Conditions that lead to the New Growth

- Revolutions cause colonizing monarchies to shrink
 - The American Revolution and War of 1812 reduced England's prominence in North America
 - Provided a new start to the colonist.
 - All the natural resources were now theirs.
 - This gave them a source of Wealth
 - This drove them to expand
 - The French Revolution caused the French to lose most of their holdings in North America.
 - Napoleon became a strong military ruler
 - France focused on Europe
 - Napoleon started wars all through out Europe.
 - Developed Instruments of War.
- Extreme Population growth do to good health and prosperity
- Age of Romanticism
- Age of Invention

- Conditions that lead to the New Growth
 - •Extreme Population growth do to good health and prosperity
 - Better understanding of diseases Advent of Modern Medicine
 - Larger food supplies and better farming practices
 - rotating fields
 - North America provided better soil
 - Science grows into the modern world
 - Gregor Mendel Modern Biology
 - Louis Pasteur Vaccinations
 - Joseph Lister Antiseptics
 - Charles Darwin Evolution

- Conditions that lead to the New Growth
 - Age of Romanticism
 - Authors harken back to more other times. Tell emotive tales.
 - Nathaniel Hawthorne Scarlet Letter
 - Lord Byron poetry
 - Charles Dickens A tale of two cities
 - Edgar Allan Poe horror Macabre stories
 - H.G. Wells Science Fiction
 - Jules Verne Science Fiction
 - Age of Invention
 - The steam Engine
 - The Cotton Gin
 - The Assembly Line
 - Age of Questioning
 - Fredrich Nietzsche Man's role in the world Questioning life
 - Soren Kierkigaard Questioned Religion and Politics

John Nash (1752 – 1835)

• Royal Pavilion (1815-1821)

Nash used Chinese ornament to highlight the space along with sculptural chandeliers. He used the "romantic" ideas to realize spaces within the royal Pavilion. As we see here its more about whimsy than it is about the orders.

The Pavilion in its entirety is based more on Asian/Middle Eastern Influence than it is on the European Styles.

Typical example of the Dutch Style.

Patterned after Palladian Style. Large windows and Minimal Ornament lie between the Ionic Pilasters on the façade. The interior shows minimal decoration. Stark difference from the rest of Europe.

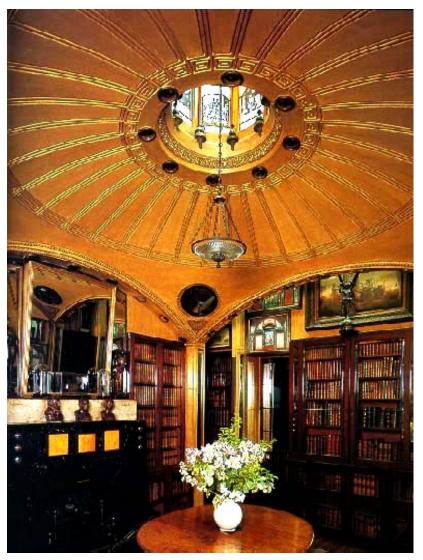


Royal Pavilion - Exterior

- John Soane (1753 1837)
 - Soane Residence (1812-1832)

Soane used a flattened dome on order-less columns. The dome did not extend the walls of this square room. This allowed for windows to bring in light around the sides of the doom and fill the archways.

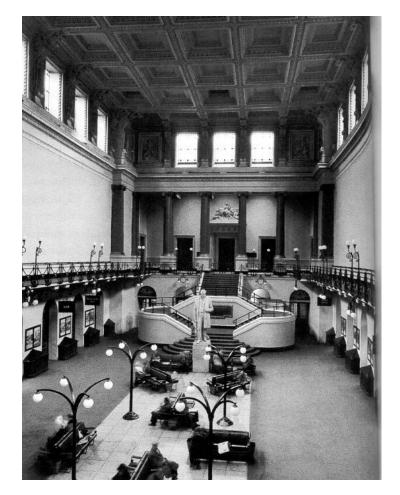
It is important to note the lack of orders. Soane used his own house as a gallery for experimentation. This allowed him the freedom to try new things before unveiling them to clients.



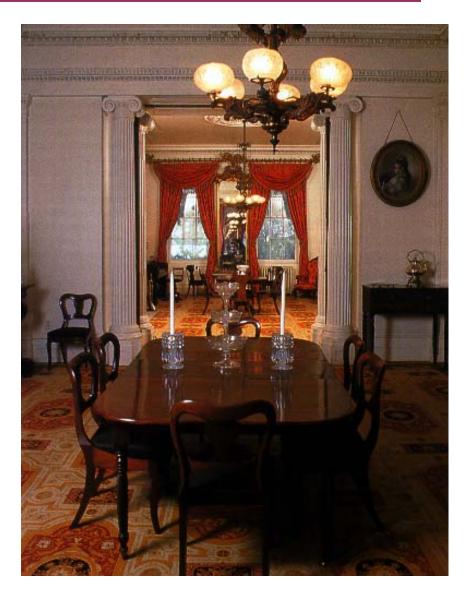
Soane Residence - Breakfast Room

Greek Rivalists, like Shinkel and Soane had to invent how the Greeks would have designed monumental interior space. Classical Greek style from the Hellenistic Period was being applied to buildings whose functions did not exist at that time. There was great amounts of "artistic license" involved. This aspect added to the creativity used within the borders of the style.

Greek style with all of its grandeur lent itself well to monumental architecture. Museums, train stations, political buildings, and houses all worked within the revival aesthetic. The style used the classical elements such as raised plinths, lonic and Doric columns, and large entablatures.



Euston Station, Great hall, Philip Hardwick, 1849



Row House Interior, New York, 1832 – typical city house in Greek Revival style

- John Soane (1753 1837)
 - Bank of London (1798-1799)

Soane used a glass dome on order-less columns to create the large atrium. The dome sets upon a drum with hidden windows. The drum has caryatid statues similar to the Erechtheum on the acropolis in Athens. The ornament was stripped down to a purely abstract representation of the Baroque style. The large groin vaulted halls make up the interiors along with lighted archways. This design begins to develop the Greek revival period of the 19th Century.



Bank of London - Breakfast Room

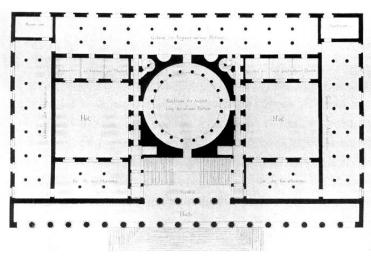
Karl Friedrich Shinkel

•Altes Museum, East Berlin, 1824-1830

Shinkel excelled in the Greek Revival style. His designs influenced many across the globe, especially Mies van der Rohe in Chicago.

