In memory of Julie Jones (1935-2021)

Esteemed scholar of Pre-Columbian art and dedicated editorial board member of the journal.
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Back cover illustration: Kneeling female figure, 15th–early 16th century, Mexico, Mesoamerica, Aztec. See fig. 5, p. 17.

Illustration on p. 2: Pierre Patte after Charles François Ribart de Chamoust. Section view of Ribart’s elephant monument from Ribart 1758, pl. VI. Hand-colored etching. See fig. 4, p. 86.

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MANUSCRIPT GUIDELINES FOR THE METROPOLITAN MUSEUM JOURNAL

Founded in 1968, the Metropolitan Museum Journal is a peer-reviewed scholarly journal published annually that features original research on the history, interpretation, conservation, and scientific examination of works of art in the Museum’s collection. Its range encompasses the diversity of artistic practice from antiquity to the present day. The Journal encourages contributions offering critical and innovative approaches that will further our understanding of works of art.

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ABBREVIATIONS
MMA The Metropolitan Museum of Art
MMAB The Metropolitan Museum of Art Bulletin
MMJ Metropolitan Museum Journal

Height precedes width and then depth in dimensions cited.
During the final decades of the nineteenth century in Paris and London, methods for presenting exhibitions were undergoing a major reconsideration, and frames from this era began to take on a new role both visually and conceptually. This development was driven by artists to indicate that their works represented a new kind of vision. Many original frames have disappeared from the walls of private collections and museums, but it is possible to piece together concept and approach through photographs, treatises, drawings, catalogues, and a few precious extant frames. This study focuses on artist-designed frames at the end of the nineteenth century with a particular emphasis on a material known as pâte coulante, unique in its ability to render extraordinary profiles, some of which could not have been realized by any
other method available at the time. Many noteworthy period frames that utilize *pâte coulante* are preserved within the Havemeyer collection at The Metropolitan Museum of Art. Although frames in *pâte coulante* can be seen surrounding the works of many late nineteenth-century and early twentieth-century paintings, this study refers to the few superb frames available for study in The Met and in private collections, which in many cases surround works by Edgar Degas (fig. 1). For artists like Degas, this method became crucial for executing radical frame designs. To reinforce the argument that the process of template-cut *pâte coulante* granted artists and frame-makers the freedom to reliably turn any design into a serviceable molding, period-correct moldings were re-created using the available historical information, and reflections gleaned from this technical study are included herein.

**Exhibitions and Frames Shift Away from the Salon**

The year 1874 marks an important turning point for artists challenging the status quo. It saw not only the first one-person exhibition by James McNeill Whistler in London, but also the inaugural show of the Anonymous Society of Artists, Painters, Sculptors, Engravers, Etc., in Paris, the group that critic Louis Leroy would satirically dub the “Impressionists.” In both cases, we see the avant-garde taking greater control over the presentation of their works and the total art environment, including the way their works were framed.

Both Whistler and the Impressionists claimed to have originated the idea of harmony between painting and frame. In 1873, Degas employed simple frames for a series of pastels titled *Répétition de ballet* that one of his most supportive collectors, Louisine Havemeyer, described as being painted “soft dull gray and green which harmonized with the decorations of the scenery and . . . dresses of the ballerina.” The same year, Whistler wrote to collector George A. Lucas:

> You will notice and perhaps meet with opposition that my frames I have designed as carefully as my pictures—and thus they form as important a part as any of the rest of the work—carrying on the particular harmony throughout. This is of course entirely original with me and has never been done . . . and I wish this to also be clearly stated in Paris that I am the inventor of all this kind of decoration . . . that I may not have a lot of little Frenchmen trespassing on my ground. ³

Regardless of who arrived at the idea first, the shared impulse to invent new styles of frames was part of a larger thrust to recontextualize works of art by reimagining the viewing experience. Underrepresented at established venues like the Paris Salon in the early 1870s, the Impressionists took issue with many of the practices standardized by the Salon and set out instead to create an entirely new format for exhibiting their work. In an open letter to the jury of the Paris Salon in 1870, Degas suggested six tiers of reform in the presentation of art. These reforms related specifically to strategies for hanging works, but Degas’s ultimate goal was to show individual works of art to their best effect. In his closing statement, Degas urges: “In short, once you have satisfied your judges’ pride, be good interior decorators.”

