

GEM & JEWELLERY News

TIARAS

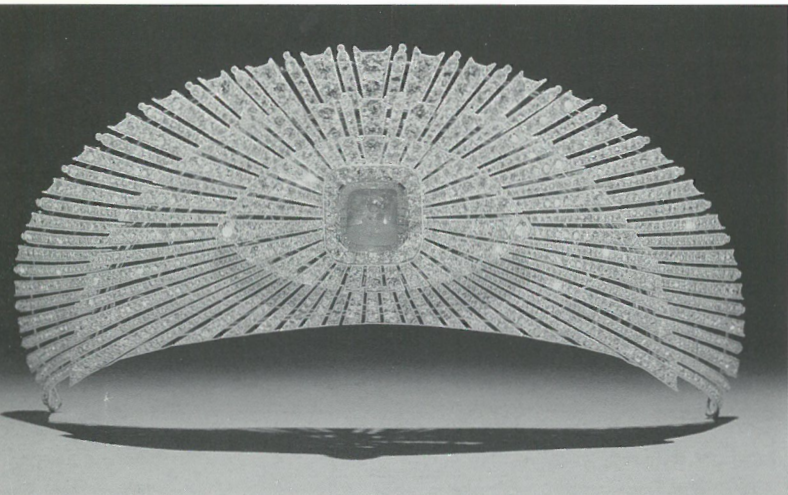
The ultimate symbol of elegance and rank

Aspectacular range of 200 tiaras forms a dazzling exhibition to take place at the Victoria and Albert Museum from 21 March to 14 July 2002, to mark the Golden Jubilee year.

This is an exhibition to delight all those with an interest in jewellery and gemstones, as it provides a unique opportunity to study the superb craftsmanship and evolving designs of the 19th and 20th centuries. A selection of paintings and photographs of owners wearing their tiaras will complement the jewels on display.

One of the strengths of the exhibition is its range of earlier tiaras. Geoffrey Munn, curator of the exhibition, commented, "Respect for jewellery of the past is a modern idea. Many fine examples were broken up, or important stones were replaced." The sunburst tiara illustrated below is a good example, where the centre was originally set with a jonquil diamond of 71 ct and later replaced with a star sapphire.

The tiaras are set with a profusion of gems, with fine examples of pink spinels, amethyst (highly prized in the 19th century),



A platinum sunburst tiara by Cartier, with 577 brilliant-cut diamonds and many more rose-cut stones, set centrally with a star sapphire, 1927. Courtesy of the V&A © The Trustees of the late Lord Howard of Henderskelse.

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The official book of the exhibition *Tiaras, Past and Present* by Geoffrey Munn is reviewed on p.28, as well as his scholarly work *Tiaras, A history of Splendour*.

citrine (set with diamonds in an Art Deco style tiara) and aquamarine.

One particularly unusual piece combines turquoise and moonstones in a criss-crossing ribbon design. Quantities of diamonds, rubies, emeralds and sapphires abound; one piece combining carved emeralds, rubies and sapphires with diamonds to represent leaves and fruit on branches.

(Continued on p.25)

The history of jewellery – an important link with people in the past

The history of jewellery sounds, on the face of it, like a sub-topic of antiques, part of the history of fashion, or simply a very specific branch of the decorative arts. The picture that enters most minds is probably that of the more vivid and complex gold-and-gemstone jewellery of the last two or three hundred years. It is all those things, of course, but it is also more. To the archaeologist, the analysis of jewellery – or 'personal ornament', to use the dryer term favoured in many archaeological circles – is important for understanding ancient societies, including those that vastly pre-date the invention of writing.

The wearing of decorative items that have no apparent practical function, such as necklaces with pendants, appears to be one of the characteristics, in the most remote periods of the Old Stone Age, that actually serve to distinguish early humans from other hominids. The motives behind wearing a pendant made of a drilled shell or carved bone were probably very similar to those that underlie the flaunting of a beautiful diamond in a gold setting today: the jewel was thought to enhance the beauty of the wearer, it

probably had a symbolic value as a religious or superstitious charm, and it signified that its owner had access to a particular level of wealth and influence within his or her community.

Stone, and organic materials like shell, bone, wood and dried seeds, have been exploited as personal adornment since time immemorial, and are still used today. Metals came later on the scene. In the Bronze Age, gold evidently already possessed the very special value that it still retains, commanding a high value and probably replete with symbolic significance. In Britain, the gold jewellery of the Bronze Age is of surpassing beauty, demonstrating superb craft and design skills. One of the curious features of studying the jewellery of that period, however, is that we cannot always tell exactly how the pieces were worn. There are no illustrations to guide us. While the forms of some collars and bracelets are fairly obvious, there are small, chunky gold rings with a small gap in the circle that might have been worn on the earlobe or ear-rim, or woven into the hair, or pushed onto the septum of the nose, or attached to clothing. It is curious to deal with jewellery whose precise use we can no longer visualize.

With the Classical world of Greece and Rome, we enter a more familiar ambience. We have inherited the finger-rings, chain necklaces and brooches of the Graeco-Roman world. Most of the jewellery of that period still looks good today, and we should be only too happy to wear it ourselves, given the chance. It was in that world, too, that the combination of precious metal with beautiful hardstones became the norm for the most prestigious and valuable jewellery. At the same time, there was cheaper jewellery made of base metals and other materials, which has its own charm and interest.

I do not have space to take the story further, and anyway, the post-Roman period is too recent for me, but the point of this is that the subject of 'jewellery history' is a far, far wider and more important one than may appear at first sight. Personal ornament provides a major component of the archaeologist's evidence for 'material culture': it is a prime source of information about ancient societies, their values and their lifestyles, and it is one of our most emotive links with people of the past. Not a small, or minor, subject at all.

Catherine Johns

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Gemstone Industry and Laboratory Conference

Harry Levy reports on the GILC held in Tucson

As has now become traditional, the GILC was held in Tucson, Arizona, prior to the opening of the main gemstone shows in February.

The Conference has been on-going for several years now, originally set up by the International Coloured Stone Association (ICA) and the American Gem Trade Association (AGTA) as a forum for discussion between the gem traders and the gemmological laboratories. Traders have tried to state their views as to what they feel should and should not be in laboratory reports and certificates, and laboratories have tried to educate the traders as to how they can present their reports without losing their integrity and honesty in reporting what they see in a stone.

Hostility

In the past there has been a degree of hostility between the traders and the laboratories, traders claiming that they cannot now sell a stone without having an independent certificate, and laboratories saying that the trade wants to know as much as possible about a stone when they buy it, but object when their customers demand this information and want a laboratory certificate from the seller. What these meetings have demonstrated is the degree of goodwill and understanding that now exists between the two groups.

Harmonization

The meetings became larger and larger over the years as both more traders and trade associations attended and laboratories from all over the world started to come. Finally a couple of years ago it was decided to select a few of the larger laboratories and let them meet

amongst themselves and report back to the main conference with their findings and recommendations. At present these laboratories are the AGTA (New York), CISGEM (Milan), GIA (Carlsbad), Gübelin and the SSEF laboratories (both from Switzerland). The group is known as the Laboratory Manual Harmonization Committee (LMHC). Their brief is to try and standardize the way laboratories report their findings on gemstones on a certificate. The main points of controversy have been how they report treatments and enhancements of gemstones.

Heated rubies

It was decided that rather than do this in a general way for all stones, they should concentrate their views on one stone and then generalize the methodology for all stones, wherever appropriate. The

stone that was chosen was ruby, as problems had arisen with certain heated rubies. The heating often left traces of glass within healed fissures in the stone.

Manual

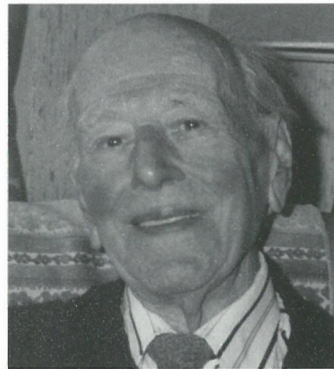
The morning session of the meeting in Tucson was spent with the LMHC reporting on the work they had done since the last meeting in Paris in 2001 after the CIBJO Congress. They said that they wanted to produce initially a manual for all laboratories to use and this would be known as the Harmonized Gemmological Laboratories Nomenclature Standards. With past experience of attempting to put such manuals together for the gemstone trade, they decided to go back to basics and produce a manual that would not only be useable by the laboratories, but also would be

George Edward Bull-Diamond

Born 17 July 1908. Died 3 January 2002

George Edward Bull-Diamond became the foremost lapidary of his generation. He was born in Islington in 1908 and began his career with Chas Mathews in 1922 as an apprentice. He very quickly became one of the finest young lapidaries, winning many prizes at the Goldsmiths Craft Council Competitions. During the Second World War he was retained by Chas Mathews working in a reserved occupation producing precision-cut agate for military instruments.

After the War, Chas Mathews was divided into two companies and in 1947 George became a director of Chas Mathews (Lapidaries) continuing to guide the company until the early 1980s. During this time he was universally



regarded as the finest gemstone polisher of his era.

