- A lacquered finish may look appropriate on modern articles but does not suit more antique surfaces.
- Lacquer is very difficult to remove completely and safely from a piece, particularly from decoration, inlays and intricate areas; your objects may undergo a high degree of handling and abrasion in the process.
- A lacquer finish protects the surface from handling marks but is not a substitute for regular housekeeping and inspection as a means of long-term preventive care.
- Small holes or scratches in the lacquer finish can cause serious 'spot' corrosion over short periods of time.

### CONSULTING A CONSERVATOR

Conservators specialising in metals have the practical skills and technical knowledge to carry out cleaning, repair and stabilisation of silver items of all periods. Their approach will be based on safe practice and minimum intervention – preserving as much of the original item as possible and retaining all related information and evidence.

- Conservation is a cost-effective option. A
  conservator can survey and assess all the items in
  your collection and go on to recommend and
  prioritise treatment and preventive care regimes in
  line with your budget and needs.
- If you just require advice on lacquering, storage and display materials, cleaning methods or sources for obtaining materials – a conservator can help.
- Conservators can also arrange for items in your collection to be analysed or sampled for purposes such as dating or determining provenance.

## Find a conservator by using the Conservation Register.

The Register is free to use; it provides detailed information on conservation-restoration businesses based in the UK and Ireland including contact details, referenced examples of previous work and the qualifications of members of staff. It is searchable by specialist skill and geographical location and each business has been required to meet rigorous criteria which include professional accreditation; the information is regularly updated.

### www.conservationregister.com

### info@conservationregister.com

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This article offers general guidance and is not intended to be a substitute for the professional advice of an accredited conservator. The views expressed are those of the author or authors, and do not necessarily represent the views of the Institute of Conservation. The Institute of Conservation would like to acknowledge use of the MGC publication 'Ours for Keeps' in the preparation of this text. The Institute of Conservation and its partners accept no liability for any loss or damage which may arise if this quidance is followed.

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# Care and conservation of silver and plate





The word 'silver' often conjures thoughts of treasure and very high-value objects. In fact, items made from this precious metal are more common than you might imagine and most people will own something made of silver: a small trophy, a coin, a watch chain or a table ornament or implement. Silver has an attractive colour and will take a high polish. It can be worked in many ways: shaped by hammering or turning, or cast into intricate shapes. It can be embellished by engraving, inset with gems or plated with gold and it is often used in association with polished hardwoods, ivory, or other metals of contrasting colour.

The silver used to manufacture most domestic-type objects originating in the UK is sterling silver. This is an alloy consisting of 92.5% silver and 7.5% copper. Many of the 'silver' objects originating from the Middle or Far East and Central or South America will have a very different composition, usually with a much lower silver content in the alloy. In some cases there is none at all – 'German Silver' is a white alloy made from nickel, zinc and copper. This guidance applies to the care and cleaning of objects which are in sound condition and made only of silver, though the techniques described can often be used when other materials are present.

A specialist metals conservator will have an understanding of the way cleaning materials and methods can affect different materials. They will advise if you are in any doubt about the composition of an artefact or the best method for cleaning and repair.

### WHAT CAN GO WRONG?

'Tarnish' appears as gradual discolouration and loss of polish, the metal turning first to pink, darkening to brown, and then to a very dark grey or black with a slight iridescent sheen. This is caused by sulphur compounds in the atmosphere, originating from the burning of fossil fuels and other industrial activity. Humans are also agents in producing tarnish – the salts and greases in our skin are highly corrosive and can mark a polished surface irreversibly.

Where conditions have become more harsh, or an object has been severely neglected, you may also see crusty, green-coloured deposits. These are the corrosion products of the copper in the silver-alloy. There are many causes for this, but common ones are storage in damp conditions or the action of chemicals, especially those from the residues of cleaning compounds.

If the green corrosion is extensive, then treatment by a specialist conservator is advisable.

### WHAT YOU CAN DO

### **Prevention**

- Avoid bringing silver into long-term contact with protein-based materials such as wool, silk or leather when choosing materials to store or display silver; these contain sulphur compounds.
- You can use sulphur-absorbing materials in a case to slow down tarnishing, e.g. Charcoal Cloth, Silver Safe, or copper-impregnated plastic films.
- Use clean cotton gloves to handle silver items especially when it is highly polished and at its most reactive.
- Keep silver dust-free using a soft, clean, lint-free cloth or a very soft hair brush. Dust can attract moisture and initiate the tarnish or corrosion cycle.
- Know your collection. Which items are valuable –
  historically, personally, financially? You should not
  attempt to remove even tarnish from these yourself if
  you value them, but trust them to a specialist metals
  conservator.
- Keep tarnish-removal for other 'everyday' items to a regular minimum. Bear in mind that each time you do this you are removing a little of the original surface.
- Keep the environment around your objects wellventilated and dry as dampness causes corrosion.
- When moving an item, use two hands around the body of a vessel and do not pick up by the handles, which are often weakened with age and use.

### Removing tarnish from silver yourself

If the tarnish is **light** then you may wish to remove it with a commercial silver cleaning cloth. This will remove dust, light sticky or greasy deposits and the dulling tarnish, leaving a brightly polished finish. This works for large areas of plain, undecorated silver, and its use can be a regular part of your general housekeeping routine. Do bear in mind the points about not doing this too often and only for non-historical pieces; remember to buy new cloths from time to time. Intricately shaped or decorated surfaces will require the use of a liquid cleaner.

If the tarnish is **heavy**, then a liquid method such as a 'silver dip' might be effective. This works by chemically dissolving the tarnish. It creates a very reactive surface however, which will tarnish again quickly, so finish with a silver polishing cloth. Follow instructions on the container carefully: wear rubber gloves and, if you are using large quantities, goggles. Use a fresh solution every time you clean the silver, rinse and dry thoroughly using clean cotton cloths. Maintain the finish with an occasional wipe-over with a silver cleaning cloth.

### THINGS TO AVOID

- Avoid wadding, creams and rouge sticks. These contain abrasive compounds which, as well as polishing off the tarnish, remove much more of the silver surface than the chemical methods above. Over time and with repeated cleaning, this will wear away the silver and any engraved decoration or inscriptions. These cleaners often also leave crusty deposits which harden and become impossible to remove.
- Do not use brass or chrome cleaners on silver. They are not designed for the purpose and contain much harsher chemicals and abrasives needed for cleaning copper or brass.
- Never use 'electrochemical' cleaners. They work by depositing a layer of another metal on top of the original surface, permanently obscuring the original finish and design.

### A note on lacquering

Most modern silver is protected after manufacture with a sprayed lacquer finish. This is usually cellulose nitrate dissolved in organic solvents. Commercial companies do offer a lacquering service, but you should think carefully and take advice before having this done to historic items, and consider the following points: