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Gem & Jewellery News

Queen Marie of Rumania at her coronation in 1922, wearing the crown by Falize.

Falize: a restless imagination

A synopsis of the lecture given by Katherine Purcell to the Society of Jewellery Historians on 2 November 1998

Queen Victoria's granddaughter Marie declared, "I want nothing that a modern Queen may have. Let mine be all medieval", before she and her consort Ferdinand were crowned King and Queen of Rumania in 1922. It was the firm of Parisian jewellers Falize which fulfilled her ambition and created for her a gold crown suspended with lengthy gold pendulae in the Neo-Byzantine taste.

The three generations of Falize were the subject of the lecture. Having succeeded in tracing the Falize descendants through the family tombstone in November 1988, Katherine Purcell discovered a remarkable archive consisting of hundreds of watercolour designs and photographs of 'lost' pieces. This discovery led to ten years of research into the Falize family's life and work which have culminated in a book devoted to the firm, which will be published in June 1999.

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Editorial

Royalty and Gemstones

Surprisingly this heading has not come up before, considering how great an influence the members of the British and European royal houses have had upon jewellery design and choice of stones (see Falize p. 17).

I write with some irony of course since royal jewellery is displayed far more than family items so that the same pieces crop up time and time again. Perhaps this is why royal influence is not strongly biased towards the experimental and tends towards conservative, well-tried designs: this is understandable since the general public find the experimental piece goes out-of-date quite quickly and is also difficult for journalists to describe or the mass market to copy. Copying also needs stones which are in regular supply. The three-strand pearl necklace serves most occasions very well: the diamond tiara and matching accessories have limited use and need the special lighting conditions that most extra-Palace events do not provide.

Nevertheless the pattern of royal occasions, state and family, sets the scene for the wearing of a wide variety of jewels by quite large numbers of people, not all of whom need to be quite so restrained in their choice of item. Jewellery cascades down the social ladder and in time reaches a wide section of the population: royal weddings bring jewellery to everyone's notice. A coronation gives the widest publicity of all: even though the greatest jewellery items of the regalia are not quite food for the copyist the fact that they may be great gemstones makes us think in the ornamental context.

The recent publication of the Stationery Office *Crown Jewels* book, though too large and expensive for general reading, will shine a spotlight on major historical pieces in such a way that interest in the links between royalty and ornament will surface once more. Jewellery historians and gemmologists will spread information from the forthcoming Symposium to be held in April (see p. 27): the wedding of HRH Prince Edward will be another royal event at which perhaps a wide range of jewelled items will be on show. The lead-in to the millennium will have a number of jewelled signposts.

Michael O 'Donoghue

Members of the GAGTL wishing to raise issues concerning GAGTL activities are reminded that they may contact the Chairman of the Members' Council, Colin Winter, c/o the GAGTL, 27 Greville Street, London EC1N 8TN.

The Millennium – a marketing tool

In the Christmas edition of *Gem and Jewellery News* I asked what sort of year end our traders would have. From what I hear it was not a particularly good season and many of those who had cash flow problems continue to have them. We are approaching the Millennium and most trades are going to use it as a marketing tool. So what is the jewellery trade going to do?

Special hallmark

The Assay Offices are producing a special Millennium mark and this should help sell more precious metal jewellery. It will be up to the trade and individual jewellers to exploit this, to increase their sales this year and perhaps bring out pieces of jewellery with a Millennium theme or at least to bear a tag to that effect. As I keep writing in this column, it is the independent high street jeweller who is having business taken away by other outlets and he must fight to retain a share of the market. As one walks down any high street today, the 'For Sale' boards or the 'Sales' signs for merchandise are indicative of business moving to the malls and to the large outlets who seem to eat up their small rivals.

The jewellery industry is unique in that it has an individualistic component both in its making and in some of the materials it uses, something that cannot be replicated and sold in thousands through large outlets. There is a very strong and romantic tradition in buying and keeping jewellery as heirlooms, and the challenge to this is in the lower end of the market where people now buy cheap articles to be worn a few times and then thrown away. As long as the jeweller can exploit this difference he will have a business.

Branded diamonds

I suspect that diamonds will feature prominently in the Millennium build-up. You may recall that I wrote about De Beers branding of diamonds (*GJN*, June 1998, 7 (5), p. 35) and I still feel that many sections of the trade have not fully understood what this means. They continue to think that De Beers is moving into the retail outlets. I do not see this being the case. They are established as the suppliers of rough diamonds to the trade and they will do nothing to jeopardize this position.

Their branding notion came about as a method of guaranteeing natural diamonds in the face of a possible threat from synthetic ones and they found that it could also be used to distinguish the stones they help market from those that may come from other sources. They will exploit this to their own benefit and to the benefit of their sight holders. I suspect they may produce a Millennium brand for a limited number of polished stones which will be marketed through those sight holders who are cutters and polishers of diamonds. With the publicity that only De Beers can generate, they will create a huge demand amongst the buying public to go for these stones, and such stones will sell at a premium over similar stones which will not bear the Millennium brand. They will have a premium because they will be severely limited in numbers, unlike hallmarked jewellery, and after the Millennium this may establish a continued public demand for De Beers' branded stones.

I will be interested to see if other sections of our trade will do something special to increase their sales for the Millennium.

Emerald enhancement: where do we go from here?

I have recently returned from a trip to Tucson where I attended a meeting called by emerald dealers from Colombia to restore and increase the sale of emeralds. The sales of emeralds, especially the better quality ones, have gone down dramatically in recent years. This has been due to the publicity generated in the trade over the filling of their fissures with various oils and resins. This is part of our disclosure debate and since it is such an important part of the trade, let me try to explain again how the present situation has come about.

Oiling

Most natural emeralds have open fissures which remain after polishing. They could be totally eliminated by cutting the stone round them but this would leave us with only small stones. Traditionally when emeralds had been cut and polished they were immersed in natural oils which seeped into the open cracks making them less visible. Sometimes the process was helped by heating the oil as this reduced its viscosity. Another method to obtain total penetration was to carry out the process in a vacuum. All these methods left the oil exposed to the air and over a period of time it would evaporate. Sections of the trade and some laboratories thought that this was something that should be declared at the point of sale, but the emerald producers and dealers thought trade might suffer and the oiling of emeralds was not declared. This position applied to colourless oils only; if the oil was coloured then most sections of the trade regarded the process as one which should be disclosed.

Resins

Since oils are volatile and will eventually evaporate from the emerald, cutters began to experiment with other agents, especially resins. These are thicker and less volatile than oils and hence should stay in the stone for a longer period. Further, it was realized that one would get a better effect if one used a substance that had a refractive index as close as possible ▶

◀ to that of emerald. Eventually a synthetic resin with a trade name of Opticon came to be extensively used. It was thought that if the resin could be solidified within the emerald then the process could be permanent. There are hardening agents which can be mixed with the resin to solidify it (indeed, this is the basis of superglues) and this was attempted, but proved unsatisfactory. In some instances the hardened filler put pressure on the stone making it more brittle and a knock or attempts to repolish or re-cut the stone could cause it to shatter.

