

Up Close and Illuminated: Artist's Methods and Materials in the Manton Collection¹

By Leslie Paisley
Chief Paper Conservator

Editor's Note: The Manton Collection of British Art at the Sterling and Francine Clark Art Institute includes more than two hundred paintings, drawings, and prints by Gainsborough, Constable, Turner, Blake, and others, and was the creation of businessman and arts patron Sir Edwin A. G. Manton (1909–2005) and his wife, Florence, Lady Manton (1911–2003). The collection, a gift from the Manton Foundation in 2007, constitutes the most significant acquisition of art by the Clark since its founding in 1955 and complements the Institute's extensive holdings of nineteenth-century French and American art. In 2010, Leslie Paisley, head of paper conservation at the Williamstown Art Conservation Center, performed a technical survey of the drawings in the Manton Collection, and with third-year intern Mary Broadway contributed an essay on the findings to the 2012 catalog, Landscape, Innovation, and Nostalgia: The Manton Collection of British Art. The essay, titled "Up Close and Illuminated: Methods and Materials in the Manton Collection," examined the range of supports and media of the Manton works on paper, with detailed descriptions of paper composition, watermarks, charcoal, graphite, chalk, ink, and watercolor. This bulletin, excerpted and annotated with the author's notes in brackets, illustrates some of the examination's technical findings and casts light on the working techniques of Thomas Gainsborough.

The eighteenth and nineteenth centuries in Britain witnessed unprecedented inventions in the production of artists' media, inspiring a wide range of new drawing styles and techniques. Conservators at the Williamstown Art Conservation Center studied the papers, materials, and experimental techniques of works on paper in the Manton Collection, providing insights into the material history of drawing at the time.²

[In addition to determining the order of media application and identifying materials used in execution of the drawings and watercolors in the collection, the process of technical examination yielded many interesting revelations. Inspection of the papers in raking and transmitted light revealed watermarks and other details; examination under the microscope and in ultraviolet light (UVA) revealed applied coatings and subsequent repairs; and, in one case, examination under infrared light revealed an inscription that was key to attributing a work. Examples of these findings are illustrated here in Figures 1 and 7. For a complete description of examination techniques and results, with illustrations, please see the catalog.]

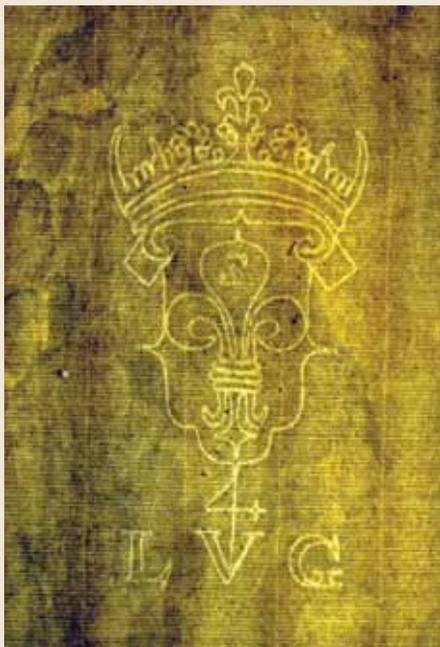


Figure 1

Fig. 1 (previous page): Thomas Gainsborough, detail of *Rocky Wooded Landscape with Herdsman Driving Cattle along a Valley and Distant Mountains*, c. 1783. Examination in transmitted light reveals fiber distribution, paper thickness, and evidence of the mold the paper was formed on. The “LVG” watermark was copied by rival papermakers to impart a sign of quality to their papers.

Fig 2: Thomas Gainsborough, *Landscape with Herdsman Driving Cows and Distant Buildings*, mid- to late 1780s.



The diversity of works in the Manton Collection demonstrates the wide range of experimentation and possibilities in the medium of watercolor that emerged during the second half of the eighteenth and throughout the nineteenth century. [A group of drawings by Thomas Gainsborough provided an opportunity to study in greater detail his working techniques, especially his use of coatings and fixatives.]

Fixatives and varnishes were necessary to ensure the stability of the work or to alter its appearance. The term “fixative” refers to a dilute liquid substance generally sprayed or dipped to adhere powdery pigment particles to paper, while “varnish” indicates a natural resin finish, often applied by brush, imparting a gloss. They were added during execution to protect the media from smudging, as well as upon completion to more closely approximate the varnished look of oil paintings.

While several watercolors in the Manton Collection contain coatings applied over the watercolor washes, the nineteen Gainsborough drawings in the Clark’s collection provide the largest, most intriguing group for study. Gainsborough considered the fixative process central to the final appearance of his pictures, and used an innovative method, particularly in his application of coatings in layers. The drawings fall into two groups: those with a matte surface, executed in either graphite or black-and-white chalks [with an applied fixative][Fig. 2]; and more fully realized drawings with added watercolor and a glossy varnish [Figs. 3 and 4].

In a letter to his friend William Jackson, Gainsborough imparted his “secret” method of making a drawing look like a painting:

Make the black & white of your drawing, the Effect I mean, & disposition in rough, Indian Ink shadows & lights of Bristol [referring to white lead chunks produced in Bristol as opposed to London] . . . when you see your Effect, dip it all over in skim’d milk . . . correct your Effects with Indian Ink . . . dip again. . . . Then tinge in your greens, your browns with sap green & Bistre, your yellows with Gall stone & blues with fine Indigo . . . when this is done, float it all over with Gum water . . . let that dry & varnish it 3 times with spirit varnish such as I sent you; tho only Mastic & Venice Turpentine is sufficient. . . .³

In an effort to better understand the layered structure of Gainsborough’s more complex, coated watercolors, initial research and analysis was carried out at the Williamstown Art Conservation Center on a group of four varnished drawings. They fit the criteria of the study not only because they appear to have been executed with similar materials and methods, but because they all contain thickly applied white media in need of consolidation, which provided open sample sites. The drawings were divided into pairs. One pair was acquired by Sterling and Francine Clark in the



1910s, the second was part of the Manton bequest.

