



PRISM Fund Annual Report 2015/16



Cover Images (L-R):
The Artic Corsair, Hull Museums
Document from the Warwick Healey Motor Company Archive, Warwickshire County Council
Collection of Charles Elcock microscope slides and naturalist's tools, The Whipple Museum

Introduction

The PRISM Fund (for the PReservation of Industrial and Scientific Material) supports the acquisition and conservation of heritage objects from the fields of science, technology, industry and medicine. It was established in 1973 in response to the growing public concern that technological change was resulting in the loss of much of Britain's industrial heritage. Since 1973 PRISM has helped hundreds of non-national museums and preservation groups in England and Wales acquire or conserve thousands of objects of industrial or scientific importance.

The Fund aims to support the variety of organisations entrusted with the care of our industrial and scientific heritage, forging links and encouraging best practice.

The Fund was managed by the National Museum of Science & Industry (NMSI) on behalf of the Museums, Libraries and Archives Council (MLA) until 31 March 2003, before being managed solely by MLA. Management of the Fund transferred to Arts Council England in October 2011 at the request of the government. Arts Council continues to take expert advice from the staff of the NMSI as well as from other national museums.

There has been no significant change to the scope of the Fund since its inception except for its extension to include conservation projects in the early 1990s.

Summary of PRISM Fund grants awarded

There were 18 grants awarded during 2015/16 worth £238,897. Comparable figures for 2014/15 were 22 grants worth £203,243. The average size of a grant was £12,946 which is £2662 less than last year's average of £9,362.

This year 18 institutions across England and Wales, from fully Accredited museums to small preservation societies, have benefited from PRISM funding. As well as bringing important objects into public collections, the PRISM fund is contributing to their ongoing care. Conservation grants represent 67 per cent of the number of this year's awards (89 per cent in 2014/15), accounting for 76 per cent of the total expenditure (89 per cent in 2014/15).

All of the objects funded by PRISM through 2015/16 have a unique or important place within Britain's rich past, and help to connect the public with the country's scientific, industrial or technological heritage.

Acknowledgements

Thanks are due to the many curators at national museums and other professionals who have provided expert assessments of the applications. Without their contribution of time and expertise the PRISM Fund would not be possible.

Paula Brikci
June 2017

Table 1 Summary of PRISM Fund awards by category

PRISM Category	2015/16		2014/15	
	Number	Amount (£)	Number	Amount (£)
Agriculture	0	0	0	0
Archives	2	£20,025	0	0
Aviation	1	£11,250	2	£14,692
Buildings	0	0	0	0
Engineering	0	0	0	0
Geology	1	£5,000	1	£5,559
Horology	0	0	1	£6,000
Industry	3	£58,000	2	£10,575
Medicine	1	£4,439	3	£27,340
Miscellaneous	2	£29,950	1	£4,971
Natural History	2	£33,759	5	£48,741
Photography	0	0	0	0
Rail	2	£25,587	3	£45,257
Road Transport	1	£20,000	2	£29,458
Scientific Instruments	1	£1,238	0	0
Water	2	£29,649	1	£650
TOTAL	18	£238,897	22	£203,243

Table 2 Summary of PRISM Fund awards by type

PRISM Grant Type	2015/16		2014/15	
	Number	Amount (£)	Number	Amount (£)
Acquisition	6	£57,513	5	£23,495
Conservation	12	£181,384	17	£179,748
TOTAL	18	£238,897	22	£203,243

Details of PRISM Grants Awarded

£20,000 to The Susan Trust towards the costs of restoring the historic wooden lighter, Susan.

Susan is the only surviving wooden built lighter from the Chelmer & Blackwater Navigation and was included upon the National Register of Historic Vessels of the United Kingdom in 2003. Susan was built for Brown & Son, Timber Merchants who owned extensive wharves in Springfield Basin, Chelmsford. This business was established by Richard Coates, the resident engineer for the construction of the Navigation. Although built in 1953, her design follows that of the earlier horse drawn lighters which from 1797 carried a variety of cargoes on the Blackwater Estuary. The Chelmer & Blackwater Navigation enabled the inland town of Chelmsford to transfer goods to and from the coast for onward shipping and this resulted in Chelmsford changing from an agricultural market town to an industrial centre. Susan was the first motorised vessel on this waterway.



Susan undergoing conservation work (Top), Susan in 1990 (bottom).

Photo: The Susan Trust

£20,000 to The Whipple Museum towards the costs of purchasing a collection of Charles Elcock microscope slides.

Charles Elcock (1834-1910) was a naturalist, curator, and microscope slide preparator born in Pontefract, Yorkshire. Elcock worked for the majority of his life in Belfast, Northern Ireland, specializing in the highly-skilled task of mounting foraminifera, the tiny shells of single-celled planktonic animals. Elcock published and lectured extensively, and between 1896 and 1905 he served as Curator of the Art Gallery and Museum at the Free Public Library in Belfast.

This collection consists of about 780 microscope slides, plus a rich collection of preparatory tools, materials, and sketches, representing a fascinating archive of this naturalist craftsman's working life.



Collection of Charles Elcock microscope slides and naturalist's tools.

Photo: The Whipple Museum

£10,000 to Fort Amherst Heritage Trust to conserve and mount two French pattern 4pdr cannons.

The cannon date from the French revolutionary period and would almost certainly have come from a captured French Naval vessel during the Napoleonic Wars period. Such weapons are relatively rare survivals as it was the practice to scrap or reuse them on British coastal defences if sufficient British made guns were not available in times of crises.

Fort Amherst is adjacent to the Chatham Historic Dockyard, where large numbers of captured French vessels were brought for decommissioning and dismantling during and after the Napoleonic wars. A print produced in the mid 19th century provides evidence that similar small calibre French cannon were in place at Fort Amherst, reflecting the regional significance of these objects.



Cannon
Photo: Fort Amherst Heritage Trust



The Arctic Corsair wheelhouse
Photo: Hull Culture and Leisure Ltd

£9,649 to Hull Culture and Leisure Limited for conervation of the Arctic Corsair Wheelhouse Front.

The Arctic Corsair is the sole survivor of Hull's side fishing fleet which at it's height numbered over 150 trawlers. Hull specialised in distant water fishing as a response to over-fishing in near and middle waters. Travelling to the distant water grounds involved a 2000 mile round trip to Iceland or a 2700 mile round trip to Bear Island.

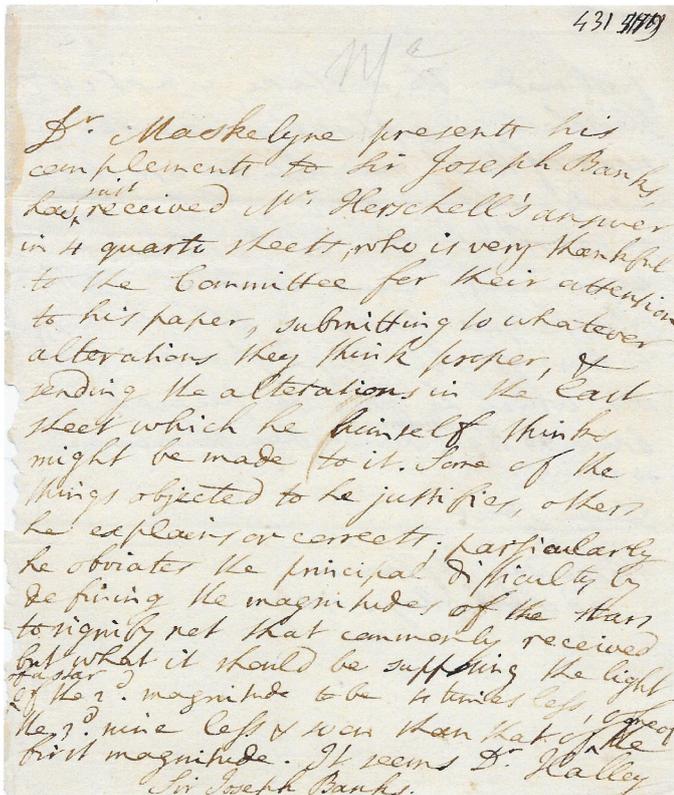
Trawler technology evolved to meet the challenge of travelling large distances in extreme weather conditions, locating and catching a declining resource and bringing back that perishable resource. The Arctic Corsair represents the peak of side trawler design and technology, and included Mirrlees Bickerton & Day 1800BHP Marine Diesel engines, Automatic Steering, Electric Winch for hauling nets, Echo sounders for detecting fish, Radar, VHF and other navigational and communications equipment.

