

Heinrich Boecker, ca. 1855 – ca. 1940

W. Emil Boecker, 1851-1945

by Brian Stevenson, Kentucky USA

Heinrich Boecker was a professional microscope slide preparer, working in Wetzlar, Germany from 1875 until at least 1930. A brother, Emil, produced microscopes and related equipment under his own name, and in partnership with Gottlieb Fecker, between 1879 and 1885. Some museums and other modern sources have incorrectly attributed Boecker microscopes to Heinrich.



Figure 1. Examples of microscope slides prepared by Heinrich Boecker. A wide variety of specimen types were produced, from insects to botanicals to diatoms to minerals. Not all of the slides he sold were produced by Boecker, as he is known to have retailed mounts by Eduard Thum and Heinrich Frey. Boecker's labels came in a variety of colors – there are no apparent correlations between color and specimen type or quality, and slides bearing two different colors of label are not uncommon.

I have yet to discover much information that directly describes Heinrich Boecker's life. Even Karlheinz Rosenbauer's comprehensive *Mikroskopische Präparate* says nothing personal about Boecker. However, some assumptions may be made, based upon what is known about his career and the lives of his siblings. Heinrich spent his whole working career in Wetzlar, Hesse, Germany, as did also his brothers, so he was probably born and raised in that city. Leopold Dippel, in his 1882 *Das Mikroskop und Seine Anwendung*, described Heinrich as being the brother of microscope-maker Emil Boecker. Rosenbauer provided Emil's lifespan as 1851

through 1945. The Boeckers' sister Emma married Emil's business partner, Gottlieb Fecker. The Feckers emigrated to the U.S., and the 1900 census recorded that Emma was born in September, 1863. In that Heinrich reportedly began his slide-making business in 1875, a birthdate of ca. 1855 is reasonable, as is also a date of death similar to that of Emil.

A. 1878

Mikroskopische Praeparate aller Art,
sowie die zur Anfertigung dienenden Gegenstände
empfiehlt **H. Boecker's Institut für Mikroskopie**
in Wetzlar.
Für Aerzte und Pathologen pathologische und gynä-
kologische Praeparate sehr zu empfehlen.

B. 1884

Heinr. Boecker, Wetzlar,
Mikroskopisches Institut,
empfiehlt
Mikroskopische Praeparate,
Deckgläser, Objectträger, Etuis, Tincturen,
Chemikalien und sämtliche mikroskopischen
Instrumente.
Catalog IX und X gratis.
== 5 Medaillen und Diplome ==

C. 1893

HEINR. BOECKER,
WETZLAR, GERMANY.
A Large Selection of
Microscopical Preparations
of all Descriptions, especially of BACILLI and BACTERIA.
All the ORDINARY APPLIANCES for the MICROSCOPE.
CATALOGUE GRATIS.

D. 1904

Heinrich Boecker-Wetzlar —
Institut zur Anfertigung mikroskopischer
Praeparate
sucht zu kaufen: Köpfe von Pieris bras-
sicae, Feldgrillen, Hauggrillen, Kamel-
halstiegen, Köpfe von Plusia gamma,
Ekto- u. Entoparasiten vom Mensch u. Tier,
in Anzahl und in Spiritus

Figure 2. A sampling of advertisements published by Heinrich Boecker. He offered a wide variety of mounted and unmounted objects, plus supplies for customers to make their own slides. Heinrich was described as a preparer and source of slides in various microscopy and entomology books through 1930.

Brian Bracegirdle's *Microscopical Mounts and Mounters* illustrates excerpts from an 1882 H. Boecker catalog, indicating an extensive range of available specimens. Presumably, that catalog also provided the information by which Bracegirdle could state that Boecker began his business in 1875.

Boecker named his operation "Mikroskopisches Institut" (Microscopic Institute). That title was also adopted by several other German slide-makers. Inexplicably, Boecker's slide labels spell the business as "Mikroskopisches" (Figure 1). That German/English hybrid spelling was also used on the similar-looking labels of Moritz Hensoldt (also of Wetzlar) and Carl Rodig (of Hamburg). Boecker's labels were identical to those of Rodig and similar to those of Hensoldt, so the odd spelling may reflect a quirk of a shared print shop. There were not any known business connections between Boecker, Rodig or Hensoldt.

An 1879 list of German naturalists gave Heinrich's address as 78 Gernsbacherstrasse, Wetzlar. He is known to have lived at several other locations in that city during his ca. 55 year career: 8 Johannisstrasse, 35 Silhoferstrasse from 1882-85, 35 Sophienstrasse in 1892, Steinstrasse in 1895, and 13 Brühlsbachstrasse in 1930.

Heinrich rapidly acquired an international reputation as a skillful slide maker. At an 1884 meeting of the Royal Microscopical Society, "*Herr H. Boecker's collection of slides of Bacteria, Bacilli, &c, exhibited in the room, were referred to by Mr. Crisp as one of the best yet seen in this country*".

While Heinrich Boecker mounted a wide range of biological, mineral and chemical preparations, he appears to have had a personal interest in butterflies and other insects. For example, his

entry in the 1882 *Naturalists' Universal Directory* reads, "Boecker, Heinrich, Mikroskopisches-Institut, Wetzlar. Mic, MacroLepid. C. Ex. Wishes exotic Lepidoptera for microscopic objects. Will send gratis my new Catalogue of microscopical preparations". Judging from advertisements and descriptions of what Heinrich retailed, it is likely that the requested lepidoptera specimens were for his personal collection.

The 1930 census book of Wetzlar listed "Heinr. Boecker, Mikrosk. Institut Brühlsbachstr. 13", indicating that he still had an independent business at that late date. He would then have been 70-80 years old. Heinrich appears to have used only one style of label during his career from 1875 until ca. 1930 (Figure 1). Thus, it is probably impossible to accurately date when any particular slide was produced during that 55 year period.



Figure 3. Photomicrograph of an H. Boecker preparation of the life stages of the human louse, by S.T. Stein, 1884.

W. EMIL BOECKER,
MANUFACTURING OPTICIAN,
WETZLAR, GERMANY,
SENDS GRATIS HIS CATALOGUE
OF MICROSCOPES, OBJECTIVES, MICROTOMES, AND APPARATUS
FOR SCIENTIFIC RESEARCH.

Heinr. Boecker's Microscopical Institute, at Wetzlar, Germany,
SUPPLIES
MICROSCOPICAL PREPARATIONS
In all branches of Natural History.. A Large Selection of Injections, Stained Preparations, Insects, Crustacea, Entozoa, and Lower Animals; Vegetable Anatomy, Woods, Articles of Food, Alga, Mosses, Fungi, Diatoms, and Sections of Rocks and Fossils. Instruments and Appliances for Mounting, &c. Sciopicon, with addition for using microscopic objectives. Glass Photograms.
Catalogue No. IX., Gratis and Post-free.

Figure 4. 1883 advertisements from Heinrich and Emil Boecker, from the *Journal of the Royal Microscopical Society*.

The relationship between slide-maker Heinrich Boecker and instrument-maker W. Emil Boecker was clarified by Leopold Dippel in his *Das Mikroskop und Seine Anwendung*. Writing about Emil's microtome, Dippel stated, "*Ich selbst habe das Mikrotom ... noch nicht näher geprüft, da aber Herrn Boecker dessen Bruder Heinrich Boecker als sachkundiger Berather in diesen Dingen zur Seite steht*", i.e., "*I have this microtome but have not examined it in detail, but Mr. Boecker's brother Heinrich Boecker is an expert in these things*".

The 1882 *Tageblatt der Versammlung Deutscher Naturforscher und Aerzte* placed both Heinrich and Emil at the same house: 8 Johannisstrasse, Wetzlar. Together, they were described as dealers of "*Mikroskope, Mikrotome, Objectivrevolver, Zeichenapparat, Loupen etc., mikroskopische Präparate (zoologische, patholog., botanische)*".

Emil (born 1851) worked for the Ernst Leitz microscope firm in Wetzlar between 1869 and 1871. After traveling for several years, Emil returned home and opened his independent business in 1879. About 1883, he formed a partnership with telescope-maker Gottlieb Fecker, who later married the Boeckers' sister, Emma. Emil left the partnership and went back to work for Leitz in 1885. He retired in 1931, and died in 1945.

Fecker continued the business for another couple of years, as "Fecker & Company". This included Heinrich to some extent, as an 1885 patent for a "*spring regulator for the engines of astronomical and meteorological instruments*" was issued to "*Fecker, G., und H. Boecker, in Firma Fecker & Co. in Wetzlar*". That point raises the possibilities that Heinrich may have also worked in the manufacture of microscopes and other apparatus with his brother, Emil, and/or for Leitz.

Fecker moved to the USA in 1887, initially working in Washington, D.C., then with Warner & Swasey in Cleveland, Ohio, from 1895 until his death in 1921.

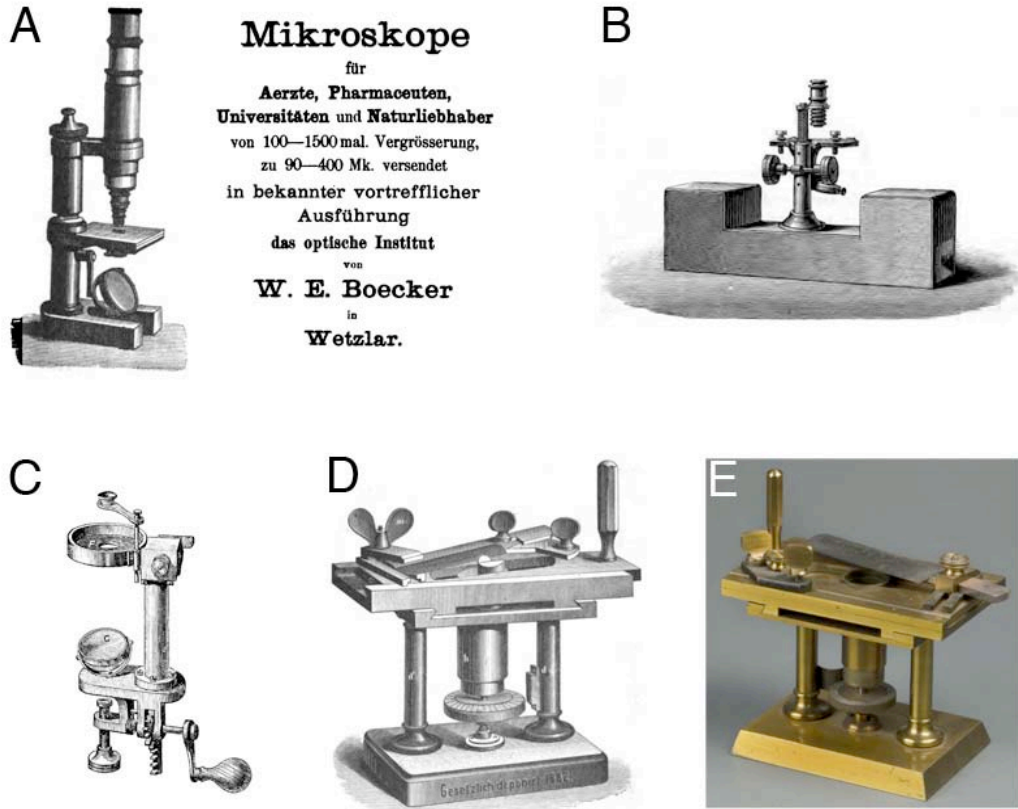


Figure 5. Some apparatus produced by Emil Boecker. He also made a freezing microtome of note. **A.** Monocular compound microscope and advertisement, from Strasburger's 1884 'Das Botanische Practicum'. **B.** Dissecting microscope, from Dippel's 1885 'Grundzüge der Allgemeinen Mikroskopie'. **C.** Air-pump microscope from 1883, "which enables an object to be examined in a vacuum under the Microscope, and the progressive effects attendant upon the exhaustion of the air watched, as well as serving for the more ordinary purposes of an air-pump in mounting". **D.** Microtome, from Dippel's 1882 'Das Mikroskop und Seine Anwendung'. **E.** An extant microtome that is currently in the Harvard University Collection of Historical Scientific Instruments. It is marked on the base "W.E. Boecker Wetzlar 1883". Image used for nonprofit, educational purposes.

Böcker & Fecker
WETZLAR.
Optische und mechanische Werkstätte
für astronomische und geodätische Instrumente, Mikro-
skope und Nebenapparate für wissenschaftl. Gebrauch.
Preis-Courant gratis u. franco.

Figure 6. An 1885 advertisement from Boecker and Fecker, the partnership between Emil Boecker and Gottlieb Fecker.

There was evidently a third Boecker brother, Ernst, born in 1856. His occupation is not known, but he had a strong interest in entomology. Ernst spent a substantial amount of time in Tenerife, Canary Islands. He wrote a multi-part article on the beekeepers of Tenerife for *Isis*, a German nature magazine, in 1883. Ernst sold insect specimens from the Canary Islands, available by subscription or through Heinrich (Figure 7). Victor von Röder wrote in 1883 about a group of diptera he received from Ernst, in which he complained that the insects had suffered from soaking in alcohol, and could not be identified with confidence. In 1914, Ernst placed an advertisement in another entomology magazine, offering to sell 50-60 caterpillars. He then lived at 22 Pariserstrasse, Wetzlar. An 1930 address book of entomologists recorded him at that same address, and being a specialist in lepidoptera. Circa 1937, Ernst donated an “*extensive butterfly and beetle collection*” to the city schools of Wetzlar.

Der Unterzeichnete beabsichtigt, im März d. J. nach den **Canarischen Inseln** — nach Gran Canaria überzusiedeln und dort in seinen **reichlichen** Musstunden Insecten aller Ordnungen, insbes. Lepidoptera und Coleoptera, sowie auch gelegentlich Mineralien, Vogelbälge und Eier zu sammeln.

Alle diejenigen, welche reflectiren, Naturobjecte von den Canarischen Inseln zu erhalten, werden gebeten, sich an dem Unternehmen in der Art zu betheiligen, dass sie Antheilscheine erwerben. Ein Antheilschein von 20 Mk. garantirt für 60 Coleopteren, ein solcher von 30 Mk. für 60 Lepidopteren im aufgespannten Zustande. Die betr. Sachen werden von Heinrich Boecker's Institut für Microscopie in Wetzlar an die Herren Abonnenten dirigirt. Es wird gebeten, die Beiträge umgehend, womöglich vor Ende Februar an den Unterzeichneten gelangen zu lassen.

Hochachtungsvoll

Ernst Boecker in Wetzlar.

Herr Ernst Boecker ist uns als wissenschaftlich gebildeter, sehr eifriger Sammler gut bekannt. Wir haben ihm bereits namhafte Aufträge ertheilt und können ihn nur dem allgemeinen Vertrauen empfehlen.

Mainz, den 6. Februar 1882.

Dr. August Nies,
Lehrer der Naturwissenschaften
insbesondere der Mineralogie an der
Grossh. Realschule I. Ordn. in Mainz.

Wilhelm von Reichenau,
Custos des Mainzer
zool. Museums.

Figure 7. An 1882 advertisement for Ernst Boecker's insect specimens from the Canary Islands, which were available through “Heinrich Boecker's Institut für Microscopie in Wetzlar”.

