

## Oskar Barnack, Ernst Leitz II and Max Berek

**Oskar Barnack** (1879-1936) is described as a quiet person, who excelled with his imagination and persistence. His inventions were distinct in many patents.

After his apprenticeship in precision engineering in Berlin-Lichterfelde and his subsequent travels, his further path in life led him to the Zeiss company in Jena. There he met the motion picture pioneer Emil Mechau (1882-1945) who changed to Leitz company in Wetzlar. Barnack followed him in 1911 and became the manager of the experimental department of the mechanical workshop.

His field of work at the Leitz company included among other things the recording techniques for motion picture films. The fine grain of the motion picture film fascinated the hobby photographer so much, that he made it usable for photography. In order to have the largest possible paper image prints, he had the idea to exploit maximally the motion picture length (24 x 18 mm) since the standardized width of normal motion picture film of 24mm could not be changed. His development led to the Leica format 24mm wide and 36mm long that is still used at present (that is equivalent to double the width of the motion picture film). With this Oskar Barnack paved the way for a spontaneous snapshot without needing a suitcase which was used for the then common large plate cameras with tripod.

Two prototypes of the Barnack camera were completed in 1913. In 1914 **Ernst Leitz II** obtained utility model protection for the „Lilliput camera“ as Oskar Barnack called it, he continued to work and further develop the camera. In 1924 Ernst Leitz II (1871-1956) decided to produce the camera in series. This was a risky decision since the Leitz company at that time was only known as a microscope manufacture. To withstand the criticism of the professional circle the Leica had to be equipped with impeccable objectives.



Oskar Barnack's picture of the Iron market in Wetzlar – 1914 taken with the ur-Leica.

## Max Berek

Through his excellent exchangeable objectives with various focal lengths and aperture, plus the outstanding quality, Dr. Max Berek (1886-1949) contributed to the worldwide large success of the Leica camera.

Berek, who was the director of the scientific department at the Leitz company, was not only a gifted mineralogist and pioneer in microscopy, but also an exceptional mathematician who calculated over 20 objectives for the Leica. In 1924 he was named honorary professor of the university of Marburg. His book “Grundlagen der praktischen Optik”, published in 1924 became a standard for calculating optics.

He was very athletic, was active in various clubs, and whenever he once again forgot his lunch because of work, his dog Rex was sent to get him. The homes of the families Berek and Barnack were near the Leitz workshops.



Max Berek in the 1930

Text: Gerhild Seibert

Pictures: Leica Camera AG

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