Shinkel used a rectangular plan with a shallow central dome for the main hall of the museum. Interiors are adorned with a series of lonic style colonnades.





Altes Museum - Plan and Exterior

The Gothic Revival

• Trinity Church, New York City, Richard Upjohn, 1846

The public became bored with the Greek Revival style since it was heavy into Neo-Classicism and Renaissance designs. So in an effort to add variety, the Gothic Revival was born in both England and America.

In this church, elaborate fan vaulting and pointed arches begin to delineate scale as does the stone tracery and art glass windows. The use of plaster rather than stone for the ceilings reduced the need for buttressing on the exterior.

The Gothic Revival highlighted the elements of the English Gothic Revival period. It did this both in the ornamentation as well as the layout.



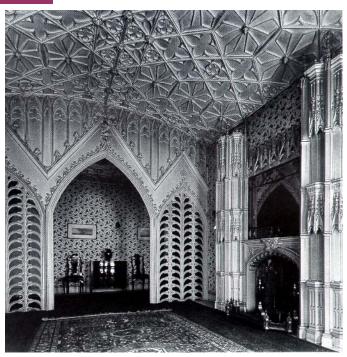
Trinity Church, New York City, Richard Upjohn, 1846

- The Gothic Revival England
 - Strawberry Hill (1749 1777)

The Building is one of the first examples of the Gothic Revival. This is evident by the Queen Anne Furniture. Horace Walpole was the architect and interior designer. He created elaborate plaster ceilings rich with ornament and scale. He used carved wood screens over the wall to create the detail of the Gothic.



Strawberry Hill, Horace Walpole, 1777, library



Strawberry Hill, "Holbien Chamber"



Strawberry Hill, exterior

- The Gothic Revival
 - Lyndhurst, New York, Alexander Jackson Davis and Ithiel Town, 1838-1865

Town and Davis designed this project near Terrytown, New York as a private country home. The plaster ribbed ceiling resembles 12th century Gothic vaulting. The pointed windows with lead tracery also recall the original Gothic style. Other elements derived from the original Gothic style were elaborate stone hearths and decorative chandeliers. The plan was asymmetrical and looked as if it had been built over time ("bricolage")

The furnishings highlighted the ornamentation of the time. Furniture became larger. The chairs had carved backs or wheelbacks are they are called. Beds had large pointed arch headboards and footboards.



"Lyndhurst," mansion, Alexander Jackson Davis and Ithiel Town, Lyndhurst, New York, 1865

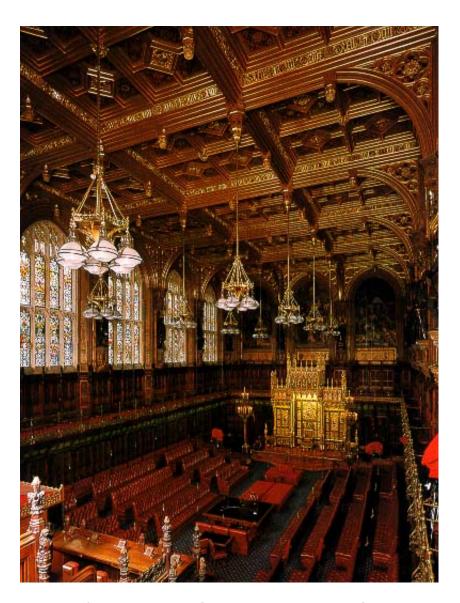
- The Gothic Revival England
 - Houses of Parliament,
 Westminster, Charles Barry and
 Augustus Pugin 1836 1852

The <u>Houses of Parliament</u> was designed by Charles Barry and Augustus Pugin. Barry did the exterior design in a Gothic-revival style. Pugin was responsible for the interiors, also designed in the same style.

The building is highlighted by large pointed windows of stained glass. The wood-paneled ceiling is done in the medieval style. Floors are carpeted.

The furniture is primarily large wooden benches in the great hall. The other smaller spaces tend to have Gothic-styled furniture, massive chairs upholstered with vibrantly colored fabrics.



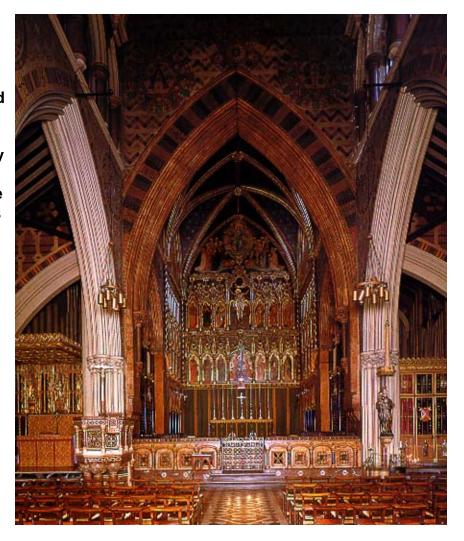


House of Lords, Westminster, Barry and Pugin, 1852

- The Gothic Revival England
 - All Saints Church, London, William Butterfield, 1849 1859



The building is highlighted by large Gothic ribbed arches. These highly exaggerated arches, wildly colored walls and floors bring a level of dominance to the design. The nave is offset with wood paneling and sculpture. This church goes beyond the historical precedent and goes into exaggerated extremes.



All Saints Church, London

All Saints Church, London

• The Victorian Era

Queen Alexandrina Victoria, reigned 1837-1901, was the most powerful ruler in Europe. She was not only the purveyor of politics but also dictated morality and "style."

Queen Victoria felt that the Neo-Classical movement highlighted Greece and Rome which were pagan. She felt that the English Gothic style and the Gothic revival style were true styles of Christianity. The "Victorian" style was highly ornamental and lavishly colored. It brought forth new creativity. It was a movement based on moving away from the classical toward something that was completely individual.

Queen Victoria preached a strict moral code. So the designs where they were over-ornamented still had to remain dignified. This dichotomy led to designs that bordered on the absurd.

