

Treatment Report

Object Number: 49.18.4



Title: Branch Hill Pond, Hampstead Heath

Attribution: John Constable

Culture/Date: English, 1824–25

Materials: oil on canvas

Purpose of Request: Treatment for European Expansion

Condition: *General description/Condition Summary:* The painting is structurally stable for display but requires aesthetic treatment for increased legibility. The surface appears grimy with a hazy film the surface coating(s) have discolored significantly. The frame is dirty, with many areas of small losses and previous repairs. See Appendix 3: Timeline (1825 – 2012) for a summary of treatment history.

Auxiliary support: The stretcher is structurally sound and in plane. All 8 keys are present and secure. It is unknown if the stretcher or its modifications are original to the painting's construction or modifications.

Primary support: The current condition of the primary support is unknown, but x-rays taken in 1952 indicate that at least one original tacking edge was removed at the time of lining. Both the original and lining canvas are aged. The lining remains well-adhered. Together, they feel stiff but still retain flexibility and are not entirely brittle. The canvases are well-tensioned on the stretcher and in plane.

Preparation layer(s): The ground layer appears well-adhered to the canvas and paint layers. In the areas of paint loss, darker colors are visible below the original paint layer. It is unclear whether these colors are an intact toned priming layer or previous retouching.

Paint layer(s): Throughout the painting, thin, straight hairline age cracks are present and most noticeable in the sky. The longest cracks extend horizontally, with shorter perpendicular cracks. The light passage of sky on the left edge contains more prominent vertical cracking, which may be related to a higher concentration of lead white. All cracks are jagged and closely spaced, which may relate to the canvas weave. One small protruding vertical crack measuring approximately ½ inch in the clouds above the horizon line is raised, and therefore visible with raking light (located 7 ½ inches from the right and 10 ½ inches down). The paint is flexible under a light amount of pressure, and there is a void behind it; it may be incipient of further cleavage. It does not appear to be caused by a puncture or dent from the reverse due to the condition of the lining canvas but may predate the lining or be caused by a slub in the canvas. The crack was first reported in 1983. Many areas of the edges are abraded from the frame rabbet. A small diagonal abrasion around ¼ inch long is located 12 ½ inches from the right edge and 7 ½ inches down has caused loss in the paint layer, leaving the white ground visible. Some areas of the impasto have been disturbed by the heat and pressure of lining, causing them to slightly recess and create 'moats' around the high points. Vaguely lighter patches of discoloration in the left half of the sky are noticeable. The exact cause is unknown but may be caused by overcleaning and 'scrubbing' the paint or blanching during a previous treatment.

Please do not publish or share the information presented in this report without permission from the author/examiner

Surface coating(s): The varnish is yellowed with small cracks throughout. There are layer of grime atop the varnish layer, causing a filmy appearance, and loose dust overall. Two small abrasions in the coating are visible in axial specular illumination. One measuring around a quarter inch long is located 2 inches from the left edge and 1 ½ inches down. Another is around ¾ inch long and located 14 ½ inches from the right edge and 1 ½ inch up.

There is inpainting around the edges associated with former paint abrasion. Most notably, there is extensive retouching on the left edge, which extends roughly ½ inch inwards. On the right side, it extends about ¼ inch. This is older retouching which has since been covered by the surface coating, so it now fluoresces similarly to the rest of the painting, although slightly darker. It also has some fluorescence which may be caused by it containing lead white. The most recent retouching was completed in 2003 with watercolor, and is more visible, as it does not fluoresce under UV irradiation.

The painting is known to have been “waxed” in 1952. Although the exact meaning is ambiguous, a thin layer of beeswax and possibly carnauba wax may have been applied to the surface and polished with a soft brush to protect the varnish underneath. [3]

Frame: One small round fragment of gesso (approximately ½ inches in diameter) detached from the frame during disassembly and has been saved for reattachment. Overall, the frame is worn across the front, with many small losses, previous repairs, and dust. Notably, there are small losses at many of the areas where the frame was previously sized down. The miters are open at all four corners but stabilized by the buildout. The painting is well supported. The wood of the buildout is marked, checked, gouged, and punctured on the back, which may indicate that it was made from a reused wood.

CITATIONS:

[1] Sarah Cove, “Constable’s Oil Painting Materials and Techniques,” in *Constable* (Tate Gallery Publications, 1991).

