ISSES *Contact*

June 2020

INTERNATIONAL STATIONARY STEAM ENGINE SOCIETY

The primary aims of ISSES are:-

'To foster, encourage and co-ordinate an interest in and appreciation of the history, recording and preservation of stationary steam engines throughout the world'.

Membership is open to all by applying to the appropriate Membership Secretary and subscriptions run from January to December. For those who prefer to pay electronically an e-mail will provide instructions on how to make payments.

Current Subscription Rates

Membership category	
Ordinary	£ 21.00
Reduced (Senior/Student)	£ 20.00
European	€ 35.00
Outside Europe (except USA & Australia)	£ 24.00
United States of America and Canada	
Ordinary	$ 35.00
Australia	
Ordinary	$A60.00
Reduced (Senior/Student)	$A55.00

All subscription rates include the Society's Bulletin (four a year) the Annual Steaming Dates supplement *UK Engines* (UK Members) and newsletter ISSES *Contact*.

Remittances should be made payable to the International Stationary Steam Engine Society and sent to the appropriate Membership Secretary:

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Other regions Please contact ISSES.Secretary@gmail.com

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ISSES

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Back:	The 1899 Shand Mason steam fire engine *Cerberus.*	Courtesy Rik Jonkman (BeBA)

A Note from the Editor

Welcome to ISSES *Contact*, the occasional Newsletter of the International Stationary Steam Engine Society. After a period of 'rest' we have an opportunity to awaken this aspect of the Society's publishing activities. The intention is to provide readers with an opportunity to receive materials that are more appropriate to a general *newsletter* format or, being time critical, notices that need to be published outside the bounds of our usual printing cycles.

We hope, and this is dependent on input from readers, that this will be produced as often as necessary. There is no fixed size or frequency and we invite all to submit material for consideration. In the past ISSES *Contact* was managed and edited by Phil Retter but he stepped down to pursue other interests and I will take over the helm for the time being.

Scope

As a general guide we hope to include here:

i. Notices directly appropriate to ISSES Members, especially relating to visits and meetings.
ii. Notices about, or changes to, forthcoming events, including for preservation sites having no formal affiliation with ISSES.
iii. Corrections or updates to events published in ISSES' annual supplement *UK Engines*
iv. Items about a newly arising threat or situational change to an engine or location regarded as being time critical.
v. Items for sale (personal or for a Society/Museum).
vi. Items wanted.
vii. Requests for information either for personal research or perhaps regarding an ongoing restoration project.
viii. Requests for physical assistance in a project related to, but not restricted to, stationary or marine steam engineering.
ix. Book reviews.
x. Short articles that might be regarded as outside of the scope of ISSES *Bulletin*

It will be the Editor's decision if submissions are published, held over for a future edition, or forwarded to ISSES *Bulletin* Editor (Chris Allen).

Whilst the key purpose of ISSES relates to stationary or marine steam engineering within reason, so long as submissions generally relate to our core subject, anything else is acceptable within the following general guidance:

> Material relating to stationary and marine steam engines is, of course, paramount, <u>but</u> we intend to make ISSES *Contact* available to a broad readership within the community of like-minded organisations or individuals. ISSES Membership is not compulsory although, of course, we hope that non-members might wish to familiarise themselves with our other publications as time progresses. Therefore, material related more to, say, a specific aspect of industrial history; items relating to portable engines; steam fire engines or other steam operated machinery; large internal combustion engines or aspects relating to water power, material that might at first glance not be regarded as within ISSES' sphere, will be considered.

Respectfully, we do not regard ISSES *Contact* as a vehicle for items relating to railways; traction engines; road vehicles etc. However, the Editor may take a more relaxed view about requests for information relating to such matters or even notification of very special associated events. And there is an exception to every rule so the more outlandish aspects about these subjects might still be considered if the Editor feels there is justification. When you receive this edition of ISSES *Contact* it may be as a physical copy or by e-mail. Going forward it is our intention to only publish electronically. This enables a low production cost and, more importantly, provides a means of rapid publication when required. Although it is not our intention to publish 'out of schedule' items frequently the mechanism will allow such action where ISSES feels it justified. The Editor is happy to consider 3rd party requests for urgent notifications on a case by case basis. One example, now too late, of such a situation would have been notification of the planned destruction of the ex-West Gloucestershire Waterworks Company pumping station at Warmley Hill.

This edition of ISSES *Contact* is possibly shorter than future editions, depending on reader feedback and contributions, but a couple of matters and timeliness with publication of ISSES annual steaming dates supplement *UK Engines* means that the opportunity is best taken now.

Although I have no intention of dwelling on the matter of Covid-19 in these pages completely ignoring the subject is, of course, not an option. I have no doubt some of our 'news items' will relate to matters impacted upon by the horrendous virus. Whilst we urge all to 'stay safe' we sincerely hope that activities for our readers during the remainder of 2020 are not totally destroyed and that, in time, we will all be able to take part in events or activities we might usually enjoy. It is for this reason that ISSES annual supplement *UK Engines* has been published and issued to our members as usual. Please see page 8 for more details.

I hope readers will support this re-awakening of ISSES *Contact* and I welcome contributions for future editions.

Paul Stephens

Further editions of ISSES *Contact*

As noted above, further editions of Contact will normally only be published electronically. However, apart from previously having no real need, we have not maintained a full record of ISSES Member e-mail addresses.