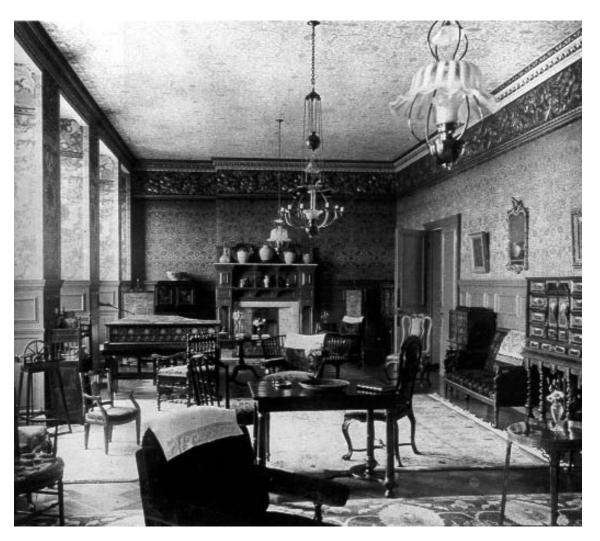




Royal Albert Hall, London, Captain Francis Fowke, 1871

The Victorian Era

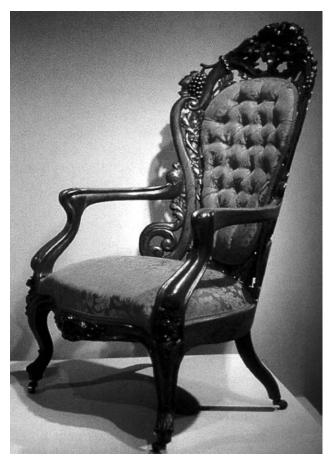
The Victorian Style drew from the stylistic movements of the time. In the Swan House we see "Queen Anne" furniture, a "Georgian" spinning wheel and William Morris "Arts and Crafts" wallpaper. The styles were not so dissimilar that they could not be used together. The energy of the room is in the color.



The Swan House, London, Richard Norman Shaw, 1876

The Victorian Era

The Victorian Style used vivid colors and floral ornamentation in plaster and wood. Furniture was thickly upholstered and carved displaying curves and shapes. Fabrics were velvets and wools. They were also used for wallcovering. Window treatments were lace.



Victorian Arm Chair



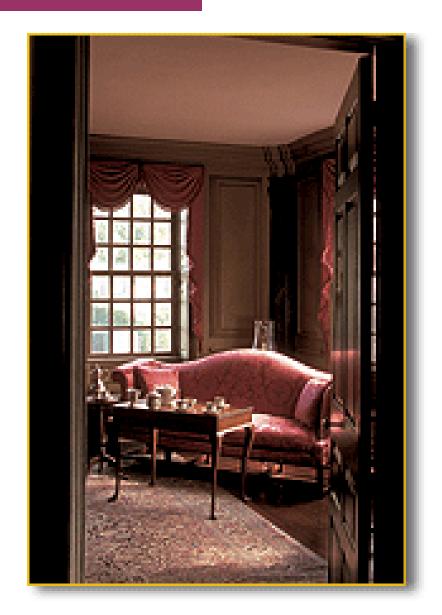
Queen Victoria's Train Car

Pre-Victorian Era

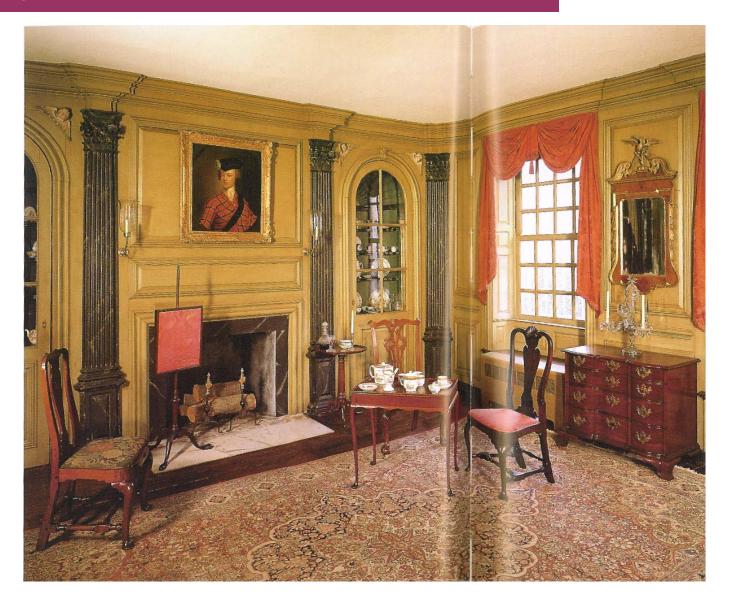
Newport, Rhode Island

Hunter House is one of the finest examples of Georgian Colonial architecture from Newport's "golden age" in the mid-18th century. The house was built and decorated when Newport was a cosmopolitan city with a principle of religious tolerance that attracted Quakers, Baptists, Congregationalists and Sephardic Jews. The great mercantile families lived patrician lives, building harbor-front mansions overlooking their trading ships, and entertained in grand style. They bought furniture and silver from local craftsmen and were the patrons of such important early painters as Robert Feke and Gilbert Stuart.





Hunter House, Newport, Rhode Island, 1748



Hunter House, Newport, Rhode Island, 1748

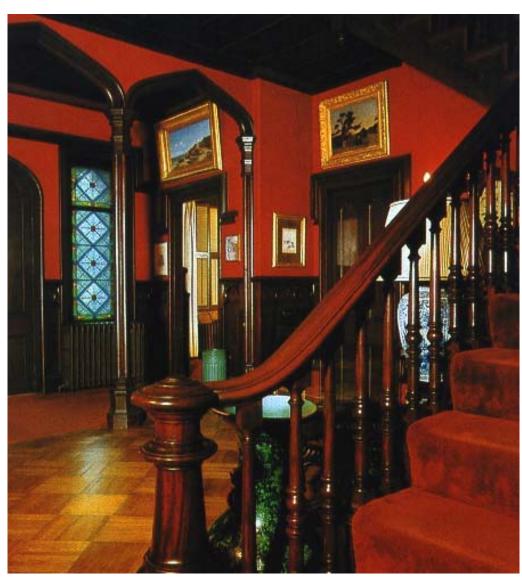
Pre-Victorian Era in America

Newport, Rhode Island

Kingscote is a landmark of the Gothic Revival style in American architecture. Its appearance in Newport marked the beginning of the "cottage boom" that would distinguish the town as a veritable laboratory for the design of picturesque houses throughout the 19th century.

In 1839 Southern planter George Noble Jones commissioned architect Richard Upjohn to design a summer cottage along a country road, known as Bellevue Avenue, on the outskirts of town. Upjohn created a highly original "cottage orne," or ornamental cottage, in the Gothic Revival style. The general effect was romantic- a fanciful composition of towers, windows, Gothic arches and porch roofs inspired by medieval tournament tents.





Kingscote, Newport, Rhode Island, 1839, Richard Upjohn

- Pre-Victorian Era in America
 - •Newport, Rhode Island



Kingscote, Newport, Rhode Island, 1839, Richard Upjohn, Library

The Victorian Era

Newport, Rhode Island

Chateau-sur-Mer is a landmark of High Victorian architecture, furniture, wallpapers, ceramics and stenciling. It was the most palatial residence in Newport from its completion in 1852 until the appearance of the Vanderbilt houses in the 1890s.

