

AHS News

Chairman's AGM address

Welcome to the sixty-second annual general meeting of the Society, and let me offer on your behalf our sincere thanks to Lizelle de Jäger and her colleagues for assisting us in holding the event here at the National Maritime Museum. The Society has many strong supporters, some of whom are very visible, some of whom choose to remain anonymous – our thanks to them all, and to Sotheby's for sponsoring us today so generously, thereby allowing us to put on such a full day's entertainment at very modest cost to you all.

Lunchtime exhibits have become a feature of these days. Thanks are owed to Rob and Jane Pedler for bringing their extraordinary De Dion Bouton, to Jonathan Betts for the magnificent Bentley, and to Morgan London for the classic Plus Four model they have provided. To support today's lectures, Pat Capon has delved into his magnificent collection of mail coach watches to offer exhibits, and Eitan Arrusi, a welcome new member from our Wristwatch group, has generously lent some original Weems and hour angle watches and associated ephemera.

This morning, I made a first introduction to the new President of the Society, Dr Patricia Fara, Senior Tutor at Clare College, Cambridge, and the next President of the British Society for the History of Science. I will be asking Patricia to present a prize at the end of our proceedings. I don't want to embarrass her by reading out the long list of her achievements and her many publications, but you will be able to read all of the detail in the next issue of the journal, and also read Patricia's own comments on where she sees some great potential for working together with the Society. Once again, Patricia, you are hugely welcome and I look forward to working together with you over the next few years.

What of the last year? We have seen all sorts of successful activities on many fronts. At the Sections and Groups' meeting in February we reviewed the continued success of people around the Society, around the world, with a varied and popular programme of material on offer. The Turret Clock group notably arranged

its first overseas tour in the summer of 2015, visiting Italy with great success. Closer to home, Sue Knight, doyenne of the AHS Study Tour, arranged a very well-received UK-based programme, a first tour taking in the Oxford area in September last year, and then a trip to the North in May of this year. Around the country, the sections have organised a varied and excellent programme of meetings, and I have much enjoyed visiting several of the sections – and my thanks go to you for the generous and hospitable welcome you have shown me on my travels. Also present at the Sections and Groups meeting earlier this year was Steve Tyrer, new Chairman of the Wales and Marches Horological Society. His Society, some of you will know, originally formed as a section of the AHS, but parted company many years ago. I am delighted to announce that discussions we have been having over the past year have led to the two Societies deciding to affiliate and Steve and I will today sign an agreement to that effect. There are a variety of ways we can advance each other's interests, and I look forward to travelling to Cardiff to offer a lecture later this year.

The Wristwatch Group, in its first year of operation, has already gathered seventy-eight members, and put on two hugely popular and very well-orchestrated events. The Wristwatch Group answers a long-felt need from within the existing membership and also provides us with a critically important recruitment tool for the future. I have to note the highly visible wristwatch element within today's programme of lectures.

A continued jewel in the crown is our flagship publication, *Antiquarian Horology* and I am sure you will all join me in congratulating Peter on continuing to produce a wonderful journal. Of course, his life is made easier by the fact that so many contributors, many in this room, continue to supply wonderful material. Peter's life is made yet easier still by the panel of fifty referees (yes, fifty!), again many in this room, who help ensure we maintain the best standards. Our great thanks are owed to those many contributors and to the referees, and to the reporters on meetings, and the contributors of excellent book and journal reviews – a wonderful wide community of contributors overall.

Of course another feature of the journal is the remarkable advertising, with such wonderful illustrations. Can I offer sincere thanks from the Society to those of you who continue to support us so strongly with your advertising – it's critically important to us. At the same time let me acknowledge the sterling work of Tony and Pamela Law, our advertising agents now for some 33 years, who achieved an outstanding result for the Society in 2015. Hand in hand with the journal goes Andrew James's superb indexes – and in mid-2015 he completed the index for volume 34. The results were added to the cumulative index which remains one of the most popular downloads from our web-site. Our sincere thanks go to Andrew for this significant labour of love.

