



Eiffel, G.: La tour de trois cents mètres.
Text by *Bertrand Lemoine*. Hong Kong/Cologne/London/Los Angeles/Madrid/Paris/Tokyo: Taschen Verlag, October 2006. Large format, 53 × 37.5 cm, many colour & b/w illustrations, 160 pp., hardback, slip-case. Texts in English, German, French, Spanish, Italian, Portuguese, Dutch, Japanese.
ISBN-15: 978-3-8228-4148-8,
ISBN-10: 3-8228-4148-X. € 99.99.

The first Industrial Revolution in the building industry was sustained by construction with iron, which was also the driving force behind *Navier's* theory of structures programme drawn up in 1826. *Clapeyron* and *Lamé* made direct use of that programme and in the final third of the 19th century *Rankine*, *Maxwell*, *Culmann*, *Cremona*, *Winkler*, *Castigliano*, *Mohr*, *Müller-Breslau* and *Kirpichev* expanded it into the artistic configuration of classical theory of structures, finally placing iron and steel structures on a scientific footing. Together with the electrical engineering and chemicals industries, the steel construction sector was without doubt one of the high-tech industries around 1900. So it was construction with iron and steel that established once and forever the self-image of the structural engineer, and the high social standing of the structural engineer's work, which is quite rightly both embodied in and symbolised by the Eiffel Tower.

Was it then any surprise when *Gustave Eiffel* appeared at the Paris World Exposition of 1900 with his magnificently bound copies of two large folio

workers who were involved in the conception, design and building of the tower. But that was not enough for him: above the four main arches of the Eiffel Tower, the great man himself instructed that the surnames of 72 natural and engineering scientists, engineers and entrepreneurs be preserved on 72 cast-iron plates as homage to the triumph of scientifically based engineering. The names include those whose creative activities had a profound influence on bridge-building, theory of structures and applied mechanics: *Marc Seguin* (1786–1875), *Henri Tresca* (1814–85), *Jean-Victor Poncelet* (1788–1867), *Jacques Antoine Charles Bresse* (1822–83), *Joseph Louis Lagrange* (1736–1813), *Eugène Flachat* (1802–73), *Claude-Louis-Marie-Henri Navier* (1785–1836), *Augustin-Louis Cauchy* (1789–1857), *Gaspard de Prony* (1755–1839), *Louis Vicat* (1786–1861), *Charles Augustin Coulomb* (1736–1806), ed to as sensuous beauty ...” The reader, looking at the coloured drawings, experiences not only “sensuous beauty”, but also pure delight in discovering the history of building with iron and steel at the close of the 19th century – and *Lemoine's* texts contribute significantly to the enjoyment.

Karl-Eugen Kurrer, Berlin