[2] Sarah Cove et al., “Mixing and Mingling: John Constable’s Oil Paint Mediums c. 1802-37, Including the Analysis of the ‘Manton’ Paint Box,” in *Painting Techniques History, Materials and Studio Practice: Contributions to the Dublin Congress, 7-11 September 1998* (International Institute for Conservation of Historic and Artistic Works, 1998).

[3] *Manual on the Conservation of Paintings* (International Institute of Intellectual Cooperation, 1940; repr., Archetype, 1997), 141.

Treatment:

The front and back of the painting were dry cleaned with PU cosmetic sponges and a soft brush to remove loose dust. The protruding crack on the horizon line was consolidated under the microscope with a 1% isinglass solution in DI water. The adjacent paint was gently heated with a hot air pen and lightly pressed into plane with a silicon tool.

The painting was cleaned with cotton swabs in 7.5 pH sodium citrate solution in DI water to remove grime. A second pass with 8.5 pH sodium citrate, bicine buffer, and deoxycholate in DI water was executed to target more oxidized varnish components. Both passes were cleared with DI water. As components were removed from the surface, more cracks and blanching in the varnish layer became visible, giving the painting a patchy, hazy appearance. During cleaning, pre-existing planar deformities were noticed; including a flexible protruding bulge in the center of the painting and two small draws on the right side of the top edge. The lining remains well adhered and stable; no treatment is required.

After testing, a 20% Paraloid B-72 varnish in ShellSol A100 was chosen to reintegrate the cracked varnish and saturate the painting. A second coating of 10% RegalRez 1126 solution in odorless mineral spirits, with 2% Tinuvin was applied on top, to further saturate patchy areas. Corrective retouching was performed in select areas with Gamblin Conservation Colors. To further adjust gloss after completion, additional RegalRez was added locally to matte areas with a small

brush.

The frame was dry cleaned with a soft brush and PU cosmetic sponges. Loose areas of gesso were consolidated with a 5% solution of Aquazol 500 in 9:1 isopropanol : water, diluted with additional water to improve penetration. Select losses were filled with Flügger to match the original design. Fills and small areas of exposed gesso were retouched with Kremer Watercolors. Felt and mat board shims were added to the rabbet with double-sided tape to improve the painting's fit in the frame. A Cloroplast backing board was attached to the reverse of the stretcher, and framing hardware was used to secure the painting. Labels which were attached to the old backing board were retained and attached to the Cloroplast under mylar.

Description:

The painting was brought to Conservation for treatment associated with the ongoing European Expansion project. It was removed from its frame and examined under normal conditions, with the aid of low magnification, and under the microscope. Digital images were made under diffuse, specular, and raking white light, as well as with UVA-induced visible fluorescence and infrared reflectography (1250 - 1700 nm).

General description: The painting is an oil on canvas in landscape format depicting shrubland outside London with a clouded sky. The details include staffage figures and identifiable villages and structures. Most prominent are a horse and cart in the bottom right corner.

Auxiliary support: The stretcher is four-membered and bridle-jointed with two key slots per join, measuring 30 ¾ by 24 inches. All 8 keys are present. The stretcher is particularly heavy and solid-feeling, suggesting it is made of a hardwood. This is supported by the visible pores throughout the wood. The inner faces of the top, bottom, and left members are beveled in an arched fashion where the bevel is deeper in the center of the bars. The stretcher members range from approximately 5/8 to ½ inch thick. The right member is not beveled. Two long and thin inserts (likely wood) on the outer edges of the vertical stretcher members serve to slightly enlarge it. The motivation for enlarging the stretcher is unknown, since it does not appear to be excessively keyed out. Two missing keys were replaced around 1982-1983, and all keys were secured with beeswax; residue of an adhesive and carrier indicate that prior to this, the keys were secured with paper tape. Indentations on the reverse show that the painting was previously held in the frame with nails. The painting is backed with two FomeCor boards, with the outermost support being adhered to labels from previous exhibitions (see Appendix 4: Labels). The bottom member of the stretcher is covered in a fine whitish dust.

Primary support: The weave structure of the primary canvas support is unknown, since it is entirely obscured by the lining canvas from the reverse. It was lined before being acquired by the museum with a glue-paste adhesive (estimated). The edges are wrapped with kraft paper tape. The lining canvas is made of fine, evenly spaced linen threads in a plain weave with 41 horizontal and 40 vertical threads per inch. The threads have a z-twist. Cusping is not visible on the original or lining canvas. The lining canvas extends 1 inch along the back of the stretcher, and the kraft paper tape extends ½ inch. Through the tape along the edge, evenly spaced iron tacks securing the canvas are visible. The tacks are magnetic.