To overcome these problems some cutters modified the process by filling the stone with unhardened resin, often done in a vacuum, and then applying the hardener to the surface of the stone. This sealed the resin inside the stone with the intention of making it more permanent.

As knowledge of these new processes spread the trade became very wary, fearing consumer dissatisfaction. Many retailers stopped selling emeralds and this stopped dealers from buying them.

Natural or synthetic fillers?

A further confusion emerged. The trade has always distinguished between natural and synthetic stones, and the original task of all our trade laboratories was to make this distinction. The distinction between natural and man-made stones is very important to our trade. Many dealers want to extend this distinction concerning stones to cover natural and synthetic products used as fillers, believing that the natural ones are for some reason acceptable, be they oils or resins, and synthetic ones somehow pollute the emerald and are unacceptable. The thought seems to be that using a synthetic filler will turn the emerald from being a natural stone to becoming somehow a synthetic.

The distinction between what is an oil and what is a resin is not that clear, and many of the oils now on sale are totally synthetic although they are referred to by the names of their natural counterparts. The chemical industry does not make this distinction when selling its industrial oils and resins and I think that trying to make this distinction in the gem trade is somewhat pointless. Whether a natural oil or any other type of filler has been introduced into an emerald, one has put something that is non-emerald into the stone. If the oil is acceptable then so should be the other colourless fillers. One should argue on the merits and effectiveness of the fillers. The arguments should be on a pragmatic basis rather than this pseudo-moral stance which the trade is taking.

Guess work

The trade has got itself into this mess and the matter is further complicated by the fact that one needs expensive equipment not only to distinguish between oils and resins but also whether they are natural or synthetic. When pressed those who try to carry this out confess that there is a certain amount of guesswork in many cases.

So where do we go from here? Many sections of our trade accept such substances as balsam wood oil and cedar wood oil. They are now realizing that these are in most cases synthetic. Another substance used has been palma oil: it fooled me for a while as I thought it was a natural oil obtained from the palm tree (compare palmolive soap). Our laboratories now tell us that this is a resin with a spectroscopic analysis very similar to that of Opticon! In fact those who have used it now admit that it is Opticon.

Stability

Another problem with resins, that should remain in a stone longer than an oil, is that they can discolour over a period, turning milky or yellow, thus changing the appearance of the emerald. The less emotive members of the emerald trade now seem to appreciate the points I am raising and are asking not for an identification of a filler but rather its stability over time. The race and urgency now is to find a filler that is stable.

Some of our trade laboratories are being asked to tackle this research. Here we do come across a moral dilemma: should our laboratories, who have traditionally been there to identify gems, their simulants, treatments and enhancements, extend their remit to actually find better ways of carrying out these treatments and enhancements? If one regards tampering with a stone – other than cutting and polishing to improve its appearance – as being party to a situation which the unscrupulous could exploit, then are the laboratories undermining the foundation of their independence?

Grading systems

In addition, some dealers would now like to have the treatments quantified (see Letters, p. 21). This seems a rational evolution of these problems. After all, the number of flaws in an emerald can significantly affect its value. The danger for most traders is that bringing in a grading system for treatments will eventually bring in a grading system for natural gemstones, further

Radiation – EU directive

Since May 1996 there has been an EU Council Directive concerning safety standards as applied to risks arising from ionising radiation. The directive covers a wide field and includes personal ornaments so the Department of Trade and Industry (DTI) in the UK has asked the National Radiological Protection Board (NRPB) to investigate the situation as it might affect gems. Several London stone dealers have participated in a survey aimed at a fairly typical spread of gems on the current market. The only stones detected with emissions just above the normal background levels of radioactivity were natural zircons – mostly the green variety. The NRPB is due to report to the DTI within a few weeks so that the UK government can legislate before the deadline of 13 May 2000.

reducing the opportunity to sell on the basis of beauty. And finding a stable filler will still require an identification of the filler: hopefully we will have methods of putting trace elements in such fillers to make them easily identifiable.

Time for dialogue

Whichever way we look at it we are on an oily and slippery slope. Rather than end up in a free fall situation, each section grabbing whatever it can to save itself, now is the time for dialogue between the different sections of the trade, including the laboratories. And for those who advocate that we should deal only in untreated stones, the simple answer is that there are not enough of them in nature to satisfy the demand. Everyone wants clean looking, good and evenly coloured stones; the market in untreated natural stones is moving towards the well-off and the rich.

We do live in rapidly changing times. Our markets are changing, our methods of marketing are changing, our products are changing. For those who can adapt these will be exciting times.

Harry Levy

International Jewellery London '99

International Jewellery London '99, the UK's premier jewellery event, is taking place from 5–8 September 1999 at Earls Court 2, London.

Many unique features and events including the Design Pavilion, a showcase of exquisite cutting-edge jewellery and giftware design, Design 2000, Europe's design competition for emerging designers, a programme of seminars and – new for 1999 – a Fashion Show, make IJL an attractive business environment.

For more information contact Samantha Harrison on Tel. 0181 910 7963, Fax 0181 910 7930, e-mail samantha.harrison@reedexpo.co.uk

Letter to the Editors

Disclosure

We have been following the enhancement of stones for some years and as Harry Levy says (*GJN*, 1998, 7 (4), 52–52) the goal posts have changed. The treatments have changed and have become common knowledge.

I believe we are working against ourselves to define the different oils or resins in the enhancement of emeralds. Oil or resin in an emerald gives the same effect and can be removed with the correct solvent even if difficult. Neither substance damages the stone unless a hardener is applied to the resin. Hardened resin in a stone is difficult to remove and if the stone is heated, as in the case of repolishing, it can separate from the contact faces of the flaw and look horrible. Several other processes can also change the resin.

The identification of whether the stone is enhanced with oil or resin is a difficult and insecure test using expensive equipment that few laboratories possess.

My feeling is that we as a trade must make a decision as to what are acceptable processes, and I make the following suggestions:

- Enhancement with oil or unhardened resin could be accepted with qualification of 'minor', 'moderate' or 'significant'.
- Hardened resin should be noted as 'treated' emerald and reflecting a lower level of acceptance.
- Rubies would be unheated, heated, heated with residue, glass-filled, etc.

When a general blanket of acceptance of treatments with definitions has been published, it leaves us able to print on our invoices a disclosure that will reassure the client, such as:

"Precious stones have by tradition been enhanced with oil, resins and heat treatment after cutting to improve colour and clarity. Where this may have been done we have examined the stones to see that they conform to the standards acceptable to our trade and its laboratories."

This sort of disclosure would be in the form of a warranty and we should be prepared to clean and re-oil where and when needed. Emerald seems to be one of the few stones that may need an 'after service'.

The difficulty will be to get all parties to agree on what are acceptable treatments.