One hallmark of the Salon was large frames, usually composed of a running molding over which was applied layers of cast classical decoration (fluting, lamb’s tongue, acanthus). The scale of Salon frames had an important purpose: when paintings were hung edge to edge, artists relied on the wide moldings to create space among neighboring paintings.

Rejecting the Salon system altogether, Impressionists sought their own gallery space, and some began conceiving frame styles that would underscore the freshness of their vision: linear running moldings with no applied decoration whatsoever. At first glance, these experimental frame profiles seem simplistic when compared to the heavily ornamented frames used by their contemporaries in the mainstream. Their formal elegance came from the shape of the profiles themselves, which were delicately designed to give a sense of harmony between painting and frame through use of restrained color and shadow pattern.

The most recognizable of these styles are the reeded frames by Whistler, and the fluted cushion frames by Degas. They shared formal elements like reeded friezes and fluted columns with the neoclassical thrust that was informing mainstream frame design of the late nineteenth century (fig. 2). They hearken back to miniature columns found on fifteenth-century tabernacle frames, which in turn come from the structural columns of ancient Greek architecture. In frames as in architecture, these historical elements had traditionally been paired with decorative flourishes like protruding acanthus, scrolls, stacked coins, and other classical motifs that act as focal points. The new styles, by contrast, incorporated only those linear elements that would create a subtle play of light and shadow across the surface of the profile.
Pâte Coulante: From Necessity to Opportunity

Though the shapes we see in the most adventurous of these new designs seem radical, and in some cases extraordinarily complex, they could be made efficiently and at low cost by borrowing a process that had been mastered for architectural moldings many centuries earlier. This process allowed artists and frame-makers to experiment with shapes that could not have been executed in wood and with a material that was already on hand in frame-making ateliers.

Pâte coulante, which translates to “flowing paste,” was initially adopted as an inexpensive alternative to machine-milled profiles in wood for running moldings. The financial woes felt by the Impressionists during the 1870s and 1880s are well documented, but artists and dealers were not the only ones experiencing economic challenges. During the 1850s and 1860s, in addition to being physically reconstructed under the direction of Baron Haussmann, Paris was experiencing a major shift in the marketplace for luxury goods. One economic result of Haussmannization was a trend away from expensive bespoke craft, and toward less costly mass-market manufacturing.6 Frame-makers of the period were pressed to find quick and cost-effective ways to keep up with demand for large, ornamented frames suitable for the Salon, and began to use pâte coulante for both cast ornament and template-cut moldings.

The earliest usage of the term pâte coulante for frame-making is found in the 1896 edition of Nouveau manuel complet du fabricant de cadres,8 so its inclusion in the 1856 edition suggests that the process, which may have been experimental as early as the 1870s, had been widely adopted by the close of the century.

Although pâte coulante appears to have been a relative novelty for frame-makers during the early years of Impressionism, the practice of pulling a form across a paste-like material via a sled or rail system has its roots in architectural antiquity.9 In execution, it also relates to the use of a wave machine for manufacturing ripple moldings, a style of ornamentation that has come to be associated with seventeenth-century Dutch frames.10 Unlike common architectural plaster, pâte coulante can be built up quickly, is much more durable, is able to take a burnish over gilding, and gives the maker extended working time.

Pâte coulante had additional advantages over composition, a material used extensively for creating the raised decoration on Barbizon frames. Composition is prepared from chalk, glue, oil, and resin, combined into a stiff heavy dough, then pressed into rigid molds, and eventually transferred to the wooden frame chassis in strips of continuous repeating patterns, or sculpted forms such as acanthus leaves. Composition accepts gilding beautifully, but is very heavy and prone to shrinkage. Pâte coulante was lighter, less expensive, easier to formulate, and resisted shrinking, giving framemakers the ability to manufacture complicated moldings and decoration at a fraction of the cost of wood-milling machines, let alone hand carvers. The frame-maker J. Saulo outlines the basic process:

