

Herbert Joseph Gunnery, 1882 – 1978

by Brian Stevenson, Kentucky, USA

Herbert Gunnery had a long and varied life, living in England, Malaysia and the USA, while working as an electrical engineer, botanist, photographer and microscope slide maker. Slides bearing Gunnery's name probably date to ca. 1911, when he operated his own business (Figures 1 and 2). In addition, Gunnery managed the microscope slide department of Ward's Natural Science Establishment in the mid-1930s. His mother was a sister of Abraham Flatters, the famous Manchester microscopist, and it is probable that Gunnery worked for his uncle at some time or another.



Figure 1. Examples of microscope slides prepared by Herbert Gunnery, circa 1911. The mounter later worked as a professional botanist, and all known Gunnery slides are of botanical subjects. Two labeling styles, of the same subject, are on the right. Presumably, the machine-printed label is of later vintage.

H. GUNNERY, Expert in Microscopy.

**Accurate Microscopical Slides in Botany (a Speciality)
Zoology and Pathology.**

All phases of Mitosis in the Pollen mother-cells and embryo sac of Liliium. Embryology of Liliium, Alisma, Capsella, etc. **Botanical Material** carefully fixed and preserved for Microscopical investigation.

Living Specimens for Morphology and Classification. **Photographic work** of every description.

Catalogues post free—

THE LABORATORY, ACOMB, YORK.

Figure 2. Advertisement from 'Life and Matter' by Sir Oliver Lodge, 1911.

Herbert Joseph Gunnery was born December 5, 1882, the fifth child of Joseph and Emily Gunnery. He was christened February 18, 1883, at St. Clement's Parish Church, Salford, Lancashire (near Manchester). Father Joseph was a railway "signalman", and mother Emily often worked as a "laundress". Emily's brother, Abraham Flatters, also worked on the railway during the late 1800s.

The 1901 census of England recorded 18 year-old Herbert as being an "*electric engineering apprentice*".

Herbert Gunnery joined the Manchester Microscopical Society in 1905. At that time, he lived at 5 Nelson Street, Rusholme. This was just off Oxford Road, adjacent to the University of Manchester. By 1906, Gunnery had moved to 13 Albert Terrace, in the Acomb suburb of York. Gunnery's interests in both microscopy and photography were evident from his exhibitions to the Manchester Club, which, in 1907, included a preparation of *Penicillium* mold and a 500x photomicrograph of the "*embryo-sac*" of a lily. Gunnery appears to have resigned from the Manchester Microscopical Society in 1908, as he is not listed in membership rolls after that year.

Gunnery was also a member of the Liverpool Marine Biology Committee. Associated with that group, he spent April 13-18, 1907, at the Marine Biological Station, Port Erin, Isle of Man.

Herbert Gunnery married Jennie Payne in the spring of 1908, in Chorlton, Lancashire. They had two children, Max and Irene.

Gunnery's scientific business, "The Laboratory", was in operation by 1910. In that year, the magazine *Knowledge* published "*a photograph by Mr. H. Gunnery, The Laboratory, Acomb, York*", of a toothwort, *Lathraea squamaria*.

On the 1911 census, Gunnery reported himself to be a "*microscopist*", self employed, and working from the family home of 13 Albert Terrace, Acomb.

The advertisement shown above in Figure 2 was published in 1911. Gunnery also promoted his products by giving free samples to magazine editors and clubs. For example, *Knowledge* magazine wrote in 1911, "*We have received a selection of slides from Mr. H. Gunnery, Acomb, York. He has specially devoted himself to the preparation of slides illustrating the phases of development in the embryo-sac and pollen mother-cells of Lilium spp. The slides we have examined are very good indeed. Special mention may be made of one, showing the embryo-sac containing two daughter-nuclei resulting from the first division of the nucleus of the megaspore. Mr. Gunnery has also sent for examination sets of botanical slides, designed to meet the requirements of the Intermediate Science and Board of Education Examinations. All the types are well illustrated in these sets, which are very reasonable in price*".

Nineteen botanical slides, and several photographic lantern slides, were provided to the Quekett Microscopical Club for exhibit on January 24, 1911:

"Mr. H. Gunnery, of Acomb, York, sent for exhibition a large number of botanical preparations, some especially good sections, showing mitotic figures and various stages of nuclear division, being much admired. The thanks of the meeting were accorded to Mr. Gunnery and also to Mr. C. Baker, who kindly provided the microscopes used.

Mr. Gunnery also sent a number of lantern slides, mostly photomicrographs, some of excellent preparations of Lilium, showing various stages of nuclear division. Another good photograph was of Empusa muscae, disease of house-fly, a L.S. of abdomen of fly, showing the fungal hyphae breaking out at the abdominal segments.

Mr. Paulson said he thought some of the slides were of great interest, as for a long time no one knew what became of the secondary nucleus, but slide No. 8 showed them that the secondary nucleus did play an important part in fertilisation. Some very interesting experiments were performed in Toulouse in connection with this subject, and it was studying the effects as regards secondary fertilisation that had led to considerable improvements in maize. He felt that they owed Mr. Gunnery their thanks for sending these slides for

exhibition”.

Abraham Flatters published *The Micrologist* magazine between 1909 and 1916. The April, 1914 issue included an article on fungi by Herbert Gunnery.

Gunnery enlisted in the British Army on December 10, 1915, at the age of 33. He joined the “*Heavy Section, Machine Gun Corps*”, i.e. the tank corps. He demobilized in 1919, at the end of World War I, with the rank of Lance Corporal.

