

Swiss Camera Museum

THE PLATE ERA



The inventions of the end of the 19th century led to the industrial production of dry plates which by then had become far more light-sensitive. This meant that instantaneous photographs were at last possible. The image now captured a movement, fixed a gesture, revealed the imperceptible, the invisible. This discovery thus opened up the way to a wide variety of applications.

The display will remind us of this groundbreaking period in the history of photography with a number of fascinating documents and a display of a great variety of amazing objects, showing the visitor how cameras have become increasingly "modernistic" in their design over the years.

This exhibition marks the final stage of the transformations of the Permanent Exhibition «L'œil de la photographie» of the last four years

The illustrations are directly downloadable on the site http://www.cameramuseum.ch/en/N7634/exposition-permanente-de-en.html?M=7563
Other illustrations are available on request.

Swiss Camera Museum - Grande Place 99 - CH-1800 Vevey Internet: www.cameramuseum.ch - E-mail: cameramuseum@vevey.ch Tel: ++41. +21.925.34.80 - Fax: ++41. +21.921.64.58 Tuesday to Sunday 11 am - 5.30 pm and public holidays falling on a Monday

New process, new possibilities

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Technology advanced at top speed and, of course, the world of photography was not left behind but also greatly benefited from such developments. The camera could now be held in one hand, became far more sophisticated and both the quality and the luminosity of the lenses improved tremendously. Electricity simplified studio lighting and provided more stable sources of light for projection, and above all for blow-ups.

Professional photographers' activities became more diverse, and photography much simpler, arousing the interest of a constantly growing mass market, with associations being set up for amateurs keen to perfect their techniques.

At the beginning of the 20th century, the invention of half-tone engraving, allowing photographs to be printed directly in books, magazines and newspapers, opened up a huge market, particularly that of press photography.

Even if photography was not fully considered a form of art at the beginning of the 20th century, nobody could deny its multitude of applications. Photography had just simply become indispensable.

Birth of the dry plate

The complexity of the wet, collodion process, discovered in the 1850s, encouraged researchers to experiment with new solutions. Research focused on reducing the exposure time while taking advantage of permanently sensitive negative plates.

In 1855, Jean-Marie Taupenot, a chemistry professor, started mixing albumin with collodion, which produced plates which were used dry. Sayce and Bolton made some slight improvements to the process by producing collodion silver bromide plates which came onto the market in 1867. Despite the progress made and the very welcome advantages of ready-to-use plates, they still lacked certain sensitivity.

The experiments of the English doctor Richard Leach Maddox, in 1871, provided a first solution: he coated his glass plate with an emulsion of gelatine, containing silver bromide, which was then dried; however, it was still not sufficiently sensitive. It was Charles Harper Bennett who, in 1878, recommended that the emulsion should be heated before being smeared on the glass. An increase in sensitivity was obvious and this allowed shots at 1/25 of a second, thus opening up the way to instantaneous photos.

The photographers' new tools

With the arrival of Richard Leach Maddox's dry plate and its obvious advantages, hand-held cameras soon appeared on the market, equipped with a viewfinder, a shutter and plate magazines. Fans of travel cameras on tripods continued using them by fitting them with a shutter.

The camera became a large cube sometimes containing several plates; it was equipped with mirror viewfinders for both horizontal and vertical images, and was hand-held. Because this groundbreaking model was so remarkably discreet, it was called the «detective» and met with great success in the 1890s. However, the Detective was in fact short-lived, for the introduction of the supple film, in the 1880s, spurred the manufacture of ever more sophisticated cameras.

The reflex camera allowing the photographers to see exactly what they are were going to photograph was first produced commercially in the 1860s and ended up in the 1880s as a more or less cubic box with a lens panel mounted at the end of a bellows, a focal shutter (situated in front of the surface of the sensitive plate) and a cap on the camera for focusing.