We enjoy strong support from Bonhams, and my thanks to James Stratton and his colleagues there for hosting an excellent evening in December, just before that month's sale. Another arena in which we are much dependent on support is with our London Lecture Series, which has been sponsored this year by Ben Wright. We have been achieving record crowds thanks to a winning combination of David Rooney's well-chosen programme of speakers, and Ben's generous sponsorship of an excellent evening's entertainment. Ben, it is very much appreciated by all. The hosts for this year's series, Columbia Threadneedle in Cannon St, have also generously supported us, and we have benefited from their help and support in putting on a series of wonderful evenings.

The website is predictably the mechanism through which virtually all new members reach the Society now, and we are very grateful to Martin Ridout for his overall stewardship of this vital resource. Thanks are also owed to David Rooney and Dee Foster for their contributions to the maintenance and updating of the website. A major upgrade over the last year has been the creation of a responsive version of the site, making the site easily readable on smart phones and tablets. We have to recognize this is in fact the most likely way a new member will first ever encounter the Society – searching on their handheld device, so many thanks to those who contributed to this latest advance. A quick note on the members' area of the web-site. We are gradually populating it with more and more material.

Look out in the next journal for the explanation of the Sun Life and Royal Exchange Fire Insurance Records (1710–1863) which we have uploaded, and which you can search. These offer an amazing new source for your research into clockmakers. We hope to offer more such resources in the future.

Turning to the library, it continues to flourish under the stewardship of Ted Powell – our thanks go to Ted for this largely unseen role. I'd also like to thank our accountant Bill for his meticulous work in keeping us on track, and for providing us with far better analytical tools than we had available when I first joined Council. And I also need to thank Dee for her bookkeeping work in support of those accounts.

And then there is the Council itself. I have been greatly supported in many different ways by all my colleagues over the last year, whether it's in considering new books, or places to meet, or arranging days like today – all the myriad things that cross our sights. I am very grateful indeed for that support. Finally, of course, the whole engine of Ticehurst ticks over smoothly under the watchful eye and steady hand of Wendy, our Secretary. We all owe her a debt of gratitude for keeping the machine running so efficiently and smoothly.

Coming back to books and our own publications – I would like to remind people about a book that may have escaped your attention. Not that long ago we co-published with Rogers Turner Books, *John Carte on Horology and Cosmology*, a transcription and introduction to a wonderful early eighteenth century manuscript. It offers fascinating and intimate glimpses into the practice of English clock and watch making in the age of Tompion. Search it out.

This year, as the culmination of a thirty year project initiated originally by Cedric Jagger back in 1986, but revived recently in a partnership between the Clockmakers Company, its Museum and Educational Trust, and ourselves, we finally have *The Life and Travels of James Upjohn*. There were many, many people who made this possible, but my especial thanks to Roger Smith who contributed expert (and patient!) editorial input over many years.

Two new books are gathering significant momentum. The draft manuscript of Ian White's *The Majesty of the Chinese Watch*

Market has been delivered – we are reviewing draft layouts, a publishing plan is mapped out ahead of us, and we will be working very hard on it in coming months.

We are near to reaching an agreement to publish Don Saff's book, provisionally entitled *From Celestial to Terrestrial Timekeeping : Clock Making in the Bond Family*, focusing on the remarkable Bond family of Boston, their extraordinary clocks, and their contribution to the development of an early time service.

The Society is passionately committed to the publication of new books, and we should see these two new titles emerge over the next year.

Lots of positive news about books, yes, but you will know from reading the detailed explanation I placed in the March journal that books are also at the heart of a stock write-off which colours our figures for 2015. I wrote those detailed notes for the journal so that you would have time to digest them and so that I would not need to offer the same explanation today – but Bill will be walking you through the accounts in a minute. The changed accounting policy we have for publications going forward is the right one, and such a write down will never again be necessary.

Another item that I set out in detail in the March journal was the newly adopted reserves policy for the Society, which bring us into line with Charity Commission guidelines. The reserve policy is set out in full in the booklet you all received, and will be subject to continued review. The largest specific reserve relates to education, and I must confess that we have not made the progress I had hoped over the last year – largely as a result of the loss of Lisa – she was an important touchstone in the development of our thinking, but I am very confident that our new President will also be able to offer us valuable insights and encouragement in best deploying these specific reserves.