Once we began to make paste frames, the profile was entirely made of wood, even in its smallest details. . . . This method was certainly time consuming and very expensive, but the product was, by comparison, also much stronger. With progress manifested the need to produce cheaply; we then simplified this work by merely indicating, in the wood, the general sinuosity of the profile. In order to obtain the details, we made iron templates in the modern manner to reproduce the exact profile of the moldings. . . . It is, as we see, certainly very practical and inexpensive.11

Adopted out of necessity to support the mass production of conventional Salon frames, pâte coulante also opened a path to the production of individualized artists’ frames. At the very moment frame-makers had developed a process to render virtually any of the elaborate traditional shapes demanded by the Salon, artists rebelling against the Salon were looking to reconceive the frame itself. In some cases, artists and framers began...
fig. 3a–d Frame profile sketches from Degas's notebooks preserved at the Bibliothèque Nationale de France, Paris. The books are dated between 1870 and 1913. (a) Notebook no. 2 (b) Notebook no. 6 (c) Notebook no. 9 (d) Notebook no. 23
working together to use this paste-and-template process to realize aesthetic innovations. Frames designed by artists became extensions of their work, having been drawn by their own hand, cut out in template form, and rendered directly into a running frame molding.

**FRAME DESIGNS OF THE NEW AESTHETIC**

Unlike the heavily ornamented frames used for Salon-style exhibitions, template-cut frames in *pâte coulante* exhibit an elegant cohesiveness, especially the models associated with Degas in Paris. These moldings, seemingly inspired by his drawings (fig. 3a–d), were conceived as a single contour. Some of the drawings are labored over, others only barely indicated, but all have gesture and a certain flow, as in a signature or the sketch of a silhouette, and could be easily transposed onto a hard material and cut out as a template.

Template-shaped *pâte coulante* is well suited to realize designs that employed the repetition of refined elements: reeds, flutes, and waves, which in turn follow or flow over simple shapes such as flats or cushions. Degas’s *crête de coq* (cockscomb) design (figs. 1, 7) is vaguely cushion-shaped (a convex quarter-round molding, usually symmetrical), yet its features do not repeat; they become more pronounced across the molding front to back, joining soft waves and sharp serrations, and creating extreme variations in the quality of reflected light. Frames like the cockscomb contain deeply curved undercuts coupled with subtle undulations that cannot be made efficiently in wood or composition, giving template-shaped *pâte coulante* a unique place in the manufacture of running moldings.

Substantial credit is due to framemakers for the development of artists’ frames, certainly for their willingness to support the new aesthetic, and in some cases as potential design collaborators. Pierre Cluzel’s involvement with the avant-garde is well documented, mentioned by numerous painters in their correspondence, and responsible for fabricating some of the most iconic designs associated with Degas. We know from Camille Pissarro’s letters to his son Lucien that Cluzel would show and sometimes sell Pissarro’s paintings from his maison at 33, rue Fontaine Saint-George in Paris. Cluzel is described by Pissarro as being one of the most skilled craftsmen in Paris, and a particularly shrewd businessman.12 Pissarro was in the habit of ordering his surroundings through Lucien, and although Pissarro does not seem to have created designs for execution in *pâte coulante*, their correspondence provides a valuable glimpse into the relationship between artist and framer-designer, which seemed mostly amiable, with some occasional tension over bills owed and differences in aesthetics. One letter from Camille Pissarro to his son stands out, suggesting that Cluzel would sometimes impress his own aesthetic upon Pissarro’s orders: “I did have some borders made in the English style by Cluzel, but as always, Cluzel had the fancy to add to these matte oak edges a white margin in relief on the painting . . . it cast a shadow on the canvas that is most unpleasant and he asks a crazy price for this beautiful work.”13

The relationship between Degas and Cluzel also merits mention in connection to the evolution of designs associated with Degas. Due to the outstanding bill that Degas owed upon Cluzel’s death in 1894, we know that Degas patronized his boutique regularly.14 Maison Cluzel is mentioned in only a few of Degas’s letters to his dealers Paul Durand-Ruel and Theo van Gogh, and only in reference to bills he owed.15 Letters addressed personally to or from Cluzel are not found in Degas’s correspondence. This should not be surprising: Degas’s studio was only a few blocks from Maison Cluzel in Montmartre, and Degas’s paint supplier had his shop just next door to Cluzel at 31, rue Fontaine, so it seems likely that Degas and Cluzel conducted their business in person.