George married Janet in 1934 and they had two sons, David and Christopher, and three grandchildren, Jonathon, Anna and David.

John Taylor

The Tucson show

Tucson, this year, seemed to be quieter than in previous years. Many dealers and stand holders said that some of the foreign buyers were not present this year. This could be due to the downturn in trade or the fear of flying, probably a combination of both.

There was no shortage of stones being offered for sale, and there were a large number of dealers from most of the gem producing centres, especially Sri Lanka and Bangkok.

During the show tanzanite seems to have been rehabilitated. Some of you may recall that after

the September 11 outrage in New York reports came out that Osama Bin Laden and the Al-Qaeda' group owned or had large interests in the

Overheard in Tucson ...

In a food line at one of the shows: "Does anyone know where is the beer stand?" (De Beers' Stand)

tanzanite mines. This caused an immediate boycott in the United States by both the television selling channels and main jewellery stores to stop selling the stones. In Tucson the American authorities announced that they found no connection between the terrorist

organizations and the marketing of tanzanite, and thus traders were again free to buy and sell the stone. One noticeable result was the sudden increase in the selling price of tanzanites after the American announcement. Tanzanite has become a very popular stone and it is claimed that it is the fourth best seller in the coloured stone trade after the big four (diamond, ruby, sapphire and emerald).

Diamond continues to be the most popular stone and there is now a pavilion devoted to diamonds at the Tucson show, a show noted in the past for primarily coloured stones, minerals and fossils.

Harry Levy

complete in its own right and could be used without reference to other publications. To this end they had produced a Terms and Definitions section as the initial part of the manual. The presentation we were given of this shows that it will be probably the most professionally produced manual for the gem trade, complementing and perhaps replacing other similar manuals.

This is a manual that will take some time to produce, as the team working on it are in different parts of the world and it is difficult for them to meet face to face. The group have to be complimented on the work they

have done so far and the concept of the whole project. It is gratifying to know that the group is working with the trade and listening to what they have to say. The next meeting of the GILC will now take place in Munich in late March immediately after the CIBJO Congress.

Heating or diffusion

The afternoon session concentrated on discussing the different perceptions relating to the advent of pink/orange treated sapphires. It had been found that the orange colour of these stones was confined to a surface layer of the stone. It was agreed that more research

would have to be done to decide on the origins of this phenomenon. Subsequent to the meeting the AGTA, GIA, Gübelin and SSEF laboratories agreed a unified disclosure policy for this new corundum treatment coming out of Thailand. This unified terminology and disclosure policy applies only to those colour varieties of corundum that reveal evidence of heat treatment and possess a surface-related orange colour layer. It was agreed that the name 'padparadscha' will not be applied to these newly treated stones. The wording on laboratory reports will be as follows:

Species: Natural corundum

Variety: Treated (orange) sapphire

Comments/Treatments:

Indications of heating.

The orange coloration of this stone is confined to a surface-related layer.

Trade in the UK

Christmas seemed to have been satisfactory for most UK jewellery outlets, but business does not seem to have slowed down in the New Year. Confidence is coming back after the September 11 outrage and let us hope that 2002 will be a good year for the jewellery trade.

Harry Levy

A 'cultured' language for stone dealers

Recently, on their website, Gemesis have been offering to sell 'cultured diamonds'. What are cultured diamonds? Are they in some way more sophisticated than the ones we normally see on the market? Perhaps the qualifying word 'cultured' refers to the diamonds themselves and they are in some way different from other diamonds.

The last option, of course, is the case – they are synthesized or

man-made diamonds.

So why do we not have 'cultured' rubies, sapphires and emeralds? We come across only cultured pearls. Why have others not tried to sell man-made diamonds as 'cultured' ones? In the June issue of *G&JN* I will be explaining some history of the lexicon that the gem trade has acquired when referring to man-made stones.

Harry Levy

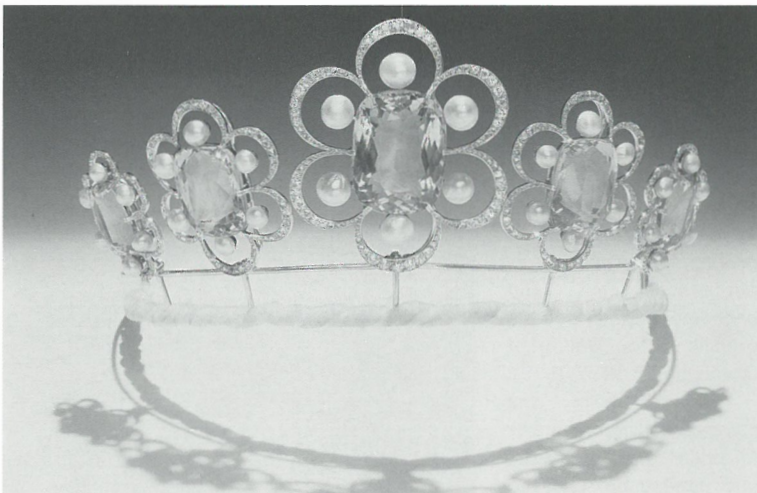
Tiaras

(continued from p.21)

Pearls are also prominent and organic gemstone enthusiasts will be fascinated by pieces composed of coral, jet, tortoiseshell with amethyst, horn with moonstone, a sheep's pelvis set with rhinestones and one made of fishscales!

Geoffrey Munn has skilfully combined the traditional with the unconventional in this excellent exhibition to demonstrate that the tiara is alive and vibrant today.

Mary Burland



Aquamarine, diamond and pearl tiara, mounted in platinum, by Georges Fouquet, Paris 1908. Courtesy of the V&A © private collection

The Danish Amber Museum

On the beautiful, sandy beaches of the west coast of Denmark it is sometimes possible to collect amber, washed ashore from the North Sea.

Danish amber was not formed locally. Much of Denmark still lay under the sea when amber was being washed there from the north, from what is now Norway and Sweden. It also came from the

Baltic in the east, swept to its destination by huge melts between the ice ages.

Three years ago an amber museum was opened in the small town of Oksbol, close to the west coast and a short drive from both Esbjerg where the ferries dock from England, and from Billund, home of the original Legoland.

The Amber Museum is housed

in a converted dairy and is light and modern. The exhibits are based on baltic amber but cover every aspect from pictures of what the original forests would have looked like, through examples of stone age carvings found locally, medicinal uses, comparison with other resins, examples with inclusions, jewellery through the ages, pressed amber, to modern, plastic fakes. All these are displayed in well-lit cases with extensive captions in Danish and English.

It could be said that it is a shame that the museum is so far from Copenhagen where it would attract more visitors, but it lies in the heart of amber country and, for anyone interested in this fascinating resin, it is well worth the detour.

The museum has produced a small book that is both a souvenir and a good introduction to amber (see book review on p.28).

Maggie Campbell Pedersen



The Amber Museum, Oksbol, Denmark.

Pearls

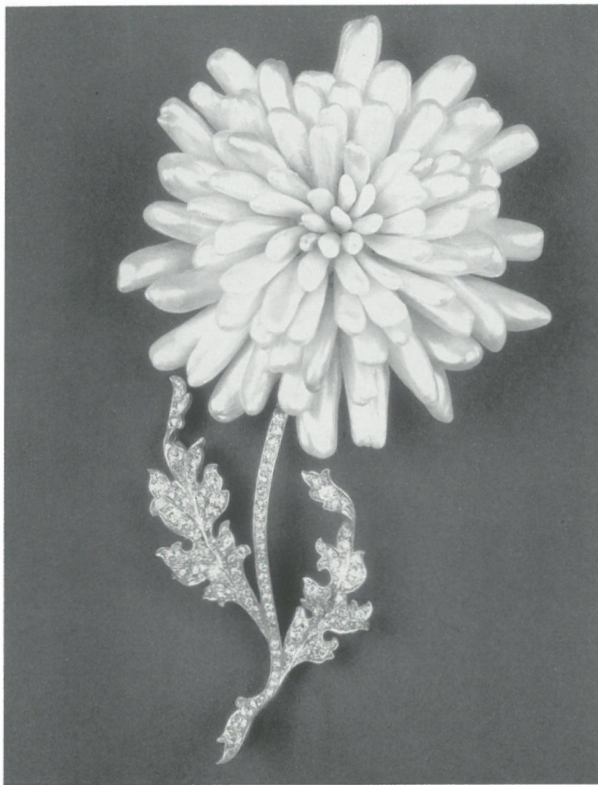
Sara Chambers reviews the Pearl exhibition at the American Museum of Natural History

During a recent visit to New York, I took the opportunity to view 'Pearls', the recently opened temporary exhibition at the AMNH. It proved to be a worthy successor to the phenomenally successful exhibition 'The Nature of Diamonds' of 1997/8.

On entering the gallery, I was confronted by an entire 'wall' of pearls, one pearl deep, encased between transparent perspex sheets. Adjacent to this 'pearl screen', a silent projection of pearl diving had me mesmerized for several minutes as I watched divers repeatedly plunge from ceiling to floor, harvesting oysters. In the introduction, the themes of glamour, religion, royalty and tradition are used to draw the visitor into the 'exclusive' atmosphere of gallery, setting the scene for an exhibition which successfully interweaves the strands of science, art, history and culture to tell the complex story of pearls.

The origin and formation of pearls is covered early in the exhibition, using a combination of factual explanations, illustrations and beautiful examples. Video and interactive displays examine the formation, composition and structure of pearls and the resulting influence exerted on their physical and optical properties. Superb SEM images of pearl microstructure, contrast with many fine examples illustrating pearl diversity.

A large graphical 'evolutionary tree' of the phylum Mollusca highlights the ancestry and wide



A chrysanthemum brooch, an example of the fine jewellery on display at the exhibition. Made of gold, platinum and diamonds with a creative use of freshwater Mississippi River pearls, the brooch was a design by Paulding Farnham for Tiffany & Co. (1904). On loan from the collection of R. Weatherly. © Wartski, London.

range of pearl producing species. Once again, specimens (both shells and associated pearls) are abundant. 50 million years old fossil pearls (on loan from the NHM) are among the exhibits which bring this potentially 'dry' subject area to life.

The section on marine pearls focuses on gem-quality pearls and the molluscs that produce them. Many examples of individual pearls and of cultural artefacts into which they have been incorporated are included. Among the most impressive are a four strand necklace of natural marine pearls from India, a 27 mm horse conch

pearl incorporated into a spectacularly ornate tarantula brooch, and a superb necklace of Caribbean conch pearls.

The origins and diversity of freshwater pearls forms another section. For me the prize specimen here is a brooch which belonged to Queen Victoria which incorporates four fine Scottish freshwater pearls.

Audio-visual displays highlight North American freshwater mussel farming, and in particular the Mississippi River drainage region. The historic importance of this area to the mother-of-pearl button industry of the early 20th century is contrasted with its current significance as the main producer of bead nuclei for the majority of the world's cultured salt-water pearls. Environmental and conservation issues, including population management and sustainability, are referenced in this section.

At the time of my visit in November 2001, the section of the exhibition dealing with the production of cultured pearls was disappointingly incomplete, the events of September 11 having disrupted the delivery of a number of specimens and artefacts from overseas. However, some models of farming and harvesting methods, and examples of harvesting equipment and grading tools hinted at what was to come. A simple display constructed using a large pearl filled cylinder divided up into sections, illustrated the culturing success rate of 50% loss (no pearl);

25% unmarketable; 20% marketable (low to medium quality) and 5% good quality. Such simple displays are often the most successful in delivering information.

The final section of the exhibition deals with the history of human fascination with pearls. A wealth of archaeological and historic cultural objects drawn from India, China, Persia and Russia illustrate the cultural appeal of the pearl through history. From Ohio the extraordinary number of pearls and pearl artefacts found and assigned to the Hopewell culture (200BC to AD 200), indicate the degree to which pearls have been and still are revered. The presence of the pearl 'La Peregrina' ('The Incomparable'), loaned by Elizabeth Taylor, and simply and beautifully displayed, brings the section and the exhibition to a perfect conclusion.

The overall impression of the gallery is one of quiet opulence with both lighting and display materials chosen to draw the eye to, and not distract from the objects on display. The background lighting in the gallery is subdued, with individual objects being well, but unobtrusively lit. Warm woods and rich velvets provide perfect foils for many of the more ornate objects. There is an abundance of plain, non-reflecting glass and a welcome absence of 'hi-tech' chrome. The careful planned layout ensures that a high level of anticipation, and therefore interest, is maintained throughout the exhibition visit.

If you are planning a visit to New York or Chicago in the near future, 'Pearls' is to be recommended. As a member of the public, I felt privileged to view such a richness of specimens; as a natural scientist and gemmologist, I was impressed with the quality and depth of subject coverage. Finally, as a museum curator, I felt relief that perhaps the tide is at last turning away from the 'ultra modern' exhibition style, which in my view is often ill-suited to the display of this type of material.

Sara Chambers

Gem and Mineral Shows

Rock 'n' Gem Shows

<i>Cheltenham Racecourse, Prestbury Park, Glos</i>	13/14 April, 20/21 July
<i>Brighton Racecourse, Brighton, East Sussex</i>	20/21 April,
<i>Newark Showground, Winthorpe, Notts.</i>	27/28 April
<i>Kempton Park Racecourse, Sunbury on Thames, Middx</i>	8/9 June,
	10/11 August

All shows open 10 a.m. to 5 p.m. Enquiries to The Exhibition Team Ltd.
Tel: 01628 621697 (e-mail: Rockngems@aol.com)

British Lapidary & Mineral Dealers Association (BLMDA)

<i>Ilkley Gem & Mineral Fair 2002</i>	
<i>The Winter Gardens, Ilkley, Yorkshire</i>	4 May
<i>Harrogate Gem & Mineral Fair</i>	
<i>The Old Swan Hotel, Swan Road, Harrogate, Yorks</i>	24,25 and 26 August

Open 10 a.m. to 4.00 p.m. Fair Organizer Rex Cook on Tel/Fax: 01282 614615 (www.blmda.com)

Enamelling for Equality: Enamels by Ernestine Mills

An exhibition to be held on 16 April - 14 July 2002 at the Cecil Higgins Art Gallery, Castle Lane, Bedford MK40 3RP.

Among notable women artists of the past is Ernestine Mills (1871-1959), a metalworker and enameller. Mrs Mills was taught by the leading enamellist of the 1890s, Alexander Fisher.

Today her works are represented in museum collections around the world and this exhibition will draw on these and private collections. The exhibition is curated by Ernestine's great-niece, Irene Cockroft, who is

the leading authority on her work. A full review of the exhibition is given on p.32. Group tours are welcome by appointment, and enamelling demonstrations and special events will be held at times to be announced. For more details contact the Art Gallery on telephone 01234 211222, fax 01234 327149 or Email: chag@bedford.gov.uk. The website is www.cecilhigginsart-gallery.org

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Tiaras

Tiaras: A History of Splendour

Geoffrey C. Munn, 2001. Antique Collectors' Club, Woodbridge. pp 432, illus. in colour. Hardcover. ISBN 1 85149 375 1. £45*

Most attractive and easy to read review of the history, development, design, manufacture and ornament of artefacts designed to be worn in the hair, the text includes illustrations drawn from both pictures and photographs: the standard of reproduction is as high as the reader would expect from this publisher and there is a useful bibliography.

The subject is addressed chronologically beginning with the classical revival and the influence of Napoleon and Josephine, then passing through a discussion of hair fashion and court and social mores and the costume ball to the revival of styles in France and Russia and Russian style. The work and influence of the Tiffany Company in the United States has a chapter to itself and the final chapter discusses Art Deco and beyond (up to the present day). There is a summary of tiaras in crown jewels and royal collections. Footnotes throughout the text are rounded up at the end.

The book is a pleasure to leaf through though reviewers, of course, do much more than that. Where appropriate the books are passed among the immediate family circle and in this case warm approbation ensued.

Michael O'Donoghue

Tiaras Past and Present

Geoffrey Munn, 128pp, 109 illus. mainly colour, further reading, index, hardbound with DW, V&A Publications, ISBN 1 85177 3592, £12.95*

Geoffrey Munn's large and scholarly publication *Tiaras: A History of Splendour* is reviewed above. This extremely elegant small book has been published by the Victoria and Albert Museum as a popular companion to their exhibition of the same name (see p.21) which is curated by Geoffrey. It is not a catalogue of the exhibition, but a stand-alone book that gives a brief view of tiaras over their known history of over two thousand years to the modern day. The majority of the illustrations are of spectacular tiaras on their own, but there are also photographs of original designs and of tiaras being worn. The pictures are beautifully reproduced, indeed much better than in the larger book. This is particularly apparent where coloured stones are shown. Irritatingly, the tiara on the front of the dust wrapper is not reproduced inside the book, although the

illustration is described inside. When the wrapper disappears, the caption will still frustratingly be there. Presumably the publishers do not consider the wrapper an inalienable part of the book, or else why would the title be elegantly blocked in silver on the spine! It is always very difficult to tell a story when there are severe limitations on space, but Geoffrey has succeeded brilliantly in relating the text to the illustrations and providing a fascinating and surprisingly comprehensive history, with a good sprinkling of anecdotes. It is particularly encouraging to see, in the modern section, that both design and manufacturing skills still flourish. This is a delicious little book that is remarkably good value.

Nigel Israel

*Available from Gem-A Instruments tel: 020 7404 3334; fax 0207 404 8843; e-mail: gagtl@btinternet.com

Amber

Mariann Ploug, Ole Faber and Lene B. Frandsen, 2000. Translated by Michael Cain. Published by Ravnuseet (The Danish Amber Museum). Price: approx. £9 + postage direct from Varde Museum, Lundvej 4, 6800 Varde, Denmark.

This small book on amber is said to have originated because visitors to the Amber Museum on the Danish west coast wanted to be able to take home the wealth of information available at the museum, to read again at their leisure (see article on the museum, p.25).

