



Christopher Mills
Conservation Services
135 High Street
Becket, MA 01223
646-270-0999

Erika Sanchez Goodwillie
Paint Specialist
54 Kirkland Ave
Clinton, NY 13323-1414
315-939-9439

Handmade Paints

Prior to the mid-19th century, painters hand-ground pigment into a medium using a muller and slab, then added binders, fillers, and necessary solvents to make a brushable, drying paint. This process resulted in an uneven distribution of coarse pigment particles in the linseed oil for oil paint or water in the case of distemper or limewash.

Today, paint analysts use advanced scientific instrumentation to provide detailed information on the nature and composition of historic paint, resulting in more accurate interpretations than ever before. We work closely with analysts to ensure that our paints are specifically made with materials that have been identified in historic coatings. We offer hand-prepared linseed oil paints, limewashes, and traditional soft distempers made using period-appropriate tools and materials.

Linseed Oil Paints

When oil paints are brushed onto a sealed surface, they present unique physical characteristics not found in modern paints. The characteristics of hand-ground paint include high gloss, brushy texture (called a “ropey” texture), and a very slight tonal variation to the finish that gives the illusion of depth. The distinct surface texture is dictated by the force, angle, and direction of the brush during application. Traditionally, the brushstrokes followed the direction of the wood grain, which produces a linear formality (and in some cases, a pattern) to the room that changes with the lighting conditions. Over time, the high gloss finish gradually shifts to a softer semi-gloss that is hard and durable. These characteristics served as the aesthetic standard in distinguished households and buildings through the mid-19th century.

The methods used to make the paints are derived from 18th and 19th-century treatises and information gathered through paint analysis and research. The oil paints are made with specified dry pigments hand-ground (with a muller and slab or with a mid-19th century hand-crank paint mill) in linseed oil, then extended with handmade drying oil, turpentine, and chalk. The grinding of the pigments and proportions of the extenders are adjusted to match the original application’s transparency, texture, and gloss level. Unless specified, the hand-made paints will not contain lead or other pigments that are now known to be hazardous.



Cloverfields, bedchamber, woodwork and walls-oil



Cloverfields Bedchamber, verdigris- oil



Stratford Hall passages, verdigris- oil, limewash



Stratford Hall, Great Hall, woodwork-oil



Thomas Jefferson's Poplar Forest, walls and woodwork-oil



Bedchamber shutter detail -oil

Distemper Paints

Distemper paints are relatively simple-made of chalk, pigments, water, and hide glue as the binder. They have been around since antiquity and produce extraordinary optical qualities with unique advantages. When correctly applied, the result is a soft, velvety finish known for its luminous effects. They are a delicate, ephemeral finish that is removed with warm water if damaged or soiled and then reapplied. The ability to remove the paint limits the buildup of paint layers that can distort detail, add weight, and prevent lime's natural air and moisture exchange. The reversible nature of the paint is also in complete compliance with modern conservation standards. This type of paint was widely used in interiors until the first part of the 20th century.

Like linseed oil paints, the methods used to make distemper are derived from treatises. First, a base "creme" is made with calcium carbonate (chalk) and water; then, if necessary, dry pigments are hand-ground (with a muller and slab) and added. Finally, prepared hide glue is gently warmed and added to the creme on the day of application.



Stratford Hall, walls-distemper, verdigris-oil



Stratford Hall, walls-distemper, woodwork-oil



Metropolitan Museum of Art, British Galleries, Kirtlington Park, walls-distemper



Thomas Jefferson's Poplar Forest Dining Room, woodwork-oil, walls-distemper

Projects Using Traditional, Handmade Finishes

Cloverfields Plantation House / 1705 Easton, MD.

Drawing Room/Dining Room/Parlor/Stair Passages

James Brice House/ 1770's Annapolis, MD.

Drawing Room/Dining Room/Parlor

Historic Deerfield/ 1795 Deerfield, MA.

Bernard Tavern

Metropolitan Museum of Art, British Galleries, New York, NY.

Kirlington Park Dining Room

Metropolitan Museum of Art, American Wing, New York, NY.

Hewlett/ Van Rensselaer Hall/ Alexandria Ballroom/ Verplanck

Thomas Jefferson's Monticello, Charlottesville, VA.

Tea Room

George Washington's Mount Vernon, Mount Vernon, VA.

West Parlor/ Center Stair Passage/ Nelly Custis Bedchamber/West Parlor/Lafayette Room

Mount Prospect Plantation House/1790, Washington VA.

Study

Johnston, Felton, Hay House/1859, Macon GA.

Second Floor Passage

Chesterwood/ 1895 Home of Daniel Chester French, Stockbridge MA.

Breakfast Porch

Stenton/1760 Plantation House, Philadelphia PA.

Yellow Lodging Room

Farmer's Delight Plantation House/ 1799, Middleburg, VA.

2nd Floor Bedchamber

James Madison's Montpelier Orange, VA

North Passage Stair Hall/Dolly Madison's Bed Chamber /Library

Stratford Hall /1725 Plantation House, Stratford, VA

Dining Room /Cherry Tree Room/Parlor/NE Bed Chambers

Boscobel House and Gardens/ 1810 Garrison, NY.

Parlor / Stair Passages

Wilton/ 1764 Plantation House Hartfield, VA.

Parlor/Study

Woodlawn Historic Stone Barn, Silver Springs, MD.

Interior limewash application

Colonial Williamsburg , Williamsburg, VA.

Charlton's Coffeehouse

Kenmore, Fredricksburg, VA.

Interior paints made by our predecessor, Chris Ohrstorm and Matt Webster

References

Susan L. Buck, Ph.D. Conservator and Paint Analyst

paintchipsanalysis@gmail.com

(757) 220-0170

Willie Graham, Consultant

w.graham@verizon.net

(804) 399-4339

Mecka Baumeister, Conservator, Objects Conservation, The Metropolitan Museum of Art

Mecka.Baumeister@metmuseum.org

Travis McDonald, Director of Architectural Restoration, Thomas Jefferson's Poplar Forest

travis@poplarforest.org

(434) 534-8123