

GEM & JEWELLERY NEWS

December 2004, Vol.13 No.4



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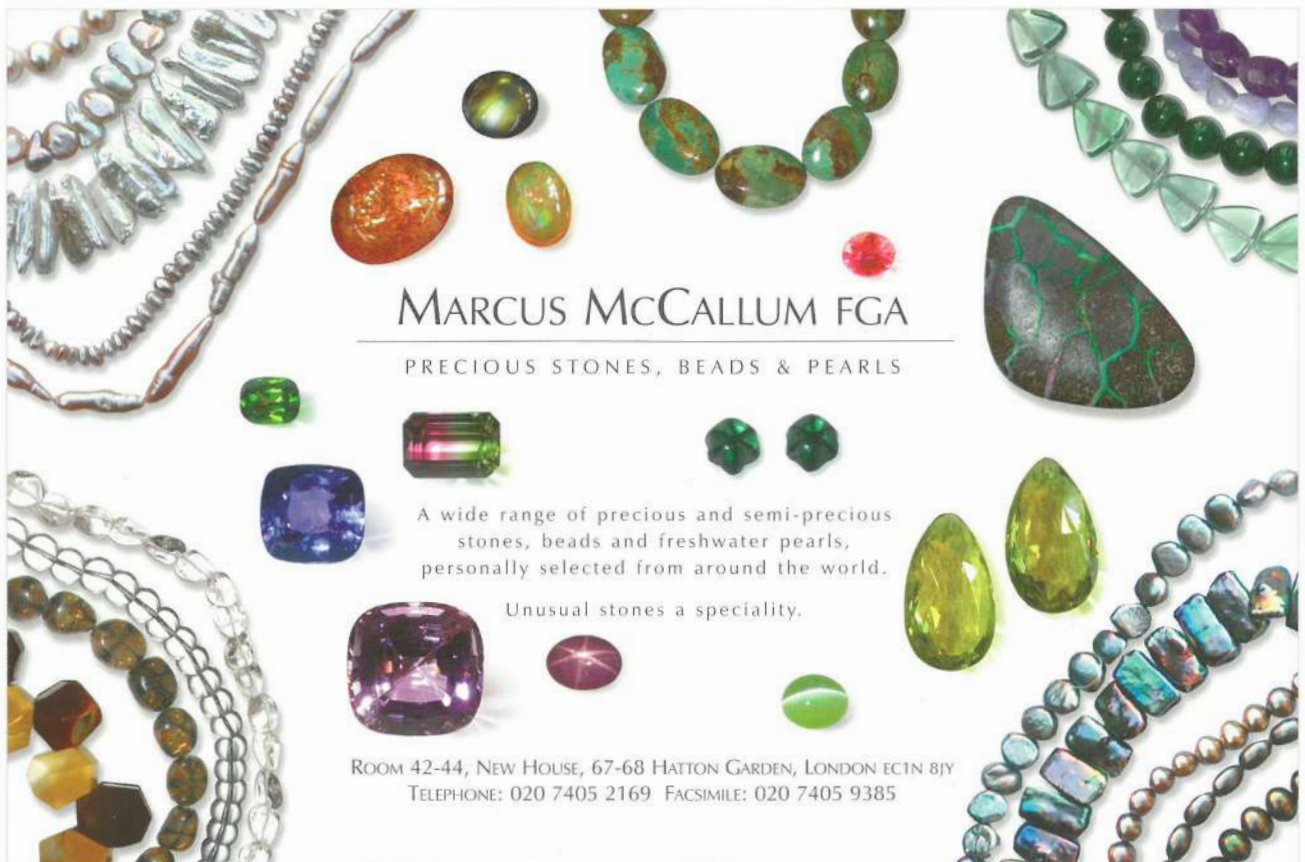
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GEM-A MAILTALK LAUNCHED

In place of an editorial this month, we are making an exciting announcement to all members of Gem-A.

We have launched an email-based forum and communications network that is free to all members of Gem-A and, by invitation, members of the SJH*. This will provide a quick way for members to ask and answer queries, receive news about the organizations and keep up-to-date on international news and events.

By sending an email addressed to gem-a@mailtalk.ac.uk it will be automatically circulated around all the members who have registered to be part of the network.

Gem-A members may register in two ways:

- Visit www.mailtalk.ac.uk/gem-a and provide your email address and your name. For now, you can leave all the other settings as they are – unless you prefer to receive a ‘digest’ (i.e. all emails in one lump per day) rather than as they come in. Or,

- Send an email to listserv@mailtalk.ac.uk. Leave the subject field empty and in the message part type the following (with capital letters, angle brackets, etc, exactly as shown):

SUBSCRIBE <gem-a> <your-forename.yoursurname>

SJH members should send an email to mailtalk@gem-a.info stating that they are a member of the SJH and that they would like to register for Mailtalk.

When you wish to search the archives, you will also need a password which you can set up the first time you search. We won’t know your password. If you forget it, mailtalk will resend it to you by email: the website explains how.

But please, members may not use this forum for any form of advertising or promotion, or for soliciting business in any way without express agreement in writing with Gem-A in advance. Language and views should be kept polite. Gem-A reserve the right to unsubscribe any member

who misuses the email forum. And remember, if you simply click on ‘reply’ it will go out to all others on the list – in the past some people have forgotten this and broadcast things that are best kept private! Gem-A and SJH may use the mailtalk list to publicise their own events or products.

The mailtalk network is managed for Gem-A by the Council for the Central Laboratory of the Research Council’s Rutherford Appleton Laboratory and is as used by several academic organizations – you can learn more at www.mailtalk.ac.uk. They employ the latest virus checking and anti-spam mechanisms to minimize the risk of you receiving a virus or unwanted spam through Mailtalk. The emails are all in plaintext which also minimizes any problems with viruses.

Jack Ogden

- * The Gem-A mailtalk is based on the JPM (International Jewellery & Precious Metal Information Network) list that was set up a year ago by Dr Jack Ogden and which has now been transferred to Gem-A. Existing JPM list users who are members of Gem-A or SJH need not re-register.

Front Cover Illustrations (from top)

- 1) Pendant/Brooch with Medusa Cameo. Castellani. Private Collection Photograph: Sheldon Collins (see page 91).
- 2) A diamond-set necklace with suspended natural pearls (English c. 1880), displayed during a visit by Gem-A conference delegates to Wartski (see page 77).

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The Gemmological Association and Gem Testing Laboratory
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27 Greville Street, London EC1N 8TN
t: +44 (0)20 7404 3334 • f: +44 (0)20 7404 8843
e: information@gem-a.info • w: www.gem-a.info

AND

The Society of Jewellery Historians
Scientific Research
The British Museum, London WC1B 3DG
e: jewelleryhistorians@yahoo.co.uk

Editorial Board

Roger Harding, Catherine Johns, Harry Levy, Michael O'Donoghue, Corinna Pike

Managing Editor

Mary Burland

Production Manager

John Goodall

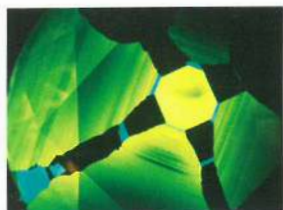
Designer

Shelley Nott

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The Society of Jewellery Historians was formed in 1977 with the aim of stimulating the growing international interest in jewellery of all ages and cultures by publishing new research and bringing together those seriously interested in the subject, whether in a professional or private capacity. The membership includes archaeologists, museum specialists, collectors, art historians, dealers, gemmologists, practising jewellers and designers, scientists and restorers, all united by their enthusiasm for the subject.

The Society holds eight evening lectures a year at the prestigious apartments of the Society of Antiquaries of London, as well as occasional symposia. The lectures cover all periods from ancient to modern, and a living jeweller is normally included each year. Refreshments are served after lectures, and this provides an opportunity for members to meet.

Jewellery Studies is published in colour on an occasional basis, and contains full length articles, book reviews and other information. Members also, of course, receive *Gem and Jewellery News* quarterly. The current maximum individual annual subscription is twenty eight pounds.

The Society of Jewellery Historians
Scientific Research
The British Museum, London WC1B 3DG
e: jewelleryhistorians@yahoo.co.uk

GEM AND DIAMOND TERMINOLOGY

Harry Levy asks: "How familiar are you with the terminology used in the trade today?"

The gem trade is being increasingly affected by unfamiliar terminology with the advent of treatments and synthetics. I would like to cover here many of the words and concepts used; some may be familiar, others may be known but could be misused.

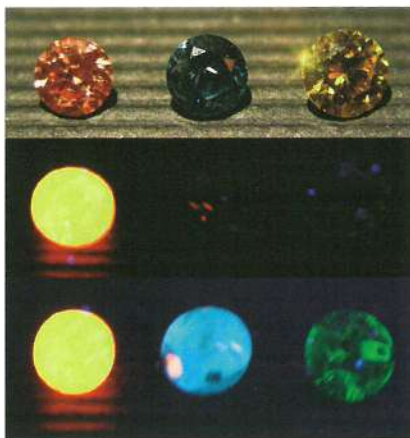
The accepted terminology has been developed over many years by bodies such as CIBJO, ICA, laboratories and other institutions involved with gemstones. Some terms are universally accepted, others are still controversial.

Natural, synthetic and man-made stones

I would like to start with the distinction between natural and man-made stones. **Natural stones** occur in nature and have to be clearly distinguished from the man-made or partially man-made materials that imitate them. A **synthetic** gem material is man-made but has the same chemical and crystalline properties as its natural counterpart. Therefore cubic zirconia (CZ) can be described as an imitation or artificial diamond, but it is not a synthetic diamond because it differs chemically from natural diamond. The simplest imitation stones, as often seen in costume jewellery, are glass (**paste**) or plastic.

Treatments

Many natural stones undergo a further process to improve or change their appearance. The changes are usually made to improve the colour, improve the clarity and cover open



Three Chatham coloured synthetic diamonds recently examined in the Gemlab with their long wave (centre) and short wave (lower) UV fluorescence. The blue diamond (centre) also phosphoresced considerably.

and closed fissures. The common treatments are:

Staining and waxing: in this case a dye or polish is used to change or improve the colour of a stone, usually a non-permanent treatment.

Coating: an agent is applied to the surface of a stone to change the colour.

Heating: this process is carried out to change the colour and sometimes the clarity to eliminate 'silk' (thin lines) in a stone.

Filling or in-filling: A substance is introduced into the stone to fill in and thus disguise cracks or fissures. Colourless and coloured oils and resins are some of the agents used, as well as glass and other substances.

Irradiation: This is a process where the stone is subjected to electron or neutron bombardment to improve or change the colour. This is done with white topaz to produce blue and other colours. Other gems may be subjected to this process and for

example some coloured diamonds may be produced in this way.

High pressure high temperature (HPHT): this is used on diamonds to change their colour, mainly from brown and darker shades of white, to less tinted colours; some diamonds change to more intense colours.

Diffusion and deep diffusion: the stone is covered with a substance and under sufficient heat the surface of the stone melts and a layer of colour is introduced into the stone. The term 'diffusion' is being used by some laboratories to cover the cases where a stone is heated in the presence of other metallic elements to change or improve the colour. In this instance the metallic element is introduced into the stone and not just at the surface.

Lasering: a laser beam is used to burn out impurities. In the case of diamonds a black impurity is changed to a white impurity. This technique has been greatly modified in recent years to make it almost undetectable.

Any of the above processes used with a particular stone should be disclosed to a buyer as a treatment.

Enhancement

This is a term that entered the lexicon as a replacement for 'treated' and was regarded as a user-friendly term. 'Treatment' implies taking a bad stone and making it look better, whereas 'enhancement' carries the sense of improving a good stone.

The two terms are now considered to have special meanings within the trade. 'Softer' treatments (such as

AROUND THE TRADE

waxing, mild heating, and filling with colourless oils and resins) that can be classified as 'accepted trade practice', are now referred to as 'enhancements'. Some, however, would like to use the term

'enhanced' for those treatments that are irreversible. So there is an inconsistent use of the terms 'enhancement' and 'treatment' within the trade without a universal consensus.

In the next issue we will turn to the thorny problem of disclosure and terminology that should be used for treated stones at the point of sale.

Harry Levy

RECENT DEVELOPMENTS IN THE DIAMOND TRADE

Since the introduction of the new format for our magazine, space has been at a premium. So I would like to cover briefly some news from the recent Diamond Bourse meeting and other sources.

The diamond trade continues to intrigue. At a World Federation of Diamond Bourses (WFDB) Congress held in New York in October, the dominant theme was the supply of rough diamonds to the trade, since the Diamond Trading Company had reduced the number of their sight-holders.

There is concern with treated stones coming onto the market, especially with HPHT stones. These are being graded for colour and clarity by some laboratories, and some traders feel that an unwitting member of the public shown such a stone with a grading report will assume it is a natural diamond.

Colourless synthetic diamonds

The advent of colourless synthetic diamonds from Gemesis (HPHT) and Apollo (CVD) is also causing consternation in the market. The laboratories and the DTC have done much work to develop instruments to detect them and claim that they can detect most HPHT and synthetic stones. The instrumentation is somewhat bulky but the HRD in Antwerp have

developed an instrument about the size of a large stapler which will differentiate between most natural diamonds and others. Those that are not passed by this machine need further testing by a laboratory – the stones could be natural, treated or synthetic.

My own feelings are that colourless synthetic diamonds are still expensive to produce and we have seen only a few isolated stones which are collectors' items rather than commercially viable stones.

Customer confidence

At a Diamond Congress in Antwerp held in November, the main theme was consumer confidence in diamonds. It is felt with adverse publicity towards diamonds on such issues as conflict diamonds used to launder money from drugs and aiding terrorists, treated and synthetic stones, and the lack of positive advertising from the trade, people would spend their money on other luxury items or expensive holidays.

On the synthetic diamond issue, a court in Germany has banned the use of the term 'cultured' to be used when selling such stones. This is a term adopted by Gemesis, who are reacting to this court ruling. Other similar terms have been agreed within the trade for synthesized coloured stones, so I am sure sales will not be affected if

the term 'cultured' is not used. But Gemesis are reacting to this ruling and to the negative reaction of the diamond trade to their products.

Some of the larger retailers and producers of rough diamonds have got together to try and maintain a healthy sale in diamond jewellery.

Another attempt to allay fears is to try to brand diamonds. The trend has been set by the DTC and other high value jewellers, but Antwerp wants to brand its diamonds, and South Africa wants to introduce some form of marking to protect the reputation of its stones.

South African rough

South Africa has announced that it will not allow the export of larger rough stones any longer, and these should now be cut in South Africa. The limit set is anything over half a carat, but I am not clear whether this limit of weight applies to the rough stone or to a potential polished one.

All these facts are creating problems, especially for the smaller companies and one-man-bands that have been the mainstay of the diamond distribution chain.

These are stories that will affect all of us in the trade, but many forces are pulling in different directions.

Harry Levy

GEM-A CONFERENCE 2004

The Kempton Park racecourse and Rock 'n' Gem Show again provided the setting for Gem-A's international conference. Over 140 members and guests attended from around the compass, including from Scandinavia, Australia, Japan and the USA.

Chatham Created Gems

The President, Alan Jobbins, first introduced the Keynote Speaker, Tom Chatham, of Chatham Created Gems Inc.

Tom Chatham described the part played by his father, Carroll Chatham, in establishing the company in the 1930s and the first work in growing emerald. By 1936 emerald had been grown from flux in a platinum crucible. The next gem to be tackled was ruby and Chatham's stones were released on the market in 1959. At this time, and for another four years, Chatham battled with the US government about an acceptable nomenclature for their stones, eventually avoiding use of 'synthetic' in favour of 'created'.

By 1972 Chatham-created alexandrite was in production, followed by blue sapphire (1978), yellow sapphire (1980) and pink sapphire in 1993. This same year the firm launched their first High Pressure High Temperature (HPHT) diamonds – the culmination of work begun by Carroll Chatham.

Discussion of the distinguishing features of synthetic diamond centred on inclusions and colour zoning, but Tom Chatham also referred to some stones being magnetic and some had trigons left on the girdle.



Chatham synthetic diamonds. Photo courtesy of Tom Chatham.

Diamonds in a range of colours are currently being produced by Chatham in quantities of 500 ct (rough) per month. Chatham can offer consistency of colour, availability, warranties, good cost comparisons (for coloured diamonds) and branding. However, colourless Chatham diamonds cost as much to produce as naturals and are not currently economically viable.

In response to questioning about grading synthetic diamonds, Tom noted that EGL currently grade their stones and discussions are continuing with GIA.

Montana sapphires

The second speaker of the morning was Ron Bonewitz on Montana sapphires. Ron, a USA-trained geologist, is currently living in the UK preparing an updated edition of *Rock and Gem* for Dorling-Kindersley. Ron first became involved in the sapphire placer deposits of Rock Creek and Eldorado, Montana, through university projects in the 1960s. These were to establish the reserves, costs of recovery and means of cutting. The first deposits

had been found by gold miners and evidence that gold was still there was apparent in his slide of a 16 inch pan with half an inch of alluvial gold in the bottom!

In one season, using a custom-made sluice box, Ron and his father recovered 15000 ct of sapphire. The sapphires come in a range of colours from red through the spectrum to blue. Most small stones have found use as watch bearings, but many gems around 2 ct have been cut, and the largest gem found weighed 22 ct.

Pearls

The afternoon session was chaired by Terry Davidson, relishing his last full day as Chief Executive Officer of Gem-A. After a brief resumé of Gem-A activities, he introduced his successor, Dr Jack Ogden, and wished him well in his new role. Terry then introduced Elisabeth Strack from Hamburg. Her recent book on pearls, published in German, should be available in English early in 2005. This comprehensive work of around 400 pages all started because she was asked to give a seminar on pearls.

GEM-A CONFERENCE

Gem-A Officers with the panel of speakers. Back row (from left): Dr Ron Bonewitz, Ross Chapman, Terry Davidson, Dr Jack Ogden, Adrian Levy. Front row (from left): Tom Chatham, Elisabeth Strack, Alan Jobbins and Cathy Scott-Clark.



Elisabeth's talk was a detailed survey of pearls both natural and cultured. In particular she described the varieties of cultured pearls being produced, their origins, structures, distribution and annual productions. Elisabeth admitted that what inspired and motivated her work were the stories behind the pearls.

Opal

After tea, the audience returned to their seats and Terry Davidson introduced Ross Chapman to talk about Australian opal. Ross has been a cutter and seller of Australian opal for over 30 years and currently recovers the gem from the Big Red mine, west of Longreach, 1000 km NW of Brisbane.

After a general review of the nature of opal, where it occurs and the annual value of the opal production in Australia (£250m), the discussion turned to how opal was processed at the Big Red mine. One image showed a concrete mixer in use to wash the crushed bedrock – the opal could be spotted easily while still wet. A description of the popular opals on the market – solid,

boulder, matrix and composite – was followed by an explanation of the grades (e.g. black, dark or semi-black and light) used in trade descriptions.

Values of black average around £1900/ct whereas light would be about £200/ct and this difference provided an enormous motive for the 'treaters' to enhance the value of their 'lights'. Such treatments could include boiling in sugar and soaking in sulphuric acid, oiling, wrapping in aluminium foil and cooking over a gas burner, painting the back of the stone, and even fracture sealing with Opticon.

In the market, red is the colour most prized in solid opal, preferably in regular chunks of colour rather than pinpoints. Collectors' pieces shown included dinosaur bones and fossil shells completely opalized.

In response to questions from the audience, Ross said that at the first sign of any cracking on the surface of an opal, it should be placed in a humid environment. Wearing next to the skin was far more beneficial to opal than keeping it in a bank vault. Price fluctuations in the market were also commented on.

The Fate of the Amber Room

The final talk of the Conference was delivered by investigative journalist Adrian Levy and described the fascinating story that Catherine Scott-Clark and he had uncovered about the Amber Room, its creation, disappearance and fate.

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GEM-A CONFERENCE

The original Amber Room arose from the desire of Frederik I of Prussia to strengthen political links with Peter the Great of Russia in the early 1700s. Frederik's court architect had a considerable supply of amber, mostly collected by men with large nets 'fishing' the amber lumps from the storm waves of the eastern Baltic. Using the skills of Master carvers from Copenhagen, the fabulous Amber Room was duly constructed and then, in the 1720s, packed into large crates

for shipment to St. Petersburg. Unfortunately, there was no plan provided and it was not until 1742 that Catherine the Great (Peter's daughter) decided on reassembly.

Adrian explained how sketchy our knowledge was of the original appearance of the Amber Room, as only one coloured picture of it survives.

After Adrian and Catherine had consulted all the available archives

and met surviving war-time curators and officials they pieced together the story of the Amber Room's likely fate. Details are given in their book *The Amber Room – the Untold Story of the Greatest Hoax of the Twentieth Century*, a review of which is given on p. 94.

Terry Davidson drew the Conference to a close with a hearty vote of thanks to the speakers for their stimulating contributions on such a wide range of topics. □

ANTIQUE AND HISTORIC JEWELS

Exciting events on the theme Antique and Historic Jewels were arranged for delegates on the two days following the Conference.

The Cheapside Hoard

The first event was held on Monday 1 November at the Museum of London when groups of members had the unique opportunity to handle and examine items from the Cheapside Hoard of Elizabethan and Jacobean gems and jewellery.

Dr Hazel Forsyth, Curator of the Post Medieval Collection at the Museum, told how the Hoard had been found in 1912 by workmen digging at a site in Cheapside in the City of London. They drove a pickaxe through a box that had been buried under the floorboards, which contained 16th and 17th century jewellery thought to be the stock of a jeweller who would have served rich merchants and their wives.

The Museum has a permanent display of a selection of pieces from the Hoard, but the items examined

were from the Museum's collection not normally on view to the public. Of particular interest to our groups were the cuts of the stones; although many were cabochons, the most common cut of the period, table-cut gems and basic faceted stones, there were also rose-cut and star-cut stones. Ian Mercer, Gem-A Director of Education, was particularly interested in a multi-faceted sapphire set in a ring. "The stone combined beauty with amazing accuracy of cut," Ian said as he examined the ring under the microscope.

The enamelling of jewellery was popular before and during the 16th and 17th centuries, and was very prominent in many of the rings, bracelets and chains examined.

Wartski

On the morning of Tuesday 2 November, delegates enjoyed a private viewing of the fine jewellery at antique dealers Wartski of Grafton Street, London W1. Among the items exhibited were 150 pieces of Fabergé and historic jewels. Geoffrey Munn, Managing Director

of Wartski, gave the history and the stories behind many of the items displayed. Again, there was the opportunity to examine some of the pieces shown. Those present were enthralled by the magnificence of many of the exhibits. Two pieces were of particular interest to Gem-A members: a brooch set with two aquamarines of 125 ct and 175 ct identical to one worn by Queen Eugenia of Spain (and indeed might be the very one), and a Russian pink topaz of 60 ct with an unusually intense colour which had been given by Tsar Alexander I to Frances Anne, Marchioness of Londonderry; the topaz had been remounted as a brooch by Garrard c. 1900.

The Crown Jewels

And what better way to complete the theme of 'historic jewels' than a private viewing of the Crown Jewels! On the Tuesday evening a group of conference delegates made a private tour of the Jewel House at HM Tower of London with Crown Jeweller David Thomas. David described the Jewels, and gave the history and stories behind many of the pieces. □

ANTIQUE AND ANCIENT JEWELLERY

Over the past few years there has been a growing interest in antique and second-hand jewellery, with more and more antique fairs springing up around the country. It could be that TV programmes such as the Antiques Roadshow and Bargain Hunt are doing for the antiques' business what Ground Force has done for the garden centres.

Whether you are one of those who visit antiques fairs (or even car boot sales) looking for jewellery, or attend jewellery sales at the auction houses, it would be an advantage to have the latest knowledge about what you are buying. Similarly, those in the retail trade should be aware of the latest developments when buying in or valuing second-hand and antique items. Or you might already be involved in antiques, either as a dealer or in a museum or gallery, and need to learn more about the gemstones in the pieces you handle.

To meet the growing demand for such knowledge, Gem-A is introducing a series of workshops at its London headquarters on various aspects of antique jewellery. Each course will be led by Dr Jack Ogden, CEO of Gem-A and founder of the Society of Jewellery Historians. As well as being a qualified gemmologist, Jack is an internationally acknowledged expert in the history, materials and technology of jewellery. Jack has lectured widely and written articles on jewellery, gems and related subjects, and his 1982 book *Jewellery of the ancient world* remains the standard work on materials and technology of early jewellery.

Each workshop will have a different emphasis, covering the history and use of gemstones

in jewellery and how they may be identified; dating and authentication; and the metals and manufacturing techniques used. All courses will provide a hands-on session using basic instruments and no previous gemmological training will be assumed.

So whatever your interest in jewellery created in times past – whether you are in the jewellery or antiques trade, or just want to know more about the 'gems' you find at local fairs or salerooms – these courses will give you the basic knowledge you need. □

Antique and Ancient Jewellery Workshops

at Gem-A, 27 Greville Street, London EC1N 8TN

All courses include hands-on sessions

GEMS IN ANTIQUE JEWELLERY

Monday 14 February

A one-day workshop that discusses the use of gemstones in antique jewellery, their character, origins and identification. Gain a fuller understanding of the gems used in 18th- and 19th-century jewellery, the ways in which they can be identified, and how this helps in dating, authentication and appraisal.

Gem-A members: £138.65 (non-members £150.40)

GEMSTONES FOR CURATORS AND CONSERVATORS

Thursday 10 March

Do you want to find out more about gems of the past and their use in jewellery? If so this one-day course is ideal for you. Aspects to be covered will include:

- the history and characterization of gemstones and their simulants as used in jewellery from ancient to recent times;
- how gemstones can be identified and how such knowledge helps in assessments relating to dating, authentication and conservation practice.

Gem-A Members: £138.65 (non-members £150.40)

A BRIEF HISTORY OF JEWELLERY MANUFACTURING TECHNIQUES

Thursday 14 and Friday 15 April

A two-day seminar that covers the history of jewellery manufacture from the earliest times up to the end of the 19th century. With the main focus on gold jewellery, the course will cover the development of jewellery manufacturing and assembling techniques, and how these affected design. The course includes a hands-on session with ancient and antique gold jewellery and jewellery components. Participants will gain a good basic understanding of jewellery technology in the past, and how this knowledge helps in assessments of dating and authentication.

Gem-A members: £205.63 (non-members £223.25)

Prices include VAT and a buffet lunch.

ROMAN JET AND SHALE

Recent research on Roman jet and shale by Lindsay Allason-Jones.

From the late 2nd to the end of the 4th century AD, black, shiny materials were popular in Britain and the Rhineland for the production of jewellery. In the past, all these materials have been described as 'jet', with a presumed source on the Yorkshire coast at Whitby; however, a project at the University of Newcastle upon Tyne, using the technique of reflected light microscopy, has shown that a wide range of shales and coals from all over Europe were also used.¹

The project first looked at artefacts from South Shields Roman fort (Arbeia) and associated sites along Hadrian's Wall on the Scottish border. The objects included beads, pin shanks, armlets, finger-rings, ring pendants and gaming counters – the usual range of black artefacts from the region – plus a shallow

dish of traditional Kimmeridge shale appearance and form. The finds proved to have been made from at least five different materials: jet, with reflectance measurements corresponding to oil company records for both Whitby and other sources along the North Yorkshire coast, such as Robin Hood's Bay and Staithes; cannel coals, with a probable source in the mid-Northumberland coalfields; detrital coals, whose reflectance measurements indicate a source in south Northumberland; torbanite from Scotland; and shales, including carbargillite, from a variety of sources such as the midland valley of Scotland. The identification of the Kimmeridge shale dish was confirmed but this has since proved to be the only artefact made from this shale source to have been found in the area, suggesting that the trade between the Military Zone and the Kimmeridge shale factories was

limited. Several rough blocks found in the vicus (civilian settlement) of South Shields fort proved to be of Whitby jet, implying a trade north from Yorkshire of raw material in 'ingot' form for local craftsmen to carve and finish.

Following the success of the Project's first stage, it was decided to extend the survey to other parts of Britain and the Roman Empire. Although there are strong similarities between the artefacts found in the Rhineland and those found in Britain – which has led archaeologists in the past to presume an active trade from Whitby to Bonn and Cologne – the analysis revealed the presence of a higher pyrite content in the German material. This suggests that the Rhineland craftsmen were working independently from their British colleagues and using other sources of both jet and shale for their products. So far, none of the German objects have proved to have been carved from either cannel coal or detrital coals. The similarities in style, decoration and form, however, imply some communication between the two craft centres, even if this was simply one individual travelling between the provinces. Evidence is also starting to emerge from France and Spain of a restricted trade in jet goods from these provinces in the 3rd century AD, whilst the analysis of items from Hungarian sites shows that, although some objects were imported from the Rhineland, some were carved from jet from a hitherto unidentified source local to Aquincum (Budapest) which gives a very low reflectance measurement of 0.14–0.1.

A sufficiently large sample of artefacts has now been analysed to indicate that, although some



Medusa pendant from Bonn. This example is made of jet but others have proved to be of cannel coal.



*Rough-outs from York of jet armlets and beads.
Photo courtesy of York Museum Trust.*

craftsmen were not too concerned as to the source of their raw materials, there may, nevertheless, have been a preference for making pins from jet, armlets, tables and trays from shale, and finger-rings and beads from cannel coal or jet.² However, this is not an invariable rule and some artefacts, such as pendants, may be fashioned from any material. Cannel coal, with its tendency to shatter, may have been regarded as more suitable for the manufacture of smaller objects, whilst shale, being stronger and thus able to take the heat and stresses of lathe-turning, was better for armlets. Shale was also available in the larger slabs required for table-tops and trays. However, the question remains: how did the Roman craftsmen differentiate between the materials and how did they know which materials would be most suitable for which objects?

These questions may be answered by an analogy to modern woodworkers. An experienced carver will know by touch alone whether a particular piece of wood is suitable for their purpose and will confidently reject other pieces which, to the untutored eye, look perfectly reasonable. In the case of the black materials, subtle indicators, such as weight, shine and tiny imperfections suggesting inclusions would be noted, probably subconsciously, leading to the decision to use a piece. The modern jet workers of Whitby know instinctively whether the pieces they gather from the beaches are workable or not. Such skills leave no trace in the archaeological record.

It is also possible that the craftsmen used geographical data to aid their decision making. It would be known that the black material from Dorset came in

large enough slabs to make table legs whilst the smaller fragments from Yorkshire were better suited to objects requiring more delicate carving. The discovery of blocks of unworked jet and shale and half-finished objects made from both these materials at York and South Shields points to the craftsmen having access to a wide variety of sources and suggests that they were either able to order what was required or had a regular supply of their preferred material, even if the source of that supply was outside the Imperial frontiers.

The Newcastle Project started with the simple aim of discovering whether the local coal measures at South Shields had been used to provide the raw material for the black shiny objects which had been found at Arbeia Roman fort. The tried-and-tested method of analysis of reflected light microscopy, used by the oil companies in their search for fossil fuels, has proved to be suitable for the study of Roman jewellery and has led to a new understanding of the Roman jewellery trade in Britain and the Roman Empire. □

1. For a full description of the methodology and list of results, see Allason-Jones, L., and Jones, J.M., 2001, 'Identification of 'jet' artefacts by reflected light microscopy', in *Journal of European Archaeology* IV.2 (August 2001), 233-51
2. For a discussion of the products and their manufacture, see Allason-Jones, L., 2002, 'The jet industry and allied trades in Roman Britain', in *Aspects of Industry in Roman Yorkshire and the North* ed. P.Wilson and J.Price, Oxbow Books, Oxford.

EXPORT BAN

At the end of October the Arts Minister, following the recommendation of the Reviewing Committee on the Export of Works of Art, placed a temporary bar (until 27 December 2004) on the export of an important piece of 20th-century jewellery that has been sold to an overseas buyer. This provides an opportunity for a British institution to attempt to purchase the item.

The jewel is a bandeau, a headband designed to be worn across the forehead, which can also be converted into two bracelets. It was made by British craftsmen in Cartier's London jewellery workshop, English Art Works, and was purchased towards the end of 1928 by Edwina, Countess Mountbatten, who was a leader of fashion in the 1920s and 1930s. Later, during and after the Second



The Cartier bandeau. PA Picselect © The Press Association 2004.

World War, she played an important role in public life, and was Vicereine of India at the end of British rule.

The intricate design, fully illustrated and documented in Cartier's records, is carried out in platinum, diamonds, rubies, sapphires and emeralds, and takes the form of a sinuous stem set with multi-coloured carved gemstone leaves and fruit. The carved coloured stones are of Indian manufacture, some of them evidently re-used.

Indian and other Oriental influences featured in many Cartier designs at this period, and this bandeau is a rare and outstanding example of a multi-gem Art Deco jewel, most beautifully made and designed, and in superb condition.

Further information and contact details may be found on the Department of Culture's website, www.culture.gov.uk

Catherine Johns

QEST SCHOLARSHIPS

Two UK jewellery designers, Jacqueline Cullen and Zoë Harding, have won Queen Elizabeth Scholarships for their innovative creations.

Jacqueline Cullen, who designs and makes contemporary jewellery in Whitby jet, has won a £2900 Scholarship. Jacqueline who works with Whitby jet in a non-traditional

way, has developed techniques that celebrate rather than disguise the jet's natural features.

Winning the Scholarship will enable Jacqueline to research Whitby jet's 19th century history and give her the resources and inspiration to continue her development of contemporary applications for the material.

Zoë Harding, who left college only a year ago, won a £2200 Scholarship. She has already set up a highly successful business designing and making fine jewellery.

Zoë's work is predominantly made from precious metals and she has used vintage corals and bezel-set small round gemstones. Her themes range from microscopic



Black coral ring set in silver by Zoë Harding.

cell structures to the natural characteristics of a gemstone.

The Queen Elizabeth Scholarship Trust (QEST), is the charitable arm of the Royal Warrant Holders Association. The scholarships are designed to advance education in modern and traditional crafts and trades in the UK.



Whitby jet brooch by Jacqueline Cullen.

MULTICOLOURED AMBER

MAGGIE CAMPBELL PEDERSEN

In the June issue of GJN I wrote about 'red amber' and in the September issue 'green amber'. Following a visit to the Hong Kong Jewellery Fair in September, I now find myself writing about 'multi-coloured amber'.

After the Gem-A lectures at the fair, I was approached by a lady who showed me a brochure of brightly coloured beads that all purported to be amber. I was told that these were for sale in good quality shops, for high prices. The lady had handled some of the 'amber' and had queried its weight, but been told that 'the more pure the amber, the heavier it is'.

Fortunately for me, the 'amber' was also for sale in the street markets where it could be found for a variety of prices, depending on each stallholder's perception of my gullibility. All the beads in the main photograph were sold to me (cheaply!) as amber.

The three rows of beads on the left of the photo (above) are re-constituted amber. This material is also sold by reputable amber dealers, one of whom told me that the yellow beads contain only 20% amber, whilst the red and brown contain 90%, the rest being made up of synthetic resin and dye.

The beads are at present undergoing testing by Gary Jones



Detail of the yellow beads.

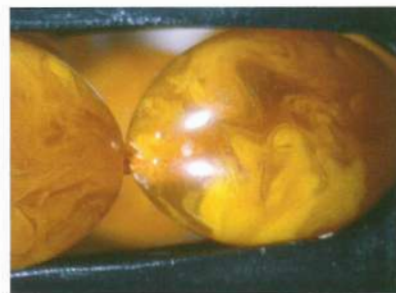


A selection of coloured 'amber'.

in the Mineralogy Department at the Natural History Museum in London. Tests to date have revealed that the red beads are in fact yellow ones, but with a coating of red dye, some of which can be removed with acetone. These and the yellow beads give an IR spectrum "which showed that the specimens consisted of polyester resin with some extra peaks, which could be attributed to amber. It is difficult to say how significant the amber is as its spectrum is swamped by that of the polyester."

The brown beads give a different spectrum, but are obviously some kind of synthetic resin. Again extra peaks are present which match those of amber. The pattern of the swirls of colour give the beads more the appearance of plastic than of natural amber.

Of the rest of the pile of beads, some are yellow plastic imitations,



The brown beads.

which have had 'sun spangles' added. One interesting example has, I suspect, been dipped in red dye which has penetrated the fractures in the material that touch the surface. This imitates heat-treated Baltic amber, where the stress fractures at the surface have partially oxidized and the deeper colour remains when the amber is re-polished. If a more subtle dye colour were used, the imitation would be excellent.

All the beads have been tested in salt water and only the brown

SPIRIT OF PHOENIX

beads mentioned above managed to float. A couple of others tried but didn't quite succeed. This could be an indication of very high amber content, but is more likely to be an indication of a form of polystyrene, or of a new synthetic resin mixture which also has a lower specific gravity than that of salt water.

It is my suspicion that some of the beads do, indeed, contain amber, but it is certain that there



Beads with dyed spangles.

is not a single natural amber bead in the whole pile. The truly gullible may believe that the bright green or bright blue are amber, and many people would happily believe that some of the red beads are amber. Most of the public could be taken in by some of the yellows and browns.

It may be easy to draw the line at plastics and plastic/amber mixtures, but it is my contention that, the moment the material has been re-constituted, it is not truly amber and should be termed something along the lines of 'amber material', 'contains amber', or even – for plastic – that appalling term 'faux'. But I very much doubt whether this idea will catch on with the stall holders at antiques markets, or the street traders in Hong Kong. □

A perfume bottle designed and made by Gem-A member Memory Stather, has been presented to British designer Vivienne Westwood OBE as a Lifetime Achievement Award.

The presentation was made at the Cosmetic Executive Women UK Achiever Awards 2004 event held at Claridges Hotel, London, on 27 October. The awards were presented by the Duchess of York.

The bottle named the 'Spirit of Phoenix', commissioned by Cosmetic Executive Women (UK), is carved from rainbow obsidian with a stopper of oxidized silver and carved cornelian. Artist and jeweller Memory Stather said: "I was of course delighted to be given the commission. Before deciding on a design for the piece, I researched Vivienne Westwood's work so that I could create a bottle that she might have chosen for herself."



Carved rainbow obsidian perfume bottle designed and made by Memory Stather.

Memory uses a wide range of natural gem materials, many of them rare and unusual, for her sculptured gems. She said: "My aim is to set free the shapes hidden in the stones while taking advantage of each gem's wonderful colours and natural beauty." More of Memory's work can be viewed at www.stather.net/memory. □

ROCK 'N' GEM SHOWS

The Hop Farm Beltring, Paddock Wood, Kent	15 and 16 January
Chepstow Racecourse Chepstow, Monmouthshire	29 and 30 January
Hatfield House Hatfield, Hertfordshire	5 and 6 February
York Racecourse York	12 and 13 February
Brighton Racecourse Freshfield Road, Brighton, East Sussex	26 and 27 February
Kempton Park Racecourse Staines Road East (A308), Sunbury on Thames, London	19 and 20 March

For further information contact HD Fairs Ltd t: 01628 621697
www.rockngem.co.uk

PASTE FROM WASTE

A green paste recently seen in the Gem Lab appears to supply a new and very worrying answer to the thorny question as to what to do with nuclear waste. The paste was kindly shown to us by Michal Košelja of the Czech Gemmological Association who is trying to trace the source and destinations of a vast quantity of radioactive green glass beads and simulated gemstones that have recently come to light in the Czech Republic.

As the illustration shows, the pastes are transparent green with some colour banding. The main warning sign is their bright fluorescence under both long- and short-wave ultraviolet light. The paste also made our Geiger counter click like an agitated rattlesnake. The pastes are many times more radioactive than allowed under international laws and could well be dangerous if worn, and particularly if beads of the glass were sucked by a child. The depleted uranium (isotope 238) must derive via very



Green paste coloured with depleted uranium under normal (top) and UV lighting (below).

black markets from unknown government or military sources. The quantities produced are believed to be enormous with 'tons' of

costume jewellery incorporating such material said to have been imported into the USA.

The use of uranium salts to produce apple- and emerald-green glasses dates back to around 1815 and these glasses became highly popular from about the 1840s onwards. The greens with their bright UV fluorescence are best known, but uranium glasses can be heat treated to make them a milky yellow and, with different firing conditions, even black enamel can be produced. However, awareness of the problems with their radioactivity led to bans beginning in the 1940s. It is sobering to note that 'glass colorant' is the only commercial use of uranium in the mid 1850s noted by James Dana in his *Manual of Mineralogy*. It is even more sobering to realize that then it was a relatively expensive mineral. Today depleted uranium is available for almost nothing – after all it is a by-product which nobody really knows what to do with.

INTERNATIONAL GEMMOLOGICAL CONFERENCE

The 29th IGC meeting was held from 12 to 18 September in Wuhan, China, at the Gemmological Institute of the China University of Geosciences. Over 40 Delegates and Observers and over 30 Guest Delegates from all over the world heard about all aspects of modern gemmology – in a packed programme of more than 60 presentations. Both pre- and post-conference tours were arranged to visit some of the extensive gemstone resources of China.

At the IGC business meeting held on 17 September, four delegates were elected to membership of the

IGC Executive Committee; they are Prof. H. Hänni, Dr J. Kanis, Mr Tay Thye Sun and Mr Gamini Zoysa, and of these Tay was elected Secretary to the Executive Committee. Eight observers were also elected to delegate status for future IGC meetings; they are W. Wight (Canada), Prof. Xin Qiang Yuan (China), Dr J Hyrsi (Czech Republic), H. Kitawaki (Japan), M. Furuya (Japan), Dr T. Thanasuthipitak (Thailand), Dr W. Atichat (Thailand) and Dr J. E. Shigley (USA).

Arrangements were put in place for the conduct of future meetings and the Executive Committee,

through Professor Bank and Dr Kanis, undertook to assemble archives and compile a history of the IGC. Also the website, set up by Mike Gray, will be reactivated.

It was decided to hold the next IGC meeting in 2007 (at an appropriate interval from the already planned Gemological Institute of America and International Mineralogical Association meetings in 2006) at a location to be decided.

I thank Tay Thye Sun and Ian Mercer for this information.