It was the scene of memorable entertainments, from the "Fete Champetre", an elaborate country picnic for over two thousand guests held in 1857, to the debutante ball for Miss Edith Wetmore in 1889. Chateausur-Mer's grand scale and lavish parties ushered in the Gilded Age of Newport.



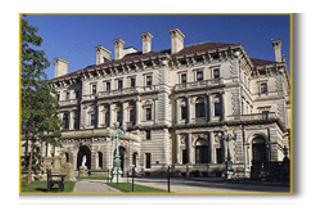


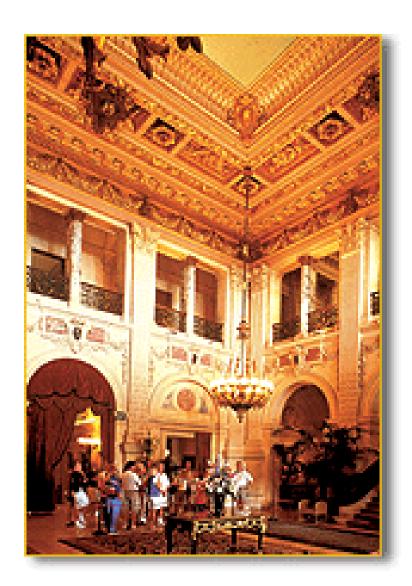
Chateau-sur-Mer, Newport, Rhode Island, Victorian Gothic Revival style, 1852, enlarged by Richard Morris Hunt, 1870s

The Victorian Era

Newport, Rhode Island

The Breakers is the grandest of Newport's summer "cottages" and a symbol of the Vanderbilt family's social and financial preeminence in turn of the century America. Commodore Cornelius Vanderbilt (1794-1877) established the family fortune in steamships and later in the New York Central Railroad, which was a pivotal development in the industrial growth of the nation during the late 19th century. Allard and Sons of Paris assisted Hunt with furnishings and fixtures, Austro-American sculptor Karl Bitter designed relief sculpture, and Boston architect Ogden Codman decorated the family quarters.





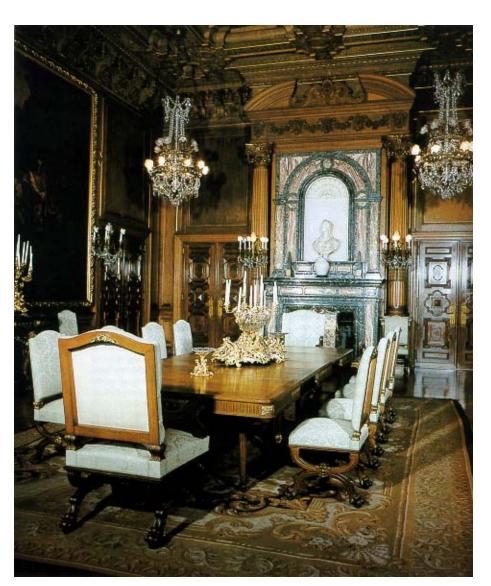
The Breakers, Newport, Rhode Island, 1893, Richard Morris Hunt

The Victorian Era

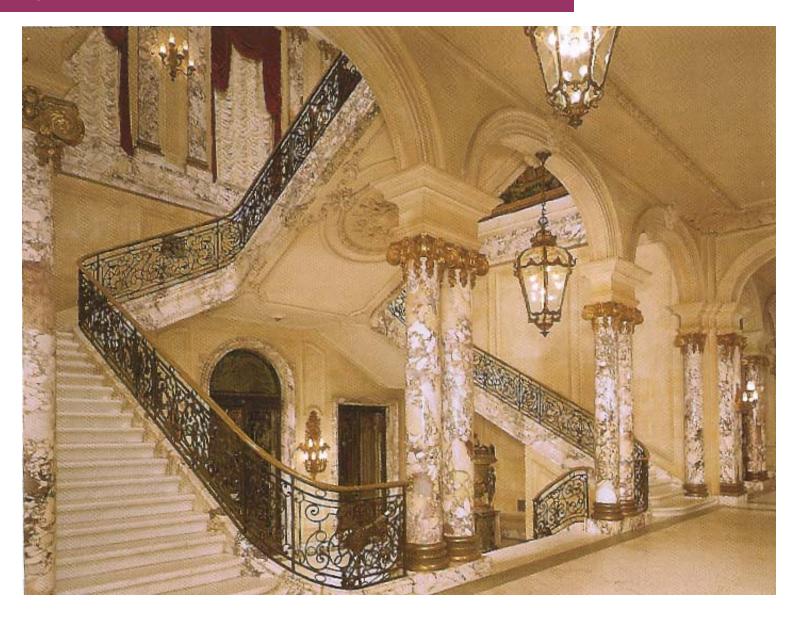
Newport, Rhode Island

The Elms was the summer residence of Mr. and Mrs. Edward Julius Berwind of Philadelphia and New York. Mr. Berwind made his fortune in the Pennsylvania coal industry. In 1898, the Berwinds engaged Philadelphia architect Horace Trumbauer to design a house modeled after the mid-18th century French chateau d'Asnieres (c.1750) outside Paris. Construction of The Elms was completed in 1901 at a cost reported at approximately \$1.4 million. The interiors and furnishings were designed by Allard and Sons of Paris and were the setting for the Berwinds' collection of Renaissance ceramics, 18th century French and Venetian paintings, and Oriental jades.





The Elms, Newport, Rhode Island, Horace Trumbauer 1901



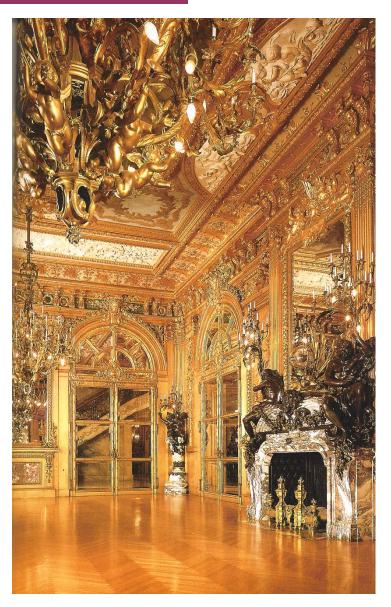
The Elms, Newport, Rhode Island, Horace Trumbauer 1901 – Grand Staircase by Jules Allard

The Victorian Era

Newport, Rhode Island

Marble House was built between 1888 and 1892 for Mr. and Mrs. William K. Vanderbilt, a summer house, or "cottage", as Newporters called them in remembrance of the modest houses of the early 19th century. But Marble House was much more; it was a social and architectural landmark that set the pace for Newport's subsequent transformation from a quiet summer colony of wooden houses to the legendary resort of opulent stone palaces.