This and other illustrated biographies of historical microscopists can also be viewed at the author's web site, <http://microscopist.net>

Resources

Beitrage zur Entomologie (1961) “Boecker, Ernst Josef (1856 -), paläarktische Lepidoptera 1937 an die Stadt Wetzlar (für städt. Schulen)”, page 487

Boecker, Ernst (1883) Die Bienenzucht aus Teneriffa, *Isis: Zeitschrift für alle Naturwissenschaftlichen Liebhabereien*, Vol. 8, pages 27-29, 211-213, 220-221, 227-229

Boecker, Heinrich (1880) Letter on microscope suppliers in German and elsewhere, *Isis: Zeitschrift für alle Naturwissenschaftlichen Liebhabereien*, Vol. 5, pages 193-194

Boecker, Heinrich (1929) "*Lista XXVII de preparaciones microscópicas: 1929, Instituto Boecker - Casa especializada en preparaciones microscópicas, Wetzlar (Alemania)*" Published in Madrid

Bracegirdle, Brian (1998) *Microscopical Mounts and Mounters*, Quekett Microscopical Club, London, pages 14, 118, 156 and 192, and plates 7C, 7D, 26B and 44K

Central-zeitung für Kinderheilkunde (1878) Advertisement from Heinrich Boecker, Vol. 1, page 162

Chemiker-Zeitung (1879) Advertisement from Heinrich Boecker, Vol. 3, page 746

Chemiker-Zeitung (1909) "*Wetzlar. Beitr. Boecker mikroskopisches Institut Wetzlar. Inhaber: Fabrikant Heinrich Boecker- Wetzlar. W*", Vol. 33, page 939

Correspondenz-Blatt der Internationalen Vereinigung Lepidopteren- und Coleopteren-Sammlern (1884) Advertisement from Heinrich Boecker, Vol. 1, page 55

Dippel, Leopold (1882) *Das Mikroskop und Seine Anwendung*, Friedrich Vieweg und Sohn, Braunschweig, pages 680-681

Dippel, Leopold (1885) *Grundzüge der Allgemeinen Mikroskopie*, Friedrich Vieweg und Sohn, Braunschweig, pages 216-217, 265, 306 and 505

Entomologen-Adressbuch (1930) "*Wetzlar - Böcker, H., Fabrikant. Lep.*", 3rd edition

Entomologische Nachrichten (1878) Advertisement from Heinrich Boecker, Vol. 4, page 330

Entomologische Nachrichten (1882) Advertisement from Ernst Boecker, Vol. 8, end of April issue

Entomologische Zeitschrift (1903) Advertisements from Heinrich Boecker, Vol. 17, advertising sections of numerous issues

Entomologische Zeitschrift (1937) Vol. 51, page 265

Handbuch der Biologischen Arbeitsmethoden (1924) "*Wetzlar. Heinrich Böcker, Mikroskopisches Institut (Mikroskopische Präparate usw)*", Part 11

Harvard University Department of the History of Science (accessed October, 2013) Image of microtome by W. Emil Boecker, dated 1883,
http://dssmhi1.fas.harvard.edu/emuseumdev/code/emuseum.asp?emu_action=searchrequest&newsearch=1&moduleid=1&profile=objects¤trecord=1&searchdesc=Related%20to%20Heinrich%20Boecker&rawsearch=seealsoid/,/is/,/7186/,/false/,/true&style=single

<http://home.europa.com/~telscope/tsus.txt> (accessed October, 2013) Fecker

Internationale Entomologische Zeitschrift (1914) Advertisement from Ernst Boecker, Vol. 8-9, page 128

Journal of the Royal Microscopical Society (1883) Boecker's air-pump microscope, Second series, Vol. 3, pages 112-113

Journal of the Royal Microscopical Society (1883) Advertisements from W. Emil Boecker and Heinrich Boecker, Second series, Vol. 3, March issue, back cover

Journal of the Royal Microscopical Society (1884) Report of the meeting of May 14, 1884, Second series, Vol. 4, pages 503-504

Meteorologische Zeitschrift (1885) Advertisements from Böcker and Fecker, Vol. 2, advertising sections of the January, February, March-April and May issues

Migula, Walter (1893) *An Introduction to Practical Bacteriology: For Physicians, Chemists and Students*, translated by M. Campbell, edited by HJ Campbell, Swan Sonnenschein & Co, New York, Macmillan & Co, Advertisement Heinrich Boecker, rear of book