With regards the finances of the Society, Council believes we are on a good footing. We are attracting new members and at least keeping the membership stable. With the subscription at its new level, and costs well controlled, we believe the finances of the Society are on a sound footing. The atmosphere in the Society is fabulous – strongly positive – here we are today, a completely sold-out event.

Our London Lecture Series is a sell-out each time. There is a tremendously positive spirit visible at meetings up and down the country. I believe we are in rude health.

Dr James Nye

Minutes of the Sixty-second Annual General Meeting of the Antiquarian Horological Society

Held at The National Maritime Museum, Greenwich on Saturday 14 May 2016

Ordinary business

1. To adopt the Minutes of the previous AGM.

To adopt the Minutes of the previous AGM held at The National Maritime Museum on Saturday 16th May 2015, as published in *Antiquarian Horology* September 2015. Mr Nigel Platt proposed that the Minutes be adopted, Mr Ian Potter seconded, all present were in favour and the Minutes were adopted.

2. To receive the annual accounts and adopt the same.

Mr Bill McNay the Accountant gave a full and detailed report on the accounts and explained the deficit for the year. This was in part owing to subscriptions being down by about 2 per cent on the previous year, but the major contributing factor was the large deficit on publications owing to the write-off of old stock as a one-off. The net cost of the Journal has decreased because of a decrease in postage and printing costs, and an increase of advertising revenue. General running costs of the Society have also decreased. The sum of five thousand pounds a year is being accrued as a reserve to cover the potential costs of moving the office premises. Mr David Smith asked why there has been a build-up of five thousand pounds in the balances held by Sections and Groups. The Accountant said that there was no one factor involved, and the Chairman offered the observation that the Sections and Groups, like the main Society, should only retain a prudent amount by way of general reserve and beyond this any funds should have identified uses. There were no further questions and the Chairman asked



This splendid 1904 De Dion Bouton Model Y was the oldest of the three classic cars brought by AHS members for display in front of the National Maritime Museum. Photo Robert Sales.

that the accounts be adopted. Mr Chris Spiller proposed the accounts be adopted, Mr Brian de Save seconded, all present were in favour and the accounts were duly adopted.

3. Election of the Council.

The Council members retiring by rotation and pursuant to the Memorandum and Articles of Association were Mr Peter Linstead-Smith, Mr Edward Powell, Mr David Thompson and Mr Alan Treherne. Mr Linstead-Smith, Mr Powell, Mr Thompson and Mr Treherne being eligible offered themselves for re-election. Mr James Stratton, having been duly nominated by Dr J Nye offered himself to stand for Council.

Mr Peter Linstead-Smith was proposed by Dr David Rooney, seconded by Mr Nigel Platt, all present were in favour and he was re-elected unanimously.

Mr Edward Powell was proposed by Mr Paul Platt, seconded by Mr James Stratton, all present were in favour and he was re-elected unanimously.

Mr David Thompson was proposed by Mr Richard Stenning, seconded by Mr Jonathan Betts, all present were in favour and he was re-elected unanimously.

Mr Alan Treherne was proposed by Mr Gary Burns, seconded by Mr Peter Hambley, all present were in favour and he was duly re-elected unanimously.

Mr James Stratton was proposed by Dr James Nye, seconded by Mr Philip Whyte, all present were in favour and he was duly elected onto Council.



AHS President Dr Patricia Fara presented the Percy Dawson Medal to Michael W. Paice for his article 'Moncas of Liverpool. A short history of a nineteenth-century watch-making family', published in the March 2015 journal. The recipient of the Dr Alan Shenton Award, Thomas Schraven from Germany, had been unable to attend. Photo Robert Sales.

4. Re-appointment of Independent Examiner

The re-appointment of Mr M Yardley of 10 Horizon Close, Southborough, Tunbridge Wells, Kent as Independent Examiner was proposed by Mr Peter Linstead-Smith, seconded by Mr Burt Lichtman, all present were in favour and he was duly re-elected.

There being no further business, Mr Clive Driscoll said he spoke on behalf of the whole Society and thanked Council for all their time, commitment and hard work on behalf of the membership. This was warmly applauded by all present.

There being no further business the meeting closed at 2.45pm.