Marble House, Newport, Rhode Island, Richard Morris Hunt, 1892

The Victorian Era

Newport, Rhode Island

Commissioned by Nevada silver heiress Theresa Fair Oelrichs in 1899, architect Stanford White modeled Rosecliff after the Grand Trianon, the garden retreat of French kings at Versailles. After the house was completed in 1902, at a reported cost of \$2.5 million, Mrs. Oelrichs hosted fabulous entertainments here, including a fairy tale dinner and a party featuring famed magician Harry Houdini.





Rosecliff, Newport, Rhode Island, Stanford White, 1902

The Victorian Era

•Biltmore, Asheville, North Carolina, Richard Morris Hunt, 1895

Richard Morris Hunt was an architect who is widely credited as the one of the fathers of American architecture. He started the first studio in America to formally train young architects in New York and took a prominent role in founding the American Institute of Architects, of which he became president in 1888. Much of his work is eclectic and designs were borrowed from many European historic styles -- some derivative of 19th century French traditions of the Beaux-Arts, having witnessed first hand the stunning transformation of Paris through city planning and beautification. When he returned to America he became part of the City Beautiful Movement.



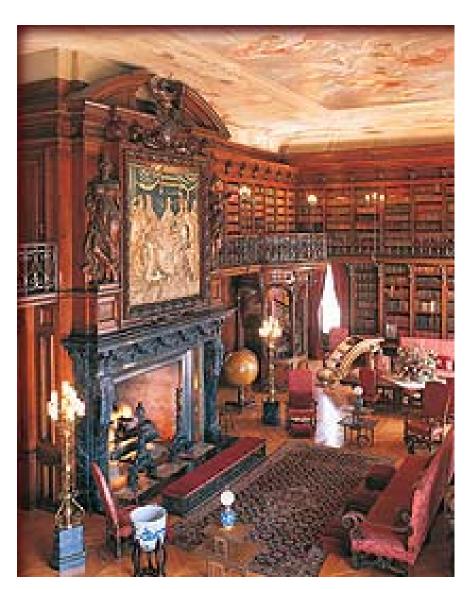


Biltmore, Asheville, North Carolina, Richard Morris Hunt, 1895

The Victorian Era
Biltmore, Asheville, North Carolina, 1895



Richard Morris Hunt, by John Singer Sargent, 1895

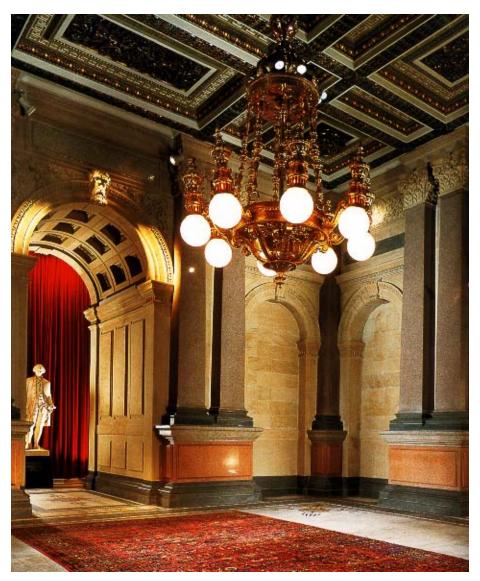


Biltmore, Asheville, North Carolina, Richard Morris Hunt, 1895

The Victorian Era

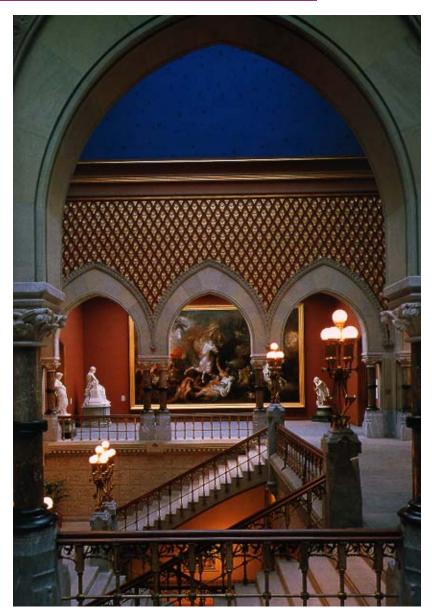
In America during the Victorian Era, Monumental Architecture remained more in the Federalist style with elements of the Neo-Classical and Greek Revival coming through.

Here in the City Hall of Philadelphia, we see a Neo-Classical layout highlighted by Victorian use of color.



The Philadelphia City Hall, John McArthur, Jr., and Thomas U. Walter, 1872-1901

• The Victorian Era



Victorian style in America: Pennsylvania Academy of Fine Arts, Frank Furness, 1876

• The Victorian Era – Eastlake Style

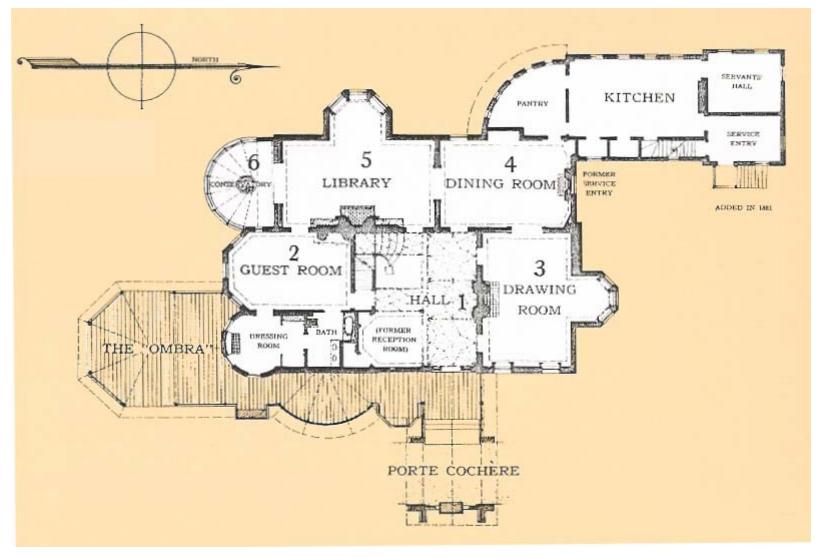


Mark Twain's House, Hartford, Connecticut, Edward Tuckerman Potter, architect and Louis Comfort Tiffany, interior designer, 1874