The book therefore repeats and adds to the extensive captions accompanying the displays at the museum, and the many

illustrations are mostly of the exhibits. This does not, however, mean that the book is a catalogue - far from it. The authors have succeeded in producing a little book that stands well on its own merits and is a very good introduction to amber, and an addition to anyone's collection of books on the subject.

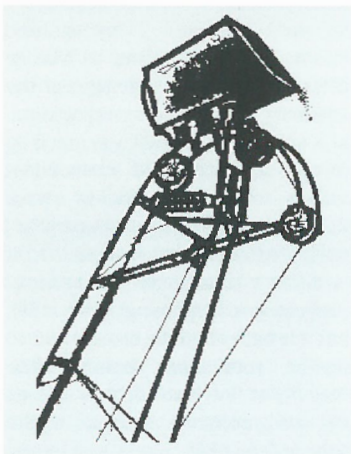
Following a basic introduction to amber world wide, it then concentrates on Baltic amber and its history in Europe, its various uses from jewellery to medicine, its simulants, and how it is mined, worked and traded. Whilst not going into great depth on any subject, it does cover a very wide range in a clear, methodical manner. The English translation is excellent.

Maggie Campbell Pedersen

Lightning Ridge – current mining activity

Bear Williams gives a fascinating insight life ‘on the Ridge’

I was 14 years old when I saw my first opal mine. Even back in the '60s I expected to see more than just picks, shovels and iron buckets. I guess it made enough sense then. And with the problems the miners ran into, up came the solutions. It started as a natural and simple progression. As a miner dug deeper into the ground, he could not toss the shovel load out of the deepening



The 'Windlass': an early method of removing dirt from the mine

hole, so up went the bucket on a rope idea, similar to that found at a well. But that too grew old quickly and so along came the 'windlass' which consisted of a mechanized track system that transported a much larger bucket from below, up over the hole, and into the air to create a pile several feet away. Imagine a roller coaster that dumps its load on the first downturn. Candles had a two-fold purpose then. An old timer called Nugget who had a stainless steel hairpiece welded onto his pate said: "Ye can see the colour better thisa way an' it'll tell ye if ya gots foul air." Such was the way back then.

Modern mining methods

On a trip to Lightning Ridge in

the summer of 2001, the technology of the latter 20th century had made its footprint in the opal mining process. Our place of visit: the Glengarry, Grawin Sheepyards. This area is located about 70 km southwest of Lightning Ridge. Prospecting there may begin by the utilization of electromagnetic surveys or aerial photographs revealing intersecting lineaments, but if there happens to be an old box tree growing at the spot with an emu under it, its that much better. At a given location the prospector then takes a 9 inch auger drill to obtain core samples. This is a fairly powerful hydraulic drill often mounted on the back of old military trucks. Cutting through sandstone, claystone and silcrete layers, samples come up and are examined. If colour is detected in the core samples the prospector would then employ the use of a Caldwell drill rig. This rig has a telescoping drum with teeth, is about a metre in diameter and will quickly excavate the actual mine shaft. From this stage a metal collar is placed on the top of the entrance and a ladder is fastened on. Opal is generally found between

Bear and Cara Williams are owners of Bear Essentials, a loose coloured stone company located near St Louis, MO, U.S.A. Their annual treks take them to Thailand, Burma and Australia.

10-30 metres deep. Once 'down under' the miner commences his horizontal excavation following the opal layer which is typically just below the sandstone and just above the claystone level.

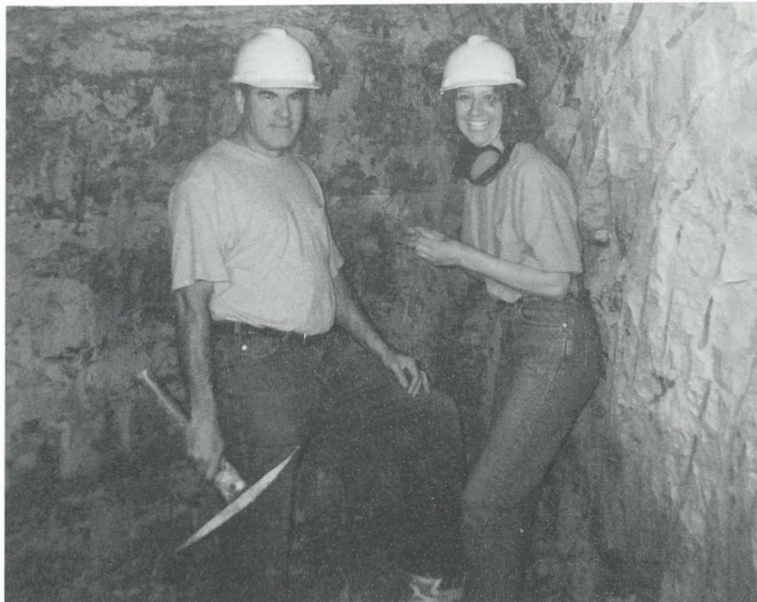
Like just about every mining process, many tonnes of overburden must be moved just to find a few stones. But with electrical lights from a generator above ground, a pneumatic digger automatically eating its way through the stone and the use of a huge vacuum machine called a 'blower', the miner's work has now become quicker and easier.

Getting down and dirty

It still is not easy work, as my wife and I quickly discovered. Mr Brian King whose mine we visited put on our hard hats and protective ear coverings and pointed down.

A typical mine shaft at the Ridge, consisting of the ladderway, vacuum tube and electrical line. The zinc collar at the top stops erosion and fastens the ladder. © Bear Williams 2002





Author with wife Cara, 20 metres below ground. © Bear Essentials 2002

Seeing the pea-sized light at the very bottom made the 20 metre drop look that much further down. Gripping tightly onto the ladder it was hand over hand, each appendage determined to support your full weight at any given time. Every metre the ladder is unceremoniously hooked onto another length, and at that first joint you remember to breathe. When you reach the bottom it's another world. At first it was a bit too cosy for me, but as soon as I saw colour on the walls of the earth, that play-of-colour that only opal can give, I forgot where we were.

The sound of the jack hammer and the blower transported me back to reality and the workings of the mine. The blower can easily suck anything that can fit into its hose including watches, shoes and your head if you let it. Easily transporting thousands of pounds, it deposits it into the large dump truck above. Most of this rock has been given a perfunctory glance and is taken off site. Since the opal found in this region is in seams, it is collected while underground. This is unlike the other material found in 'nobbies' where all the dirt is taken to be

washed in puddlers to find the stones.

Fossicking and ratting

Visitors may fossick or 'spec' for opal in a field given they have first obtained permission from the landowner or claimholder. Another form of specking known also as 'noodling' involves looking through those piles of dirt excavated from the mines. While it's no problem having a go at it around the dump sites, you had better make your presence known if you enter a miner's claim area, you could be mistaken for a 'ratter'! They will steal opal out of an unattended mine. Ratters, usually caught at night when the miners are back at their camp are dealt with by the local law. Back in the old days Nugget "wouldah jess hung'em". But then again just a year back, one ratter's camp was blasted with dynamite. The modern method perhaps? Most times however they are identified and run out of town or arrested.

Mining procedure

Many residents in Lightning Ridge are semi-permanent, which a summer there will explain. But no

one seems to truly know how many really live there. Some say 2500, another gnarly old salt originally from Turkey reckons there are 8000. The post office says 5000.

If you are in the business of mining in Lightning Ridge, as an individual you are permitted to hold only two claims at once – a good idea for everyone and it keeps huge corporate mining concerns out. First a miner obtains an opal prospecting licence (OPL) and if he finds colour he will go to register his claim. The area is 50 m by 50 m which he must peg and post to establish his mineral claim. Work then begins.

In some background information given to me by Maxine O'Brien, who is the Manager of the Lightning Ridge Miners' Association, she states, "The industry is made up of an estimated 1000 independent miners who collectively have approximately 70 million [Australian] dollars of equipment invested. ... It is difficult to estimate the value of production of Lightning Ridge opal, but it is believed to be around A\$200 million retail per annum. The majority of fine black opal is sold as cut and polished stones to the Japanese market."

Reclaiming the land

Another good idea that developed through the Department of Mines and the Miners' Association at the Ridge is that in order for a miner to get the next claim he must have left the land of his previous mine in good shape, i.e. the dirt is not in piles, the mine shaft is capped and the area is clean. This 'rehabilitation' is done to ensure a safe and useable environment for the sheep farmers or other future use. Other codes of conduct suggested by the Department of Mineral Resources include 'Do not light open fires during bush fire season' and 'No driving in the fields during wet weather'. Fixing the roads will ultimately cost money and make the drive in between repairs murder on the vehicles and passengers.