Roger Harding

GEM DISCOVERY CLUB

Gem-A's popular hands-on Gem Discovery Club meets every Tuesday evening at Gem-A's headquarters in London. The evenings are run by Michael O'Donoghue who never fails to bring along specimens to enchant, intrigue and often perplex participants. There is also a guest speaker once a month. All Gem-A members may join the Club which is an ideal venue for them to hone their skills and network with other gemmologists. For more details see <http://www.gem-a.info/membership/gemClub.htm>

Chatham Chats

Participants at the Club on Tuesday 2 November had the unique opportunity to handle and examine a wide selection of Tom Chatham's synthetic gemstones, from huge ruby crystals to a selection of his latest coloured synthetic diamonds.

After a brief presentation about his stones and the characteristics that allow gemmologists to distinguish them, Tom circulated around the seminar room chatting to participants and answering questions as they examined his gems with the wide variety of equipment provided. As the evening drew to a close, Tom generously donated a selection of his latest synthetic diamonds to Gem-A



Samples of the uncut synthetic diamond crystals.

for their teaching and research collection. This supplements his gift of rough and cut synthetic coloured gemstones last year.



Club members examine the Chatham synthetics.

'Star' stones

September's specialist at the Gem Club was Ian Mercer, Gem-A's Director of Education, who took us through the Natural History of Gem Materials. Ian reminded members not only that ornamental materials were fashioned from star-dust but that we originated from the same source.

Tactfully avoiding the inescapable conclusion that some of us may have originated from more famous stars than others, Ian pointed out some cosmic gems, colouring elements and the material results of cosmic explosions. Nearer home, Ian continued with the effects of terrestrial explosions and cataclysmic events and the resulting materials (building stones as well as jewels).

Specialist Evenings

On the first Tuesday of each month Club members have the opportunity to examine items from the collections of gem and mineral specialists. Short introductory talks are followed by hands-on session under the guide of the guest speaker.

Winter/Spring Programme

Tuesday 1 February
ROY HUDDLESTONE
Doublets

Tuesday 1 March
ALAN JOBBINS
Gems and crystals from over half a century of collecting

Tuesday 5 April
MARCIA LANYON
Beads

Tuesday 3 May
CECILIA POPE
The Gemmologists' Jewel Box

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THE SALCOMBE BAY TREASURE

Susan La Niece summarizes a lecture she gave with Venetia Porter to the SJH on 12 October entitled 'Islamic jewellery from a 17th century ship in Salcombe Bay'.

In 1995, divers found a remarkable collection of gold and other items on the seabed at Salcombe Bay, Devon. There was little or nothing remaining of the wrecked ship but the finds included gold coins, ingots and jewellery together with an intriguing collection of items, including 17th century Delft and German ware, a Dutch merchant's seal, half a dozen dried broad beans, a pharmacy jar complete with pills and a fish-shaped sounding weight.

Moroccan Coins

There are over 400 gold coins, more than a quarter of them struck by the Moroccan ruler Ahmad al-Mansur, known as al-Dhahabi, the Golden One, on account of his conquest of Timbuktu and the West African gold sources in 1591.

The latest coins belonged to al-Walid who ruled between 1631 and 1636: the wreck is likely to date to shortly after this. The lecture discussed the results of different aspects of research into the finds, currently being carried out at the British Museum.

The jewellery is largely attributable to Morocco, with the probable exception of one or two pendants of European type. It is not of the highest quality, but exhibits a range of techniques such as filigree, granulation, openwork and enamelling. The forms are conservative, with similar types to be seen in North Africa today. The common factor is that none are



*Some of the jewellery and ingots from the Salcombe wreck.
Photo courtesy of Michael Cowell.*

complete: almost all trace of enamel has been removed, gemstones extracted from settings and, like the ingots, the jewellery has been deliberately cut, with no two pieces found from the same item.

Gold Analysis

Analysis of the gold by Michael Cowell (British Museum) has determined that the ingots are similar to the jewellery in overall metal composition but distinct from the coins. In other words the ingots are likely to be melted down jewellery, similar to the remaining fragments, but the coins were not being melted, as presumably they had a ready exchange value, unlike the hotchpotch mixture of jewellery.

The second finding, this time from ultra-trace element analysis by M. Guerra (CNRS Paris), was that most of the gold matched well with West African gold sources, and was

distinct from that in circulation in Europe.

Ship Origin Unknown

The identity of the ship is still far from certain – it has an English provenance, but little else to link it with England. Many of the more personal possessions are Dutch in origin, yet the coins and the jewellery link it to Africa.

Two different interpretations are possible: that it was a pirate ship carrying the divided spoil of a raid, or that it was a Dutch merchantman perhaps carrying perishable goods as well as gold from the Barbary coast to Europe.

The importance of the find for jewellery studies is the rare survival of N. African gold jewellery from a firm 17th century context. The final results of the research will be published as a British Museum Occasional Paper. □

FROM THE SALEROOMS

THE PHOENIX NECKLACE

One of the most spectacular pieces of surviving Arts and Crafts jewellery was sold at Sotheby's in October for an astonishing £32,000.



Necklace, gold and opals, with diamond chips. Artificers Guild 1904. Photograph courtesy of Sotheby's.

The phoenix necklace was an early design by Edward Spencer at the time when he had recently become Director of the Artificers Guild, then owned by Montague Fordham. The piece was written up at length in the *Studio* (Vol. 32, 1904) with a fulsome description of its symbolic theme. The executed piece follows very closely a drawing preserved in the Artificers Guild archive at Goldsmiths' Hall.

The necklace had been lost to sight until recently, and its reappearance was a welcome opportunity of seeing such an important piece, unaltered and in good condition. Sadly it has now left the country for a museum in the United States.

Muriel Wilson

SALE DATES

UK SALES WINTER 2005

BONHAMS, New Bond Street London

Fine Jewellery:

7 April

Knightsbridge

Jewellery: 19 January, 9 February, 2 and 23 March

(For sales at other UK venues visit Bonhams' website)

t: 020 7393 3970 www.bonhams.com

CHRISTIE'S, South Kensington

Jewellery: 25 January, 15 February

Pawnbrokers' unredeemed pledges: 25 February

Fine jewellery and rings: 20 March

t: 020 7752 3269 www.christies.com

DREWEATT NEATE, Donnington, Newbury, Berkshire

Priory Sale with Jewellery and Silver: 8 February, 22 March

Jewellery and Silver: 23 March

t: 01635 553553 www.auctions.dreweatt-neate.co.uk

FELLOWS & SONS, Birmingham

Second-hand Jewellery and Watches (by direction of Pawnbrokers Nationwide): 6 and 20 January,

3 and 17 February, 10 and 24 March

Antique and Modern Jewellery: 13 January, 3 March

t: 0121 212 2131 www.fellows.co.uk

GARDINER HOULGATE,

The Bath Auction Rooms, Bath

Jewellery: 7 and 19 January, 2 and 16 February, 2, 16 and 30 March

t: 01225 812912 e: auctions@gardiner-houlgate.co.uk

HAMPTONS, Godalming, Surrey

Jewellery and Fine Arts: 12 and 29 January,

8, 12 and 26 February, 12 March

t: 01483 423567 www.hamptons.co.uk/fineart

LYON AND TURNBULL,

33 Broughton Place, Edinburgh

Specialist sale of Jewellery and Silver: 17 February

t: 0131 557 8844 www.lyonandturnbull.com

SOTHEBY'S, New Bond Street, London

Fine Jewellery: 27 January and 16 March

t: 020 7293 5000 www.sothebys.com

Dates correct at time of going to press
but may be subject to alteration.

THE CASTELLANI AND ITALIAN ARCHAEOLOGICAL JEWELRY

From 18 November 2004 to 6 February 2005, the Bard Graduate Center for Studies in the Decorative Arts, Design and Culture in New York is presenting the Castellani and Italian Archaeological Jewelry, the first exhibition to explore in depth the artistic and scholarly contributions to jewellery made by three generations of the Castellani family in 19th-century Rome.

This landmark exhibition, organized by the Bard Graduate Center, will also be seen in Rome at the National Etruscan Museum at Villa Giulia, Rome, from 21 February to 29 May, and in London at Somerset House from 13 June to 2 October 2005.

Comprising more than 250 objects from major public and private collections throughout the world, Castellani and Italian Archaeological Jewelry explores the work and legacy of the firm in a comprehensive fashion, illustrating the wide-ranging aspects of the family's artistic and cultural activities. For the first time a representative selection of Castellani jewellery

from the National Etruscan Museum at Villa Giulia and the Capitoline Museums in Rome is being seen abroad, along with pieces from the British Museum, Musée du Louvre, Metropolitan Museum of Art, Cooper-Hewitt National Design Museum, Musée des Arts Décoratifs (Paris), and other public institutions and private collections. The co-curators of the exhibition are Dr Susan Weber Soros, founder and director of the Bard Graduate Center, and Dr Stefanie Walker, special exhibitions curator at the Center and a specialist in jewellery history.