• The Victorian Era – Eastlake Style



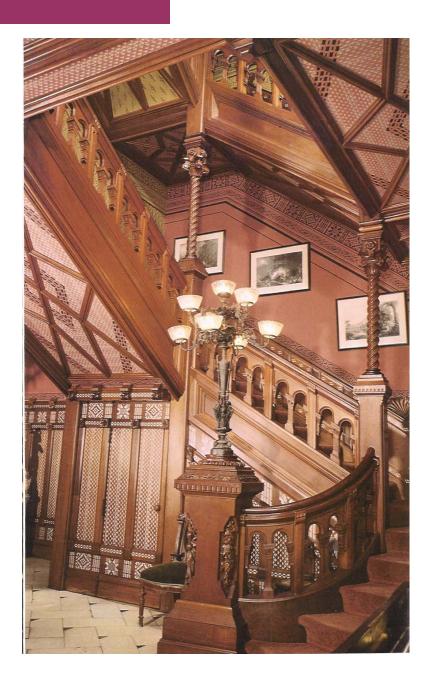
• The Victorian Era – Eastlake Style



• The Victorian Era – Eastlake Style



Cutout pattern



Mark Twain's House - stairway

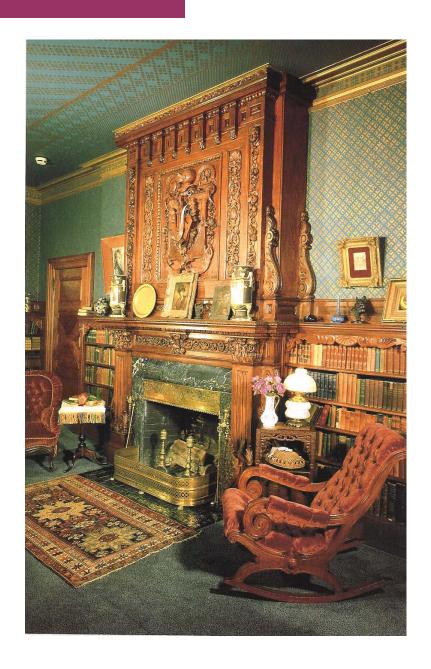
• The Victorian Era – Eastlake Style

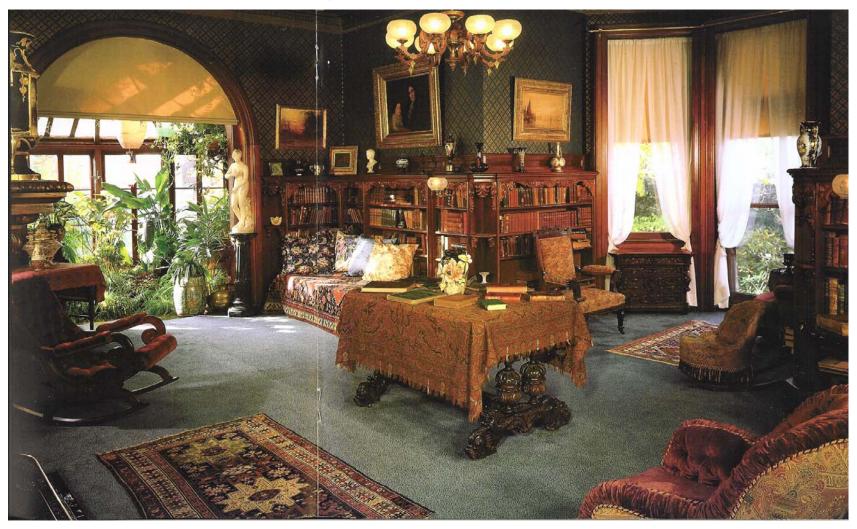


Mark Twain's House - Drawing Room



Mark Twain's House – Dining Room





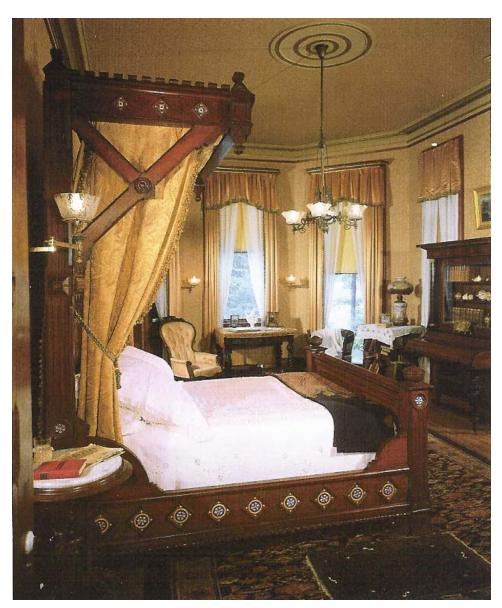


Mark Twain's Bedroom

• The Victorian Era – Eastlake Style

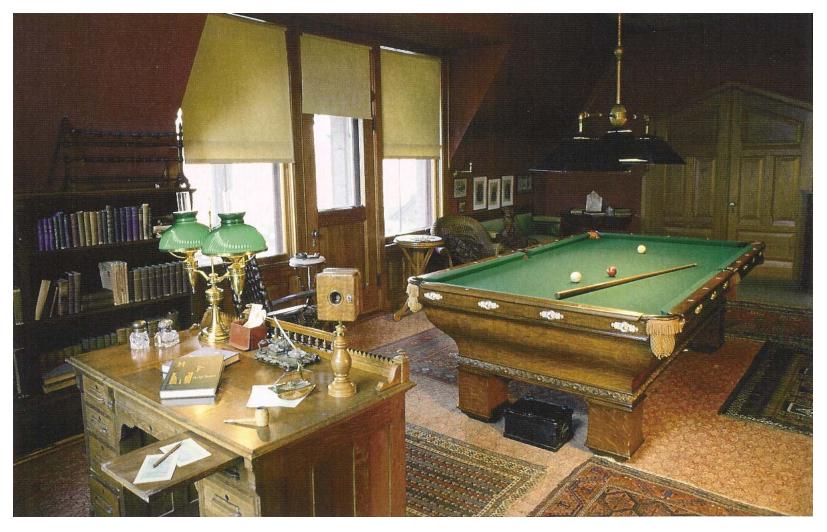


Gaslight sconce



Mark Twain's House - Guest Bedroom





Mark Twain's House - Billiard Room

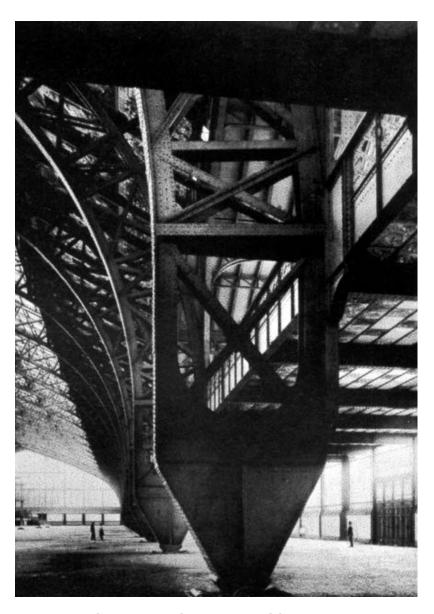
THE 19TH CENTURY - INDUSTRIAL REVOLUTION

The Advent of Steel and Iron

In Europe and America a new profession developed in the 19th Century, the civil Engineer. Mechanical constructions started to become more advanced. People understood how to use metals and what metals were capable of. Steel and Cast Iron construction was a function of needing to build newer longer bridges as well as ship design. The need to build sturdier ships for war led to better and taller Structures.