£16,534.00 to Isle of Wight Steam Railway Company Limited for the restoration of a 1930s Isle of Wight Coal Train

The distribution of coal was fundamental to the development of the Isle of Wight from the mid-19th to mid-20th century, and the Isle of Wight Steam Railway moved coal from Medina Wharf to power stations, gas works and goods yards throughout the Island, ready for use or onward distribution by coal merchants. The restoration of two coal wagons has enabled the IWSR to present a complete coal train, as was used in the 1930s, both as a static exhibit and as a working demonstration.



Isle of Wight coal train carriage
Photo: Isle of Wight Steam Railway



A letter from Nevil Maskelyne to Joseph Banks.
Photo: The Herschel Museum of Astronomy.

£1,525 to Herschel Museum of Astronomy for the acquisition of a letter from Nevil Maskelyne to Joseph Banks.

The letter demonstrates the connection between two eminent scientists, Nevil Maskelyne, Astronomer Royal and Sir Joseph Banks, President of the Royal Society. The subject matter concerns the debate over calculations of the magnification of stars and William Herschel's theory that mistakes were originally made by Edmund Halley. Until his discovery of the planet Uranus in 1781, William Herschel was not considered a worthy member of the scientific community, but following his groundbreaking achievement, he became recognised as major contributor to astronomical knowledge. This letter reflects the high regard in which his work was held by his contemporaries.

£9,053 to the Greensand Railway Museum Trust to restore Simplex locomotive WDLR 2182

Motor Rail No. 2182 is one of the remaining examples of the large number of “Simplex” internal combustion locomotives built by Motor Rail and Tramcar Co. Ltd. for service with the War Department Light Railway in France during World War One. It is one of what is believed to be 27 locomotives built with full armour plating in order to protect the driver when working close to the front line. After World War One No. 2182 spent much of its working life at the Furness Brick and Tile Company.



Hot rivetting of chassis on Motor Rail No. 2182.
Photo: Greensand Railway Museum Trust.



Ichthyosaur ribs and paddle.
Photo: Lyme Regis Museum.

£5,000 to Lyme Regis Museum for the acquisition of the Lyme Regis Ichthyosaur

The ichthyosaur remains are part of a particularly large specimen (*Temnodontosaurus platyodon*), which ranks among the largest discovered locally, and indeed nationally. In ichthyosaur anatomy, the skull and front fins are essential diagnostic material, both being required in order to completely ascertain genus and species, and this acquisition reunites these pieces of the specimen with its skull, already in Lyme Regis Museum’s collection.

This ichthyosaur is the same species and of similar dimensions to the first ichthyosaur to be scientifically described, found by Mary Anning in Lyme Regis in 1811, and was discovered not far from her home (now the site of the present day museum), where Anning famously sold fossils to tourists and scholarly collectors of the period.

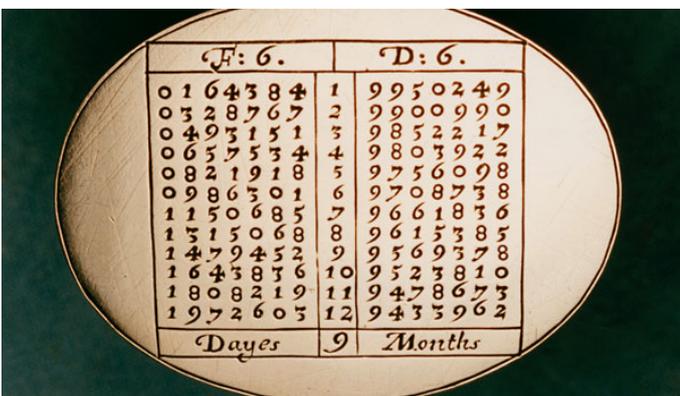
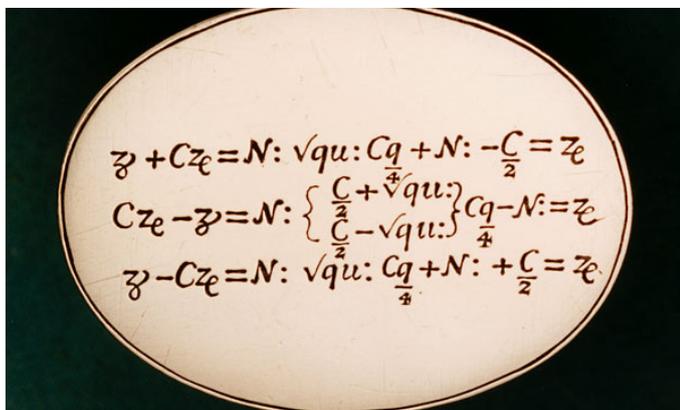
£11,250 to Metheringham Airfield Visitor Centre for the acquisition of a Rolls Royce engine and propeller.