Background

Fortunato Pio Castellani (1793- 1865) first opened his workshop in 1814, and the firm quickly became known for designing fashionable jewellery in imitation of contemporary French and English work. In the 1830s, Fortunato Pio became inspired by the ancient jewellery and metalwork being unearthed at such archaeological sites in Italy as the Etruscan Regolini Galassi Tomb (1836). Encouraged by his friend

and patron, Duke Michelangelo Caetani (1804-82), Castellani became the first 19th-century goldsmith to create works closely modelled after classical Italian and Greek prototypes, thus creating a new fashion trend.

Castellani's appreciation of the exquisite craftsmanship displayed in ancient jewellery and his desire to improve Italian craft and design motivated him to pursue the rediscovery of the 'lost' art of granulation. This technique of applying tiny granules of gold to an object's surface to create decorative patterns was perfected by the Etruscans in the 9th to 4th centuries bc but had long been forgotten. The quest to master the art of granulation absorbed the Castellani family for decades, and the revival of this and other ancient techniques was one of the greatest contributions made by the Castellani to the history of jewellery making.

In the 1850s, Fortunato Pio's two sons, Alessandro (1824-83) and Augusto (1829-1914), gradually assumed management of the firm and marketed their archaeological jewellery not only to the local and international aristocracy but also to educated tourists and artists visiting Rome. In the 1860s shops were opened in London and Paris, and a workshop founded in Naples. The firm also displayed its work at expositions in Florence, London and Paris and, in 1876, at the Centennial Exposition in Philadelphia. The following year the much-praised collection was on view at the Metropolitan Museum of Art.

The distinctive Castellani jewels tend to use simple geometric designs enhanced with patterns made of tiny gold granules, small



*Brooch with Lamb of God. Castellani. British Museum, Hull Grundy Cat. 985.
© The British Museum.*



Bracelet. Castellani. New England private collection. Photo: Sheldon Collins.

blossoms and filigree wire applied with absolute precision. Perfect, miniature mosaics, composed of the smallest, block-like tesserae imaginable, evoke the early Christian masterpieces of Rome, Ravenna and Constantinople. Gems, cameos and scarabs – either ancient originals or imitations – provide the focal point of some jewellery pieces, while others achieve their effect from a variety of enamel techniques rendered in a wide range of rich colours.

A key motivation for the Castellani interest in reviving the styles and techniques of the ancient Romans and Etruscans was the rising nationalism that would soon lead to a united Italy. In accordance with their political beliefs, the Castellani were committed to promoting the cultural significance of Italy at a time when French and English taste predominated. Fuelled by patriotic feelings and a desire to educate, the Castellani pursued an ambitious goal of studying and reviving all periods of Italian jewellery. In addition to their classicizing innovations, they produced a highly successful line of

Medieval and Renaissance Revival pieces.

The Exhibition

With a wide variety of objects including jewellery, drawings, paintings, and historical documents, the Castellani and Italian Archaeological Jewelry presents to the public for the first time the full range of Castellani contributions to the history of jewellery design and the cultural development of Rome, Italy's new capital. The works on display include classical revivals and examples of Medieval, Renaissance and other historical styles.

The exhibition examines the working process of the Castellani, an area that is particularly important due to their interest in ancient techniques. Albums of drawings and tools from the workshop track the process of design and painstaking, specialized manufacture. Pieces shown next to their ancient models highlight the Castellani achievements in imitating ancient granulation techniques and the development

of their refined micromosaics. The exhibition also includes a selection of ancient objects that influenced both the design process and the family's involvement in collecting, trade and restoration.

The Castellani and Italian Archaeological Jewelry places this influential family and its jewellery creations within a broader cultural context. The exhibition displays several paintings, photographs, and sculptures of individuals wearing archaeological-style jewellery, illustrating the type of people who patronized the Castellani shops and how the jewellery was worn.

The Catalogue

The accompanying catalogue presents 13 essays by the foremost international scholars of Italian jewellery, archaeology and 19th-century history. Each essay is richly illustrated with colour images of the pieces shown in the exhibition. □

For further information, please call 001 212-501-3000 or e-mail generalinfo@bgc.bard.edu.

JEWELLERY

ANCIENT, ANTIQUE AND CONTEMPORARY

Masterpieces of American Jewellery

An exhibition to be held at the Gilbert Collection, Somerset House, London, from 15 February to 12 June 2005.



The American Flag brooch. Cartier, New York, 1927. Diamonds, sapphires and rubies set in platinum.

The 200 pieces on show range from late 18th century to the 1990s and were all designed and manufactured in the United States. Masterpieces of American Jewellery highlights the creativity, craftsmanship and excellence of design found in American jewellery and explores five major themes: Americana, Nature, Humour, Pastimes and High Style.

Centrepiece Jewellery Exhibition

Centrepiece is a dynamic and energetic group of artists whose workshops and studios are situated in Birmingham's Jewellery Quarter. The group's work may be seen and purchased at the Annual Centrepiece Jewellery Exhibition running until 22 December at the Birmingham Symphony Hall, and at the New Art Gallery in Walsall Town Centre until Spring 2005.

For more information on Centrepiece contact Abigail Fleissig on 07946 304778, email Abigail.fleissig@uce.ac.uk

China's Golden Age

The exhibition *China: Dawn of a Golden Age* at the Metropolitan Museum of Art, New York, until 23 January, focuses on 550 years of China's early history – from AD 200 – 750. The wide-ranging exhibits, many recently excavated, include bronzes, stone sculpture, paintings, jade and textiles, but perhaps of most interest to readers is the jewellery.

Pieces on show include some wonderful gold animal plaques (reminiscent of those from the Russian Steppes, but cast rather than in repoussé sheet), fine granulated work, gold mounted jade, and gold and silver vessels.

Shown here is the lower part of necklace from the tomb of Li Jingxun, Xi'an, Shaanxi Province (dated to dated AD 608) excavated



in 1957 and now in the National Museum of China. The lower stone is a large pear-shaped Sri Lankan sapphire showing the wheel cut grooves used to remove surface flaws. Such grooving is also typical

of the sapphires set in Byzantine jewellery of similar date. The necklet itself does not appear to be a Chinese product, but is probably an import from the Sassanian Persian, or

perhaps central Asian, world. Photo courtesy of the Metropolitan Museum of Art, New York.

The comprehensive and fully illustrated catalogue *China: Dawn of a Golden Age, 200 – 750 AD* by James C.Y. Watt is published by the Metropolitan Museum of Art, New York and the Yale University Press. ISBN 1-58839- 126-4 (hardcover) ISBN 1-58839- 127-2 (paperback).

FUSION

The Creativity of Communication

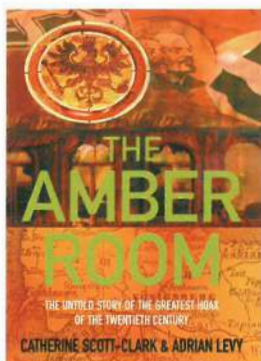
FUSION is an exhibition of the work of members of the Designer Jewellers Group who joined with internationally-acclaimed textile artists to collaborate and explore new areas of creativity. The result is a multi-medium exhibition which spans the realms of both functional and decorative objects, from exquisite miniature textiles

that masquerade as jewellery, to jewellery that has been turned into textile.

The exhibition is to be held at the Cheltenham Art Gallery and Museum, Clarence Street, Cheltenham, from 4 December to 15 January 2005. Further information from Sophia Wilson or Anna Stanway on 01242 237431.

THE AMBER ROOM

The Amber Room – the Untold Story of the Greatest Hoax of the Twentieth Century.



Catherine Scott-Clark and Adrian Levy, 2004. Atlantic Books, pp 386. ISBN 1 84354 035 5. Hardback price £17.99.

This is the second book written by Cathy Scott-Clark and Adrian Levy that covers a subject of great interest to gemmologists and jewellers. Their first book, *The Stone of Heaven* (subtitle 'The Secret History of Imperial Green Jade') was published in 2001 and told the history of jadeite jade in Burma and China, and how it later became fashionable in the Western world.

In their new book, the two authors attack one of the mysteries of the 20th century. The fate of the Amber Room – which was originally commissioned by Frederik I of Prussia at the turn of the 18th century, but then given to Peter the Great and sent to Russia – is a subject that has tantalized people for fifty years.