Because we lack written descriptions of their interactions, as we have for Pissarro, the impact Cluzel had on Degas’s designs remains speculative. A close look at the extant frames by Cluzel on Degas’s works, however, offers some valuable clues. We find the label of Maison Cluzel on three of Degas’s works preserved at The Met. They are noteworthy, for while they bear resemblances to designs from Degas’s sketchbook, the finished frames exhibit more refinement (figs. 4a, b, 5, 6a–d). In the case of Degas’s cockscomb molding, the extant frames in this

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**fig. 4a, b** Sketch by Degas for the flat-paneled ‘passe partout’ frame; profile drawing taken by the author from the frame by Maison Cluzel
format exhibit much more variety in terms of form and scale than the closest sketch we have from Degas (figs. 7a–d). It is certainly possible that Degas provided a sketch for Cluzel that is now lost. It is equally possible that Degas and Cluzel developed this shape together. 

Evolving Tastes and the Rarity of the Artist’s Frame

Over the last thirty years, there has been growing interest in uniting paintings with frames of their own era. Museums are joining paintings with their original surroundings when possible and utilizing antiques when the original is lost. Matching a painting with a frame from the same period is ideal, especially when it is possible to locate a style of frame approved by the artist. Late nineteenth-century Salon frames can be found, but with some exceptions they are antithetical to the intentions of the artists who were trying to distance themselves from the Salon system.

Museum visitors may well wonder why some works by the avant-garde are presented in conventional frames, while others feature borders that are entirely unique. Not all artists associated with Impressionism felt compelled to use the progressive frame designs of their colleagues. Monet did not design his own frames, and was in the habit of asking his dealer to choose frames for him. \(^\text{17}\) In one particular correspondence he expresses his fondness for antique frames, \(^\text{18}\) and photographic evidence from his studio at Giverny shows his works housed in neobaroque, Louis XIV, and Barbizon frame styles. Renoir shared Monet’s interest in traditional framing, proclaiming his preference for “old frames carved from hardwood, where we feel the hand of the worker.” \(^\text{19}\)

Museums looking to pair an avant-garde painting with a progressive model from the late nineteenth century may find it difficult to locate such a frame, since they were customarily discarded over the years as paintings changed ownership and tastes evolved. This was the fate of many of Degas’s painted frames, even though Degas is known to have stipulated that his works must stay with their frames. \(^\text{20}\) The dealer Ambroise Vollard recounts that Degas once repossessed a painting in anger upon finding that one of his frames had been removed. \(^\text{21}\)

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fig. 5 Period frame by Cluzel that houses Edgar Degas, *The Collector of Prints*, 1866. Oil on canvas, 20 7/8 x 15 3/4 in. (53 x 40 cm). The Metropolitan Museum of Art, H. O. Havemeyer Collection, Bequest of Mrs. H. O. Havemeyer, 1929 (29.100.44)
fig. 6a–d (a) Sketch by Degas (b) Profile drawing taken by the author from the Cluzel frame (c) and (d) Period frame by Cluzel that houses Edgar Degas, Sulking, 1870. Oil on canvas, 12 ¾ × 18 ¼ in. (32.4 × 46.4 cm). The Metropolitan Museum of Art, H. O. Havemeyer Collection, Bequest of Mrs. H. O. Havemeyer, 1929 (29.100.43)
Degas’s cockscomb frames, which Vollard described as one of Degas’s favorite types, have disappeared, except for two surviving examples (The Met; Musée d’Orsay, Paris). A photograph of Max Liebermann’s living room in Berlin, 1932, suggests that Degas’s *Frieze of Dancers*, now at the Cleveland Museum of Art, was once housed in a white cockscomb-style frame (fig. 8).

Some designs were seen as being too radical, and it should come as little surprise that a white cockscomb border would have stood out in many settings. Degas’s painted frames may have appeared too plain or unfinished against the gilded decor of many a collector, and dealers found it easier to sell a painting if it was housed in a conventional gold frame. We get the sense from Pissarro’s letters that he sometimes quarreled with his dealers who were upset at the lack of gilding on his frames. Durand-Ruel in particular favored a gilded Louis XVI–revival pattern for many works that passed through his gallery. By the 1890s dealers were able to begin selling works by the Impressionists more steadily, giving the artists much-needed financial security and the dealers themselves more leverage over presentation.

Yet even when a work was sold in an artist’s frame, it was common practice for collectors to rehouse the work in a border that harmonized with the rest of their collection. Some collectors employed what is known as a house style for their framing, which had the effect of homogenizing the presentation of works by different artists, and at the same time impressed the stamp of ownership on the individual work.

The disappearance of the original frames may also have something to do with the material itself. In the case of a finely modeled frame in *pâte coulante*, certain kinds of damage are very difficult to repair. If a section of the molding was crushed or lost (fig. 9), it may have been easier for a collector or an institution to replace the frame rather than try to re-create the lost section. This is due largely to the fact that the wooden substrate underneath the *pâte coulante* does not inform the details we see on the top of the molding, which makes the re-creation of those details very difficult.
METHOD AND TECHNICAL INSIGHTS

Extant artists’ frames in pâte coulante from the late nineteenth century are rare and therefore seldom available for structural analysis. One exception is a singularly designed period frame in pâte coulante attributed to Maison Cluzel that was once owned by Parisian antique frame dealer Christophe Nobile. Its shape bears some resemblance to the two cockscomb frames original to Degas’s Bathers at The Met and Musée d’Orsay, Paris, but the individual elements that make up the molding are a mixture of large and small reeds, blades, and curls. The state of the frame was in disrepair when it entered Nobile’s inventory, and in order to restore it and reinforce the joinery, he was forced to open it at the miters. This afforded him the opportunity to study the construction details via the cross section (fig. 10a, b). The wooden base was assembled from rather simply shaped slats laid over one another. The built-up layers of paste make up a large amount of the molding, which suggests that this design might have been modified and expanded during fabrication. The view of the cross section of such a unique example was elucidating in itself, but raised challenging questions regarding execution that were difficult to answer: what are the working properties of a material that is hard enough to withstand handling but not prone to shrinkage, and how efficiently could that material be built up to this extent? The technical analysis that follows offers some illumination.

The most detailed instructions for making pâte coulante appear in the 1905 edition of William Millar’s landmark treatise on architectural plasterwork,
Millar’s recipe comprises materials found in nineteenth-century frame shops and plaster studios alike: fine plaster, chalk (whiting), rabbit skin glue, and alum (potassium aluminum sulfate). Although the exact ratio of elements is not specified in Millar’s or any other treatise from the era, the basic principle is that fast-setting plaster is added to traditional gesso (chalk and rabbit skin glue) so that the artisan can build layers quickly; the plaster gives the mixture form, and the gesso gives the mixture hardness. Through trial and error, it was apparent that the properties of the material are sensitive to each other, and the ratios are dependent on the application. A higher ratio of glue provides added strength to the cured paste, but it is too springy to be cut properly under the template and is therefore best used for cast ornament. The guiding criterion for a recipe of _pâte coulante_ for this study was the combination of properties common to traditional gesso and composition: the material must be able to accept bole for gilding and be hard enough to take a fine burnish; it should not compress under the pressure from burnishing; and it must be dense enough to resist scratching.

As mentioned in the period manual by J. Saulo above, a wooden substructure following the general shape of the finished profile is essential. A wooden interior frame, preferably hollow, will keep the weight down and provide traditional joinery options for the frame-maker. The paste is heavier than the wood, and throughout the process the paste contributes moisture to the wooden base. It is therefore worth the effort to match the wooden substructure to the shape of the finished molding as closely as possible (fig. 11). The late nineteenth-century method for keeping the wood stationary during the application of the paste remains unclear. Given the similarities between cutting _pâte coulante_ for frame moldings and cutting plaster for interior moldings, it is conceivable that framers were familiar with the process of fixing a metal template onto a wooden chassis with a fence (fig. 12).