Natural History Museum holdings (accessed October, 2013) Boecker, W Emil, 1 illustrated price list and 1 catalogue printed in German from W Emil Boecker, Wetzlar, Germany, dated February 1883, <http://www.nhm.ac.uk/research-curation/library/archives/catalogue/dserve.exe?dsqServer=placid&dsqIni=Dserve.ini&dsqApp=Archive&dsqDb=Catalog&dsqCmd=show.tcl&dsqSearch=%28RefNo==%27DF%20ZOO%2F200%2F24%2F19%27%29>

The Naturalists' Universal Directory (1882) "Boecker, Heinrich, *Mikroskopisches-Institut, Wetzlar. Mic, MacroLepid. C. Ex. Wishes exotic Lepidoptera for microscopic objects. Will send gratis my new Catalogue of microscopical preparations*", S.E. Cassino, Boston page 81

Pharmazeutische Zentralhalle für Deutschland (1880) "Präparate, mikroskopische: Heinr. Boecker, Wetzlar" Vol. 21, page xii

Pharmazeutische Zentralhalle für Deutschland (1890) Advertisements from Heinrich Boecker, Vol. 31, numerous issues

von Röder, Victor (1883) Dipteren von den Canarischen Inseln, *Wiener Entomologische Zeitung*, Vol. 2, page 93

Rosenbauer, Karlheinz A. (2003) Fecker & Comp., Boecker & Fecker, Emil Boecker – Mechaniker, in *Mikroskopische Präparate*, Vol. 1, page 8

Rosenbauer, Karlheinz A. (2003) Heinrich Boecker – Mikroskopisches Institut, in *Mikroskopische Präparate*, Vol. 1, pages 8-11

Rowan, Steven W., editor (2008) *Cleveland and its Germans*, Western Reserve Historical Society, page 111

Stein, S. Theodor (1884) *Das Mikroskop und die Mikrographische Technik*, Wilhelm Knapp, Halle, pages 313 and 322

Strasburger, Eduard (1884) *Das Botanische Practicum*, Gustav Fischer, Jena, Advertisements from W.E. and H. Boecker at rear of book

Tageblatt der Versammlung Deutscher Naturforscher und Aerzte (1879) "Boecker, Heinrich, *Mikroskop. Institut, Wetzlar, Gernsbacherstrasse 78*", Vol. 52, page 13

Tageblatt der Versammlung Deutscher Naturforscher und Aerzte (1882) "Böcker, W.E., *Optiker, Wetzlar - Buffleb, Kaufmann, Johannisstrasse 8*", "WE und H Boecker *Mikroskope, Mikrotome, Objectivrevolver, Zeichenapparat, Loupen etc., mikroskopisebe Präparate (zoologische, patholog., botanische)*", and "Böcker, H., *Optikus, Wetzlar - Kaufm. Buffleb, Johannisstrasse 8*", Vol. 55, pages 12, 25 and 35

United States censuses, accessed through ancestry.com

Verzeichniss der von dem Kaiserlichen Patentamt (1887) "Fecker, G., und H. Boecker, in *Firma Fecker & Co. in Wetzlar. Federregulator für die Triebwerke von astronomischen und meteorologischen Instrumenten. 29. Mai 1886. 38024*", page 63

Whitman, Charles O. (1885) An ether freezing apparatus, in *Methods of Research in Microscopical Anatomy and Embryology*, S.E. Cassino and Co., Boston, pages 80-81

Zeitschrift für Angewandte Mikroskopie (1899) Advertisements from Heinrich Boecker, Vol. 4, advertising sections of numerous issues

Zeitschrift für Instrumentenkunde (1884) Ueber ein neues Mikrotom mit Gefriereinrichtung, automatischer Messerführung und selbstthätiger Hebung des Objectes, Von Mechaniker W. Emil Boecker in Wetzlar, Vol. 4, pages 125-127

Zoologisches Adressbuch (1895) "Wetzlar, Rheinprovinz. Heinrich Böcker, Mikroskopisches Institut - Steinstrasse. Spec. Mikrosk. Präparate.", R. Friedländer & Sohn, Berlin, page 74