



HELMUT LAGLER'S TOWERING ACHIEVEMENT

by ED SCHWARTZREICH

A few months ago, several of us at LSI were contacted, via a third party, informing us that author Helmut Lagler wished to donate a copy of his multi-volume, ongoing series “Phänomen Leica” to LSI’s library. It was clear to us that Lagler’s generous offer had not recognized that LSI is a decentralized entity with an international membership, but no central location that members can use as a library. Indeed, that function is comprised of our website, its extensive archives, and the *Viewfinder* magazine. What to do?

There was brief discussion among those Hr. Lagler contacted, but no solution. So, a bit before the turn of the year to 2023, I emailed Hr. Lagler and relayed the nature of our quandary. I suggested that if he wished, I would write a review of his books for *Viewfinder*, so that those in the English-speaking community could get an idea of the scope and utility of his encyclopedic work, and then decide whether to either dip a toe into this astounding accomplishment, or plunge fully in. He readily agreed to send me the available books for such a review purpose.

Lagler’s work is unlike any Leica literature previously produced: it is an encyclopedia and its scope is **everything Leitz and Leica**. He terms it an “encyclopedic book series”. Most of us English-speaking oldsters are familiar with using the “World Book Encyclopedia” or the “Encyclopedia Britannica” from our childhood. In Germany the analogous product was the “Brockhaus Enzyklopädie”. I recall all too well being asked to look something up for my school studies (this is before Wikipedia by several generations) and then finding myself happily sidetracked reading not only the assigned information, but several or more of the adjoining or referenced pages because they were so interesting.

Lagler’s “Phänomen Leica” is addictive like that. Amazingly, Lagler put in place all by himself these books’ myriad details: equipment surveys, brief bios, chronological assessments by year of the Leitz Company’s history, personnel, new inventions, production issues, patents, brochures and literature. A phenomenal undertaking, copiously illustrated, of which the only flaw that I can see is that it leaves out most of the British and American Leica studies. The books are also written in German and their focus is on the German history of the company (albeit Leitz Canada). While the more-lengthy “set pieces” of biography or specific narrative may present the non-German reader with the need for detailed translation, the text for many of the briefer items can be fairly easily intuited. In any case, there is an excellent translation App on iOS devices that instantly translates text via photographing a page. An example of this App’s abilities is shown below, towards the end of this article.

A set of encyclopedic books may almost seem an anachronism in these days of on-line sources and e-books, but for Leica historians and collectors there is nothing more satisfying than having an actual full reference library at our fingertips (viz. innumerable very heavy illustrated Leica books that cause our shelves – and our spouses – to groan). So many of us Leicaphiles are also Leica book collectors in any case, and treasure our volumes.

Each encyclopedia editor has to decide how to arrange its material. Lagler has chosen his own method: first, two books which are overviews of the literature and then the inventions / patents / products. The remaining books focus on each of several eras, and write of the company, the people who worked there, and the local scene including politics. Volume 3 is on the early history of the company up through the Leica I, and Volume 4 (I received a preproduction copy) is about the screw mount cameras, with Volumes 5 -8 still in preparation. This arrangement is explained in greater detail below.

Such an organization of data means at times that the reader may encounter the same history, device, or person more than once from different angles, but each time such fits into its own narrative. Subjects are not cross referenced as in an ordinary encyclopedia, or as they might be in an online presentation, but nonetheless a fairly knowledgeable Leica reader can find his or her way easily once Lagler’s overall layout is grasped.

If, let’s say, if one wants to look up their newly acquired Leica III in Lagler’s books, one might first turn to Volume 4 on the SM Leicas and find the page with basic information about that camera. Then one might look in the same volume about what was happening around Leitz in the year 1933 – there will be quite a few pages here. One can then perhaps turn to Volume 1 and see the Leica literature which might pertain to a Leica III – handbooks, catalogues, Leica books (often with brief bios of these authors at the back of Vol 1). Or one can look at relevant patents that might pertain to a Leica III and/or its accessories in Volume 2. There is also an alphabetical list of Leitz inventors at the start of this volume that one can search.

If, on the other hand, one wished to find more information on the renowned Leitz Director Henri Dumur, Volume III is where to look, both for a bio and for the family tree that shows how he was related to the Leitz family proper. But Dumur shows up briefly in other volumes as well.

Here, in translation and slightly amended, are Lagler's own summaries for how his volumes are laid out:

VOLUME 1: Literature Guide – An extensive private literature collection consisting of books, company newspapers, specialist publications, brochures and catalogs on the subject of Leitz / Leica served as the basis for this volume, with a focus on the photo area. In total, the content of this volume comprises around 17,000 entries. The selection of entries is focused on the literature of the individual cameras, selected lenses, and photographic keywords. This selection is supplemented by a listing of relevant patents on these items.