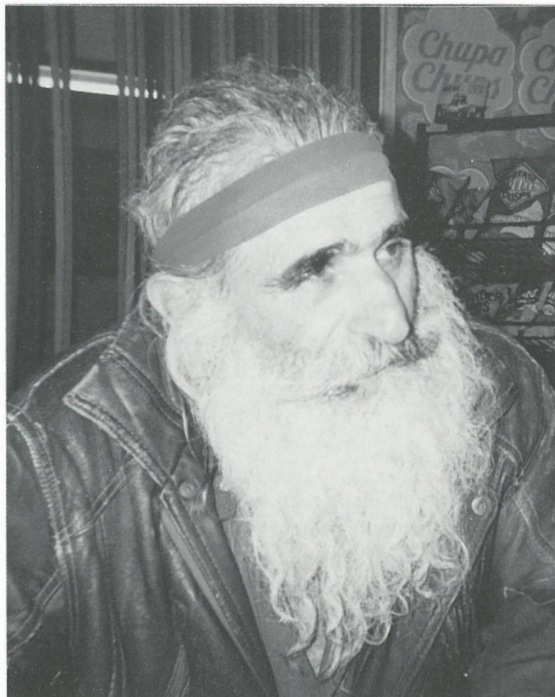
Most miners will conscientiously follow the suggestion knowing it just makes good sense.

Buying process at the Ridge

The traditional selling process is reversed in the Ridge. The buyers advertise they are buying and the sellers remain low profile. While the more established buyers may actually maintain a residence in the Ridge, buying often will consist simply of getting lodging at the corner motel. One spot in particular has blackboards outside the room and you write your name on the outside. This is an invitation for miners to call on you to show you their material. A notice can be posted at the pub that you are looking as well. Of course, it always helps to know someone as reputation is everything. It takes years to learn how to look at opal, knowing where and how to cut it. Then there is the evaluation of the finished stone. If you were to have a 15 x 20 mm opal with a black base and various bright colours but predominately red all in a harlequin pattern and it looked vibrant at every angle you would be looking at a very expensive stone. Many a fine black opal can go for upwards of £8000

per carat. Please note that harlequin patterns on opals can be confused with other patch or flag designs and the harlequin design is actually very rarely seen. Use the word with discretion.

Spending your days down a mine shaft by no means makes you an expert in putting a value on a piece. Much opal looks more valuable in the rough than it does polished. No miner wants other miners selling too cheap and thereby lessening the value of their stones. The Lightning Ridge Pricing Commission was set up to help miners set fair and consistent prices on opals. It consists of volunteers who come together once a week for miners to bring in opal to evaluate.



An opal prospector. Photo Bear Williams.

Due to the great number of factors that go into grading opals, there can often be a range of calculations.

A fine opal is like a fine painting. We all see it differently.

What is scrimshaw

Following the mention of scrimshaw in my article on baleen (*GJN*, December 2001, p.17), several readers have asked what exactly is meant by the term. The word 'scrimshaw' seems to mean different things to different people, and even experts are not totally clear on the definition. Whilst generally accepted as the term used for a style of decoration on certain ivories and baleen, 'scrimshaw' also means the actual items produced from these and other materials by the sailors on board whaling vessels. Further, 'scrimshaw' can be used as a noun, verb, or adjective.

Scrimshaw became a small industry in its own right as a by-product of the whaling industry. There was plenty of raw material at hand and plenty of time between catches to work the material, and it could be done by all those on board, from the captain down. It was usually for personal use rather than for sale when the vessel returned to port. These craftsmen have sometimes been called 'scrimshanders'.

The best known scrimshaw items are whole teeth – mostly from the sperm whale but occasionally from other whales or walrus – which

have been decorated with illustrations engraved with a knife, sail needle or other sharp instrument and then coloured with ink, tobacco juice or even rust. Popular illustrations were patriotic scenes with flags, whaling scenes and animals seen on the voyage.

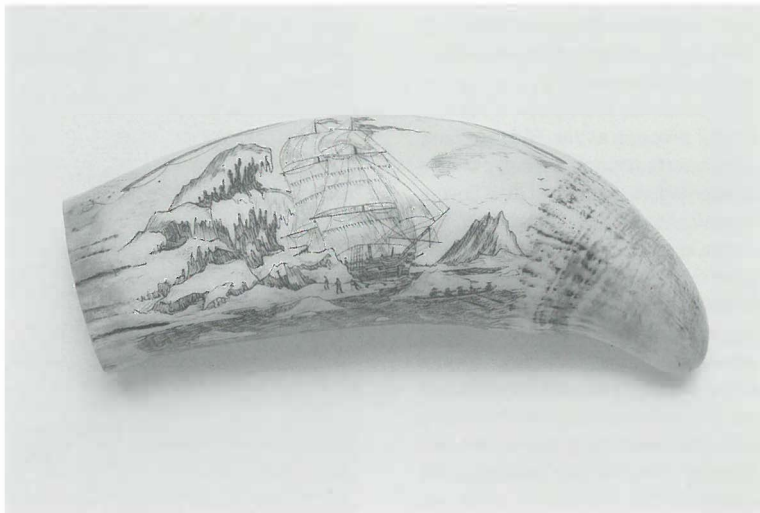
Another well known scrimshaw article is the corset busk, which was the stay running up the front of the corset, often made from a strip of baleen (the keratinous plates carried in the mouths of non-toothed whales). These were made for wives and sweethearts back home and illustrated with such things as

hearts, flowers, pretty ladies or simply geometric patterns.

Just as common yet less well known were all the other items made by the sailors using any materials that were available, including ivories, bone (usually the large jaw bone of the whale but also others), wood, rope, mother-of-pearl, and coconut shell. These were turned into a multitude of items, varying from knitting needles, sewing accessories, kitchen utensils, (pastry crimpers were a favourite), ornate walking canes, baskets, delicate drawing instruments such as rulers and squares, to heavy-duty tools such as mallets and cleats for the ship. The more delicate and fancy items tended to be made of ivory, whilst more robust items that were not made to be admired were of less valuable material.

More careful workmanship went into the things that were going to be on show or be used for delicate purposes. Thus the whole teeth which were for ornamentation were decorated with pictures, whilst sewing accessories were very finely carved though not necessarily etched.

In Europe and Asia organic gem materials have been highly prized for centuries and used in a multitude of different ways for decorative purposes. In America pearls and coral were used in jewellery and more recently some mother-of-pearl



Plastic imitation sperm whale tooth.

has been used as an inlay material, but there has been little or no use of any other organic gem materials with the notable exception of scrimshaw. Although it was already produced by European whaling fleets in the 17th century, it was made famous and given its name by the Americans who, with three times the number of whaling vessels, dominated the industry. The Golden Age of American scrimshaw was the early to mid 19th century.

Scrimshaw has been faked, usually copying whole, etched teeth. These can be very convincing,

especially the later ones made from epoxy resin poured into a silicone rubber mould, given enough weight to simulate ivory and mounted so that the base and the inside are not visible.

Collections of scrimshaw can be seen in the Town Docks Museum in Hull, England, and in various museums in New England in the United States, for example at Mystic Seaport Whaling Museum in Connecticut, the Kendall Whaling Museum in Massachusetts, and the Peabody Essex Museum of Salem, near Boston.

Maggie Campbell Pedersen

The Alchemy of Enamelling for Equality

An exhibition preview by Irene Cockroft

Because of its precious nature and its durability, enamelling has from time immemorial been used politically. It has been used as personal adornment reinforcing status. It has been used for pictorial religious teaching and for creating instruments of devotion. Enamelling has been used as a medium for commemorating famous events and for immortalizing political figures and heroes. In the late 19th

and early 20th centuries enamelling was used in all these age-old ways to support an entirely new phenomenon, Women's Suffrage. The Cecil Higgins Art Gallery, Bedford, is mounting a unique exhibition that transforms social history into a visual treat.

The fusing of two historic ingredients makes Enamelling for Equality a seminal exhibition. The first ingredient is the Arts and Crafts

Enamelling for Equality Exhibition
16 April - 14 July 2002 Cecil
Higgins Art Gallery, Bedford
(see p. 27).

movement. The second is the Women's Suffrage campaign. Enamelling for Equality brings together a dazzling array of art objects to demonstrate how crafty

Victorian and Edwardian women used art as a means of publicising their claim for political equality.

Women's Suffrage

Like all good stories, *Enamelling for Equality* begins *Long Ago...* Way back in 1832 a new Reform Bill extended voting rights to a large section of householders. Without precedent, a four-letter word was inserted. Persons eligible to vote became male persons.

Although prior to 1832 women were not specifically excluded from voting, they were not expected to do so. The vicinity of the rowdy election platform was no place for the gentle sex. However the gradual conferring of voting rights on all males over the age of 21 whilst denying rights to all women, concentrated female minds on the injustice and the danger of taxation without representation.

Three generations of Suffragists were to bear witness to entrenched male prejudice. Not until 1928 were British women granted equal voting rights with men ... far behind most other developed countries.

Arts and crafts

In the 1830s Britain was in the grip of the Industrial Revolution. In 1829 Thomas Carlyle lamented, 'On every hand the living artisan is driven from his workshop, to make room for a speedier inanimate one.' The wealthy became wealthier. The artisan was reduced to an impoverished cog in a machine-driven manufactory. The profit motive led to goods becoming so cheap and shoddy that they began to lose ground to foreign imports. In 1836 architect A.W.N. Pugin advocated a return to the gothic style of the Middle Ages when designer and craftsman were one, as a means to stem 'the present decay of taste'.