The lectures

First lecture

The theme of the day was 'Time On The Move – Time Standing Still', and two abstract lectures framed four concrete ones. The first speaker was the anthropologist Dr Brian Durrans on the subject of 'Freezing Time'? A sceptical

take on time capsules, which was an essay in classical form with an introduction, exposition and conclusions. He said that rather than time itself, or the devices used to measure it, he was more interested in how people experience it in their everyday lives. Clocks intrude upon lives by their presence and their measurement of time, but are themselves measured through wearing to the point of stoppage. Several examples from literature and the cinema concerning different attitudes to time keeping were given, the earlier ones eccentric, but in the twentieth century a potential symptom of existential anxiety when timekeepers are not used for their proper function, but as measures of the passing of personal time foreshadowing mortality. Some people refuse to wear a watch to avoid this constant reminder, but what we make of mortality is really measured by what we do to affect other people, either now or after our own deaths, by any means that outlasts us.

Time capsules are of two kinds, both of which involve the suspension of time, it simply stops. They might be naturally occurring events treated as a philosophical concept, or pre-meditated constructions using material objects. An example of the former is a contemporary film whose story involves both the Alpine iceman Ötzi, who has been his own time capsule, and the former partner of the main character who had fallen to her death in a glacier, and whose frozen body might or might not have come to light, precipitating a mid-life crisis in the man, exposing his own failure to live in the present. However most time capsules are material, and a form of social engagement in which people either try to perpetuate themselves, or to make contact with a later age. They often fail to reach their destinations because of inadequate precautions to record their locations, or to protect the capsule or its contents. They might be inspiring or ambitious, but most are pompous and conventional or just plain trivial. They frequently spring from the old foundation deposit tradition, in which everyday items such as newspapers and coins are sealed under foundation stones, and examples of all these kinds were given, where their moment of creation, or even discovery, are known.

Judging by the manner in which some encapsulators describe what they do, time capsules have a purpose beyond the transfer of

material objects. There is a desire to bridge time and share the moment in which the capsule is opened with the person who opens it, to be certain that the present will continue into the future, even though time has not been continuous in the manner of a clock display, but has been chopped into sections for transfer into the future. Accounts of making or finding a capsule sometimes refer to a visceral experience of the actual presence of somebody who is not there. The physical act of making a capsule is vital, it becomes a part of the maker which journeys into the future with the expectation that, given these prompts and props, the finder will think deeply about the maker so as to share in an equal personal experience.

Second lecture

David Penney gave a paper on *Mail Coach Watches*. He said that it was in memory of Charles Allix, who had prepared an updated version of his section about these watches for a second edition of his book on carriage clocks, as yet unpublished. Some of David's information had come from that source, and was now included with the permission of Sally Allix. Watches for mail guards were issued to compel the crews operating the Post Office coaches to keep to the rigid time schedules in use by the end of the eighteenth century. The first post carried in a coach was to Bath in 1784, and the system survived for about one hundred years. Many watches used during this period were described and illustrated, and David has promised to supply the paper complete for publishing in *Antiquarian Horology*, so a detailed report will not be given now.

Third lecture

Richard Edwards started collecting pocket watches forty years ago, and occasionally bought a wristwatch. Several early examples had puzzling features which led to an interest in their history, and his talk *The Invention and Early History of the Wristwatch* covered the results of his researches in that time. One watch had hallmarks for 1907 in the back, and also on the case lugs, proving that it was not a conversion, yet the dial was in the wrong position when worn on the wrist. The movement was not of ladies fob watch type, but looked like other wristwatches, and had a

maker's mark for Baume & Co. Another early acquisition by Williamson of Coventry had their size 0 movement for fob watches. The name Jaquet-Droz is well known for small decorative timepieces, perhaps incorporating a locket, to be worn around the neck or on the wrist, made from the late eighteenth century onwards. These were really jewellery, too small to be a practical wristwatch. Patek Philippe et Cie also made a jewellery based item in 1868. Girard-Perregaux claim to have invented the wristwatch in 1880, but there is no surviving evidence whatsoever to support the claim.