VOLUME 2: Technical components and inventors - This volume shows the development of the technical details of the Leica models, in six production epochs, from the first Leica production to the Leica screw system, the Leica M, the Leica R, compact, and then digital cameras. Their patents are arranged chronologically within each of the following technical components: film handling, shutter, rangefinder, exposure metering, flash, SLR, lenses. Here the reader can see the technical progress based on the chronological assignment of the Leitz patents in the various production epochs.

VOLUME 3: Prehistory and First Production 1848-1929 - The development of the Leitz-Werke, from the small mechanic's workshop of Carl Kellner to the large industrial plant under the leadership of the Leitz family, is described in detail in this volume. Their product range of microscopes and long-range optics was supplemented by a photographic camera as early as 1905. One focus is of course on the development of the Leica by Oskar Barnack from 1912 (through interrupted by the First World War) until Ernst Leitz II decided to go into production (1924). For cinema equipment, a development by Ernst Mechau, a division was founded in 1919 in Rastatt.

VOLUME 4: Leica screw system 1930-1953 (currently available by the time this article is printed) - Driven by success, Oskar Barnack and his team develop and expand the Leica into a complete camera system. With the Leica I(C), from 1930, lenses can be exchanged using interchangeable thread mounts. Possible uses of the Leica and its accessories are becoming more and more extensive. With the seizure of power of the National Socialists, the Leitz family got into dire straits, but was able to escape because the optical industry was classified as "essential to the war effort" until the end of the war. After the war, new and further developments for the Leica (still the screw system) and in other areas started.

VOLUME 5: Leica M-System 1954-1963 (available mid-2023) - In 1954 the trend-setting Leica M3 was introduced. The M3

had an accurate rangefinder system, a precise bayonet mount, and the possibility of an exposure meter coupling - the ultimate at the time. The M-System has proven to be a milestone that has lasted until today, developed and still produced. The firm's production and employee numbers constantly increased during this period, the Leitz main plant in Wetzlar was expanded, and new plants in Midland (Canada), Taubenstein and Weilburg (Oberlahn) arose. Leitz became a global corporation.

VOLUME 6: Leica R-System 1964-1988 (expected to be available in 2023) - In the book "LEICAFLEX - The development of a legend" Georg Mann describes the difficult birth of the R system, which did not appear until 1964. The year 1974 ended the "Leitz Family Era". Wild Heerbrugg AG becomes a partner. In the "Photo" area, developments are lost. Due to the competition from Japan, various cooperative ventures are made, e.g. with Minolta. 1986: The companies Leica GmbH, Leica Microsystems GmbH and Leica Geosystems AG are formed. 1987: Ernst Leitz Wetzlar GmbH was taken over by Wild Heerbrugg AG, creating Wild Leitz Holding, Inc.

Still in planning:

VOLUME 7: Leica compact system 1989-2003

VOLUME 8: Leica Digital System 2004-2018

This current article will examine more closely Lagler's Volumes 1 and 2. A later article will review Volumes 3 and 4, and present briefly some of Helmut Lagler own history with the Leica.

Volumes 1 and 2 tend to represent the skeleton, or the internal structures, on which the other volumes are laid. Or possibly, if I can dredge up something from my medical past, the anatomy lessons that many other authors and researchers have conducted on the body (of Leitz / Leica). As such this might be felt less interesting than the other volumes, but these bare bones, muscles, ligaments, and tissues are basic to the story.

Paging through Volume 1, we come first to a brief summary of the Leitz production epochs, years, models, and who was directing the company in these particulars. This, if you will, is the UR-Enzyklopädie of "Phänomen Leica". Next are many sections with thumbnails of the front view of Leitz catalogs, prospectuses, VIDOM issues, Leica Fotografie issues, Objektif (Leitz's in-house publication), etc. Then we go through an almost equally-long chronological section on each of the camera models from each epoch, coupled with which author has written about them, and where such was published.

Then we are given a simple list of patent numbers and writings on the innards of the cameras, such as shutter mechanisms, diaphragms, viewfinders, film-handling devices and other accessories. And then the various lenses, again with the patent numbers and authors who described them in the Leica literature.

Towards the end of Volume 1, there is a listing of Leica photographic authors of note, including personages like Walther Benser, Luigi Cane, Theo Kisselbach, Ulf Richter, etc. There is usually a photograph of that author and a very brief relevant bio. Unfortunately, Jim Lager is not himself depicted in this section, although he is often otherwise cited on specific topics or items!