In 1837 the government found it necessary to establish Schools of Design in an effort to redeem the reputation of British manufacture. Art critic John Ruskin (1819-1900) and later, designer and socialist William

Morris (1834-96), took up the challenge to reunite heart, head and hand, and are remembered as the two main founders of the Arts and Crafts movement.

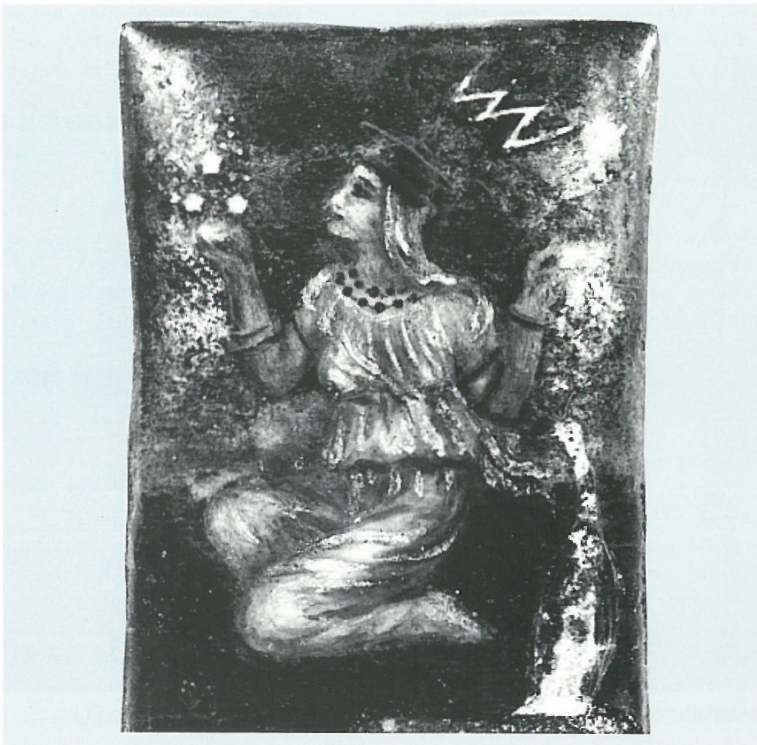
The practical incarnation of the theory behind the movement came in 1861 with the formation of the firm of Morris, Marshall, Faulkner & Co. to manufacture furniture and fabrics embodying good craftsmanship, good design and fitness of purpose. Ruskin espoused a revival of traditional rural crafts to revitalize the countryside and reverse factory-led urban squalor.

Many cottage crafts like spinning, weaving and lacemaking were the province of the fair sex. Women took grateful advantage of the opening of new markets by Ruskin and other philanthropists.

Rural and working class women were not the only females who needed to earn a living. Marriage as the only honourable profession for Victorian gentlewomen was becoming increasingly less feasible. The preponderance of females to males was growing and the social problem of untrained ladies with no means of support was becoming acute.

The fashion for handcrafted wares was seized upon as a solution to the problem. Arts and crafts seemed simply an extension of approved ladylike accomplishments like sketching and embroidery. All that was required, the authorities reasoned, was a little training to raise existing skills to a commercial standard.

One of the many loves of the chief god in Greek mythology, Zeus, was the forest nymph, Callisto. The nymph was seduced by Zeus in the form of a bolt of lightning. Here Ernestine Mills depicts Callisto thoughtfully wearing a helmet incorporating a lightning conductor. Zeus's jealous wife Hera, disguised as a peacock, observes the illicit union. Callisto is turned into a bear, shot and killed, and transformed into the constellation of the she-bear, Ursa Minor. Callisto's bare state may be intended as a pun. Image 6 x 9 cm © V.Irene Cockroft. Photograph David Cockroft



By the 1870s there was a proliferation of art classes for women in London, the provinces, Scotland and Ireland. Establishments intended to train artisans, were flooded by gentlewomen desperate to learn a craft.

Fine art training including figure drawing from life, was hardly an option for sheltered womenfolk. Females were steered towards the decorative or applied arts such as bookbinding, ceramic painting, lacemaking, embroidery, dressmaking and fabric design. Every opportunity to learn had a waiting list.

Enamelling

In 1886 the director of the South Kensington School of Art invited a French enameller, M. Dalpayrat, to demonstrate the technique of painting with glass and fire to selected students. Few took an interest, dismissing the painstaking process as applied rather than fine art. One student, Alexander Fisher, saw the potential. Fisher developed his own style of enamel on metal painting, and imbued it with Pre-Raphaelite passion.

Fisher in turn taught at the South Kensington School. One of his students was Ernestine Evans Bell. Tina Bell became a disciple of Fisher's style of enamelling and remained so until her death in 1959. Enamel on metal at its best is breathtakingly beautiful and versatile.

Tina and many of her female friends had assiduously studied classical art at the Slade School. Realising they stood no chance in the art market against determined male colleagues such as Augustus John, these young women added craft training to their accomplishments, as a means to earn a living. Thus enamelling gained some exceptional artists. They approached enamelling in a painterly style, with an astonishing degree of success.

Full circle

An orphan at 21, Tina Bell was a typical gentlewoman obliged by fate to earn her living. Her family background was radical. Both parents had campaigned for women's right to vote. Following their premature deaths from cancer, Tina became a ward of militant Suffrage leader Hertha Ayrton. In 1898, Tina married Herbert Mills, a medical doctor who was instrumental in implementing Lloyd George's National Health Insurance Act of 1911. Among Dr Mills' patients was the Pankhurst family.

Mrs Ernestine Mills placed her artistic skill at the disposal of the Women's Suffrage campaign. She enamelled Votes for Women brooches, pendants for imprisoned heroines, and other jewellery that was sold to raise funds for the campaign. A frequent theme of her enamelled tablets was empowerment, lauding the achievements of female saints and goddesses. The art of Ernestine Mills is a tangible record of women's struggle to win political equality.

When Ernestine first began exhibiting her enamels in 1900, she was one of a number of female friends working in this medium made fashionable by Fisher. As the years passed and domestic chores increased for the maturing women, the number of art-enamellers dwindled. Enamelling for Equality reveals major work by high priestesses of the craft such as Geraldine Carr, Mrs Bethune and, it is hoped, Phoebe Traquair. Some pieces have not been on public display since first exhibited a century ago, including two stunning, newly discovered major pieces by the women's charismatic mentor, Alexander Fisher.

In this Golden Jubilee year, visitors will be privileged to see an Ernestine Mills enamelled bowl graciously loaned by Her Majesty the Queen. The bowl was a gift from the artist to the then Princess Elizabeth on her marriage to Prince Philip.

Ernestine Mills's daughter recalled having her childhood nursery taken over for the making of political banners. As Hermia Mills was born in 1902, this probably refers to the parade on Women's Sunday in June 1908. The talented women who had been relegated to training in the decorative, rather than fine arts, turned their hands to designing, printing and embroidering all manner of subversive Suffrage material, teaching each other necessary skills.

The Cecil Higgins Art Gallery provides the perfect setting for this exhibition. It is a Victorian mansion endowed with many treasures of the Victorian and Edwardian eras. The permanent display links to the Enamelling for Equality exhibition at too many levels to enumerate. Follow the S for Suffrage trail snaking back and forth between temporary and permanent exhibits. Don't miss this unique opportunity to catch a glimpse of history through the eyes of a spirited protagonist and master craftswoman. Enjoy a revelation on the political importance of the exquisite and durable art of enamelling.

Joan Bolton King will be giving demonstrations of enamelling techniques at times to be announced. Her new book, *Enamelling, in the Art of Crafts Series*, is a mine of information for both beginners and the more experienced enameller. Work by leading contemporary enamellers will be on sale.

Further reading:

Anthea Callen, 1979. *Angel in the Studio – Women in the Arts and Crafts Movement 1870-1914*. Astragal Books, London
Elizabeth Crawford, 1999. *The Women's Suffrage Movement – A Reference Guide 1866-1928*. UCL Press, London
Joan Bolton King, 2001. *Enamelling, Art of Crafts Series*. The Crowood Press, Wiltshire.

All Change in China and North America

Continual changes in the gem industry demand continual changes in education and exam requirements. Recent visits to China and the USA revealed plenty to verify this demand.

Some parts of mainland China are revealing a most rapid development in progress, more so now than in the previous twelve years of Gem-A involvement there. With development in gem education, instruments, research and synthesis, in huge urban improvements and infrastructure, in retail business and marketing, in so many ways, China is booming. Gem-A is providing services for fifteen far-eastern Allied Teaching Centres, and its newly-developed course notes and exams are set to help more people realize the value of a thorough education and enhanced reporting technique in their efforts to cope with change.

