

## GILDING

Gilding is the art of applying thin leaves of gold or metal leaf onto a carefully prepared surface. It is a craft that has changed little over the centuries.

It was used in Ancient Egypt where the first recorded gold mine was opened in 1500 BC by Pharaoh Thutmose III. Gilding is also mentioned in the Old Testament and by Homer.

Gilding was developed to a high degree during the Middle Ages when it was used in manuscript illumination and panel painting. There are detailed accounts of gilding and Cennino Cennini's book, "Il Libro dell'Arte", first published in 1437 (presently by Dover Books).

Gilding was used to great effect during the 17th and 18th centuries and then reached another high point during the late 19th and early 20th centuries when brightly gilded objects were considered desirable and fashionable.

Gold is an inert metal and is permanent. It does not tarnish or change colour in any perceptible way. It is one of the most malleable substances and can be rolled and beaten into extremely thin leaves or drawn into the most delicate of wires.

Today gold leaf is sold in "books". Each book contains 25 leaves, which measure 3.25 inches square. The gold is beaten until it is reduced to approximately 1/250,000 of an inch thick. 2000 leaves weigh approximately one ounce and will cover 26,000 square inches.

The number of carats describes the purity of gold - pure gold is said to contain 24 carats. Other metals (mainly copper and silver) are alloyed to the pure gold in order to alter its appearance and give different handling properties.

Gold leaf is available as Loose or Transfer. Loose is simply the gold leaves placed between the rouged sheets of the book and is used in conjunction with a gilders cushion, knife and tip. It can be used with both water and oil gilding. Transfer is the same gold leaf but which has been pressed onto individual sheets of tissue. The gold is released by applying light pressure to the back of the tissue. Transfer leaf is only used with oil gilding.

Other metal leaf includes silver and palladium. There are also foils of aluminium and copper available and the gold coloured leaf known as Dutch or Schlag metal is an alloy of brass and zinc. These base metals are used for oil gilding and need a protective surface coating to prevent them from tarnishing.

It is possible to gild a variety of surfaces such as vellum, paper, textile, stone and glass but the principle material is timber. There are two distinct methods – water and oil gilding.

## RABBIT SKIN GLUE

This is used as the initial glue size coat and as a component in gesso and bole. It is available in sheet or granular form and makes a softer, more flexible glue than animal/pearl glue. To make up the correct strength soak one part glue to ten parts cold water and allow it to soak and in a

number of coats, usually a minimum of eight. The purpose of gesso is to fill the grain of the timber or any surface imperfections and provide a hard, smooth foundation for the gold leaf. When the gesso is dry it can be rubbed or carved down to a very fine finish.

### BOLE

This is the coloured clay that is mixed with rabbit skin glue and which is applied over the fully finished gesso. It is the layer on which the gold is applied and it is effective for water gilding and burnishing because of its fatty, soapy nature. It seals the gesso and slows down the absorption of the gilding water.

Bole is available in various colours but most commonly yellow, red and black. Yellow is usually first, especially to inaccessible parts where the leaf might not cover. Because it does not burnish very well it is usually covered with between two and four coats of another colour, eg; red, black, etc. Bole gives the thin leaf a richer depth of colour and the familiar glow to a worn piece of gilding.

### WATER GILDING

This is the finer, more skilful, of the two techniques and is distinguished by its ability to be polished to a high shine with an agate stone burnisher. It takes place over the dry and polished bole using loose gold leaf, which has been cut to size on the gilders cushion. The surface is wetted with the gilding water (distilled water, meths and sometimes glue size) and a piece of gold is picked up using the gilders tip (flat, natural hairbrush). This is then brought down into contact with the wet bole where it is sucked down onto the surface. This is repeated until the piece of work is covered. A second coat can be added and is known as double gilding.

After a few hours the gilding will have reached the point where it can be burnished – too darnp and it will snag, too dry and it will scratch. The burnisher is run over the surface until a shine is developed. Usually only the highlights are burnished so that they give some contrast against the matt passages.

Water gilding is associated with superior items because of the time and skill involved in the preparation and gilding. It is vital that each stage is done cleanly and carefully. Being wholly water based water gilding is very susceptible to damp conditions or being handled with hot, damp hands, etc.

### OIL GILDING

This is the simpler, more durable method of gilding although it cannot be burnished with an agate stone. It basically consists of applying the loose or transfer leaf onto a slightly tacky surface. It requires a clean and sound ground, which is non-absorbent. The oil/gold size is applied in a thin, even layer making sure that there are no runs or puddles. When it is virtually dry and there is only a slight 'tack' to the surface, the leaf is laid and pressed into contact. If it **is** gilded too early it will remain sticky, dull and prone to damage. If the oil size becomes too dry, the leaf will not stick.

Oil gilding is very versatile and can be used for many purposes including very intricate or large,

flat areas, sign writing and work out of doors, etc. It can be damaged by organic solvents and particularly with Nitromors paint stripper.

The traditional length of an apprenticeship for a gilder is six years. It takes a great deal of time to master the delicate techniques involved in the processes of gilding. The quality of the gilded surface can only be as good as the preparation beneath. The metal will magnify imperfections. so therefore it is essential that as much care as possible is taken in the preparation stages.

#### FURTHER READING

*Practical Gilding – Ann and Peter Mactaggart, ISBN 0-9507782-5-7.*

*Framing and Gilding – Paul Curson, Skills Book Publishing Party.*

*Gilding and. Antique finishes – Yvonne Rees, Practical House Series.*

*Artist 's Handbook of Materials and techniques – Ralph Meyer, I SBN 0-571-11693-01.*

*Manual of Traditiona lwood Carving - P Hasluck, Dover, ISBN 0-486-23489-4. II l.ibro Del Arts –*

*The Craftsman's Handbook, Dover, ISBN 0-486-20054-X.*

*The woodworker Magazine – Series of articles of over four, monthly issues during 1995 by Andrew White.*

*Gilded Wood – Conservation and History – Edited by D Bigelow, Sound View Press, ISBN 0-932087-21-3.*

*Gilding and Surface Decoration – Edited by S Budden, UKIC 1991 Conference Papers.*

#### SUPPLIERS

*Wrights of Lymm, Wright House, Millers Lane, Lymm, Cheshire, WA13 9RG. Tel: 01925- 752226.  
Gold leaf, sign writing, sundries, etc.*

*E Plolon Limited 273 Archway Road, London, N6 5AA. Tel: 0181-348 0315. Gilders' sundries, artists' materials and equipment.*

*Stuart Stevenson, 68 Clerkenwell Road, London. Tel: 0171-253 1693. Gilding sundries, artists' materials, etc.*

*Cornelisson and Son, 105 Great Russell Street, London. WC2B SBH. Artists' materials including pigments, resins, gums, etc.*

*A P Fitzpafrick, 1 Barnabas Studios, 10-22 Barnabus Road, London. Tel: 0181-985 7865. Kramer Pigments, gilding sundries, Micas.*

*A & M Hearing Limited, Faraday Road, Crawley, Sussex, RH10 2LS. Tel: 01293-540471. STERAMOULD - flexible silicon moulding material.*

*Alec Tiranti Limited, 27 Warren Street, London, W1P 5DG. Tel: 0171-636 8565. Modelling tools, moulding materials, gilding sundries.*

*George Jackson, Unit 19, Mitcham Industrial Estate, Stretham Road, Mitcham, CR4 2HA. Traditional composition mouldings.*