Finally, there is a list and / or pictures / bio of prize-winning photographers for the “Meister der LEICA”, and Barnack Awards. And then a source list for some of the images and text used in this volume.

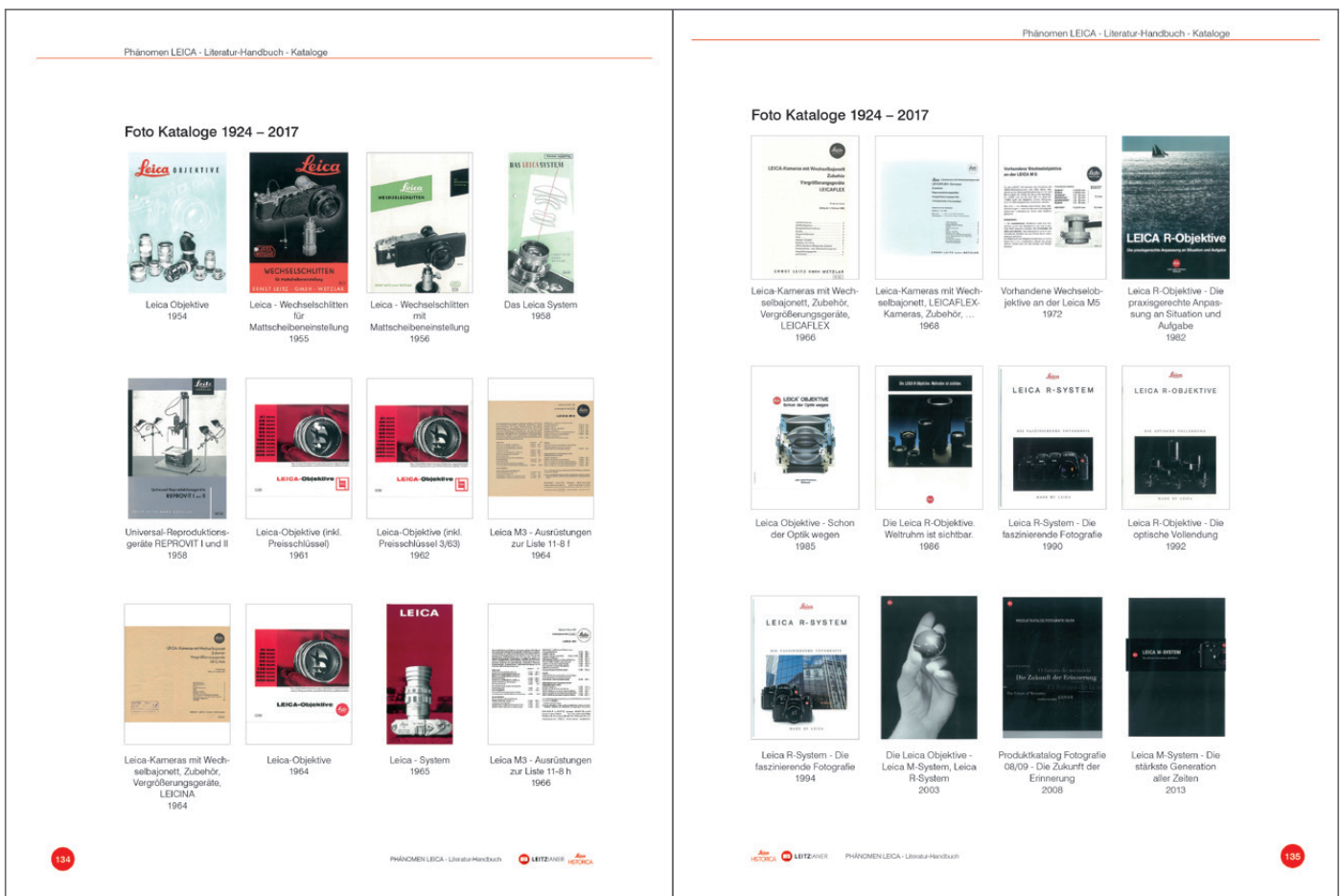
To the right (FIGURE 1) from Volume 1 is a portion of the page that describes the Model IIId, listing the authors who have written about it. And below (FIGURE 2) is a typical double truck in Volume 1, showing various catalogs.

		Leica IIId		
Systemart:	Leica Schraub-System	Ser.-Nr.:	360002 - 367325	
Baujahr:	1939 - 1947	Anzahl:	426	
Jahr	Thema	A	Titel	Autor
1940	Gebrauchsanleitung zur Leica IIIc und d (Ergänzungsblatt)	8	Gebrauchsanleitung zur Leica IIIc und d (Ergänzungsblatt)	Ernst Leitz GmbH
1975	Leica IIId	4	Leica - Illustrated Guide - 1925 - 1975	Lager, James L.
1978	Die Leica IIId	1	Leica 1925 - 1975 - Ein Handbuch für den Sammler	Rogliatti, Gianni
1978	Leica IIId	1	Leica Historica - Gewindekammeras 1925-1960 (Hahne-Liste)	Hahne, Willy
1987	Die Leica-Modelle der Kriegsjahre: IIId, IIIc und IIId	1	LEICA: Das große Leica-Buch	van Hasbroeck, P.-H.
1993	Leica IIId	1	Leica - An Illustrated History - Volume I - Cameras	Lager, James L.
1995	Die LEICA IIId	1	Leica von 1925 bis heute	Rogliatti, Gianni
2000	Leica IIId	1	Leica Taschenbuch (7. Auflage)	Laney, Dennis
2005	Kamera-Stabilisierungswinkel für die LEICA IIId / Leica IIId	5	Vidom 89	Bawendi, Dr. B.

(FIGURE 1)

For Volume 2, first off is a list of Leitz and Leica inventors, alphabetically, with the division of the company they belonged to, and the areas of construction that the patents are in: film handling, shutters, viewfinders, and so on. The number of patents that were granted to each individual is also shown.

We then are shown exploded diagrams of each type of camera: screw mount, M, R, etc. Then comes many pages of patents,



(FIGURE 2)

broken down once again areas of construction, and within this, by type of model (M, R, etc). The patents are reproduced in considerable detail, most probably representing their originals.

Next come Leitz and Leica lenses, first as a primer about lens design of each major type, then each lens considered descriptively separately by system: (SM, M, R, and so on), and finally the patents concerning these lenses, and a list of their inventors.

To the right (FIGURE 3), from Volume 2, is the 1920 patent for the famous 4-element Leitz Anastigmat that Dr. Berek designed for the o-Serie prototypes. However, from what we know currently, this lens did not end on any of the cameras, being superseded immediately by the 5-element lens which became the ELMAX. Also to the right (FIGURE 4) is the iPhone translated image of this as well – this “ain’t too shabby”, as native Vermonters say... and should suffice for basic intelligibility.

At the outset of this review, I titled it “Helmut Lagler’s towering achievement”, which it truly is. It is mostly totally comprehensive, thought out carefully and usefully if somewhat unusually, and fascinating just to leaf through, if not to utilize for whatever needs an historian or researcher might wish. It is fully up to date, and I included the last illustration on Berek’s 1920 lens patent to show this, as this topic is being hotly debated by Leica historical researchers, almost as my words are being written.

To be continued. 

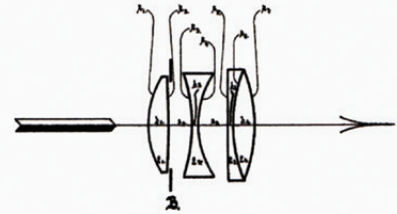
Patente Objektive

Unsymmetrisches Objektiv

Patent-Nr. DE000000343086A

Anmeldung: 09.10.1920 · Veröffentlichung: 28.10.1921

Erfinder: Dr. Max Berek



PATENTANSPRÜCHE:

1. Unsymmetrisches, sphärisch und chromatisch korrigiertes Objektiv mit anastigmatischer Bildfeldebnung, bestehend aus drei durch Luftzwischenräume getrennten Gliedern, von denen das erste eine Sammellinse, das zweite eine Zerstreuungslinse ist und das letzte aus zwei miteinander verkitteten Linsen besteht, dadurch gekennzeichnet, daß sich der Blendenort in dem Luftraum zwischen dem ersten und zweiten Glied befindet und infolgedessen die Kittfläche im dritten Glied dieselbe oder schwächere Krümmung hat als die letzte Fläche desselben Gliedes.
2. Unsymmetrisches Objektiv nach Anspruch 1, dadurch gekennzeichnet, daß das zweite Glied auf der Achse verschiebbar angeordnet ist zwecks Einstellung auf verschiedene Objektweiten.

(FIGURE 3)

Patents, lenses

Unbalanced lens

Patent No. DE000000343086A

Registration: 10/09/1920 · Release: 10/28/1921

Inventor: Dr. Max Berek

PATENT CLAIMS:

1. Unbalanced, spherical and chromatically corrected lens with anastigmatic image field flattening, consisting of three links separated by air spaces, the first of which is a collecting lens, the second is a scattering lens and the last consists of two cemented lenses, characterized in that the aperture location is located in the airspace between the first ur

2. Unbalanced lens according to claim 1, characterized in that the second member is arranged displaceably on the axis for the purpose of adjusting to different object widths.

(FIGURE 4)