To ensure you receive future copies, please will all readers confirm their contact details including:
Name,
Postal Address (optional),
If you are a Member of ISSES, perhaps a lapsed member?
If you represent an organisation with engineering heritage interests
or if you are an enthusiast of technical history who would like to be kept on the e-mail distribtion list for future editions of ISSES *Contact*
If you would like to be removed from the list it will be appreciated if you confirm that preference

The E-mail address to use is **contact@isses.org**

ISSES Rejuvenated

All voluntary organisations are reliant on the availability of their principal members to properly function and operate; this is particularly significant when there are a limited number of people completing the required tasks. Lack of available time has significantly impacted ISSES in recent years. We have struggled to maintain our annual subscription year during the last three volumes of the *Bulletin* (Volumes 37, 38 & 39) resulting in their being stretched beyond the usual twelve month period. The Society's newsletter *Contact* has not been produced since Phil Retter stepped down some years ago, and the Journal *Stationary* Power was last produced in 2006.

The ISSES Committee remains at three members, Paul Stephens, Chris Allen and John Cooper (a position all three have held since the formation of SERG – Stationary Engine Research Group, a forerunner of ISSES - in 1982), with support from Chris Hodrien as Publicity Officer/Technical Advisor and Mike Potts as Membership Secretary - his contact details are on page 2.

However, as ISSES *Bulletin* editor Chris Allen noted in IB39.2 things have improved since the end of 2019 with more time now available to do the things we want and this has allowed us to look forward with more optimism. The Bulletins forming the current volume 39 are on target for all to be published this year. IB39.3 is with the printers and if you haven't received it by the time you read this it will be winging its way to you. From 2021 we will be able to revert to annual production of bulletins, with the first one appearing in the early part of the year.

With the move to reintroduce the *Contact* newsletter as outlined by Paul Stephens it will allow an improvement in communication with members and the ability to include items which would not make Bulletin pages or are more time critical. There are also plans to resurrect the Journal *Stationary Power* although that will probably not be until 2021 at the earliest.

We thank all of our members for their patience and understanding during the recent erratic period and hope you will carry on supporting the group so that we can continue to provide high quality information and articles on our favourite form of motive power.

And, if your membership has lapsed there is no problem with fulfilling a full set of Volume 39 Bulletins, or even past years if you are in need of some good reading during this time of lockdown.

John Cooper, Secretary, ISSES
isses.secretary@gmail.com

ISSES Bulletin 39.3

The latest ISSES *Bulletin* to be published and released to our members in June 2020 is Volume 39.3. It is typical of the Society's Bulletins and the contents are as follows:

Coal Supply Crisis
A commentary by Chris Hodrien, an energy professional, on the crisis facing the UK heritage sector as the government moves to ban the sale of domestic coal. Steps being taken by the heritage sector and possible solutions are touched upon.

UK Notes and News
This is a regular feature looking at events across the UK sector affecting both surviving in situ engines and the heritage sector. This can include engines under threat or new discoveries of engines in museums or the commercial sector.

Le Moulin de Tesson, Jersey
A local mill historian reveals information about the discovery and preservation of the remains of a beam engine in a watermill. This is suitably illustrated with photographs.

Garlogie Beam Engine
Information on a preservation project of a derelict beam engine in Scotland, again with photographic illustrations.

Some Stationary Steam Engines in Sweden
Dave Collier has a PhD in Lancashire textile mill engine builders and is a regular contributor with heavily illustrated articles of his international travels. This is the latest instalment and covers stationary engines in Sweden. It is intended that it will be followed by an article on steam ships in Sweden. Dave's photography is superb and this article includes four pages of colour photographs.

Marine Notes and News
John Cooper provides this in alternate Bulletins and it is always a sizeable section that follows the same format as UK Notes and News. ISSES's remit extends to marine steam and as organisation we comment on what happens beyond the engine room door and illustrate engine rooms whenever possible.

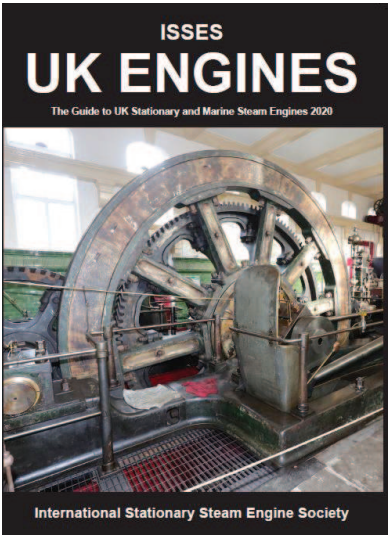
This edition is unusual in that there is no Antipodean (Australia and New Zealand) content. The *Bulletin* typically contains about 20% Antipodean content and our Australian co-ordinator, Owen Peake, ensures a steady supply of interesting and relevant material from the other side of the World.

As ever, I welcome submissions for future editions. We are a broad church and endeavour to cover as wide a range of Stationary Steam and Marine engineering as is possible from the material we receive. Whilst the revived ISSES Contact is aimed at providing shorter items, member notices, book reviews and items needing immediate notification to Members and associated organisations/ individuals, I always welcome submissions or suggestions for future editions of the Bulletin.

Chris Allen, Editor ISSES *Bulletin*
callen59@sky.com

For non-members copies of the above *Bulletin* are available at £6.00 inclusive of UK postage. Please e-mail the editor of *Contact* (Contact@isses.org) for further details of how to order.

ISSES *UK Engines*



For new readers, unfamiliar with ISSES they are unlikely to be aware of the Society's annual supplement *UK Engines*. It aims to provide a guide to places in the UK where one, often more, stationary or marine steam engines may be seen. In many cases they are workable mostly by steam but in some cases compressed air, electric motor or occasionally more exotic means.