With Steam engines creating energy it allowed the first assembly lines to move forward. Without this, steel construction would not have been born. It would have taken many years to cast all the pieces. But with assembly lines and automated processes, steel could be made extremely quickly.

Engineers such as Gustav Eiffel and William Le Baron Jenney not only built Bridges but also the first Highrise Buildings.



The Gallerie De Machines, Exposition Universalles, Paris, 1889

• The Advent of Steel and Iron



Eiffel Tower, Exposition Universalles, Paris, 1889

The Advent of Steel and Iron

Iron and Glass were predominately used in utilitarian structures at first. It allowed for greater spans. Here in this train station, we see the steel arches support the glass and steel roof. The glass allowed for natural lighting. This large column-free space lends itself to this function. The Victorian ornament was done away with.



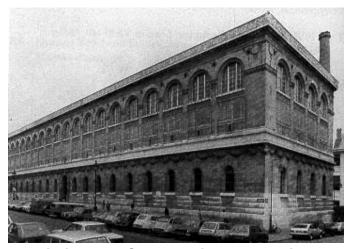
Biblioteque nationale – main hall

The Advent of Steel and Iron

Henri Labrouste 1801-1875

From the exterior, this library built from 1844-1850 is a typical Neo-classical building in the Beaux Arts style. It has arched windows, Classical ornament and built with stone.

The interior lends itself to a modern time with the use of cast iron to support the roof. The castellated arches span between the iron ionic columns. Even the new material was made to match the neo-classical style. The Iron allowed for longer spans which allowed the library to be much more open.



Biblioteque St. Genevieve – Exterior



Biblioteque St. Genevieve - main hall

- The Advent of Steel and Iron
 - Henri Labrouste 1801-1875

The national Library of France built from 1859-1867 used the principles developed early at the Biblioteque St. Genevieve. The large main hall is a series of 9 domes supported on a series of Cast Iron arches. Each Dome has a glass oculus. The columns were made thinner to express the strength of the steel. The ceilings were constructed of ceramic panels designed to fit into steel forms. In its day it was the most impressive metal structure ever built.



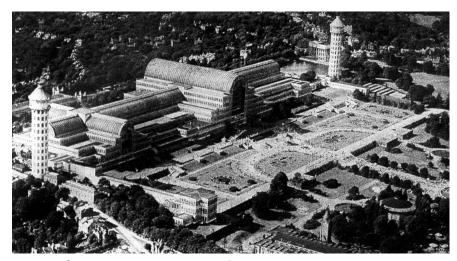
Biblioteque Nationale – main hall

- The Advent of Steel and Iron
 - Joseph Paxton 1803-1865
 - The Crystal Palace 1851

Joseph Paxton created the 19th century's most impressive building. He was a gardener for the Duke of Chatsworth. He had built a large green house for his boss. The Duke then talked to Prince Albert and suggested a similar structure since it could be erected quicker than a masonry building. This structure was meant to hold the first World's Fair in 1851. So in a meeting with Prince Albert, Paxton sketched the idea out on a bar napkin.

The building uses the principles of Gothic buttressing to develop the forms needed to create such open spans. The structural cast iron elements were very small. That contributed to the beauty of the building.

The building was eventually dismantled and rebuilt else where until it burned and was demolished in 1936.



The Crystal Palace – exterior



The Crystal Palace – main hall

•World's Fairs – Exposition Universalles

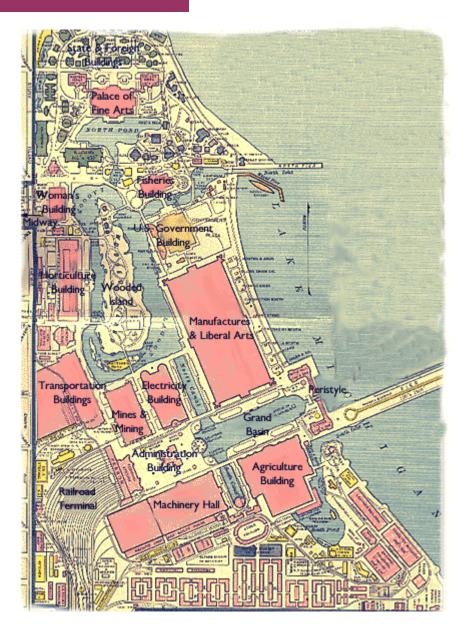
City	Date	Area	Number of Exhibits	Attendance
London	1851	26	13,939	6,039,195
Paris	1867	41	43,217	6,805,969
Philadelphia	1867	236	30,000	8,004,274
Paris	1889	72	61,722	32,350,297
Chicago	1893	633	65,000	21,477,212

Comparison of the most important 19th century world's fairs

THE 19TH CENTURY - INDUSTRIAL REVOLUTION

• The World's Columbian Exhibition, Chicago, 1893

The World's Columbian Exposition of 1893 was an event of immense cultural importance to an America nearing the turn of the century. From May 1 to October 31, 1893, Chicago and the Exposition were host to 27 million visitors-nearly one quarter of the country's population at the time. Fairs were an incredibly popular event in the nineteenth century; the Centennial Exhibition in Philadelphia drew over 10 million visitors in 1876 and Paris' extremely popular **Exposition Universelles drew over 28 million to** the city of lights. Fairs encompassed the spectrum of experience and interest of the 1800s--from sport to entertainment to high culture. To understand their importance and draw in modern terms, they could be seen as a combination of the Olympics, DisneyWorld, the Superbowl, and the National Gallery--an international entertainment and cultural event with lasting social importance.