The templates for shaping _pâte coulante_ specified in the manual by J. Saulo of 1896 are made of iron. The treatise of plastering techniques by Millar of 1905 suggests thin sheet metal. No period photographs or diagrams that describe the system used by frame-makers for the traveling template were found. For the purposes of this study, a track system was developed by the author that would give the best chances for reliable results.

Like the process for molding plaster, _pâte coulante_ is applied soft and run over with the template until the material can hold its shape. The maker can add fresh paste and recut as soon as the prior coat begins to stiffen, provided the track, chassis, and template are kept wet and running smoothly. The fineness of the template is critically important to the efficiency of this process; if the cutting edge is carefully smoothed, then there is no need to sand the finished molding. This must have been an immense boon for framers who manufactured profiles that required absolute uniformity from molding to molding. A more refined surface texture is achieved by switching from _pâte coulante_ to...
thin gesso for the last few passes once the molding is massed out, which gives the surface an ultra-smooth, polished texture, as seen on some period examples.

The lengths of finished and well-dried moldings are then cut and trued to 45 degrees. Performing a preliminary cut with a bandsaw, which was available in Europe at the end of the nineteenth century, 30 and then smoothing the miter by sanding yields the best gluing surface. Closing the seam of the miter takes some patience. Microscopically, pâte coulante shears much more cleanly than wood fibers on a miter cut. Additionally, some small expansion occurs when aqueous glues are applied to wood. These factors contribute to a hairline gap on the face of the miter, and some delicate filling is always required. The seam may require many light fills with the aqueous gesso until the moldings are consolidated. Once the seams are mended, the frame can be treated as one would a traditional gesso frame; the surface will take bole or paint.

Template-cut pâte coulante moldings can also be integrated with traditional woodworking. One fine example is the well-known passe-partout on Degas’s Collector of Prints at The Met (see fig. 5). The chassis of the frame is fabricated very much like a traditional cassetta frame, with broad, flat boards keyed from the back. The fluted molding is glued to the face of the frame. Damage to the flutes reveals that the decoration is shaped in paste about ⅛ inch thick over a square
fig 13 The construction details for the period frame by Cluzel that houses Degas, The Collector of Prints (fig. 5). Template-shaped pâte coulante is indicated in light blue over a two-piece wooden substructure. The gesso layer (white) covers the rest of the profile and hides the transition between the pâte coulante and the wood.

wooden rail. After the molding was mitered and glued to the frame, the whole chassis received gesso in the traditional manner (fig. 13).

Because so many of the original models have been lost, research pertaining to artists’ frames is challenging. Nevertheless, period treatises on construction practices, artists’ correspondence, and the few extant models reveal an intricate link between process and design. The multitude of factors that contributed to the frame inventions of the late nineteenth century offer critical insight into artists’ working practices, and illuminate not only the paintings from that era, but also the economic climate, prevailing tastes in architecture and interior design, and the proliferation of aesthetic ideas and processes.