Patrick Aldridge, FGA
Gemcut SA, Geneva, Switzerland

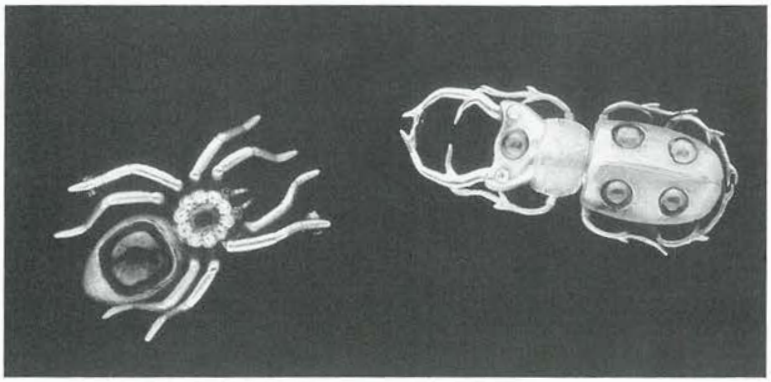
Saleroom notes

A red spinel and diamond butterfly brooch sold for US$300,000 at Christie's sale of magnificent jewels held in Geneva on 18 November 1998. Spinel does not feature in the major catalogues more than once or twice a year and then usually as part of a collection of the work of one designer. This sale included jewels from the estate of Jacqueline Delubac: the house comment was that while the diamond market appeared currently selective, strong prices were being paid for beautifully-cut stones. In the same sale a rectangular diamond of 29.12ct, graded D, VVS 2, set in a ring by Bulgari, fetched US$1,984,191 and a pair of blue and colourless diamond and pearl ear-pendants by JAR made US$1,620,220. Antique jewellery collected for an earlier Christie's Geneva sale held on 21 May 1998 was 100% sold: there was strong buying (18%) from the U.K. for the sale overall, compared with 10% for Hong Kong and 19% for the United States. A pair of Colombian emeralds weighing 8.84 and 9.12 ct sold for US$ 623,220.

Michael O'Donoghue

In defence of the 'bug'!

Nine months to go and we are warned to beware the dreaded Millennium bug. 'Bugs' are no strangers to jewellery; for millennia arthropods have been central to many cultures, becoming symbols of power and beauty. The ancient Egyptians elevated the humble dung-beetle to godly level, whereby the scarab became a central motif on amulet seals made of faience and precious materials. In ancient China jade cicadas placed in the mouth of the dead ensured immortality, and in ancient Greece the spider and his web represented the weaver Arachne.



Spider brooch, set with emerald, carbuncle garnet and diamonds, c. 1885. Stag-beetle brooch, set with cabochon garnets and old cut diamonds. c. 1880.

Amber, a most important material to the palaeontologist, reveals tiny time capsules of insect life entrapped and preserved in sticky resins millions of years ago. Carved into special objects, amber jewellery with unusual fossilized insect inclusions is much sought-after. An interesting account on this subject was given by Andrew Ross in a lecture entitled *Insects in amber* to members of the GAGTL on 13 January.

Grappling with the European hallmarking issues and numerous unusual symbols used to mark precious metals, in France a method was introduced in 1838 to countermark silver items. Steel 'bigorne' anvils were finely engraved with naturalistic insect types (ant, earwig, weevil, beetle, grasshopper, etc.) within geometric shapes, which were impressed from the underside of an item as an extra precaution to prevent false hallmarking.

Great personages and leaders have chosen the industrious 'bee' as an heraldic device, the most famous being that used by the Emperor Napoleon, and in later years the Bonaparte influence added to the vogue for 'bee' jewellery of the 1860s and '70s. The Barbarini coat of arms of Pope Urban VIII incorporates three 'bee' emblems on the shield, which is surmounted with a papal tiara and the crossed keys of Saint Peter.

In 1859 Charles Darwin published the *Origin of Species* which stimulated enormous interest in all aspects of natural history. Insects became immensely fashionable in the 1880s and '90s – beetles, butterflies, dragonflies and spiders adorned high society ladies and crept over hats and bodices. The fly motif was particularly popular and detailed references can be found in jewellers' catalogues of the period, such as that of the Goldsmiths & Silversmiths Company Ltd. Plique-à-jour enamelled winged insect creations were Art Nouveau favourite themes, a fine example being the corsage ornament by René Lalique, of a dragonfly devouring a woman.

Perhaps the much maligned Millennium bug may assume a fashionable form and find its way onto a lapel pin or into a brooch – or then again it may stay in virtual reality – any ideas?

Corinna Pike

At London Guildhall University

A new twelve-session class, Introduction to Gemstones, has started on Monday evenings at London Guildhall University.

Led by Michael O'Donoghue, participants are able to examine large numbers of the classic species and a wide range of books and journals. The course will culminate in a visit to the gemstone collections in the Natural History Museum.

The class (cost £120 for the session) was full from the beginning and some class members may go on to take GAGTL Preliminary and Diploma courses. It is important that the considerable interest in gemstones lying just below the surface in many of the general public is recovered and fashioned!

The long-running 'Post-Diploma' class continues under Michael O'Donoghue who has taken over from Alan Jobbins. The class is presently studying the bibliographic tools of mineralogy-abstracting and the works of Hintze, Doelter, Goldschmidt, Dana, Hey, Embrey & Fuller, DHZ, Greg & Lettsom – if you don't know any two from this list why not come to the class (weekly on Thursday evenings)? We are also pursuing, with the aid of some quite old and rare state mineralogies, the gemstones of the United States – again, if these places ring no bells, the answer is in your hands (or feet)! Naturally the evenings also include specimen identification sessions. Weekly notes are provided and these can be kept to build up useful surveys of a number of gem-related topics.

Ring Michael O'Donoghue on 01732 453503 for details of these two classes.

Michael O'Donoghue

Falize

Continued from p. 17

The wide range of styles which inspired the creations of the three generations of Falize were discussed, respecting the chronology outlined in Albert Racinet's *'Ornement Polychrome'*. This pictorial encyclopaedia published in 1869 was owned by the Falizes, and examples of engraved metals in the Indian taste and floral ornaments in the Persian style illustrated in the work were shown to inspire jewels by Falize decorated with vivid translucent enamels.

A number of pieces decorated with opaque cloisonné enamels decorated with Oriental motifs, which are amongst those works most readily associated with the Falize oeuvre, were found to derive from woodblock prints by Hokusai and other Japanese artists.

Watercolour designs revealed that Egyptian, Greek and Assyrian sources had inspired the firm both in its jewellery and goldsmiths' work. Indeed one of Lucien Falize's masterpieces was the 'Vase Sassanide' in the Assyrian taste, carved from rock crystal and decorated with enamelled gold mounts; which was commissioned by the great English patron Alfred Morrison and formed part of the firm's display at the 1889 Exposition Universelle.

Several charming jewels were inspired by medieval calligraphy, including brooches and bracelets bearing messages of love, in which the vivid translucent enamelled script was highlighted by 'paillons' against a pale opaque enamelled ground. Larger scale examples of works in the medieval taste included a carved ivory carriage clock, and an enamelled and gem-set silver timepiece in the form of a Gothic tower also commissioned by Alfred Morrison and now owned by the Metropolitan Museum of Art.