Plan of the Fair





The Heroic Statue of the Republic







Wooded Island and the Transportation Building by Louis Sullivan



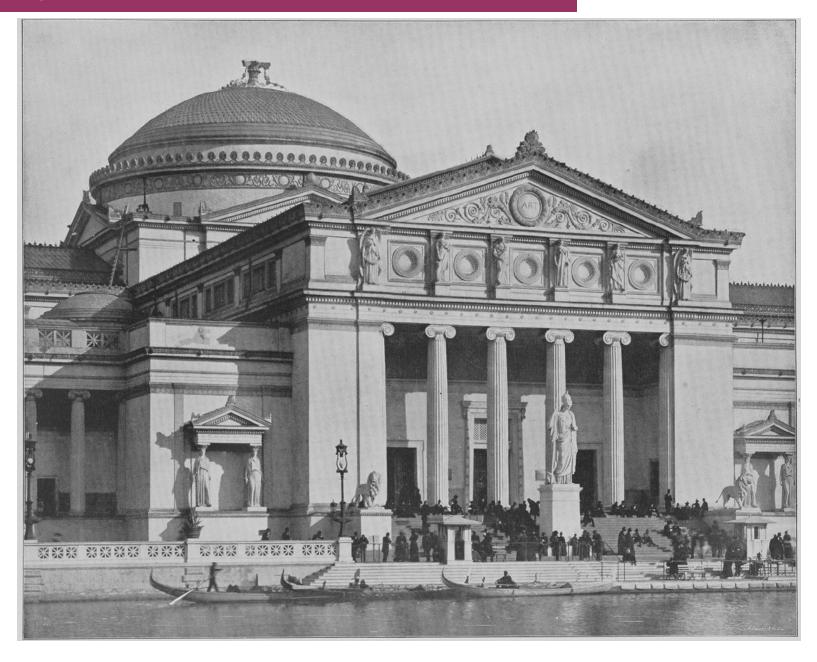
Ho-o-den: A most cordial feeling for Japan instantly followed the official announcement that the Mikado, desiring to show his admiration for America, asked to present to the City of Chicago, for use during the World's Fair, and for maintenance by Japan permanently, in commemoration of 1893, a reproduction of the most ancient, most beautiful and most celebrated temple in Japan, the Ho-oden, or house made like the Phoenix (bird).

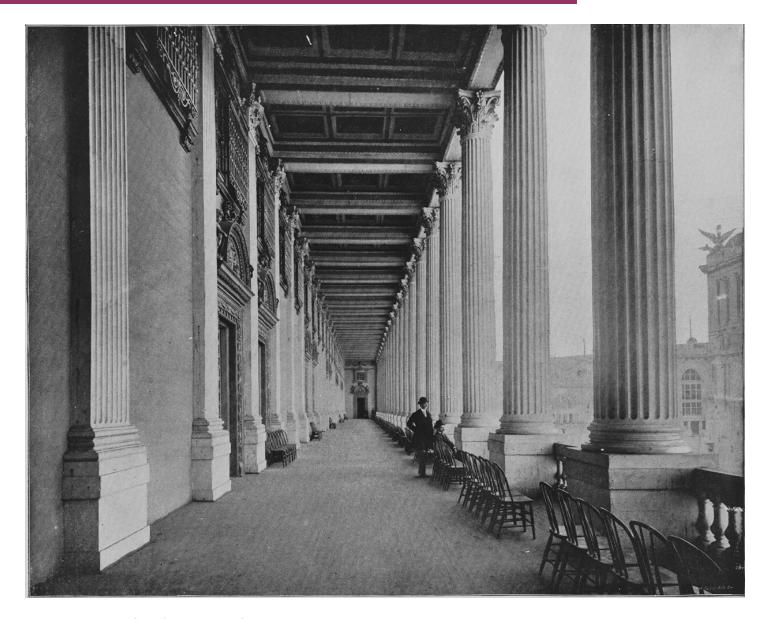


The Ferris Wheel

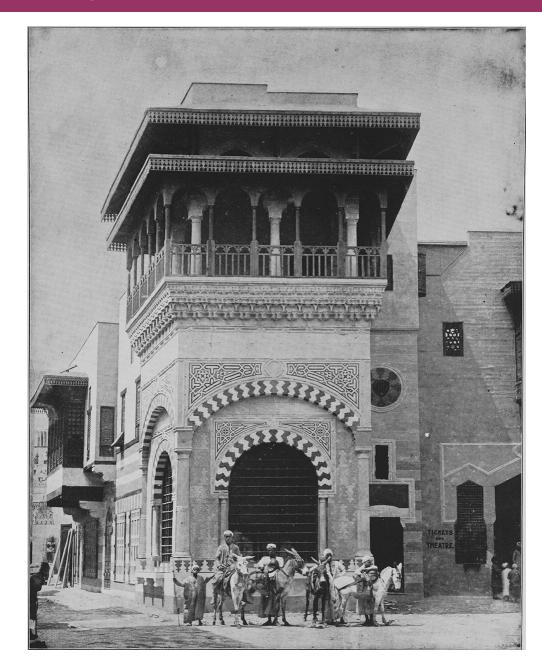


The Palace of Fine Arts (now the Museum of Science and Industry), Charles Atwood





Grand Loggia of the Machinery Hall



The Streets of Cairo



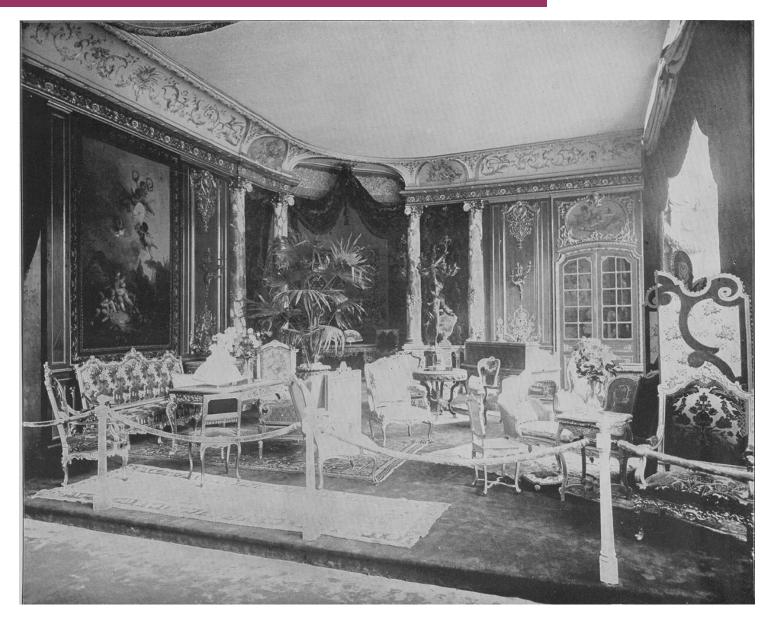
South Sea Islanders



Gallery in the Art Palace



Reconstruction of Marie Antoinette's bedroom (originally built in the Petit Trianon in 1768 at Versailles): One may easily judge that house-decoration has made no progress for many centuries; otherwise it would be impossible to re-introduce the styles of Henry VIII, Louis XIV, XV, and XVI. The scene on this page represents a reproduction of Queen Marie Antoinette's bedroom at the Little Trianon, in Versailles, which was shown in the French section of the Manufactures Building by M.M. Alavoine, leading manufactures of Paris. All of this work on textiles was done by hand in silk, and the skill and patience displayed by the French workman must evoke astonishment. Even to the picture on the wall, all is the product of needlework.



French furniture on display