

# Conservation and Restoration of Historical Boxed Mineral Collections

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It is imperative that historical mineral collections are maintained, conserved and restored. These assemblages represent a valuable resource for research and reinterpretation using modern techniques.

Conservation and restoration fall into three main categories:

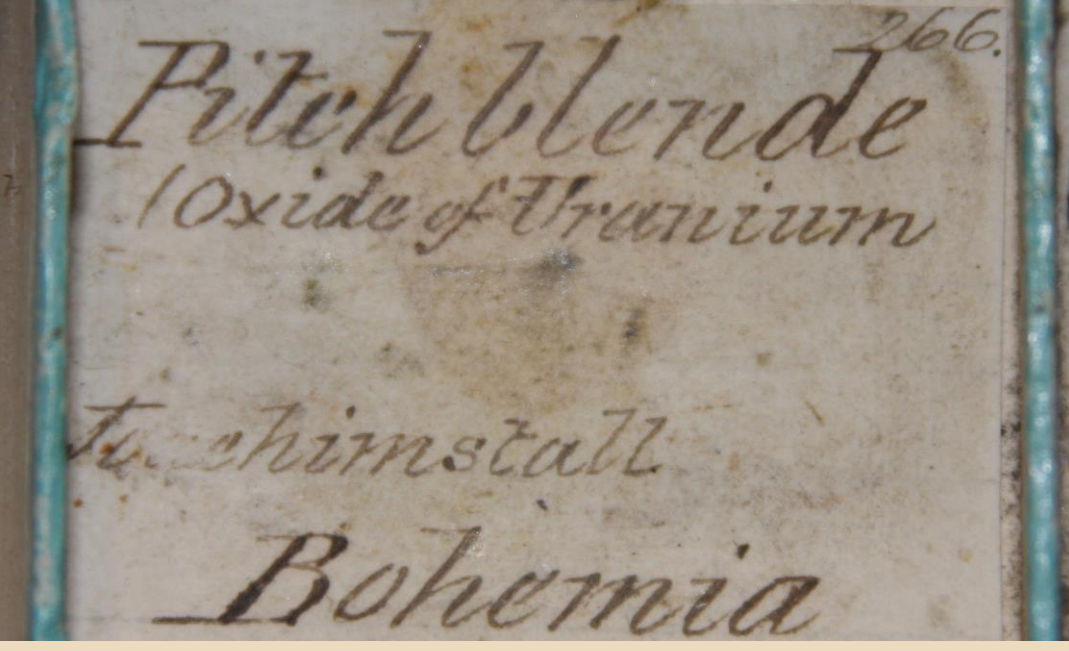
- Minerals
- Labels
- Boxes in which the collection resides



## Minerals

Beyond the normal cleaning of specimens within these boxed sets, care must be taken with some particular villains, such as pyrite (causing pyrite decay), arsenic, asbestos and radioactive minerals.

Pyrite decay on ammonite



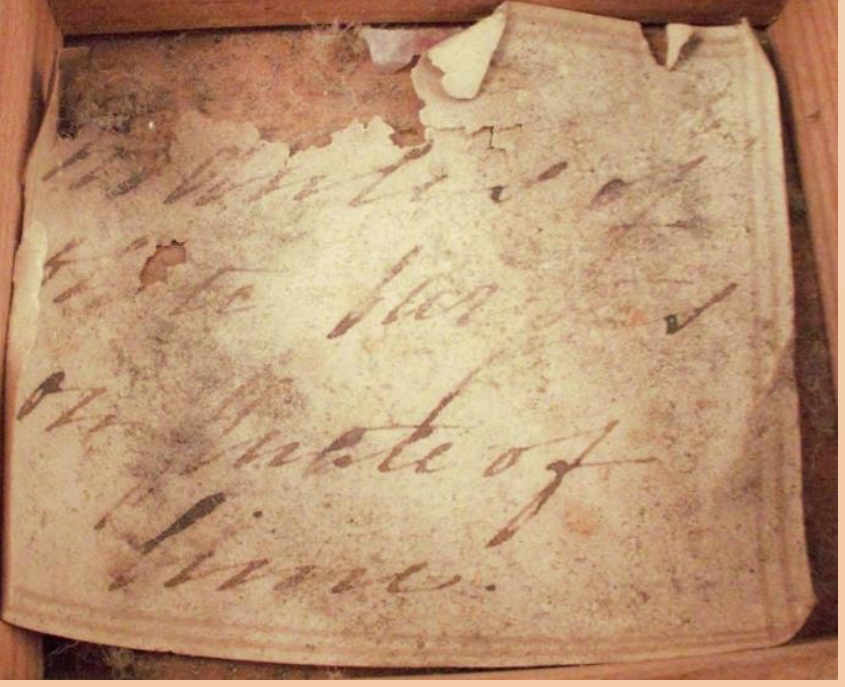
Highly radioactive specimen now entombed within lead



Much advice is available on the internet and in peer-reviewed journals for the treatment and stabilisation of pyrite. For specimens of arsenic and any other poisonous material, it is advisable to draw attention to its nature. Asbestos can be isolated within a sealable transparent envelope and identified as a potential hazard. Minerals emitting ionising radiations are best isolated and enclosed in lead.

## Labels

Most labels have been in contact with their associated mineral and will most likely be discoloured with age. A gentle application of eraser putty can be beneficial and uncover further information. Some labels that are in a very delicate condition may require placing within a polypropylene sleeve.



A label from a collection of minerals assembled by John Vallance, of Matlock Bath, about 200 years ago. This requires stabilisation and protection in an acid-free sleeve.



## Boxes

Most mineral boxes were constructed of mahogany or pine, and over the course of 100-200 years are in need of a feed. A liberal application of a beeswax polish is normally all that is needed to restore the wood to its previous splendour.

Fillers can be utilised to cure unsightly splits and are fairly easy to use.

Nail polish remover is effective for duct tape residue. It is recommended to leave any water marks as they are part of the history!



Removal of residue to former state



Water damage from plant pot