The Falizes also much favoured the jewellers, goldsmiths and engravers of the Renaissance. Designs by Albrecht Dürer, Virgil Solis, and Hans Holbein inspired enamelled gold jewels by Falize, which were exhibited at the 1878 and 1889 Expositions Universelles. One of Lucien Falize's most celebrated works was the gold and enamelled 'hanap' or lidded goblet commissioned by the Musée des Arts Décoratifs, decorated with a frieze carried out in basse-taille enamels featuring the work of eight different guilds. All the craftsmen are portrayed in sixteenth century dress, and Lucien Falize himself is represented on the base in the guise of a Renaissance goldsmith.

Gold chimera brooch by Falize, c. 1895.

Nevertheless, not all the firm's work derived from documented sources and specific historic periods. Several of Alexis Falize's earliest surviving watercolour designs, dating from 1838–1846, revealed his minute observation of exotic or unusual floral ornaments. He introduced his son Lucien to the distinctive characteristics of the plant as a decorative device. From Lucien's designs featuring such unconventional ornaments as enamelled raspberries and bracelet clasps in the form of snail shells, one detects the influence of Japanese art, which acknowledges the ornamental applications of the most insignificant elements to be found in nature.

Despite the historicist work produced by the three generations of Falize, the way in which they interpreted nature inspired many of their contemporaries – indeed, Lucien Falize was widely acknowledged as one of the precursors of Art Nouveau, and entirely possessed by 'the religion of nature'.

Falize Loan Exhibition

to coincide with the publication of *Falize – a Dynasty of Jewellers* by Katherine Purcell

The first exhibition devoted to Falize will take place at Wartski, 14 Grafton Street, London, from 10 to 19 June 1999, Monday to Saturday, 11 a.m. to 5 p.m. (closed Sundays).

Sixty watercolour designs from the Falize archive will be included in the show, as will a large number of pieces in private collections. The Victoria and Albert Museum, the British Museum, the Ashmolean Museum, the Metropolitan Museum of Art, the Walters Art Gallery, the Maryhill Museum in Goldendale, Washington, the Schmuckmuseum in Pforzheim and the Museum für Kunst und Gewerbe in Hamburg, will be contributing loans to the exhibition.

Synthetic Moissanite

A colourful comparison with diamond

With the profusion of articles written on synthetic moissanite it is now generally accepted that separation between this and diamond is fairly well established.

In the case of loose stones, this can be achieved by a heavy liquid specific gravity test, using di-iodomethane, and in mounted stones of about 5 mm and larger by the detection of visible double refraction in the synthetic moissanite. Smaller stones prove more difficult in yielding convincing evidence when mounted, and this depends to a large extent on individual eyesight regardless of the use of a 10× loupe or microscope. This difficult area must be given greater attention by the average jeweller, who needs a simple inexpensive set up to provide some evidence of what may be set in the ring, which he has either been offered for sale or has accepted for valuation. This can be achieved by fairly simple means, by detecting single or double refraction more convincingly than thinking you see it with a 10× loupe in a small mounted stone. Although this will not identity the gemstone, our prime objective is to differentiate between the single refraction in diamond and the double refraction in synthetic moissanite, when confronted with a small stone which appears very much to be one or the other, and is mounted in a piece of jewellery which apparently defies all access with normal routine procedures.

The principle on which the test is based is that of analysing the light which has entered and been reflected back, not from the surface but from within the stone.

All that is required with this method is a tungsten spot light or pen torch, a diffuser of ground glass and a polarizer such as a photographic polaroid filter. A useful addition for comparison is a small solitaire diamond ring of say 0.20 ct, borrowed from stock for demonstration purposes. This, along with the ring holding the synthetic moissanite, are each placed in a piece of plasticine to hold them upright and put alongside each other on a dark non-reflecting surface. The tungsten spotlight is placed at a distance of about 150 cm and directed at a low angle towards one of the rings so that the beam just clips the stone which should have its table facet angled at about 45° towards it. Each of the rings is examined in this way one at a time and, when in place, the piece of ground glass is held directly over the stone at a height of about 10 cm. The ring is then manipulated until small spectra are seen to form a pattern on the ground glass screen. These spectra are the images of the light source which have been refracted, dispersed and internally reflected from the pavilion facets of the stone. By placing the polaroid disc over this display on the ground glass and rotating it through 360° one of two possible effects will be seen, as the vibrations of this reflected light are analysed.

John Harris asks
"Have you seen the performance of the Dancing Spectra?"

In the case of diamond, being singly refracting, the spectra refuse to perform and the pattern will remain unchanged throughout the complete 360° rotation of the polaroid. When the other ring set with synthetic moissanite is put in place of the diamond and observed in a similar way, a pronounced difference can be seen. As the ring is manipulated to produce the spectra on the ground glass, at certain angles these spectra may be seen in pairs due to the strong double refraction of the synthetic moissanite. It will also be noticed that the spread of each tiny spectrum is greater due to the stronger dispersion of synthetic moissanite at 0.104, compared to that of diamond at 0.044, then as the polaroid disc is rotated the performance begins and the small spectra appear to hop about in their rhythmic dance as the pattern is seen to change. After 45° some spectra start to fade then after 90° will disappear to be replaced by others. This is particularly noticeable where they are in pairs as each one is then seen to replace its partner. This sequence continues to change through 180° and is then repeated as the polaroid disc is rotated to complete 360°.

In both diamond and synthetic moissanite some bright white images will be seen on the glass screen which may vary in intensity. These are simply the surface reflections from table and crown facets, and play no part in the detection of double refraction.

Other doubly refracting colourless faceted stones such as zircon, white topaz and white sapphire, will react similarly to synthetic moissanite but show lower dispersion. Singly refracting stones such as colourless synthetic spinel, CZ and YAG will react in a similar way to diamond in the test. However, as in both situations, these other diamond simulants may be identified by other means and should not present the same problem as synthetic moissanite. This test therefore tells you what it is not, rather than what it is, which is all that is required to differentiate between the two stones under comparison.

These observations are seen at their best in dark or subdued light surroundings. If the light beam does not just catch the stone but falls directly on the ring, it will cause too much glare on the ground glass and spoil the performance of the dancing spectra.

This arrangement calls for no special equipment, can be easily and inexpensively set up in the work place and demonstrated to other onlookers. It is readily adapted to mounted stones which of course have to be reasonably clean, especially on the pavilion facets.

An absorbing letter

by Alec E. Farn

Gemmological friends, both from Hatton Garden, admitted in discussion that, now at an advanced age, they are finding it far from easy to dispossess themselves of not just their gemstone collections but books, etc., as well.

Among my own collection, apart from the gifts by authors of autographed copies of their works, I have a few books which I have 'found' in scattered junk shops and others close to Hatton Garden in the street market of Leather Lane, now alas no longer an interesting venue for bargain hunters.

One of my most interesting purchases came from a market stall in Leather Lane. I was fairly well-known by the stall holder as a previous customer having purchased a wide range of curios over a period of years. These 'forays' usually took place in my lunch breaks. This particularly interesting and intriguing book was a heavy tome with deeply incuse goldleafed spine with similar treatment to the thick front and back covers with title and floriated oval surround.