Mr Edwards suggested five attributes to define a practical wristwatch. Its primary function should be to tell the time, it should be robust enough for wear all day, winding and hand setting should be keyless, the strap should be separate and repairable, and it should be mass produced. He described the advances in the watchmaking trade which led, eventually, to the wristwatch. In the 1820s the Swiss makers altered their designs, from something that was essentially a small clock to the much slimmer and more compact Lépine calibre. By the 1840s watches were more machine made, had lever escapements, temperature compensation, and electro-gilding rather than mercurial. Keyless winding and hand setting was available in the 1850s, and interchangeability of parts was finally achieved by Waltham in 1889. By that time the Swiss were producing large numbers of cheap ladies fob watches, which could be converted into wristwatches by soldering on wire lugs, but these conversions, are hated by the trade. The Swiss applied a hallmark to their products from 1880, but the London Goldsmiths' Company only did so from 1st July 1907.

The first advertisement for ladies wristwatches, or bracelet watches, that Mr Edwards has seen was in an 1887 issue of *The Illustrated London News*. The first devoted entirely to wristwatches was from Le Roy et Fils of Bond Street in 1890, who claimed to have invented the bracelet watch. Queen Victoria is reputed to have presented one to a Lady-In-Waiting, which rapidly started a fashion, but between 1895 and 1905 there are no advertisements, so the fashion seems to have changed.

In the nineteenth century there was a great fear of effeminacy amongst men, which

prevented the use of wristwatches, seen as jewellery. Military service was an entirely different matter, and there are many photographs of soldiers wearing leather wrist straps, probably holding ladies fob watches, as part of their equipment. The earliest seen was taken during the 3rd Burma War of 1885 / 1887. Their use was widespread by the Boer War, and a letter home by a Canadian volunteer asks for one, saying that all his comrades have them. They were personal items, not official issue. Perhaps because of this wartime experience they were acceptable earlier in Europe than America, and the Waltham house journal of 1921 said that they had not placed wristwatches for men on the market until 1912.

A patent for permanent wire strap lugs was taken out in 1903 by Dimier Freres et Cie, so this helps to date any watch that has them, and is the last of the five attributes of the modern wristwatch to be achieved. An International Watch Co watch from 1906 is the first firmly datable piece with a detachable leather strap. Joseph Louis Cartier was the first designer to mould the lugs into the case, in 1904.

So the conclusions are that the wristwatch dates from about 1790, possibly invented by Jaquet-Droz, the modern bracelet watch was introduced by Le Roy et Fils in the 1880s, British soldiers in India probably wore the first military watches about 1885, and Cartier produced the first case of modern appearance in 1904.

Fourth lecture

Rory McEvoy's lecture was entitled *Time on the wrist, time on the dash*. He set out to describe two types of specialist navigational timekeeper that were developed in the twentieth century.

First the Hour Angle Watch, which incorporated a complication whose invention was credited to Charles Lindbergh, Pictures of him and his aircraft were shown, and we were reminded how lucky he was to have successfully made the first solo non-stop flight across the Atlantic. He was not a navigator, but a U.S. airmail pilot accustomed to look out of the window and follow suitable ground features, such as roads. Flying over the ocean, he did not have the benefit of celestial navigation, but only dead reckoning, and was lucky that there were very few winds to drive him off course

during the 33 hour flight. As he approached Europe he saw some fishermen and circled the aircraft around them hoping to shout out of the window to ask for directions to Ireland. Early aerial exploits were precarious at the best of times!

During those 33 hours he must have realised what a dangerous position he was in, so it is not surprising that an announcement later appeared that he was to be instructed in navigation by Commander Philip Van Horn Weems. This pilot had been one of the crew of the Curtiss seaplane that in 1919 had made the first crossing of the Atlantic, not non-stop but taking twelve days. In 1933 Lindbergh undertook another transatlantic flight, and took with him a Longines Hour Angle Wristwatch, which had actually been the idea of Weems. It told the time and also had numerals for degrees and minutes of arc. There was an extra chapter ring for seconds that could be adjusted according to radio time signals received. Another type of Weems watch was his seconds setting model without hour angle features, and manufacturers other than Longines took up the principles. Pictures of all these models were shown, and the way in which they were used explained, including the addition of an allowance for the equation of time, according to Weems' method of navigation. By 1933 these calculations had actually been rendered unnecessary thanks to the ephemerides of sun, planets and stars contained in the air almanac, so the navigator's job was much easier.

The second kind of navigational aid to be considered was the Gokay Beacon Watch, which helped to make landings on aircraft carriers much safer than previously. The precarious nature of this operation was demonstrated by several videos of early films. The watch was mounted on the aircraft's dashboard, and again had a moveable seconds bezel. A radio signal transmitted in a steady rotating pattern was heard intermittently by the pilot, who found a course to steer such that each stroke came when the seconds hand was in the same position. He would then be approaching along the centre line of the ship. A further video took us through a successful landing using this system.

Fifth lecture

The lectures were returned to the theme of Time Standing Still in the most literal way possible by Keith Scobie-Youngs, whose subject was *Catastrophe in the Tower*. He said that in his early career he had worked alongside John Vernon, Vic Adams and Albert Fairy of Thwaites and Reed, all of whom had been involved in the disastrous failure of the movement of The Great Clock of Westminster at 3.45am on Thursday 5th August 1976. He had heard their account of the events of that night, which differed in one important respect from what is generally known.

The first sign of trouble was the sound of a muffled boom, just like a bomb dropping, heard by a policeman on duty in New Palace Yard, about 100 metres from the clock tower. He walked into Speaker's Green, saw nothing unusual, returned to his post, and noticed that the clock had stopped. Following standing orders, he telephoned the engineers' control room to report the boom and the stoppage. The engineer on duty assumed that one of the weight lines had failed, so he informed the BBC that the Greenwich six pips would have to be used for the time signal. He contacted Thwaites and Reed, who were responsible for maintenance, and Vic Adams, their London based expert was woken at 4.20am in his house in Kings Cross. He and the clock winder Albert Fairy arrived, followed by a member of the bomb squad, who stated that there had not been a bomb, as the windows had not been blown out. The official photographer took a large number of photographs, some of which we saw. John Vernon came, and the process of clearing the wreckage started. Although the chiming train had disintegrated it was possible to make temporary repairs to the frame and going train, so that the clock started working and telling the time by 4pm on the same day.

The cause of the disaster was certainly metal fatigue in the wrought iron shaft driving the enormous fly fan, and it has been calculated that it must have rotated over 4 million times in the previous 117 years. However no one has ever questioned why so much damage occurred when there was a room of sandbags at the bottom of the tower, provided especially in case of a falling weight. A freely dropping weight of one ton would

cause damage to the hammer lifting arms and locking levers from the half-million foot pounds of force, but having reached the bottom the wheel train would gradually stop. Why was there a shock so great as to cause so much other damage?

Conversations with the three Thwaites men provided the probable answer. The weight lines need to be changed occasionally, but in the case of The Great Clock there is very little time to do so because it has to be kept running. Lowering the weights to the bottom and climbing and descending takes considerable time. This can be avoided as there is a room underneath the movement into which the weights can be pulled and disconnected whilst the line is changed. But if the rope is too short the fact will not be discovered because the clock is wound every other day, before the weights run down. No one has spoken about changing the rope; there are not any service records so it is not known whether it was last done by Thwaites and Reed or by the contractors before 1971, E Dent & Co; and the rope was not measured and reported at the time of the disaster. Keith believes that the weight never did reach the bottom on its line; it stopped dead and put an unendurable force on the movement above. This is the simple explanation.

In later discussion, Douglas Bateman said that he and a colleague from the R.A.E. at Farnborough had been able to visit the clock shortly after the catastrophe in order to measure the Q of the pendulum. This turned out to be modest, about 9,000. They also measured the weights and were able to correct some of the published figures. They calculated that the pendulum only needs 3 millivolts to run it, and could be operated for a year from a D size battery.

Sixth lecture

Our Chairman, James Nye, brought the day's proceedings to a close, quite literally, with the last lecture on the theme of Time Standing Still, his title being *Stop all the Clocks*.

