The buildings to the left and rear are gone.

Loco 60532 *Blue Peter* has arrived on the Aberdeen Ferryhill turntable and has started to be turned in the original manner, by muscle power.



Present day: An overall view looking north-east.

The turntable looking north towards Aberdeen Station. Derelict and vandalised.



The Ferryhill, steam locomotive turntable in Aberdeen is a 'grade A listed structure' and almost certainly the last of its type extant in the UK. It was built for the Caledonian Railway in 1905 by Ransomes & Rapier, Ipswich, and is 70ft diameter and is capable of turning the largest steam locomotives, e.g. *Flying Scotsman*. Its restoration to use will allow steam locomotive hauled trains to use Aberdeen as a destination, whereas currently it is not economically viable to do so. The turntable is owned by Network Rail. The Trust has a 25 year lease on the turntable site commencing May 2015.

The AIA grant of £20,000 will be used to replace the cross-timbers which support the railway tracks on the turntable the longitudinal timbers on top of the steelwork. It will also fund the replacement of safety handrails to provide a safe walking route for the engine crew to pass along the turntable from the loco cab to the turntable operating position, provide a Tarmac strip round the circumference of the turntable to give a non-slip surface when the turntable is being pushed round manually and provide a public information panel.

The turntable will then be offered for use to Charter railway operators to enable Aberdeen to become a steam locomotive hauled train destination. There is no facility to turn a locomotive within 100miles, so use of the turntable will generate an income to ensure its continued maintenance.

Furthermore, the Ferryhill Railway Heritage Centre, including the turntable, will be open to the public as a museum and historical restoration visitor attraction.

## Greensand Railway Museum Trust, Simplex Locomotive



The 'Armoured' Motor Rail & Tram Car Co Simplex locomotive 461/1917 WDLR 2182 is the sole survivor and representative of a class of which there were only 27 built, as part of MR&TC's achievement of assembling, for the WW1 effort, a total of 823 of their 'tractors', as the War Department called them.

Its value to the Leighton Buzzard community is that, post 1920, four of the ex-WW1 40HP Simplexes were acquired – two each of the 'Protected' and 'Armoured' versions, by the owners of Leighton Buzzard Light Railway to haul their sand trains on the mainline from Double Arches to their sidings on the LNWR network and the branch to the Grand Union Canal. They carried out this function for 34 years – a tribute to MR&TC's design and engineering abilities. The AIA grant of £3,300 will assist the Greensand Railway Museum Trust replicating the unique 'cupola' roof design which was an iconic feature of the armoured models.

## Helston Railway Preservation Society. William Murdoch Locomotive



William Murdoch is a 0-4-0 steam engine built in 1949 by Peckett and Sons of Bristol – one of the finest examples of this little work-horse still operating in England. Originally owned by Portsmouth Council who used it at their gas works, when it finished its working life it was transferred to the care of the GWR Preservation Group.

The AIA grant of £14000 will provide for a Boiler repair, the fitting of vacuum brakes and the re-assembly of the engine to enable operation by the Helston Railway Preservation Society. External engineers (funded by GWRPS) will undertake the certified work while much of the labour will be provided by Helston Railway Preservation Society volunteers.

## Lakeland Arts. Steam Launch *Lady Elizabeth*



The SL Lady Elizabeth is believed to have been built by the Monarch Company of New York State circa 1900 and transported to England soon after. She is a small steam launch built with a vertical bow and counter stern and has a single cylinder steam engine with Stephenson's valve gear. The boiler is a Lune Valley type fired by paraffin and was built by Lune Valley Engineering in 1910.

The vessel was salvaged by George Pattinson in 1955 having sunk in a few feet of water off Cockshott Point at Bowness, where it had been abandoned by its previous owner. Pattinson restored SL Lady Elizabeth to use, adding the steam plant and boiler. She will be conserved by the AIA grant of £20,000 with as little intervention as possible and then this elegant little vessel will be on static display in the boathouse, with occasional demonstration trips out on the lake.

## Museum of East Anglian Life. *The Empress of Britain*



The Empress of Britain is a general purpose agricultural steam traction engine made by Charles Burrell & Sons of Thetford, Norfolk in 1912. It is important to the industrial heritage of East Anglian Life as it represents the steam era in agriculture, the work of one of the most important East Anglian steam and the role of the contractor providing specialist machinery to work the land.

Purchased by the Museum of East Anglian Life In September 1983 she became the museum's showcase steam engine and is used to demonstrate traditional farming techniques to visitors. The Empress provides opportunities for volunteers to engage their passion for steam engines and the museum has a dedicated group of volunteers 'the steam team' who meet regularly to maintain the engines whilst sharing and passing on their engineering skills and expertise.

Since the early 2000s, over 270 visitors and museum trainees have benefitted from the opportunity to learn by getting hands-on.

Unfortunately in the winter of 2016 The Empress failed its annual boiler inspection and urgently needed repairs so that it could pass its boiler inspection and be a working exhibit once more. The AIA grant of £16,700 will cover most of the repair costs provided by Mervyn Mayes' boiler shop in Yaxham near Dereham, Norfolk and needed to bring The Empress back to a working standard.

## **UNDERFALL YARD MACHINE SHOP, BRISTOL**



The Underfall Yard in Bristol's historic docks claims to be one of the only surviving Victorian dock workshop complexes in the world. Its completeness is incredibly rare and its historic importance has been recognised in its designation as a Scheduled Ancient Monument. The Underfall Yard, as we know it today, was built between 1880 and 1890 for the maintenance of Bristol Docks and to service the dock machinery. The Yard and Visitor Centre are open to the public daily, with the dock buildings currently open for guided tours and during holiday periods.

The Grade II\* Listed Machine Shop within the Yard contains an assemblage of original machinery dating from the 1880s. The machinery was used to manufacture and repair essential components of the complex docks and floating harbour in Bristol including locks, gates and bridges and therefore they are an important part of the city's rich maritime past. The machinery that makes up this application comprises a planing machine and slotting machine both manufactured by Joseph Whitworth & Co and associated line-shafting, manufactured by Stothert & Pitt. The AIA grant will fund the restoration of this machinery which can then be operated by an electric motor.