I leafed through and saw that it had many colour plates and black-and-white diagrams dispersed throughout. From that first glance it seemed to represent a considerable outpouring of what to my mind was a wide range of esoteric works.

On asking the price I was pleasantly gratified by the low esteem in which the book was held by the stallholder. I bought it there and then.

The full title, *Curiosities and wonders of nature, science and art* or *The intellectual observer, a review of natural history, microscopic research, and recreative science*, whetted my appetite.

Sometime later glossing through the book I was taken aback to read the title of an article 'Micro-spectroscope investigations' and under this title in smaller print 'Letter from Professor Church'.

Earlier, in July 1951, I had enquired details of this book, which bore no date, from the Department of Printed Books at the British Museum and received a prompt reply from the Principal Keeper, G.B. Oldman. He stated that the book appeared to be similar to other works published by the firm of Groombridge and Sons in the 1870s but could not trace a copy of the book in the British Museum [Michael O'Donoghue will take up this point in the next issue]. Thus the book must now be around 130 years old when one considers that Professor Church's letter remarking upon the absorption spectrum of zircon was written *circa* 1866.

I have read Professor Church's printed letter several times. It always seems to me to be a little like a lecture and what I imagine to be Victorian in style. I have meticulously copied the letter for gemmological interest. Historically it is a gem of a letter. To find such a 'gem' only a stone's throw away from the old laboratory at 15 Hatton Garden where B.W. Anderson and C.J. Payne worked so devotedly in recording the absorption spectra of gemstones for posterity was indeed a rare stroke of luck.

Micro-spectroscope investigations

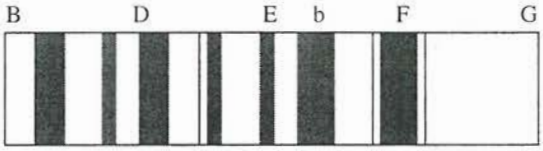
Letter from Professor Church

(reprinted from *Curiosities and wonders of nature, science and art*)

The Editor has received the following interesting letter from Professor Church.

"Have you tried the experiment with chloride of cobalt, which I mentioned to you? If you take the saturated cold solution of this salt it will give the spectrum roughly sketched in Fig 1*, a thinner film of the same solution, heated (on a glass slide with thin cover) over the candle or lamp gives the spectrum drawn in Fig 2†. You will notice two black bands, I had almost said lines, in the red. As might be predicted from the change of colour on heating, the solution is afterwards much more transparent to rays beyond D. The chloride of copper and nickel also give very interesting results.

"But I think you will be most pleased with the experiment I have now to relate. I have worked lately on the spectra of pleochroic minerals and salts. Among the minerals recently examined several fine specimens of the true zircon or jargoon, a silicate of zirconia. These gave a beautiful and most characteristic system of seven dark bands quite different from those belonging to any other substance yet examined. They are roughly sketched in the following figure.



"Zircons as colourless as common glass shew these bands as well, perhaps better than those possessed of colour.

"They are to be observed with zircons which have been ignited as ▶

◄ well as those still in their natural condition. But some zircons show the phenomenon better than others, this difference not being due apparently to the colour of the stone or the thickness through which the light traverses. I am not quite sure, but I incline to think that those zircons which have come from some localities shew the bands better than those from others. Several Expailly specimens scarcely exhibit anything of this kind; all those from Ceylon and Norway show the bands well.

"From this observation I am induced to hazard the conjecture that it may be, after all, the presence of Swanberg's norium which determines the difference. You are aware that the orange 'jacinth', a variety of zircon, is very precious, and that the essonite of cinnamon-garnet is constantly sold for it. Curiously enough, the cinnamon-garnet or essonite (a lime-garnet), has no conspicuous dark absorption bands at all, and so, the spectroscope may be brought to bear upon the discrimination of these two stones. We have thus a much more ready process than that of taking the density of the specimens. The lime-garnet is of comparatively small value. The iron-garnet of different shades (carbuncle, almandine, etc.) gives a beautiful and very characteristic spectrum with several intensely deep absorption bands.

"I write these particulars of my experiments at once, for I thought you might like to make a little paragraph about them for the readers of the *Intellectual Observer*. I ought to add that the absorption bands of zircon resemble those of didymium, discovered by Gladstone, in their sharpness and in being produced by the passage of light through a colourless medium. Silica, the other constituent of zircon, gives no bands."

"* The figure alluded to shews the red darkened, the orange light, and a broad dark band commencing to the right of the yellow and extending beyond the line 'F', the remainder of the spectrum is cloudy.

"† Fig 2 shows the narrow black bands in the red, modified tints replacing the broad dark band of Fig 1, the blue coming out clear. The experiment is a very beautiful one."

White Cliffs: Australia's first commercial opal field

Highlights in its history by Gwen Rowe

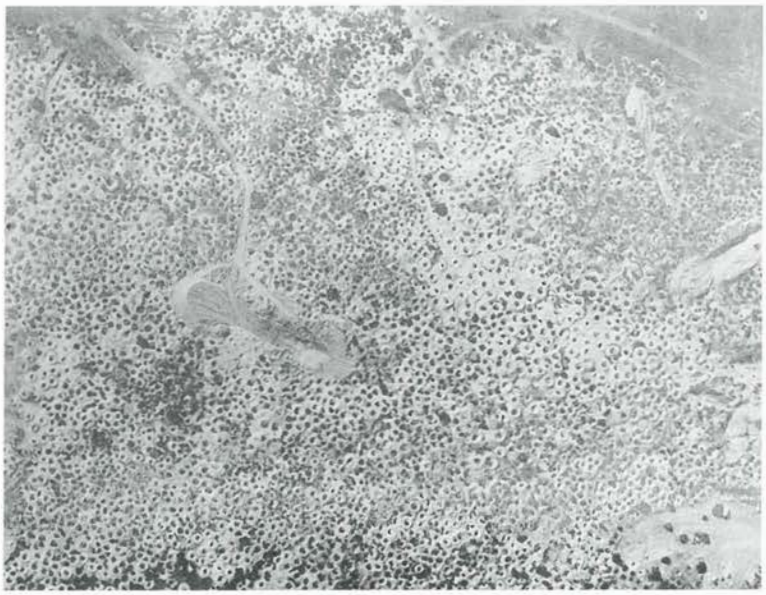
White Cliffs opal field, New South Wales, established Australia's international opal markets in 1889, an industry now valued at A $600 million p.a., and led eventually to the July 1993 Federal Government proclamation of opal as Australia's national gem.

It supplied overseas markets for some twenty-five years, restoring the 'forgotten gem' to favour as a precious stone after centuries of superstition, and became a classroom for geologists, palaeontologists, government officials and hopeful fortune-hunters.

The turbulence of the opal field's first decade was a result of government ignorance of opal, and the grants of huge unworkable leases in the belief that opal was alluvial (later disproved by a Royal Commission report of 1901).