Changes in the gem trade, including the advent of commercially-grown synthetic corundum, stimulated production of the world's first gem diploma course, and the exam for the Diploma in Gemmology, ninety years ago in London. Corundum is at the centre of change, with large-scale synthesis in China reported in the Wuhan and Hong Kong conferences, intense treatment and experiment in Thailand reported and debated in USA, and the great range of colours on offer at the Tucson gem fairs.

The need for a broad-based and high-quality education in gem materials, to a depth necessary to enable rapid and informed observation and decision making, is ever more apparent amid this acceleration of changes. A long-standing but growing mood in the USA is that of recognition of the

relevance of FGA status, promoted originally by Tony Bonanno and his initiation of the AGA. More people in North America are now helping trade movers and non-trade enthusiasts add to their experience or previous training in the most valuable way, by gaining the prestigious high-level world gem qualifications, Gem-A's Diploma in Gemmology and the Gem Diamond Diploma. Amongst those who are contributing direct support, continuing this American tradition of true value recognition, is Cortney Balzan in San Francisco. Cortney again provided Gem-A with its booth at the AGTA show in Tucson's Convention Centre. Ian Mercer and Doug Garrod were assisted by Cortney's manager, Darlene Johnson, plus the full-time concentrated effort of Ann Dale, who brought in her long-established expertise in helping the Association.



Tucson 2002: (From left) Doug Garrod, Ann Dale, Peter Yantzer, Michael Cowing, Elena Semenits, Greg Sherman and Branko Deljanin, at the Gem-A stand.

Terry Davidson, Gem-A's acting CEO, was on hand to encourage the action. Added to all this was the launch of a ground-breaking Gem-A Diploma in Gemmology 'FGA' Scholarship scheme for USA, sponsored by EGL

USA New York, and the *National Jeweler*. A high-profile advisory board will oversee entries received by 1 May. Our heartfelt thanks go to Cortney, to EGL in New York and to the *National Jeweler*, and to all those

who expressed and discussed their continued support for the high value of the Association's services in a changing world. And thank you Tucson for the brilliant sunshine.

Ian Mercer

Short courses and Workshops - Spring 2002

The Rocks We Wear

Wednesday 10 April

Are you fascinated by the sparkly stuff we wear in jewellery? Want to know some more about gemstones without being blinded by science? Then come along to this workshop and let us whet your appetite for gems. Handle a wide variety of stones and find out why your favourites look the way they do.

Gem-A Member price £75 + VAT (£88.12)

Non-Member price £85 + VAT (£99.88)

Bead-Stringing Workshop

Wednesday 17 April

Learn the technique from an experienced stringer. Hints and tips on this day of practical instruction with all beads and stringing materials provided.

Gem-A Member price £108 + VAT (£126.90)

Non-Member price £118 + VAT (£138.65)

Stone Faceting Workshop

Saturday and Sunday 27 and 28 April

This two-day hands-on workshop will enable you to walk away with a stone you have cut yourself. A faceting machine for each participant and expert advice from cutters Roger Young and Jim Finlayson will ensure that the workshop is both productive and enjoyable for everyone. This faceting weekend is a delight and not to be missed.

Price £175 + VAT (£205.63)

Gemstones for Jewellers

Wednesday 1 May

What are the essentials that you need to know about the gems in your workshop or retail outlet? How can you distinguish between various gemstones of similar appearance? Learn about factors affecting value, receive guidance on the care of your stock and advice to give to customers. How can you use this information to improve your sales presentation?

Gem-A Member price £75 + VAT (£88.12)

Non-Member price £85 + VAT (£99.88)

Six-Day Diamond Practical Course

8-10 and 13-15 May (Exam 16 May)

This intensive, six-day diamond grading course plus Certificate exam, places the greatest emphasis on the use of the 10x lens. The course covers:

- Clarity grading using a 10x loupe
- Colour grading with emphasis on grading by eye
- Aspects of cut including symmetry and proportions
- Simulants and treatments
- Description of rough crystals

Price £650 (Inc. VAT)

Photographing Jewellery

Tuesday 2 July

Anyone who has tried to photograph jewellery will know just how tricky it can be. At this workshop Bob Maurer guides you through the basics of this specialized area of photography, enabling you to use basic equipment to maximum effect.

Price £134 + VAT (£157.45)

Student Workshops

Three-Day Preliminary Workshop

15 to 17 April

Gem-A student price £120 + VAT (£141)

Non-student price £156 + VAT (£183.30)

Four-Day Diploma Workshop

20 to 23 May

Gem-A student price £199 + VAT (£233.82)

Weekend Diamond Grading Revision

25 and 26 May

Gem-A student price £120 + VAT (£141)

Two-Day Diploma Practical Workshop

25 and 26 May

Gem-A student price £120 + VAT (£141)

All workshops held at the Gem Tutorial Centre, 27 Greville Street, London EC1N 8TN
Session times: 10.00 a.m. to 4.30 p.m. Sandwich lunch provided (unless otherwise stated).

For further information and a booking form contact Rachel Warner on 020 7404 3334.

Award

Our congratulations to Dr Jamie Nelson (GA Research Diploma) who has been awarded the August Köehler Medal of the State Microscopical Society of Illinois for 'Outstanding contributions to microscopy'. The award was made at the Inter/Micro-2001 Conference and SMSI Awards Banquet held at the Knickerbocker Hotel, Chicago, on 27 June 2001.

How to identify a 'real' pearl

Recently I visited a pearl farm on a small island south of Phuket, Thailand. It is a fairly small operation with 50,000 oysters under water and an annual yield of about 20,000 pearls ranging from 5 to 20 mm. There was an introductory talk in which a girl advised the audience that the simplest way to tell 'real' (i.e.

cultured) pearls from plastic was to take two pearls and rub them hard against each other. The real pearls would survive this, while the plastic ones would crumble. I pass this advice on to *GJN* readers with the caveat: Do not try this at home!

Evelyne Stern

Gem Discovery Club

Some of the most interesting specimens that we see are brought in by Club members. In recent months we have looked at a number of blue sapphires from Asia and in particular from Nepal: many show interesting growth markings which the lapidary has left visible. One Club member is still searching for Kashmir sapphire crystals and has tracked down a number of dealers in the area but so far without success. On the other

hand there seems to have been little attempt to pass off sapphires from other areas as Kashmir material.

Mike Freeman, who won the Tully Medal some years ago, most kindly passed his gem and mineral collection to me last year and the Club has benefited from being able to examine a number of crystals from Africa where Mike worked for many years. We have some very fine crystals of azurite on matrix from the classic locality of Tsumeb, Namibia.

Gem-quality crystals of sphene and of rhodolite were also available, the latter from Tanzania: a cabochon grandidierite (Madagascar) remained unidentified at first but someone spotted it after a time!

We have plans for the development of the Gem Discovery Club which will be revealed in due course. I feel that it has considerable potential.

Michael O'Donoghue

Course Tutor retires

After a record 35 years, the Revd S. B. Nikon Cooper has retired as a Gem-A correspondence course tutor. Nikon qualified in the Gemmology Diploma examinations 1965 and was appointed a course instructor two years later. He was one of a team of three at that time, with Keith Mitchell and Vera Hinton.

The photo was taken recently in Tasmania and shows Nikon with one of his successful students, Mrs Bebs Roper of Hobart. 'She still keeps in touch', said Nikon, 'exemplifying the friendliness I have found through the Association.'

We are sure that his many former students join us in thanking Nikon for his outstanding contribution to the study of gemmology and in wishing him well in the future.



JEWELLERY SALES

Spring sale dates from the auction houses.

Christie's South Kensington

Jewellery: 9 April, 23 April (20th Century Jewellery – Sunday view),
8 May, 21 May (Antique Jewellery), 18 June (Fine Jewellery –
Sunday view), 2 July

Pawnbrokers Unredeemed Pledges: 24 May

Viewing Mondays (9 a.m. to 7.30 p.m.) and Tuesdays (9 a.m. to 12 noon)
prior to sales. Sunday viewing where stated (1 p.m. to 4 p.m.). Tel. 020
7581 7611 (www.christies.com)

Dreweatt Neate, Donnington Priory Salerooms, Donnington, Newbury, Berkshire

Silver and Jewellery, Decorative Arts since 1860: 17 April

*General Antique and later Furniture and Effects, with a Silver and Jewellery
section:* 16 April, 11 June

Sales commence at 10 a.m. Viewing Saturdays (9 a.m. to 12.30 p.m.) and
Mondays (9.30 a.m. to 7 p.m.). Tel: 01635 553553 (auctions.dreweatt-neate.co.uk)

Fellows & Sons, Birmingham

*Antique and second-hand jewellery and watches
(by Direction of Pawnbrokers Nationwide):*

4 and 18 April, 2 and 16 May, 6 and 20 June, 4 and 18 July

Antique and Modern Jewellery and Watches: 25 April, 13 June

Viewing Tuesdays and Wednesdays (10 a.m. to 4 p.m.) prior to sales, and
on day of sale (8.30 to 10.30 a.m.). Tel. 0121 212 2131 (www.fellows.co.uk)