Preparation layer(s): The canvas was prepared with a thick, smooth gesso layer obscuring most of the canvas texture. The white color of the priming is visible where small losses to the paint layer have occurred. A preliminary layer of thinned brown paint was applied to the lower portion of the painting, used to block in the forms of the landscape, which is still visible in some low points and mid-toned shadows where paint has not been applied on top.

An infrared reflectogram captured at 1510 – 1700 nm shows that multiple horizon lines were drawn. The primary line extends across the horizon, while other partial horizontal lines only extend across some of the landscape and may have been used to portion off the distant land. Other instances of underdrawing are also more noticeable in the landscape, though there are no obvious compositional changes or drawings beneath the paint. The reflectogram reveals that the position of the horse's head has been moved slightly back. A related graphite sketch on paper of the horse and cart in the bottom right corner is in the VMFA collection (2013.171) which shows that although the primary horse and cart are rendered the same, the accessory figures (another horse and a

singular attendant) have been changed.

Paint layer(s): The top half of the painting is dominated by sky; containing feathery, thinly applied clouds blended wet-into-wet with slight impasto in the highlights. The undersides of the clouds are a rich grey, but brief passages of subtle reds are visible. The top right corner is a saturated blue. Vertical brushwork near the horizon indicates rain far in the distance. The horizon line depicts distant, striated land which slowly transitions into the foreground. Identifiable locations and structures are suggested along the horizon and are repeated motifs in other Constable paintings. Moving forward in space, the paint becomes warmer in hue and more saturated as the atmospheric perspective decreases. In the foreground, the paint is more thickly applied, likely with tools other than a brush. The impasto forms the illusion of detail in the natural environment. As this is a larger studio painting, parts of the foreground were likely painted wet-over-semi-dry; glazes tinted with green or earth colors may have been applied to the landscape to unify the colors. The landscape is dotted with staffage including bathers, laborers, livestock, and dogs. Black, white, red, blue, yellow, and browns are used within the painting. These may correspond with ivory or charcoal black, lead white, vermillion, Prussian blue, Naples yellow, and earth pigments, which have been identified in other paintings by Constable from 1824 – 1826. [1][2]

Surface coating(s): Under UVA irradiation, a coating is present which fluoresces blue with a slight green cast, likely indicating a natural resin varnish; it appears to be applied by brush to achieve a thick, glossy layer. The painting's treatment history (see Appendix 3: Timeline (1825 – 2012)) suggests other surface coatings may be present. Some of the coating extends onto the taped tacking margins.

Frame: The frame is comprised of a hardwood molding with Louis XV style carved ornamentation, measuring 34 ¼ by 40 ½ inches with a 23 ½ by 29 ¾ inch window. The frame was originally created at a larger size and was previously sized down by removing sections at easily obscured areas along each side to be the appropriate size for the painting. The rabbet of the frame has been deepened with a hardwood buildout, which appears to be nailed on. The build out is 7/8-inch deep and beveled on the outer edges. The painting is fit in its frame with a poplar slip frame, which is fit into the larger frame by a strip of cork on the top edge. The slip frame was added in 2001 to accommodate for glazing (now removed) and includes felt padding. The painting fits into the slip frame with strips of FomeCor on each side. The painting is surrounded by a slip frame with a small cove. Moving outward, the frame is decorated by a fluted fascia with acanthus leaves and lotus. Following is a sanded frieze. A vinelike astragal separates the scoop profile of the molding, which is decorated with incised lines and foliage. Centered on each edge is a cartouche. The sweeps are decorated with festoons of five-petaled flowers. Scrolls and rinceau lead into the corners of rocaille decorated with lamb's tongue. The outer edges are dentilled.

Exhibition, Housing, & Handling Reqs: Treatment is required to prepare the painting for display in the VMFA galleries, including an update of the housing.

- Temperature = 70°F +/- 5° (21°C +/- 3°)
- Relative humidity = 50% +/- 5%
- Visible light = 25 footcandles
- UV light < 0 µW per lumen

Conservator:	Margaret Priest (Graduate Intern in Paintings Conservation - Summer 2026)	Actual Trtmt Hours:	72.00
	Meredith Watson (Associate Conservator of Paintings and the Paul Mellon Collections)	Date Completed:	08/05/2026