A team of Members consisting of Chris Allen, John Cooper and Chris Hodrien spend time during the first months of each year pulling together event dates from many sites and the result is edited into the final version by Paul Stephens. A slightly different group of contributors provide photos that are fitted in as space allows.

The publication has changed enormously over the years since it first appeared in 1982 or earlier and consisted of a single double sided list. The latest edition is now 100pp and covers the whole of the United Kingdom.

Over recent years considerable work has gone into making the publication, we think, more usable. This year it has been re-organised into geographical regions for England and Wales and it is likely Scotland will see similar treatment in future editions. The Channel Islands, and the Isle of Man, are also included as is Northern Ireland albeit the later being regarded as work in progress until we learn more. 2020 sees re-introduction of some selected non-steam sites that include examples of water power and large internal combusion (IC) engines. Smaller water mills; IC engines; windmills; locomotives and road steam vehicles are usually excluded as they are outside of the scope of the publication. *UK Engines* features engines from humble steam hammers lurking in out of the way places all the way up to the most magnificent textile mill engines and pumping machines that can be found through the length and breadth of the UK.

The horrendous virus Covid-19 has caused massive uncertainty and the editor, for some time, considered simply writing off the 2020 edition. However, for a number of reasons it has been decided to continue with production. Not the least because it gives our readers something to enjoy amongst all the enormous negativity that Covid-19 seems to have resulted in. With the arrival of 'lockdown' the content has been modified to strip all specific dates earlier than July but otherwise it will appear as usual. Doubtless the 2020 season will be a shadow of what might have been but we hope that readers will still find UK Engines an interesting read.

For readers of ISSES *Contact* who would like a copy an e-mail to Paul Stephens will provide instructions on how copies may be obtained at £7.50 inclusive of postage.

Paul Stephens
contact@isses.org

Heritage Knowledge Hub

Early Engine Database

I am delighted to be able to announce the launch of the first source of information for the newly set-up '**Hub**' for storing and sharing sources for research relating to cultural heritage. A fully searchable online database of information about 18th Century engines in the UK has been produced, based on the work carried out over more than forty years by John Kanefsky. It covers Newcomen engines and early Watt engines as well as other types of engine built prior to the end of 1800. This is the first time John's work has been made this publically available and we are delighted to have been involved in this opportunity for this to now be shared with a wider audience.

The purpose of the Knowledge Hub that the Cultural Heritage Institute (CHI) are establishing, is for data such as this to be accessible through a single point of entry to as wide a circulation as possible. The intention is to make raw data available for people both to add to and enhance as well as to use in their own research. It is also intended to provide a home for so called 'grey literature', i.e. documents and reports that have been produced but not previously published. Kanefsky has previously published a number of papers setting out his conclusions drawn from his collected information but not the full data itself. This therefore fits well with the aims of the CHI and is an excellent first choice for the hub.

Following this link will give access to the database: http://coalpitheath.org.uk/engines/

Access is also possible via the website of the **International Early Engine Conference (**IEEC), one of the partners in the preparation of this resource. It had been hoped to formally launch it at IEEC-2 this May but that has, of course, been postponed until May 2021.

Comments and suggestions of amendments and additions to this database are welcomed so that over time the dataset can be improved and grow to become an even more useful resource for anyone researching this subject.

The CHI are also in the process of obtaining and making available similar material which will be added to the hub in due course. This includes working with members of the **International Stationary Steam Engine Society** (ISSES) regarding a separate database continuing this data into the 19th Century. It is not only industrial heritage that the Hub is hoping to cover as the intention is for it to grow to include other aspects of cultural heritage with sections covering transport, agriculture and land use, entertainment and sport, food and drink, to name but a few aspects of the tangible and intangible ways man has interacted with his surroundings.

Specific enquiries about the Cultural Heritage Knowledge Exchange Hub can be addressed to myself (David Hardwick - David.Hardwick@RAU.ac.uk) or CHI director Geraint Coles (Geraint.Coles@RAU.ac.uk)

The CHI is located in the former Carriage works of the Great Western Railway at Swindon. For details of the CHI itself and the courses currently on offer please visit https://www.rau.ac.uk/cultural-heritage-institute

David Hardwick, Senior Lecturer, RAU

International Early Engines Conference - IEEC2

Rescheduled due to Covid-19

We can now confirm that the second International Early Engines Conference (IEEC2) has been rescheduled to run at the Black Country Living Museum in May 2021 (either 14/15/16 or 21/22/23 to coincide with the BCLM's *Red By Night* event). We have received many excellent proposals for papers and some text for a few of those have already been through the editing process and are ready for publication.

Whilst we are disappointed to have to postpone until 2021 because of Coronavirus, the quality and variety of the papers promises to compensate for the delay. We have two papers that add significant numbers of additional engines to our knowledgebase and we have two more concerned with the early rotary engines; Scotland and Wales feature too with papers on engines in both areas.

Whilst the papers are always fascinating, all attendees of IEEC1 (2017) commented that the personal conversations, networking and 'joining up' were particularly enjoyable. There is no let-up in the evenings either, after Friday's conference we go to see the Cornish engine at Sandfields Pumping Station and on Saturday evening there is *Red By Night* to look forward to.

To find out more or book, please visit our web site at https://www.earlyengines.org

Steve Grudgings, Chair, IEEC Committee

A Modern but Short Lived Engine

Chris Hodrien

Although there are some instances where use of steam power can be justified, generally where exhaust steam can be used for process or heating purposes, such installations are unfortunately rare.