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NOTES

1 Leroy 1874.
2 Havemeyer 1993, 250.
3 Whistler to Lucas, January 18, 1873, preserved at the Walters Art Museum Library, Baltimore.
4 The task of tracking design trends is complicated by a competitive attitude that developed in the 1880s between Whistler in London and some of the Impressionists in Paris. With regard to intimately choreographed spaces, both sides claimed ownership. Writing to his son in London in 1883, Camille Pissarro laments that the Impressionists are not receiving their due credit: “How I regret not to have seen the Whistler show . . . he is even a bit too pretentious for me, aside from this I should say that for the room white and yellow is a charming combination. The fact is that we ourselves made the first experiments with colors . . . . But we poor little rejected painters lack the means to carry out our concepts of decoration.” (Rewald 2002, 22–23). It is also important to note that some frame styles that have been named after certain artists, like Whistler, may not be entirely of their invention. Known for his keen sense of interior design, Whistler was initially influenced by the design trends begun by the Pre-Raphaelites, and by architects like Thomas Jeckyll (Soros and Saulo 2002, 190–97), with whom he collaborated on the Peacock Room, now in the National Museum of Asian Art, Smithsonian Institution, Washington, DC. In terms of frame design, Whistler does seem to be the most vital conduit for ideas between Paris and London. Whistler lived and worked in Paris in the early stages of his career, and even after settling in London, he is known to have had some of his frame designs executed in Paris (Cahn 1989, 63).
6 For an excellent summary of the shift to mass-market manufacturing, see Clark 1999, 46–52.
7 Saulo and St-Victor 1896.
8 St-Victor 1850.
9 Millar 1905, 1–24, 296–323.
10 Thornton 2002.
11 “Quand on commence à faire des cadres en pâte, le profil était entièrement fait de bois, jusque dans ses menus details . . . . Ce procédé était certainement d’un emploi très long et fort onéreux, mais le produit était, par contre, aussi beaucoup plus solide. Avec le progrès s’est manifestée la nécessité de produire à bon marché; on a alors simplifié ce travail en se contentant d’indiquer seulement, dans le bois, les sinuosités générales du profil. Pour obtenir les détails, on a fait des gabarits en fer reproduisant en à-jour les moulures exactes du profil. . . . C’est, comme on voit, certainement très pratique et peu dispendieux.” Saulo and St-Victor 1896, 13.
13 “J’ai fait faire des bordures dans le genre anglais par Cluzel, mais comme toujours, Cluzel a eu la fantaisie d’ajouter à ces bordures en chêne mat une marge blanche en relief sur la peinture . . . cela fait une ombre sur la toile des plus désagréables et il demande un prix fou pour ce beau travail.” Bailly-Herzberg 1988, 435 (March 1, 1894).
15 Colloque Degas 1989, 460, 467.
16 Christophe Nobile, a frame-maker, restorer, and owner of Maison Samson in Paris, who has closely studied the cockcombs frame preserved at the Musée d’Orsay, Paris, favors the hypothesis of collaboration: “The picture framers Pierre Cluzel, who closely
and I would say these prototype frames were fabricated ‘dans les règles de l’art’ by experienced professionals.”

19 “que les cadres anciens taillés au ciseau dans le bois dur, et où l’on sent la main de l’ouvrier”; Renoir 1891, 298.

20 “Looking at a pastel by Degas, a stout woman bathing in a chamber, Monet said he valued Degas’s drawing only, and it was a common trick of his to make the frame assist and complete the picture. The picture was sold to Monet with the stipulation from Degas that the frame must be kept.” Theodore Robinson, diary, 1:34 (July 7–8, 1892), Archives, Frick Art Reference Library, New York, https://arcade.nyarc.org/record=b314567-s6.

21 Vollard 1937, 65, 66.

22 Ibid., 65. Surviving examples are MMA 29.100.37; Musée d’Orsay, Paris, REC 50.


25 Interesting examples are the frames employed by Count Isaac de Camondo that employed the decorative ribbon-and-stick motif of Louis XVI on the back edge, coupled with a more modern flat frieze of the passe-partout model.

26 Tableaux et dessins anciens et du XIXe siècle: Cadres anciens et de collection, sale cat., Artcurial, Paris, January 20, 2018, 66, 128, lot 419. As Nobile stated (personal interview, November 25, 2018): “I’ve had the opportunity to have a close examination to a very few (about three different models) of those period frames and I would say these prototype frames were fabricated ‘dans les règles de l’art’ by experienced professionals.”

27 MMA 29.100.37, Musée d’Orsay, Paris, REC 50.

28 Although Millar (1905, 403) was working out of London, he uses the French name for this material, which was called by other names, including “Alabastine” by William Pearce (1898, 265–70) and “economic paste frames” by Isabelle Cahn (1899, 10, 15).

29 Due to the strong connection to architectural plasterwork, my early suspicion at the outset of this research was that framemakers might have contracted their orders for paste frames out to professionals in the plaster moldings trade. But based on the account of J. Saulo, it seems equally likely that templated paste frames were manufactured in-house by frame-makers. See Saulo and St-Victor 1896, 12, 13.

30 The concept for the bandsaw dates to the beginning of the nineteenth century, but the welding technology of the time was inferior to the rigors of usage. In 1846, Anne Paulin Crepin of France applied for and was granted a patent for a new welding technique that allowed the blades to withstand the stress of cutting and flexing at high speeds. She sold the patent to A. Perin & Company of Paris, which brought modern bandsaws into the mainstream.

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