Summer heat drove the first miners to live underground. Before 1900 bakers, hop-beer bars and restaurants had joined them. Today 90 per cent of locals occupy 135 dugouts, several of them unusual tourist venues.

The Member for Wilcannia 1889-94, Edward Bulwer Lytton Dickens, ensured White Cliffs had water, mail and a coach service, police, and a school. The State's first opal village was surveyed and included the Oval, now named for W.J. (Tiger) O'Reilly who was born there in 1905.



White Cliffs: an aerial view of the main field containing an estimated 50,000 shafts. The field was bulldozed in 1965 before prohibition by the Department of Mines.

In 1981 the world's first experimental solar station designed to power small outback towns opened at White Cliffs. It was updated in 1997 with the installation of photovoltaic receivers which gave more power at less cost – linked to the Snowy Mountains Hydroelectric Scheme it avoids fossil fuels by using sun- and water-power only. Another first for White Cliffs!

The 1992 NSW Mines Act declared the main field 'White Cliffs Historic Mineral Reserve', the only opal field anywhere to be so designated.

Ancient finger rings, the Alain Ollivier Collection. Beatriz Chadour-Sampson, 192 pp, 245 × 175 mm. Hard bound with DW. Prähistorische Staatssammlung. München. ISBN 3-927806-2-X. £50.00.

This collection of 37 rings is small in number, but provides a wide-ranging introduction to the art and history of the ring in ancient times. It includes Egyptian, Western Asiatic, Phoenician, Greek, Etruscan, Roman, Byzantine, Islamic, South Asian and Pre-Columbian rings. Meticulous research sheds light on the background to each ring, the social status of the wearer, as well as the tastes and fashions of the time that influenced the ring's design. In a broader context it is shown how the rings mirror the political and economic changes of the ancient world, and how the exchange of ideas followed the trade routes across Europe and between Orient and Occident. Alain Ollivier asked the author to write this book a few days before he died in 1994. With its beautiful production and lavish colour illustrations (including lovely 'jewel box' endpapers), it certainly fulfils the wish of the collector that the reader leafing through the book should have the feeling of browsing through a jewellery box filled with rings. The book is dual language (German and English) throughout, and includes a glossary, select bibliography and index. The publication coincided with the collection going on permanent display in the Prähistorische Staatssammlung.

Nigel Israel

Medieval Ring Brooches In Ireland, A study of jewellery, dress and Society, Mary B. Deevy. 158 pp, 34 colour illustrations and 25 black and white illustrations. Also 135 drawings of ring brooches. Hardbound in DW. Wordwell Ltd, Wicklow. ISBN 1-869857-24-0 £29.95.

At first sight this appears to be a rather dry, scholarly, small catalogue of ring brooches (primarily dress-fasteners). It is, however, much, much more. Certainly scholarly, but surprisingly wide ranging and definitely not dry. On the contrary, it is a fascinating read!

Chapter 1 is a short introduction covering the distinction between ring brooches and annular buckles, Nomenclature and the History of research.

The flavour of the book is well summed up by the first sentence: "The study of medieval jewellery can introduce us to many aspects of life in the Middle Ages, including aesthetic perceptions of art and beauty, concepts of wealth and worth, and occasionally the complexity of spiritual beliefs."

Further chapters deal with 'Classification, chronology and comparative material', 'Distribution and provenances', 'Medieval metalworking and the manufacture of ring brooches', 'Medieval Dress and the wearing of ring brooches', and 'Jewellery and society in medieval Ireland'. In the latter chapter it is explained that ring brooches were sometimes exchanged as lovers' gifts, symbolizing fidelity, although their inscriptions occasionally betray jealousy and insecurity. They were also often worn for their amuletic and talismanic properties. Inserted between the latter two chapters are sixteen pages of fine colour plates on art paper. Many of the illustrations (both colour and black-and-white) show depictions of ring brooches in medieval manuscripts, sculpture and pottery. There are then eleven pages of useful references before the section cataloguing 140 brooches. All except three of the brooches are depicted by excellent drawings alongside the textual descriptions, showing separately, where necessary, the backs and the pins.

There are two appendices detailing respectively 'Additional ring brooches' (not included in catalogue) and 'Unlocated ring brooches and artefacts which may be ring brooches'. Finally, there is a very brief glossary; this glossary has the feel of having been added as an afterthought, and is the one really disappointing part of the book.

The ring brooches dealt with in this book range from very ornately decorated gold brooches with ►

The Crown Jewels

The History of the Coronation Regalia in the Tower of London

Symposium – Tuesday 27 April 1999

The Society of Jewellery Historians has arranged a full day symposium to celebrate the recent publication of the magnificent catalogue raisonné. This will be a unique opportunity to hear the authors of the book talking on their specialist areas.

The provisional programme includes:-

Claude Blair: ***The Swords***
Shirley Bury: ***The Coronation and the Jewel House from the Restoration,*** **and** ***The Crown Jewels***
Arthur Grimwade: ***The Plate***
Alan Jobbins, Roger Harding and Kenneth Scarratt: ***The Gemstones***

There will be an evening reception in The Tower with a private view of the Regalia.

The cost for the entire event is £90, including all catering. The day alone is £60. Participants may apply for *extra guest tickets* for the evening only at £30, but preference will obviously be given to those attending the whole event. Separate cheques should be sent for any *extra evening tickets* in case they are not available, in which case the cheques will be returned.

If you wish to attend this event and would like an application form please write to Nigel Israel at The Society address (given on p. 18) marking your envelope SJH/CJ and enclosing a SAE. Please say if you and any guests are SJH/GAGTL/SCS members.

◀ precious gems and filigree to the plainer copper-alloy examples of the lower orders, some of which imitate the gold brooches and are set with imitation gems. I must admit that I had previously thought medieval ring brooches a rather narrow subject, and might well have not investigated this book. I am delighted to have read it, and enthusiastically recommend it to anyone interested in jewellery, even (or perhaps particularly) if they are not Medievalists.

Nigel Israel

Beads

'Beads of the World', the first-ever exhibition of beads in a public museum in the UK, will be exhibited at the Broadfield House Glass Museum, Kingswinford, West Midlands, until 11 April 1999. Further information on 01384 812745.

Peter Francis, Director of the Center for Bead Research in the USA, will be visiting the UK in June. He will be giving a series of four bead identification workshops and will speak at the Bead Society of Great Britain AGM on 27 June. Further details from Stefany Tomalin on 0171 792 3436.

Island of Gems

Third successive year

The exhibition of Gems and the Gem Industry of Sri Lanka was held at the end of October 1998 in the vicinity of Hatton Garden in London, the centre for gems and the jewellery industry in England.

The exhibition was declared open by the Deputy High Commissioner of Sri Lanka, Mrs Chitranganee Wagiswara and the Head of the London Buddhist Vihara, The Most Venerable Dr.Medagama Vajiragnana Thero.

The exhibition which depicted various aspects of the Sri Lanka gem industry was attended by many visitors.

The exhibition, as in the previous years, was organised by D. H. Ariyaratna.