One such modern installation was the small German built Spilling engine installed at the farm of A.J. Woodward & Sons Ltd, Beckford, Worcestershire around January 1991. Installed probably second-hand it was to take steam from a boiler fuelled with chicken litter to generate electricity with the exhaust being used to warm greenhouses and chicken sheds during the winter months.

ISSES members saw the engine during the 1990s and noted that it was a single cylinder totally enclosed machine of 410mm bore by 126mm stroke running at 1,000rpm producing 155kW and driving a shaft driven alternator.

The installation was monitored by the Energy Technology Support Unit of the Department of Energy to assess the viability of using chicken litter for combined heat and power. However, partly because the owners were forced on the grounds of human health issues to cease using chicken litter, they had to use Polish coal instead. The result was that the plant was not economic.

The death knell came c2007 when the site was re-classified by the Government energy regulator Ofgem as 'a small coal power station'. Accordingly, the Environment Agency demanded an unaffordable upgrade in continuous pollution monitoring/reporting. As a result operations ceased and the engine went for scrap because no buyer could be found at the time.

Report on Demolition of Warmley Waterworks

David Hardwick

An interesting set of Edwardian civic buildings, (including the last chimney in an urban setting in South Gloucestershire) were recently demolished. South Gloucestershire Council (SGC) own the site and therefore they had the power to stop this but unfortunately chose not to.

During the 19th century the site was Cowhorn Colliery and was later utilised (from 1906 to 1970) by the West Gloucestershire Water Company to pump water up the shaft using steam powered engines. It has significant historical links with other key industrial sites, including Champion's Brass works, which form the nearby Conservation area. It is mentioned as a key site on the local industrial trail but had no statutory protection. The council also chose not to include it on their local list nor on the Historic Environment Record.

Planning permission had been granted to demolish the building in 2019 despite the SGC's Heritage and Conservation Officers stating an alternative use should be found together with strong objections from national and local heritage groups.

Although granted consent for demolition, before this started attempts were made by a combined group of local heritage bodies and interested locals to get SGC to consider proposals for alternative uses or any compromise that could have saved at least some of the structures. Immediately prior to demolition, with the machinery already on site ready to start, it was thought a last minute reprive was on the cards when it was indicated that senior representatives of the council would meet to discuss options and a 'Stop Notice' would be put on the demolition work. It subsequently appears there was, however, never any desire to meet and the work proceeded as originally planned.

To make matters even more galling, the site is used for parking bin-lorries by the council's tenant SUEZ (who are the council's appointed waste management contractors) but it has already been identified as being unsuitable for this use and there is a commitment to move out within a couple of years, possibly sooner.

It has not gone uncommented on now that the council now have a cleared site in a primary residential area that in a short time will be suitable to sell for housing development. It has also been noted that any other applicant proposing such a damaging approach to our cultural heritage would face strong opposition from the council. In this case they seem to have applied different rules to land where they have a vested interest. As a result a heritage/community asset has been lost.

The site once contained two steam pumping engines built in 1910 by Summers & Scott of Gloucester. They were of an unusual design being horizontal side-by-side compounds with two LP cylinders flanking a central HP cylinder. The cylinders were 15½" & 21½" (2) x 24". Steam was distributed by slide valves mounted on top of the cylinders, with the HP having an expansion slide valve riding on the main valve. The valves were driven from the crossheads of adjoining cylinders rather than the usual eccentrics. Each engine drove a single well pump via a connecting rod from a crank on the outboard side of the flywheel to an outdoor bell crank over the well. The LP piston tail rods operated a pair of plunger force pumps. According to George Watkins, in the 1940s the engines gained heavier flywheels from another site. Steam appears to have been raised in a pair of Cornish boilers with associated economiser plant. The steam plant was finished with in the 1950s. Despite the loss of the steam plant, the surviving buildings, including the chimney, were clearly recognisable as those of the steam powered water works.

A Steam Fire Engine in Amsterdam

Marc Stegeman & Rik Jonkman

From the internet Marc Stegeman traced some information about a historic steam fire engine (No.10) in Amsterdam, the Netherlands and passed it to ISSES. Rik Jonkman has provided some of the photos and additional information.

The fire engine (in Dutch a Stoombrandspuit) was built in 1899 by Shand, Mason & Co, of London for Amsterdam, it was the 10th steam pump in the city, It was put in reserve service in the mid-1920s and out of commission by 1946. Although it is still owned by Brandweer Amsterdam-Amstelland (regional fire brigade), it is maintained by BeBA - Stichting Behoud Erfgoed Brandweer Amsterdam (Heritage Fire Brigade Amsterdam https://erfgoedbrandweer.nl).

The fire engine is fitted with an inverted vertical 3-cylinder engine rated at 2hp. The pump could deliver 3,400 litres a minute against a head of 80 meters (over 260ft). It was named *Cerberus* after the three-headed dog of Greek mythology. According to the web site the engine's output was comparable to results achieved with modern fire appliances.

Previous restorations, funded by public subscription, were in 1970 and 1976, with the engine being displayed at the National fire museum in Hellevoetsluis. It was steamed at Hellevoetsluis Stoomdagen for some years until its boiler certificate expired. In 2015 Cerberus was returned to Amsterdam and two years later was the subject of an investigation to establish if it was feasible to make it steamable again.

Lloyds did the preliminary survey and subsequently the boiler and engine were made accessible for restoration. The existing builders' documentation and instructions were digitized for future use. Whilst in Amsterdam *Cerberus* was stabled in the former fire station 'Rudolf' at the Remmerdenplein, Amsterdam but for restoration it was moved to the fire brigade investigations hall at the Afrika Pier in Amsterdam harbour.