This WW2 Rolls Royce Merlin aero engine was originally fitted to an AVRO Lancaster (the iconic Lancaster Bomber) and is considered to be one of the Second World War's most iconic engineering masterpieces.

Metheringham Airfield Visitor Centre, is dedicated to the men and women who flew and supported RAF106 Bomber Squadron from 1943 until the end of the Second World War, and this acquisition directly links to the aircraft flown from from Metheringham Airfield. As well as complementing the museum's collections, the engine demonstrates the technological advancement of the British wartime aero-engineering industry. It is the only complete version of the engine fitted to the legendary Avro Lancaster which still maintains its original ancillary equipment and



Rolls Royce engine and propeller
Photo: Metheringham Airfield Visitor Centre



17th Century mathematical aide-memoire (front and reverse view)

Photo: Museum of the History of Science.

£1,238 to the Museum of the History of Science for the purchase of a 17th century English Mathematical aide-memoire .

Mathematics in the 17th century was a very broad field, from the work of intellectual giants such as Descartes and Newton to the first mechanical calculating machines. This aide-memoire sheds new and revealing light on the culture of mathematics in 17th-century England. It is a small silver medallion engraved on one side with mathematical formulae and on the other with a numerical table. The formulae are positive solutions for quadratic equations, while the table would have been used to calculate interest.

£20,000 to Black Country Living Museum for the refurbishment of the Anchor Forge Steam Hammer (report to be submitted)

The steam hammer, patented by James Naysmith in 1842, is considered to be one of the greatest inventions of the Industrial Revolution. It enabled large pieces of iron to be forged more effectively than the traditional tilt hammer. Using the steam hammer it was possible to forge anchors in one piece, resulting in a much stronger end product. Prior to this anchors were forged using a “bit-by-bit” process, that is, small pieces were forged separately and finally welded together. The Black Country was Great Britain’s leading centre for the making of anchors and marine chain, playing a crucial role in equipping the Royal Navy and the Merchant Fleet. Anchors for the ‘Titanic’ and the Royal Yacht, ‘Britannia’ were forged in the region.



Anchor Forge Steam Hammer
Photo: Black Country Living Museum

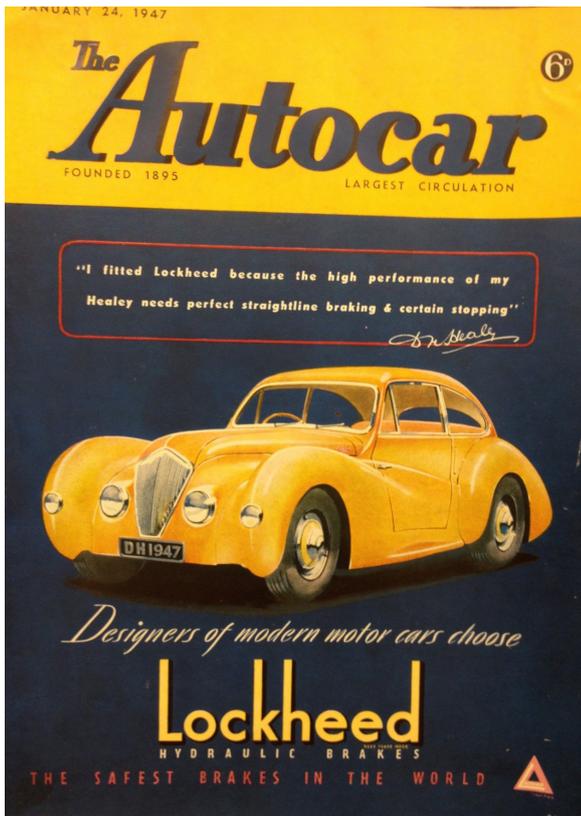
£4,439 to the British Dental Association Museum for conservation of SS White dental instrument set.

