Art History 285

Modern Architecture from Neo-Classicism to the Modern

Professor Wharton
Morals reformed - health preserved - industry invigorated - instruction diffused - public burthens lightened - Economy seated, as it were, upon a rock … all by a simple idea in Architecture! … A new mode of obtaining power of mind over mind, in a quantity hitherto without example: and that, to a degree equally without example, secured by whoever chooses to have it so, against abuse. - Such is the engine: such the work that may be done with it….

Jeremy Bentham, Panopticon, 1787
Illinois State Penitentiary, Stateville, Joliet, IL (1925)
Robert Barker:
June 19th, 1787. NOW KNOW YE, that by my invention, called Nature at a Glance [later named Panorama], is intended, by drawing and painting, and a proper disposition of the whole, to perfect an entire view of any country or situation, as it appears to an observer turning quite round; to produce which effect, the painter or drawer must fix his station, and delineate correctly and connectedly every object which presents itself to his view as he turns round, concluding his drawing by a connection with where he began. He must observe the lights and shadows, how they fall, and perfect his piece to the best of his abilities.
Near Quebec: Cyclorama of Jerusalem on the Day of the Crucifixion
Robert Barker, Patent for the Panaorama, 1787

Panorama/cyclorama: schematic section
Altotting, Bavaria, Panorama of Jerusalem on the Day of the Crucifixion, Fugel and Kreiger, 1902, after Piglhein, 1885
The Jaffa Gate reconstruction as at present, looking towards the city.

The same, as suggested when the unsightly obstructions that hide the wall line are cleared away.
Concrete
1824: Portland Cement – burning limestone and clay to produce a stronger cement than that made using plain crushed limestone.

mid-19th c.: Iron mesh reinforced concrete--increases both tension and compression strength.
Iron is a mineral: structural properties depend on production

- wrought iron: hammer or forged
- cast iron: poured into moulds
- steel: refined; Henry Bessemer, patent, 1855, invented the blast furnace.
- stainless steel – high chromium content – invented in Germany in 1913.
Stephensons Rocket, 1829