Once dis-assembled the boiler was taken to the Medemblik steam pumping station museum for restoration work to be carried out by volunteers of the SHM (Stoomtrein Hoorn-Medemblik).

Although restoration has yet to be completed the volunteers are confident that the work will be completed in due course.

Drilling out rivets from the Shand Mason boiler of Cerberus.
(Courtesy BeBA)

A Request for Support

The Boulton & Watt Engine, Powerhouse Museum, Sydney

David Miller (dp.miller@unsw.edu.au) writes calling for letters of support to try and stave off the planned move of the historic Whitbread Brewery Engine that has since 1988 been displayed in the renowned Powerhouse Museum in a restored historic power station in the Ultimo district of Sydney, Australia.

He writes if readers can:

help the cause of the Boulton & Watt Engine held at the Powerhouse Museum here in Sydney. You may have heard that the NSW Government has decided to move the Powerhouse Museum from its Ultimo site in downtown Sydney to Parramatta in Sydney's west. Controversy has gone on for a number of years but the Premier seems determined to make this move even in a time of pandemic austerity.

Within this larger battle there has been particular concern about the Boulton & Watt engine (the Whitbread Engine). It is not clear that the relevant expertise still exists to move the engine to a new Museum in Parramatta and there is real concern about the risks to the engine if such a move was attempted.

It would be a significant help to the cause of those of us opposing the move if readers could see fit to write a letter regarding the significance of the engine and the inadvisability of moving it. Please let me know if you could possibly help in this way. If you can, I will put you in touch with Andrew Grant, a former Curator at the Powerhouse, who is central to the struggle and can provide the detailed facts of the matter, and advice on how and where to direct any communication you might be willing to make.

E-mails to David would seem to be the most appropriate initial response. Apart from the Boulton and Watt engine the power collection includes an impressive display of stationary steam engines, including a very rare 1837 Maudslay beam engine. Many of these engines operate in what is a very rare example of a technical museum steam-powered gallery. The loss of this collection in its current industrial setting would be a tragedy. Even if the Boulton and Watt engine is successfully removed and re-erected - at great risk - there is no plan to reassemble the other highly significant and historic engines in the new museum.

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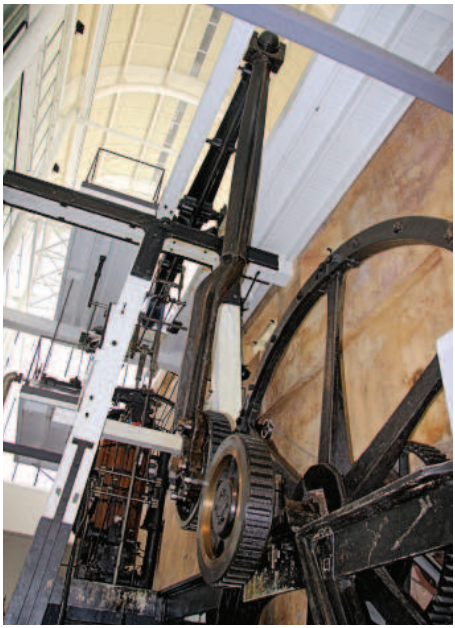


The 1783 Boulton & Watt, sun & planet rotative engine, Powerhouse Museum. (Paul Stephens)

Internet Resources

Chris Allen

This is the first of a possibly regular series of articles on resources available to those interested in steam or a more wider range of engineering/technical subjects. Whilst we will may not cover the more obvious sources such as Google or Bing searches there are a number of resources that may be less well known. The first few of these items will probably cover Internet resources but we are happy extend further subject to submissions from readers. Although I have commenced this input from other readers will be very welcome. One benefit of moving Contact to an electronically published platform will mean that the internet links should work without the need for retyping.

WWW.Geograph.org.uk

A very useful source of images with informative captions is to be found on the website of the Geograph project - http://www.geograph.org.uk

This has been running since 2005 and is a project to provide geo-located images covering the whole of the United Kingdom and Eire. To date, in excess of 6.4 million photographs have been posted. The site has excellent search functionality both from the home page and from its own 'Browser'. Although there are many landscapes of countryside and upland areas, there is also a very rich vein of urban material including many items of industrial archaeology. Many of these images are accompanied by useful captions and it is also possible to suggest corrections or contact the author of images to open a dialogue. Membership is free via a simple process of registration and the site's managers endeavour to prevent the site being hijacked by providers of spam.

Another feature of the site is that all the images may be re-used under a Creative Commons licence that just requires images to be appropriately credited. As a consequence, Geograph images appear in news items and in published works with some regularity.

Here are just a few examples of searches appropriate to our readers:

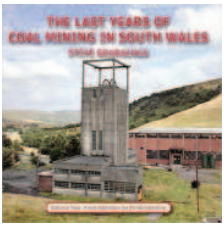
Newcomen - https://www.geograph.org.uk/browser/#!/q=Newcomen
Beam engine - https://www.geograph.org.uk/browser/#!/q=Beam+engine
Industrial archaeology - https://www.geograph.org.uk/browser/#!/q=Industrial+Archaeology
Steam engine - https://www.geograph.org.uk/browser/#!/q=steam+engine
Textile mill - https://www.geograph.org.uk/browser/#!/q=textile+mill

A stationary steam example, there are quite a lot of good photos to be found, is at: https://www.geograph.org.uk/photo/4719800

Anson Engine Museum, Fowler beam engine
Deliberately taken with quite a long exposure to show the engine at work under steam. For a picture of the 'complete' engine, and details, see Link

Book Reviews and Shorter Notices

The Last Years of Coal Mining in South Wales, Volume Two: from Aberdare to Pembrokeshire)



Steve Grudgings, hardcover, 250mm x 250mm, 238pp, more than 250 colour and black & white photos, published by Folly Books, £25
ISBN 978-1-916178908

Steve's latest 'Last Years' book was officially launched on 14th December at the South Wales Miners Museum, Afan Forest Park, Cynonville, Port Talbot.

In his introduction Steve writes:

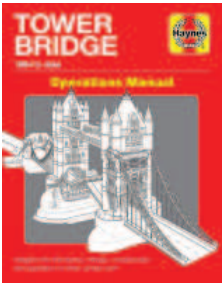
'*I count myself extremely fortunate not only to have witnessed and photographed the last few years of coal mining in South Wales but also to work with a publisher with the expertise and empathy to transform my raw material into what we both hope is a quality product. The process of producing this book has been a most enjoyable exercise, allowing me to indulge my memories and recollections of many visits to South Wales.*

These visits continue and there are a few of us who continue to seek out the increasingly derelict and overgrown remains of this once dominant industry. If you had not experienced it first hand, it's difficult to understand how much influence the coal industry had on the welsh valleys in visual, economic, social and environmental terms. The coal industry in general and in South Wales in particular was both dependent upon and the instigator of a series of linked communities. The obvious communities were the physical ones of housing, shops, clubs and pubs around the pits, less obvious were the economic ones linking suppliers and customers of the industry. The miners themselves were another and it would seem that the dangers, risks and sheer hard work entailed in mining coal prompted levels of care and dependency for workmates unequalled in other working communities .With few exceptions, most ex miners will tell you that this what they miss most in other workplaces. Like its predecessor, the emphasis of this second volume is on the images and is very much a personal perspective rather than an inventory or gazetteer of pits. Whilst most images were taken by myself, my friend Tim Rendall contributed some from his visits to sites I missed. The initial inspiration of us coming from fellow Bristolian John Cornwell's photographic first publications on Welsh pits back in the 1980s. Recognising that none of his colour work has been published, we have, with the cooperation and permission of Ceri Thompson and colleagues at the Welsh National Coal Museum, been able to use some John Cornwell's work to fill gaps in my visits and also hopefully to draw attention to the quality of his work. We hope you enjoy this photographic expedition from Aberdare westwards to Pembrokeshire.'

The book provides a unique pictorial record of the fast few years of coal mining in the western valleys of South Wales with over 250 images of large and small collieries across the district.

Highly recommended. ***The Scribe***

Tower Bridge 1894 to date - Operations Manual
John M Smith, 2019, Hardback, 270mm x 210mm, 187pp, Illus., Haynes Publishing, £25.00
ISBN 978-1-78521-649-7



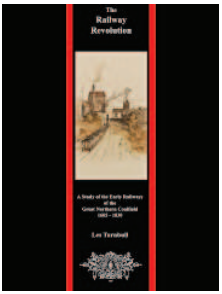
Although Haynes Publishing is best known for car manuals, it has been branching into 'manuals' for other aspects of technology for several years. This is one of its latest offerings.

John M Smith is a chartered engineer and he provides some excellent insights into this iconic structure that go beyond the merely descriptive. Topics covered include the protracted plans for a Tower Bridge, construction, details of the structure (it is now actually 12 bridges in one), the hydraulic plant, the men who built the bridge and the maintenance of the bridge. The book is extremely well illustrated with drawings and photographs, the majority in colour. The illustrations are of a high quality and take the reader to places they would probably not see otherwise. ISSES members will be particularly pleased that the steam and hydraulic plants are covered in reasonable detail and may be impressed by the author's calculations of whether the pier accumulators have sufficient stored energy for a bridge cycle, the time taken for the engines to recharge the accumulators and the probable availability of the bridge plant (99.9952%). The author also provides an analysis of the forces in the bridge and a comparison with those stated by the bridge's designers.

This is an excellently produced book that describes a steam powered icon of the Victorian period and is likely to be of interest to readers with interests in mechanical or civil engineering.

Chris Allen

The Railway Revolution - A study of the Early Railways of the Great Northern Coalfield
Les Turnbull, softcover, 297mm x 210mm, 172pp, Illus., published by the North of England Institute of Mining and Mechanical Engineers in association with the Newcastle upon Tyne Centre of the Stephenson Locomotive Society, £15 + £3 p&p
ISBN 978-0993115158



Payable to Newcastle Centre, The Stephenson Locomotive Society
address: Newcastle Centre Sales, c/o 24 Melbeck Drive, Ouston, Chester-le-Street, DH2 1TL.

Les Turnbull's latest publication provides a compelling account of the regional and commercial context for the development of the railway networks that served the Great Northern Coalfield and laid the foundations for the 'railway revolution'.

Whilst some aspects of this topic have been ably documented by Les and others, this account covers new ground, specifically:

- A detailed study of the costs and challenges of hauling coal by road from Whitley Colliery a mile or so to the River Tyne at Cullercoats in 1678/79 and the resulting economic case for the introduction of a waggonway in the 1680s.
- In depth descriptions of the development of the railway network connecting the Duke of Northumberland's royalty at Hedley with the coal staithes on the Tyne at Stella.

- Analysis of the development of rail transport (with some previously unrecorded systems) in what is now urban Newcastle from the records of eighteenth century engineers.
- The evidence for the coexistence of steam traction, iron rails and passenger transport in 1813 that predates George Stephenson's similar endeavours.