He said that he wanted to explore the association between stopped timepieces and death, and made reference to two films. In *Four Weddings and a Funeral*, lines from W H Auden are quoted 'Stop all the clocks, cut off the telephone, / Prevent the dog from barking

with a juicy bone. / Silence the pianos and with muffled drum / Bring out the coffin, let the mourners come.' In *Jean de Florette*, the central character dies and a neighbour immediately stops the clock, then leaves to break the news, which he does by saying that he has just stopped the clock in Monsieur Jean's house. This is the accepted code all around the world, and several examples were given, notably from an Irish study which had found that relatives disengaged from normal life by stopping the clocks, and from the wider world by covering televisions, turning off radios and leaving newspapers unread. One reason for this is that, as time has stopped for the deceased, this must be reflected and his spirit allowed to move on without being worried about time. Another custom is the covering of mirrors, so that the rising soul should not catch sight of itself.

A similar widespread perception is the case of timepieces that stop when their owners die, and James discussed the material circumstances and statistical probabilities of this phenomenon, which is also used in many works of fiction. In the latter case it is usually a watch which is being used to establish an alibi, and the criminal will have altered the time displayed to suit himself before smashing the watch to stop it. Several examples of real life murders were described in detail. On a much larger scale, watches recovered from the victims of the Titanic disaster have been found to show unexpected variations, perhaps due to personal idiosyncrasies of winding and setting, and a forthcoming article in *Antiquarian Horology* will consider this matter. The ultimate large-scale tragedy must surely have occurred at 8.15am on 6th August 1945, when the atom bomb exploded over Hiroshima. The watches that stopped then marked time standing still as history divided into two eras.

The whole beautifully planned day drew towards its own stopping point. Overall there had been an introduction, a quadripartite exposition and a conclusion. Dr Durrans had pointed out that a glacier was an excellent metaphor for a time capsule in which time stops, and a river, as at Greenwich, the opposite metaphor for freely running time. The Titanic had tragically become her own time capsule when she encountered a large section of glacier, out of context, freely moving on the ocean.

Let Dr Nye stop this report of the Annual Meeting in his own words (in précis). After citing Hiroshima he said ‘The big thought at the beginning of the talk was this notion of timepieces capturing and evoking a critical moment in somebody’s life, the moment that time stands still for an individual. There is an asymmetry between the timepiece on the one hand and the person whose time comes to an end. Part of the fascination of clocks and watches is their relentless capacity to mark out extended periods of time. Unlike individuals, timekeepers can be repaired, coaxed back to life in order to watch over the lives of new owners, to mark out those lives. They can be re-energised, and therefore in one sense they offer something distinctly timeless. Thank you for listening’.

S B de Save

AHS prize for West Dean student

In November last year the AHS Council decided to award the AHS Prize to Tabea Rude for her MA thesis ‘An investigation of the degradation of phenol formaldehyde based composite plastics used as electrical insulation in General Post Office Type 36 time transmitters’. In July, our Chairman attended the awards day ceremony at West Dean College and presented her the prize. For the benefit of readers, he supplied the following explanation of the project.

We have hundreds of years of experience in dealing with traditional and natural materials (paints, wooden finishes, textiles etc) but many objects from the twentieth century were made, at least in part, from pioneering new plastics. Now that we are many decades, and nearing a century in some cases, from the production of such items, we are only beginning to see ways in which such early plastics may be decaying, denaturing, suffering from sunlight, outgassing, reacting badly with other materials, whatever. This poses a challenge for museums and other conservation-led environments. What treatments are possible and perhaps necessary to stabilise and conserve such early plastics?



AHS Chairman Dr James Nye presented the prize to Tabea Rude.

Clocks, as dynamic heritage items, may present more problems than other objects. A timekeeping device used across huge numbers of GPO telephone exchanges throughout much of the twentieth century was the Post Office 36 – a clock used in the calculation of call-charging, for example. A Clock 36 has existed at West Dean for many years, and has often been the focus of enquiry for one reason or another. Tabea’s project focused on the parts of the electrical circuits in the clock, which are formed of an insulating synthetic resin in the same family of plastics as Bakelite, made through the reaction of phenol and formaldehyde. These plastics were in places fixed to other parts made of brass and this has produced a form of corrosion over time, as a result of a reaction between chemicals in the plastics and the brass, exacerbated by the particular micro-climate of the clock. Tabea’s project researched the formulation and structure of the materials in question, involved careful controlled experiments and destructive testing of similar components in order to