Gardiner Houlgate, The Bath Auction Rooms, Bath

Jewellery: 10 and 24 April, 8 and 22 May, 7 and 19 June, 3 July

Sales commence at 11 a.m. Viewing Tuesdays (9 a.m. to 5 p.m.) and
morning of sale (from 8.30 a.m.) Tel. 01225 812912 e-mail:
auctions@gardiner-houlgate.co.uk

Sotheby's, London

Modern and Antique Jewellery 18 June

Viewing week prior to sale. Tel.: 020 7293 5000 (www.sothebys.com)

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

Royal Ceremonial in the Age of Film and Television

The Oral History of 20th Century Courts

The Society for Court Studies is holding this Golden Jubilee Conference on Friday and Saturday, May 10 and 11. It will study the impact of the modern media on great royal ceremonies from the jubilees of Queen Victoria, through 20th century coronations to the funeral of Diana, Princess of Wales. Royal ceremonial in Europe and the Islamic world will also be examined. The wide range of distinguished speakers will include David Starkey (the Society's President), Lord Snowdon, Robert Lacey and Philip Ziegler. The cost, including lunches, is £120. There will also be a unique concert of Royal and Coronation Music in Westminster Abbey on the Friday evening. For further information contact the Society on: e-mail: admin@courtstudies.com website: www.goodqueenbess.com/scs/pages/homepage.html Fax: 020-7503-9876, Tel: 020- 7503-9903, or write to 'Royal Ceremonial' Bookings, PO Box 14057, London N5 1WF.

Dates for your diary:

Court Jewellers, Splendour, Finance and Intrigue

A symposium on 26 and 27 September 2002 organized by The Society of Jewellery Historians and The Society for Court Studies.

Gem-A Conference 2002

The 2002 Conference is to be held on Sunday 3 November, in conjunction with the Rock 'n' Gem Show at Kempton Park Racecourse.

Presentations will be held throughout the day but allowing plenty of time for delegates to visit the Show. Further details will be given in the June issue of *GJN*.

Scottish Conference

The 2002 Annual Conference of the Scottish Branch of the Gemmological Association is to be held at the Queen's Hotel, Perth, from Friday 3 May to Monday 6 May.

Programme

3 May	CHRISTINE REW – Material innovations
4 May	PROFESSOR ALAN COLLINS – Coloured diamonds TED THEMELIS – Glimpses from the treatment laboratory BRIAN DUNN – Fin de Siecle jewellery: the Naughty Nineties JIM FINLAYSON – The faceting revolution
5 May	PHILIP STOCKER – Gemmology and the expert witness TED THEMELIS – Gemstones of Myanmar Workshop sessions
6 May	Field trips (weather permitting)

For further details contact Catriona McInnes on 0131 667 2199

e-mail: cm@scotgem.demon.co.uk

Gem-A and SJH London events

Details of times, venues and prices are given on p. 40

3 May: Gem-A lecture

New aspects of cut in round brilliant-cut diamonds.

JOSEPH TENHAGEN

With the use of controlled colour-coded red, green and blue light entering through the crown in specific order and angular relationships, it is possible to visually demonstrate a diamond's internal light handling capability. Using the methods developed by Joseph Tenhagen, it is now possible to see and illustrate the diamond's proportions, symmetry and the amount of brilliance (light return) through the crown and the amount of light lost through the pavilion. These visual representations change with even the slightest change in any one of the diamond's proportions or symmetry. In fact, in his research to date, no two diamonds have had exactly the same visual representation.

Joseph W. Tenhagen, FGA, GG, NGJA, majored in geology at the University of Miami. He is a Past President and Past Secretary of the Diamond Bourse of Southeast United States Inc., and is currently a member of the Board of Directors. He has been publisher of the *Diamond Value Index*, Pricing Advisor to *The Guide*, and has published papers in trade journals.

14 May: SJH lecture

Frédéric Boucheron from 1858-1902

MARIE-NOËL DE GARY

Marie-Noël de Gary was formerly Curator of the Cabinet des Dessins at the Musée des Arts

Décoratifs in Paris and is still in charge of the jewellery drawings there. In 1995 she took up the post of Chief Curator at the Musée Nissim de Camondo. She has been working on the Boucheron archive and her lecture concentrates on Frédéric Boucheron and the firm during the 19th century.

2 July: SJH lecture

Redeeming Birmingham: the work of T. & J. Bragg

SHENA MASON

Shena Mason is a former editor of the trade journal *British Jeweller*. Since 1990 she has worked on several Birmingham Museum and Art Gallery projects, including the Museum of the Jewellery Quarter and Soho House, on both of which she has given Society of Jewellery Historian lectures. Her book *Jewellery making in Birmingham, 1750-1995*, was published in 1998. Her lecture traces the history of the influential Birmingham jewellery firm of Thomas and John Bragg and its progenitor the 18th century buckle-maker John Bragg. Under the leadership of his son Thomas and grandsons Thomas and John, the firm diversified, grew and prospered during the 19th century, drawing widespread attention to itself and the Birmingham jewellery trade, when John Bragg persuaded a group of Birmingham jewellers to exhibit jointly at the International Exhibition of 1862. By the 1890s the Braggs were highly regarded general jewellers, known nationwide for their civic regalia, who included members of the Royal family amongst their clients.

My old trickster was back in town again. He came to the office and claimed that he did not want to sell me any stones but wanted to buy some sapphires. This intrigued me and he asked for two 7x5 mm oval sapphires. We agreed to a price but then he dropped his bombshell – he had no money to pay for them but he was willing to trade. He showed me a parcel of 7 x 5 mm oval green and pink tourmalines. I would not agree to a straight swap and at last we agreed that I would take one pink tourmaline plus two green ones in exchange for my two sapphires.

He then asked for three 5 mm round sapphires. In this instance he gave me three pink stones and two green stones of the same size in exchange.

"I have four pink and four green square tourmalines left", he said. "How many square sapphires of the same size and shape will you give me?" Assuming the same rate of exchange as in the first two transactions how many sapphires should I give him?

Solution to the last puzzle

The answer to the last problem is based on a well know mathematical rule known as the Pigeon Hole Principle. This states that if you have X pigeon holes and Y letters to put into these boxes, if Y is greater than X then at least one hole will have more than one letter in it. Thus if I have 11 letters to post and only 10 holes in which to post them, I can put one in each box, but I can only do this for 10 letters. The last letter must go into a hole that already has a letter in it. Thus one box will have more than one letter in it.

The same principle applies to the last puzzle. As the number of stones exceeds the number of stone packets, and no packet is empty, at least two packets will have the same number of stones in them.

Harry Levy

Gemmological Association and Gem Testing Laboratory of Great Britain

London

Unless otherwise stated, meetings will be held at the Gem-A Gem Tutorial Centre, 27 Greville Street (Saffron Hill entrance), London EC1N 8TN. Further details of spring meetings are given on p.39.

9 April and 21 May. Private viewing and curatorial tour of the Tiaras exhibition at the V&A. Fully booked.

3 May. JOSEPH TENHAGEN

New aspects of cut in round brilliant-cut diamonds
2:00 to 4:30 p.m. Tickets £7.50 Gem-A members (£10.00 non-members)

Midlands Branch

Friday meetings will be held at The Earth Sciences Building, University of Birmingham, Edgbaston, at 6.30 for 7.00 p.m. Admission £2 for a member. For further information call 0121 445 5359. Gem Club is held from 3 to 6 p.m.

29 March. MARTYN PUGH

The art of the goldsmith and silversmith

26 April. DR JAMIE NELSON

A fascinating insight into the behaviour of light in gemstones and the idiosyncrasies of gemstone cuts. The meeting will include the Branch AGM.

19 June. Gem Club

Photomicroscopy with Doug Morgan and David Larcher

22 June. Summer Supper Party.

North West Branch

Meetings will be held at Church House, Hanover Street, Liverpool 1. For further details contact Deanna Brady on 0151 648 4266.

17 April. DR ROGER HARDING

Gems in the collection of the Natural History Museum, London

15 May. ROSAMOND CLAYTON

Diamonds – the fourth dimension (cut)

19 June. Bring and Buy

Scottish Branch

For further details of Scottish Branch meetings contact Catriona McInnes on 0131 667 2199.

3 to 6 May. Annual Scottish Branch Conference

To be held at the Queen's Hotel, Perth.

Speakers: TED THEMELIS, PROFESSOR ALAN COLLINS, CHRISTINE REW, BRIAN DUNN, JIM FINLAYSON and PHILIP STOCKER.

Further details of the Conference are given on p.38.

South West Branch

For information of branch events contact Bronwen Harman on 01225 482188.

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. 39.

30 April. JACK OGDEN.

Hot flames, cold steel: the manufacture of Georgian and Victorian jewellery.

14 May. MARIE-NOËL DE GARY

Frédéric Boucheron

2 July. SHENA MASON

Redeeming Birmingham: the work of T. & J. Bragg

24 September. ANN LOUISE LUTHI

A history of hair jewellery.

22 October. JUDY RUDOE

Jewellery at the Great Exhibition

26 November. CHARLOTTE GERE

Victorian romantics: dressing up in the 19th century