And if this is not enough Les provides a sixty page illustrated gazetteer of all the railways in the Great Northern Coalfield from 1605 to 1830.

As with his previous work on Early Railways in the Derwent Valley and William Brown's Engine's, this 170 page account is copiously illustrated with maps and related documents. I was particularly drawn to the drawing and engravings of Thomas Bewick and John his lesser known brother, whose family worked a small colliery near Prudhoe from 1700 onwards.

I heartily recommend this to anyone interested in early railways 172 pages and the cost is £15 plus £3-50 pp. The book is available from Melissa Forster at the Common Room, 0191-2509717, Email Melissa.Forster@thecommonroom.org.uk

Steve Grudgings

Shorter notices

Engine manufacturer booklets

The Northern Mill Engine Society is offering a print to order service on several A4 booklets produced from serialised engine builder histories originally published in the NMES newsletter *The Flywheel*. These are excellent and well-produced booklets that place all the information at your fingertips in one place. They are also of value to people who are not members of the NMES and would not otherwise get to see this material. They are a valuable addition to the bookshelf of anybody interested in Lancashire mill engine builders.

The titles and prices are:

Hick, Hargreaves	50pp	£17
Pollit & Wigzell	72pp	£25
Newton, Bean & Mitchell	78pp	£25
Saxons	4pp	£15
B Goodfellow	68pp	£22

Postage is extra.

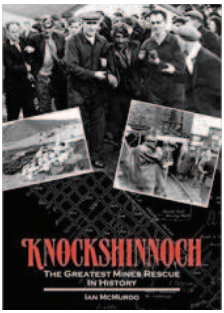
Further information, and ordering is available via John Phillp at john.phillp@blueyonder.co.uk

Chris Allen

Knockshinnoch, The Greatest Mines Rescue in History

Ian McMurdo, soft cover, 204mm x 138mm, 312pp, Illus. £15, available from www.Carnpublishing.com

ISBN 978-1911043010



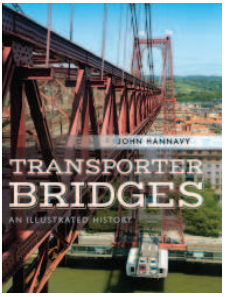
Oh No! I hear you say - "*not another mine disaster book*". It is, but this one is special. I won't spoil it for you as all I can say is it is a true account of a fascinating series of events, and the people and personalities involved.

The detail is extraordinary, it reads a bit like a modern thriller I really could not put it down. Ian McMurdo has recorded the events very well from excellent research and interpretation of events.

This book is a must-have for any Mining Historian or enthusiast and is £15 well spent.

Mike Taylor BIAS & SGMRG

Transporter Bridges - An Illustrated History
John Hannavy, Hardback, 297mm x 210mm, 269pp, illus., Pen & Sword Transport Books, £30.00.
ISBN 978-1526-760388



Although not of stationary steam interest, this beautifully produced hard-back book will be of interest to readers with a wider interest in industrial archaeology, particularly of transport related topics.

Transporter bridges use a suspended gondola to get traffic across a waterway without obstructing it, the supporting structure being high enough to allow the passage of the tallest ships. They are rare and impressive structures and only nine still stand in their original form with five in use. In addition to covering the history of transporter bridges and schemes that never came to fruition, the book covers the surviving examples in detail with many excellent quality colour photographs. These latter include photographs of constructional and drive mechanism details that will appeal to those of an engineering bent.

The book ends with fact sheets covering a total of 33 transporter bridges that were proposed in the 145 years since 1873. Only 20 of those were actually built. The proposals include some surprises, including a 1998 proposal for a gondola beneath London's Royal Victoria Dock pedestrian bridge. Although this never happened, the docking stations were built and a maintenance gondola does operate just below the truss.

This is a superb 'coffee table' standard book that combines high quality illustrations with well researched and informative text. I shall find a space for it alongside canal lifts and inclined planes.