At first glance, it was clear that the first [Clark] pair, *Herdsman and Cattle* and *Landscape with a View over a Distant Plain* [Figs. 5 and 6], were significantly less yellowed than the second [Manton] pair, *Landscape with Figures, Herdsman and Cattle at a Pool*, and *Distant Church and Wooded Landscape with Figures and Winding Track Leading to a Cottage* [Figs. 3 and 4]. Examination of the paper, media, and coatings confirmed much of Gainsborough's description of his working technique.⁴

The artist in all four cases selected a fine quality, laid, linen-and-hemp-fiber writing paper, sized with gelatin. Gainsborough used graphite for the preliminary underdrawing, charcoal for linear detail, and stumped or smudged portions of the charcoal with a tool to infer the darkest darks and midtones. At this point, he brushed a plant-based gum, such as gum arabic, gum tragacanth, or almond gum, on the drawing, and then dipped it in skimmed milk depending on the friability of the media. This initial fixative held the charcoal in place and prevented it from sullyng the white highlights, which were applied next. When working in dry media, Gainsborough preferred an opaque dry lead- or calcium-based white chalk, which he referred to as Bristol after its place of origin. In cases where dry and wet media were combined, Gainsborough applied the whites thickly; in some instances he may have done so directly from a tube of paint.

Fig. 3 (top left): Thomas Gainsborough, *Landscape with Figures, Herdsman and Cattle at a Pool, and Distant Church*, mid-to late 1780s.

Fig. 4 (top right): Thomas Gainsborough, *Wooded Landscape with Figures and Winding Track Leading to a Cottage*, mid-to late 1780s.

Fig. 5 (above left): Thomas Gainsborough, *Herdsman and Cattle*, 1770–80.

Fig. 6 (above right): Thomas Gainsborough, *Landscape with a View over a Distant Plain*, c. 1775.

Once laid in, the highlights needed to be fixed to preserve their opacity and vibrant, fluffy quality. This fixative was likely the skimmed milk to which he referred in his letter. Preliminary cross-section analysis using fluorochrome dyes and visual evidence support this supposition. Using milk as a binder provided a film of natural fixative that would have been relatively tough and almost transparent once dry. For its application, Gainsborough preferred dipping, evidence of which became apparent when the drawings were viewed under



Fig. 7: Thomas Gainsborough, detail of *Wooded Landscape with Figures and Winding Track Leading to a Cottage*, mid- to late 1780s, as viewed under ultraviolet light (UVA). The top and bottom right corners each exhibit a curved area of little to no fluorescence. This indicates that one or more artist-applied coatings are absent from these areas, possibly where the paper was held or clipped while dipping.

ultraviolet light (UVA), showing areas the approximate size of a person's thumb [Fig. 7], which likely indicate where the artist held the sheet of paper as it was gently submerged. Following the milk fixative, Gainsborough laid in any colored washes, first the yellows, browns, greens, and blues, then ending with reds and oranges, which were often vermilion based. This structure is confirmed by other drawings, in which the pigment can be seen applied on top of white, and in which the lead-white highlights are protected by a skim milk coating.

Once the composition and colors were in place, the decision to varnish the drawings to make them look more like oil paintings was presumably made based on the quality of the work and its intended status and audience. For the varnish, Gainsborough preferred mastic resin and Venice turpentine, which could be brushed over the surface of the drawing. Often, more than one coat was used, producing an effect like an oil painting. Over time this natural resin varnish has yellowed and developed a fine crackle pattern, more so on the two works that received more light exposure. Future analysis on these coatings may help determine the exact composition and placement of the coating layers.

A true microcosm of British drawings from the eighteenth and nineteenth centuries, works from the Manton Collection will continue to excite further research and examination over time. As paper conservator Marjorie Shelley observed about her conversations with Sir Edwin: "What I remember about him most of all was his enthusiasm for works of art . . . and his curiosity about the materials and techniques. . . . He was a truly unique [collector] in that regard. . . ." How fitting then that we include a consideration of process and materials with this catalog. The mysteries these sheets have to reveal will continue in Williamstown and beyond.

1 Excerpted from Clarke, Jay A., ed., *Landscape, Innovation, and Nostalgia: The Manton Collection of British Art* (Williamstown: Sterling and Francine Clark Art Institute, 2012).

2 Susannah Blair, Research Assistant, Department of Drawings, Getty, and Jay A. Clarke, Manton Curator of Prints, Drawings, and Photographs, Sterling and Francine Clark Art Institute, contributed significantly to this essay. The authors are grateful for their suggestions and additions during the editorial process.

3 Thomas Gainsborough to William Jackson, 1773, in Mary Woodall, ed., *The Letters of Thomas Gainsborough* (Greenwich, Conn.: New York Graphic Society, 1961), 177–79.

4 Research project on varnished Gainsborough drawings, on file at the Sterling and Francine Clark Art Institute, Williamstown, Massachusetts.

5 Marjorie Shelley, interview with Jay A. Clarke, October 2011. Brackets in this final paragraph are original to essay as published.