Hubert Mornard

Hubert Mornard, Brussels, Belgium, died on 5 January 1999.

Hubert was a Belgian gemmologist (and utter Anglophile!) and was a director of the Ecole Belge de Gemmologie. As a boy he witnessed the arrival of British troops in the relief of Brussels, and his parents billeted two British officers.

Basil Anderson passed on to me a letter from Hubert Mornard requesting a visit to the gem testing laboratory. I was quite new in the directorship of the lab, but the visit was arranged and he was discreet, he was charming and his English was perfect. We met several times and became very good friends.

In memory of Hubert Mornard, I am donating to the GAGTL a brownish zircon which was a gift to me from Hubert.

Alec Farn

The opening of the 1998 exhibition Island of Gems

Gem and Mineral Fairs

BLMDA International Gem and Mineral Fairs

Details from Rex Cook, Vice-Chairman of the BLMDA on 01282 614615, e-mail mineralsatnelson@compuserve.com

1 May. Wintergarden, Ilkley

28, 29 and 30 August. The Old Swan Hotel, Swan Road, Harrogate

***Note:** the London Fair to be held on 27 and 28 March at the Regents Park Marriott Hotel, Swiss Cottage, has been cancelled. It is hoped to reintroduce the London BLMDA fairs in 2000.*

Gemstone Mineral and Fossil Fairs

Organized by Celtic Minerals

Fairs open from 10 a.m. to 5 p.m. Details from Simon Ingram on 01828 633833 (tel./fax), e-mail: celtmins@globalnet.co.uk

10 and 11 April. Amatola Hotel, Anderson Drive, Aberdeen.

29 and 30 May. Capital Moat House Hotel, Clermiston Road, Edinburgh.

7 and 8 August. North Lakes Hotel, Ullswater Road, Penrith.

Rock 'n' gem shows

Details from the Exhibition Team Ltd on 01628 621697.
Shows are open from 10 am to 5 pm Saturday and Sunday.

20 and 21 March. Cheltenham Racecourse, Prestbury, Glos.

17 and 18 April. Kempton Park Racecourse, Sunbury on Thames, Middx.

8 and 9 May. Newcastle Racecourse, Newcastle

22 and 23 May. Haydock Park Racecourse, Newton-le-Willows, Merseyside

Students visit Antwerp

Diamond cutting at the Dia2000 factory in Antwerp.

As the sun rose over the London docks on 6 November, 14 GAGTL students led by Doug Garrod and Lorne Stather met at London City Airport ready to set off for a diamond weekend in Antwerp, hosted by John Speelman.

Friday afternoon was spent at the Dia2000 cutting factory where we were allowed to roam freely around the factory, spending time talking to the diamantaires about the stones they where polishing.

Students were also able to see the marking of rough, semi-automatic bruting machines and automatic polishing machines. There was an opportunity to handle the finished products, polished diamonds of various size and style of cut, in the selling offices.

On Friday evening everyone was taken to a Russian restaurant where an interesting evening was spent enjoying music in a range of styles from folk to opera. The more energetic among the group went to dance the night away until the small hours.

On Saturday morning a visit had been arranged to the Diamond Museum. A museum guide took the party around and explained the various exhibits, and the morning ended with a short video about HRD.

On Saturday afternoon and Sunday morning the party split-up into smaller groups and visited places of interest in and around Antwerp including the cathedral, the zoo and the various markets.

The weekend was educational and immense fun. Many thanks to John Speelman who made the whole visit so successful.

Doug Garrod

FEEG

Presentation of FEEG diplomas to Italian students by Dr Vincente de Michele (IGI). Also pictured from the ieft: Mme N. Cavanozian (ING, France), Dr J. Nogués i Carulla (EGUB, Spain, Chairman of Examinations Committee), Professor Dr H. Bank (DGG, Germany, Chairman of FEEG). Photo Antoine Jarry.

The third General Assembly of the Federation for European Education in Gemmology (FEEG) was held in Paris on 29 January.

Members from France, Germany, Italy, The Netherlands, Spain and Great Britain reviewed the results of the 1998 FEEG examinations and welcomed a new member from Belgium, the Société Belge de Gemmologie.

In 1998, 48 students from five countries entered for the FEEG examination in July. After a small number of resits in October, 38 were successful in passing the theory and practical; this represents a pass rate of 79 per cent, very similar to that achieved by students in 1997, 84 per cent of whom passed. Each successful candidate received a splendid diploma eminently suitable for display and will be ▶

◀ qualified to use the title European Gemmologist (EG).

On 30 January, the successful students were presented with their FEEG diplomas at a ceremony held in the Chambre Syndicale de la Bijouterie, 58 rue du Louvre, Paris. The chairman of FEEG, Prof. Dr. H. Bank, and the FEEG members from the respective countries presented the diplomas and this was followed by a reception hosted by the Institut National de Gemmologie de France and FEEG.

In the afternoon there was a full programme of lectures, attended by over 80 students and members; the topics and speakers were as follows:

J.S. Cozar and A. Harker (IGE, Madrid): *Glass fillings in ruby*

U. Henn (DGG, Idar-Oberstein): *Gemstones of the garnet group*

J.C. Zwaan (SNIWOEP, Leiden): *Mining of Zimbabwe emeralds*

P. Maitrallet (CCIP, Paris): *Identification of emerald fillings by infrared spectrometry*

J.M. Nogues Carulla (EGUB, Barcelona): *Infrared and Raman spectroscopy applied to gemmology*

R.R. Harding (GAGTL, London): *Synthetic moissanite identification*

J.-P. Poirot (ING, Paris): *Trace element contents and origin determination of rubies.*

The meeting was chaired by Mme Cavanozian and A. Jarry and they concluded by thanking the speakers for a most interesting session covering such a wide range of gemmological issues.

The next General Assembly of FEEG will take place in Holland on Friday 28 January 2000 and this meeting will be followed by a gemmological symposium. The theme of the symposium will be relevant for students interested in the latest developments in the gem world in Europe and elsewhere. Details of the programme will be published in the summer and will also be available from FEEG members' headquarters.

For further information contact Doug Garrod on 0171 404 3334.

Opals – glorious technicolor

Students examining opals with the expert guidance of David Callaghan.

Those who attended the GAGTL opal workshop on 3 November 1998 were privileged to see a private collection of some of the finest gem-quality opals in the world.

Throughout the day David Callaghan, himself an avid fan of opal, led the students in appreciating the finer points of some exceptional stones.

The subjects covered included the nature of opal, the cause of its colour, the mining areas and the types of opal produced at the different localities. Artificial treatments, imitations and synthetic opals where studied in the afternoon.

Students from a variety of backgrounds found themselves completely absorbed by the day.

Doug Garrod

FEEG Exam dates

At the General Assembly, the dates of the 1999 FEEG examinations were decided and are due to take place as follows:

Theory: Tuesday 6 July,
resit Wednesday 13 October
Practical: Between 5 and 9 July
resit between 11 and 15 October

To enter, students must have the gemmology qualification of a member of FEEG, and the closing date for applying to sit the 1999 exams is 31 May.

Competitions

Several readers have complained, when they have met me, as to how difficult the problems and puzzles are that I set in this competition. They really are not difficult, in that they do not require reams of computation or special skills in any discipline – other than a bit of gemmology, when I can work this in.

They require a bit of insight and some lateral thinking. They need inspiration rather than perspiration! I have avoided the sorts of puzzles you can find in any puzzle magazine or the puzzle section of any tabloid newspaper where you may be expected to chase hidden words in a maze or square of letters. I have also avoided the worst of puzzles that require great computational skills or pages of deduction that you may find in the quality Sunday papers.

I have tried to present a set of classical problems, and for those who collect and keep our magazine, puzzles that can be pulled out to amuse or impress your family and colleagues. The problems and solutions are all relatively 'obvious' with hindsight!

For all our readers, a very simple problem this time:

D	D	D	D	= 16
E	R	S	E	= 33
D	R	R	D	= 18
E	D	E	R	= 29
28	18	?	23	

D = Diamond E = Emerald
R = Ruby S = Sapphire

What is the sum of the third column? Solutions (not answers) please.

Answer to last competition

Having said the above, the last problem was difficult and does need some computation and a clear mind. It was somewhat heavier on the perspiration side! There are many answers to the problem, but only one that solves it in only three weighings, covering all possible outcomes. Take any four stones and place them in one pan and any four other stones and place them in the other pan. Two possibilities can occur:

(A) *They balance* – we can deduce that they are all synthetics so that diamond is in the last four stones. Take any three stones from this last batch and weigh them with any three of the known synthetics from the first weighing:
  (i) *they balance* – that means that the last stone is the diamond. Weigh it against any of the known synthetics: if it goes down it is heavier, and if it goes up it is lighter;
  (ii) they do not balance – we know the diamond is in these last three stones. If that pan goes down it is heavier, if it goes up it is lighter. From these first three stones take any two and place one on each pan. If they balance, then they are synthetics and the third stone is a diamond and the previous weighing told us if it was heavier or lighter. If they do not balance, then from the previous weighings we know that the diamond is lighter or heavier and thus we can identify the diamond.

  In both cases we have solved the problem in only three weighings.

(B) *The pans do not balance* – call the stones in the pan that goes down H1, H2, H3 and H4 (heavy ones) and those in the pan that goes up L1, L2, L3 and L4 (the light ones). We know that diamond is one of these eight, but we do not yet know if it is lighter or heavier. Call the remaining stones S1, S2, S3 and S4 (we know they are synthetic). The next step is the only difficult one to follow. Place, say, H1, L1 and S1 in one pan, and H2, L2 and L3 in the other:
  (i) if they balance they are all synthetics, so the diamond will be either H3, H4 or L4. For the third weighing place H3 in one pan and H4 in the other. If they balance L4 is the diamond and it is lighter (known from the first weighing), if they do not then the one that goes down is the diamond and it is heavier;
  (ii) if the pan containing H1 goes down, we know that either H1 is the diamond and is heavier, or that the diamond is either L2 or L3 and in this case is lighter. For the third weighing compare L2 against L3. If they balance H1 is the diamond; if they do not the stone that goes up is the diamond;
  (iii) if the pan containing H1 goes up then either L1 or H2 is the diamond, and all the others are synthetics. As the third weighing take, say, L1 and weigh it against an S stone. If it balances then H2 is the diamond and is heavier, and if it goes up then L1 is the diamond and it is lighter.

This covers all the possibilities and determines which is the diamond and whether it is lighter or heavier than the synthetics in three weighings.

I have made the solution as easy as possible to follow. All the solutions sent in required more than three weighings to cover all the possibilities, but nevertheless it was good to hear from our readers. *Harry Levy*

1999 GAGTL Photo Competition

Gems of the Century

GAGTL members are reminded that the closing date for the 1999 Competition is **30 April.**
Entry forms available on request from Mary Burland on 0171 404 3334.

GAGTL Branch News

The 1999 Scottish Branch Annual Conference is to be held on 30 April to 2 May at the Queen's Hotel, Perth.

A full programme has been arranged which will include the following talks as well as social events.

For further details contact Catriona McInnes on 0131 667 2199.

- **Historic Scottish Jewellery by George Dalgleish**
- **Affordable gemmology and The naming of garnets by Dr W.W. Hanneman**
- **Update on Tucson by Alan Hodgkinson**
- **Collecting gemstones in Nigeria by Judith Kinnaird**

What's On

Gemmological Association and Gem Testing Laboratory of Great Britain

London Branch

Unless otherwise stated, meetings will be held at the GAGTL Gem Tutorial Centre, 27 Greville Street (Saffron Hill entrance), London EC1N 8TN, at 6.00 for 6.30 p.m. Entry will be by ticket only at £4.00 for a member (£6.00 for a non-member).

14 May. Shining examples – the teaching potential of a gemmologist's jewel box
CECILIA POPLE

28 June. AGM followed by a Reunion of Members and Bring and Buy Sale. GAGTL members only (free of charge)

14 July. Demantoid garnet and other new gems and minerals from Namibia
PROF. PETER R. SIMPSON

31 October. GAGTL Annual Conference. Details to be announced in the June issue of *Gem and Jewellery News*.

North West Branch

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

19 May. Pearls – romance and fact
ROSAMOND CLAYTON

15 September. Photographing gems and their inclusions.
JOHN HARRIS

20 October. Window to beauty
PIERO DI BELA

17 November. AGM followed by Diamonds and simulants.

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.

26 March. Jewels in the hand
JAMES GOSLING

30 April. Branch AGM and ID Challenge

23 May. Gem Club (venue Barnt Green, Worcs): Jet
PEGGY HAYDEN

26 June. Summer Supper (Barnt Green, Worcs).

Scottish Branch

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

30 April to 2 May. Annual Conference. Guest speaker: *DR W. W. HANNEMANN*
Further details are given on p. 31.

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.

12 April. *PROF. SIR JOHN BOARDMAN*
Edward Warren and the Lewes House Gems

24 May. *FELICITY ASHBEE*
The Life and Work of C.R. Ashbee, Architect, Designer and Romantic Socialist, 1863–1942

21 June. *PROF. HENRY DIETRICH FERNANDEZ*
Papal Tiaras

4 October. *GERTRUD SEIOMANN*
A gift from Gabriele d'Annunzio and some other engravings on precious stones

8 November. *GEOFFREY MUNN*
The Tiara – elegance abandoned. A light-hearted look at an evolution of style

6 December. *GRAHAM HUGHES*
The International Exhibition of Modern Jewellery, Goldsmiths' Hall, 1961

The Crown Jewels

Symposium – Tuesday 27 April 1999

A full day's symposium organized by the SJH to celebrate the publication of the magnificent catalogue raisonné. A programme of talks by the authors of the book will be held during the day, followed by an evening reception in the Tower of London with a private view of the Regalia.

The cost of the entire event is £90 (£60 for the day only).

Further information on this event and application details are given on p. 27.

The copy date for contributions for the June issue of *Gem and Jewellery News* is 21 April