Chris Allen

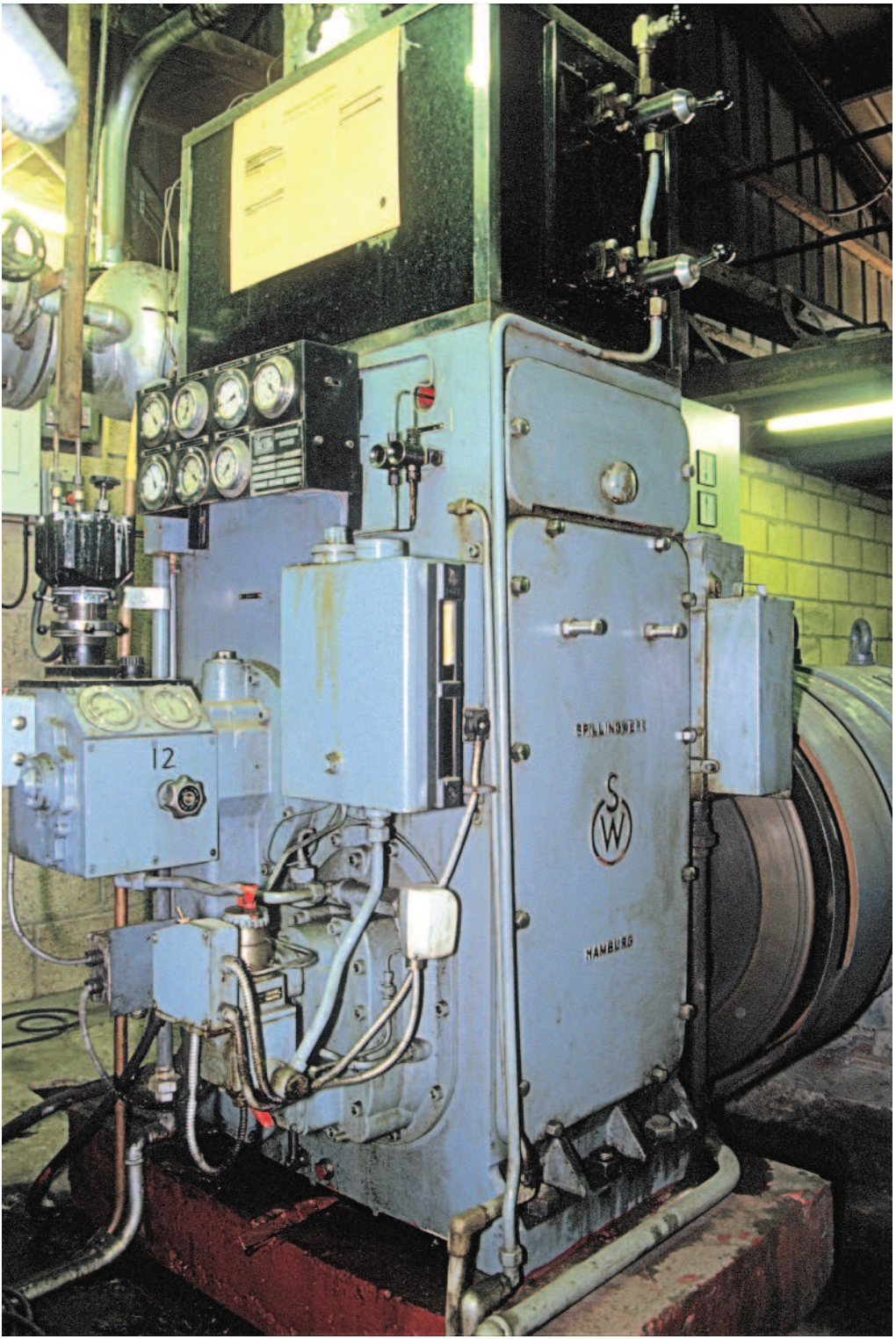
And Finally

To finish what we hope readers will agree is an interesting new edition of ISSES *Contact* there is a challenge.

There's no prize but interesting answers get to appear in a future edition of the newsletter.

Who knows what this photo is of and who might have made it? The more detailed your response the better!

Please send your suggestions to:
Contact@isses.org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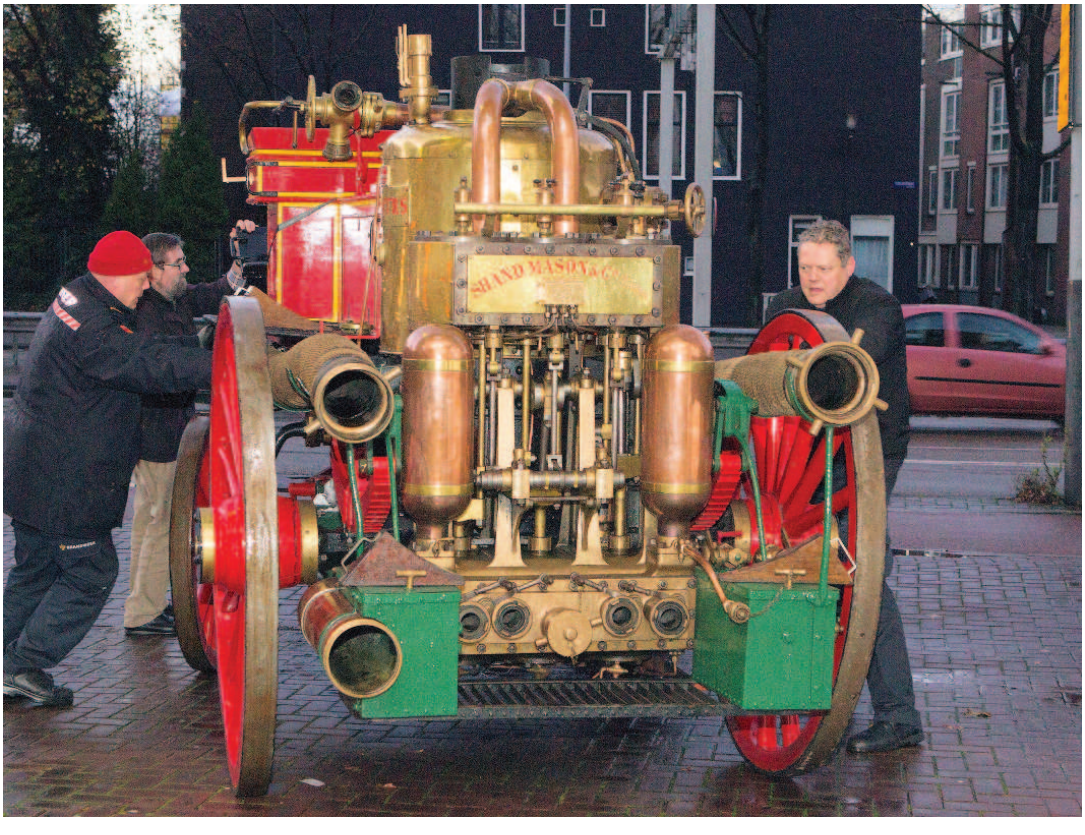
SHAND MASON