With their usual thoroughness, the two authors have investigated the subject in depth. They have travelled extensively, extracting information both from archives and from (often reluctant) curators, professors, and other people in

Russia and eastern Germany. Against almost impossible odds they have gained access to old files, some of which belonged to the former Stasi or KGB. It soon becomes clear that 'glasnost' does not pervade every corner of the former communist countries.

The tale is fascinating, though the reader may, at times, be left wondering whether so much detail is necessary. However, it should be remembered that this is the story of research undertaken by two investigative journalists, and not a novel. The authors are not interested in writing a glamorous story, but only in uncovering the truth about the fate of this extraordinary work of art.

Because of the amount of detail in the book, the final conclusion

comes rather abruptly and seems to lack the detail necessary to prove the point. On the other hand, the conclusions that the authors have reached would be impossible to prove beyond all doubt, as those involved are now dead and can no longer confirm or deny it.

The authors are convinced that they have found the answer and I for one believe them. Undoubtedly, there will be some people who will not wish to accept the conclusion, even after reading the book. But then, there are some people who still believe that the world is flat.

And what was the authors' conclusion? What actually happened to the Amber Room? Read the book and find out!

Maggie Campbell Pedersen

GEMS: Their Sources, Descriptions and Identification

First published in 1962, *Gems: Their Sources, Descriptions and Identification*, written by Robert Webster and revised in its fourth edition by Basil Anderson, has become universally recognized at the most comprehensive and authoritative treatise on gem materials in the English language. The fifth edition, first published in 1994 and edited by Peter Read, was extensively revised by fifteen gemmologists chosen for their expertise in the relevant sections.

The decision has been made not to reprint the book, so when present stocks are sold it will no longer be available.

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PUZZLE

PUZZLE

I have a parcel of sapphires weighing 500 ct consisting of identical stones that weigh 0.25 ct each. I also have a parcel of rubies weighing 100 ct, but the stones in this case weigh only 0.20 ct each.

I sell 10 ct of rubies. A few days later, as is usual in our trade, the stones are returned all except one which they had kept. In my frustration I put the rubies into the sapphire packet. Realizing my mistake, I asked one of the girls to sort out my error, telling her that I had put 49 rubies into the wrong packet and that the rubies and sapphires were now totally mixed in the sapphire packet. My girl merely counted out 49 stones from the sapphire packet putting them into the ruby parcel. When I looked again, I found that not only did I have rubies in my sapphire parcel but I now had sapphires in my ruby packet!

I do not know what the moral of the story is, but do I have more

sapphires in my ruby packet or more rubies in my sapphire lot?

Harry Levy

Answer to puzzle in the September issue

The essentials of this puzzle is that a jeweller has to make either a brooch or a pair of earrings using small diamonds arranged in a square (so, for example, a 3 x 3 square would use 9 diamonds) as a leaving present. The jeweller says he can do this in such a way that the number of diamonds equals the number of years the woman has worked with the company. The next day the boss realizes that the woman has actually worked a year less than he thought – but the jeweller says he can still make suitable jewellery, using one diamond for each year she has worked. How long has she worked?

The initially planned jewellery could obviously be a square

brooch of 1, 4, 9, 16, 25, 36, 49, 64 diamonds or a pair of square earrings which would use double any of these number of diamonds – i.e. 2, 8, 18, 32, 50, 72, etc. So we need to find one of these numbers that, take away one, is also on one of these lists. There are actually two possibilities. The originally planned jewellery might have been a brooch of 9 (3 x 3) diamonds, which when reduced by one would allow two earrings each of 4 diamonds (in a 2 x 2 square). Or the originally planned jewellery might have been a pair of earrings each with 25 (5 x 5) diamonds – total 50 – which, when reduced by one, would permit a square brooch of 49 (7 x 7) diamonds. Since the woman is described as having worked for the company for “a very long time”, the second option must be the correct one.

Clearly Mrs Butty has worked at the Square meal Sandwich Company for 49 years

Jack Ogden

SJH FORTHCOMING MEETINGS

Details of the venue and times of meetings are given on p.96.

TUESDAY 25 JANUARY

The Brooch as an Insignia of Rank in Early Medieval Ireland
NIAMH WHITFIELD

Niamh Whitfield is an authority on the art and archaeology of the Early Medieval period, especially of her native Ireland. She has carried out and published fundamental studies of early Medieval metalwork, including analysis of the highly skilled techniques whereby the goldsmiths of that period produced intricate designs in filigree.

TUESDAY 22 FEBRUARY

The Jewellery Industry of Newark, New Jersey
ULYSSES GRANT DIETZ

Ulysses Grant Dietz is Curator of Decorative Arts at the Newark Museum, and has been responsible for numerous major exhibitions on themes such as ceramics, furniture and jewellery. He is also the author of many important books on the decorative arts in America. His lecture will focus on the jewellery manufactured in the Newark area in the 19th century.

TUESDAY 26 APRIL

The Science of Some Glass Gems and Enamels from Late Antiquity to the 18th Century
IAN FREESTONE

Ian Freestone, now a Professor at Cardiff University, was for many years a senior scientist in the British Museum's Department of Scientific Research. His research on the scientific aspects of ceramics, stone, glass and enamels has encompassed artefacts from all the numerous regions, cultures and periods represented in the Museum's collections, and has enhanced our understanding of ancient technologies.

WHAT'S ON

GEMMOLOGICAL ASSOCIATION AND GEM TESTING LABORATORY OF GREAT BRITAIN

Midlands Branch

Friday meetings will be held at the Earth Sciences Building, University of Birmingham, Edgbaston.

Admission £4 for a member. For details call 0121 445 5359.

Friday 28 January

DR JEFF HARRIS

Diamonds from Crust to Core

Friday 25 February

JOHN BENJAMIN

European Jewellery - Elizabeth I to Elizabeth Taylor

MIDLANDS BRANCH CONFERENCE

Sunday 13 March

Man-made Diamonds and
Their Identification

Friday 1 April

DAVID CALLAGHAN

Gems by Candlelight

Friday 29 April

GWYN GREEN

Identification of Gem Materials
using the Microscope

Midlands Gem Club

For details contact Paul Phillips
on 02476 758940

email pp.bscfgadga@ntlworld.com

North East Branch

For information call Neil Rose
on 0113 2070702 email gema.
northeast@gemro.com

North West Branch

Meetings will be held at YHA
Liverpool International, Wapping,
Liverpool L1 8EE. For further
details contact Deanna Brady on
0151 648 4266.

Wednesday 20 April

ERIC EMMS

Diamond treatments

Scottish Branch

For details call Catriona McInnes
on 0131 667 2199, e-mail
scotgem@blueyonder.co.uk

Tuesday 18 January

LIZ GORING

Suffragette Jewellery

Tuesday 22 February

DR JEFF HARRIS

Diamonds - a Research Perspective

Tuesday 15 March

ALAN HODGKINSON

Tucson and all that's new

SCOTTISH BRANCH CONFERENCE

Friday 29 April to

Monday 2 May

The Lovat Hotel, Perth

Keynote Speaker:

SHANE McCLURE,

Director of West Coast
Identification Services,
GIA Gem Laboratory

South East Branch

For details contact Colin Winter on
01372 360290, e-mail info@ga-seb.
org or visit the branch website at
www.ga-seb.org

SOUTH EAST BRANCH CONFERENCE

Friday 17 June to

Saturday 2 July

Colombo, Sri Lanka

South West Branch

Contact Richard Slater on 01635
553572.

For up-to-the-minute
information on Gem-A
events visit our website at
www.gem-a.info

SOCIETY OF JEWELLERY HISTORIANS

Unless otherwise stated, all
Society of Jewellery Historians'
lectures are held at the Society
of Antiquaries, Burlington House,
London W1 and start at 6:00 p.m.
sharp. Lectures are followed by
an informal reception with wine.
Meetings are open only to SJH
members and their guests. A
nominal charge is made for wine
to comply with our charity status.
Further details of Winter meetings
are given on p.95.

Tuesday 25 January

Dr NIAMH WHITFIELD

The brooch as an Insignia of Rank
in Early Medieval Ireland

Tuesday 22 February Annual General Meeting followed by

ULYSSES GRANT DIETZ

The Jewellery Industry of Newark,
New Jersey

Tuesday 26 April

IAN FREESTONE

The Science of some Glass Gems
and Enamels from Late Antiquity
to the 18th century

Tuesday 24 May

DR ERIKA KISS

16th-17th century Hungarian
Jewellery

Tuesday 28 June

OTTO KUENZLI

His Life and Work



d a v i d
g a n n

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