Samuel Stockton White was an American producer of dental instruments, which were widely used within the UK, competing with British manufacturer Claudius Ash. Advertisements from the period often state ‘American dentistry practised here’ reflecting the feeling at this time that America was leading the world in terms of scientific understanding and manufacture.

This instrument case, dating from 1860, is a large elaborate set designed for permanent use within a surgery setting, demonstrating that dentists were beginning to make a full time living from practising dentistry in one town rather than travelling from place to place. The state of the nations teeth was generally poor during this period, and the set includes a full set of 12 forceps, scalers and instruments for producing gold fillings.



One of the historic trade cards.
Photo: British Optical Association Museum.



Poster from the Warwick Healey Motor Company Archive
 Photo: Warwickshire County Council

£18,500 to Warwickshire Country Council for the acquisition of the Warwick Healey Motor Company Archive

The name Healey is synonymous with high performance sports cars and is an icon of British design. Founded in Warwick in 1945 the company produced their earliest cars in an old RAF hangar off Miller Road, Warwick and a showroom in Emscote. The archive tells the history of the company, from its foundation in 1945 to the death of Donald Healey's son (and successor as Managing Director) Geoff in 1994. Highlights of the collection include original drawings such as a pencil design for the first Healey car, original designs for iconic models such as the Austin-Healey Sprite and Austin-Healey 100, and designs from circa 1952 for a steam powered car.

£18,000 to Bradford on Avon Museum for restoration of The Iron Duke

Named after the Duke of Wellington, The Iron Duke is a rare survivor of the rubber industry in the UK. The machine is large and heavy (circa 16 tons), and was the machine on which Bradford-on-Avon's important rubber industry was founded.

In 1848, Stephen Moulton situated the Iron Duke within pre-existing water and steam-powered factory buildings in the town. With the assistance of an already available skilled local workforce, Moulton soon had contracts to supply rubber buffers, springs and hose-pipes for the Great Western Railway at Swindon, working with engineer Isambard Kingdom Brunel, and other work quickly followed. The rubber industry was the town's principal employer for decades, and The Iron Duke remained working until 1969.



The Iron Duke
 Photo: Bradford Upon Avon Museum



The William Boulton Steam Engine
Photo: UK Historic Building Preservation Trust

£20,000.00 to UK Historic Building Preservation Trust 'Bringing the William Boulton Steam Engine Back to Life'
The William Boulton Steam Engine was the mechanical heart of Middleport Pottery, one of the last working Victorian potteries in the UK. The coal-fired engine, which was still working into the 1970s, provided the motive power for arks, blungers and pumps and was fed by a large historic Lancashire boiler which also provided steam for heating and drying ware.



One of the East India Company school drawings after conservation
Photo: Royal Albert Memorial Museum

£13,759 to Royal Albert Memorial Museum
In the late 18th and early 19th century the East India Company set out to record the complete flora of India for the advancement of botanical science and for commercial exploitation (primarily food crops and medicines). These drawings were commissioned by the Company, probably under the supervision of the Calcutta Botanic Garden. They are painted on paper with gouache, watercolour and pencil under drawings annotated with ink inscriptions. The RAMM set of drawings relate to several printed publications of the era of William Roxburgh and Sir Joseph Banks, including Plants of the Coast of Coromandel and Flora Indica. As far as is known, the RAMM is the only non-national UK collection to hold original drawings from this group.

£19,950.00 to the Tank Museum
for Conservation and restoration of
Matilda II

The Matilda II was the only British tank to see service throughout WW2, starting its battles against the invading German Forces in France in 1940, fighting to great effect against the Italian Army and the Africa Corps in North Africa in 1940-1942 and later fighting the Japanese forces in the Far East, mainly with Australian troops. The tank could withstand any known anti-tank gun of its day as well as almost all other artillery.

The Tank Museum's Matilda is painted to represent a tank called 'Golden Miller' that was commanded by Lt Col HRB Foote when he won the Victoria Cross in Libya in 1941.



The Matilda II
Photo: The Tank Museum