SHORT SERVICE.
(For the Duration of the War, with the Colours and in the Army Reserve).

Card No. 39
7118

ATTESTATION OF
Name Herbert Gunnery Corps Machine Gun Corps

Questions to be put to the Recruit before Enlistment.

1. What is your Name? Herbert Gunnery
2. What is your full Address? 115 Wellington Street Gorton Manchester
3. Are you a British Subject? Yes
4. What is your Age? 33 Years — Months
5. What is your Trade or Calling? Microscopist, Photographer, Electrical Instrument Maker
6. Are you Married? Yes
7. Have you ever served in any branch of His Majesty's Forces, naval or military, if so, which? No
8. Are you willing to be vaccinated or re-vaccinated? Yes
9. Are you willing to be enlisted for General Service? Yes
10. Did you receive a Notice, and do you understand its meaning, and who gave it to you? Yes Name — Corpse —
11. Are you willing to serve upon the following conditions provided His Majesty should so long require your services? Yes
For the duration of the War, at the end of which you will be discharged with all convenient speed. You will be required to serve for one day with the Colours and the remainder of the period in the Army Reserve. In accordance with the provisions of the Royal Warrant dated 20th Oct., 1915, until such time as you may be called up by order of the Army Council. If employed with Hospitals, Depots of Mounted Units, or as a Clerk, etc., you may be retained after the termination of hostilities until your services can be spared, but such retention shall in no case exceed six months.

I, Herbert Gunnery do solemnly declare that the above answers made by me to the above questions are true, and that I am willing to fulfil the engagements made.

Herbert Gunnery SIGNATURE OF RECRUIT.
D. Wheeler Signature of Witness.

DESCRIPTIVE REPORT ON ENLISTMENT.
(To accompany with Entries on the Muster History Sheet.)
Applicable to all ranks.

Name Herbert Gunnery

Apparent age 33 years — months. Height 5 feet 3 1/2 inches.

Chest Measurement (Girth when fully expanded 33 inches. Range of expansion 2 inches. Pale Blue Fair)

Distinctive marks Scar on upper lip
Dental treatment

INFORMATION SUPPLIED BY RECRUIT.

Name and Address of next-of-kin Jennie Gunnery
115 Wellington Street Gorton Manchester Relationship wife

Particulars as to Marriage.

(a) Christian and Surname of Woman to whom married, and whether spinster or widow. (b) Place and date of marriage.
(c) Present address. (d) In-voice of U.S. War vesting only.

Jennie Payne Congregation Church 115 Wellington Street Gorton Manchester 7/2/17
Spencer Rusholme

Particulars as to Children.

Christian Name	FRAT. DATE	Date and Place of Birth
<u>May</u>	<u>Sept 1909</u>	<u>Acomb. York</u>
<u>Irene</u>	<u>Feb 1911</u>	<u>Acomb. York</u>

Figure 3. Excerpts from Herbert Gunnery’s military enlistment record, December 10, 1915. Gunnery described his occupation as ‘microscopist, photographer (and) electrical instrument maker’. We also learn that he stood 5 feet, 3 ½ inches tall (1.6 meters), had a pale complexion, blue eyes, fair hair and a scar at the left side of his mouth. He had received dental treatment, probably dentures. Other information indicated that he had poor eyesight and required glasses.

It is most probable that Gunnery resumed his former trades after the end of the War. He was acknowledged for providing “microscopic and photographic preparations” to a 1925 article in *The Journal of the Textile Institute*, published in Manchester.

Shortly after that, Herbert Gunnery put his interest in botany to a very different use, and began work on rubber plantations in Malaysia. Exactly when Gunnery moved to the Far East is not clear, but he was evidently established with his employers by 1926, as that year’s *Annual Report* of the Rubber Research Institute of Malaysia stated, “Mr. H. Gunnery, Technician, was transferred to the Pathological Division, although he still undertakes any work required for other Divisions”.

Gunnery’s expertise in microscopy was put to good use in Malaysia. In 1929, *Rubber Journal* reported that “a technique for the microscopic investigation of the caoutchouc particles in latex has been worked out by Dr. E. Rhodes and Mr. H. Gunnery”.

Herbert remained in Malaysia while his wife, Jennie, and their 21 year-old daughter, Irene, sailed back to England in 1932. They arrived in London on June 21, with a final destination of 20 Church Road, Longsight,

Manchester. That address was also associated with the microscopy company of Flatters, Milbourne & McKechnie. Jennie returned to Malaysia within the next few years.

Herbert demonstrated an interest in butterflies while in Malaysia. He collected a female *Charaxes durnfordi durnfordi* in Selangor during 1929, which entomologist Alexander Steven Corbet declared to be the female neotype of that butterfly. Corbet also reported that he and Gunnery collected butterflies on the Langkawi islands in the autumn of 1932. A butterfly was named *Amathusia gunneryi* by Corbet in 1936, although it has since been reclassified as a variety of the Palm King, *Amathusia phidippus phidippus* (Figure 4). Herbert also produced photographs of butterflies, contributing several to the Raffles Museum in 1932, and contributed photographs and “*practical help in.. matters botanical and mycological*” to Corbet’s 1935 book on tropical soils.



Figure 4. *Amathusia phidippus phidippus*, the Palm King butterfly. This was also named ‘*Amathusia gunneryi*’, in honor of Herbert Gunnery. Image adapted from http://www.nymphalidae.net/Classification/Nymphalidae_genera.htm

In 1933, Gunnery and Arnold Sharples published a scientific paper on wound healing in rubber trees and flowering hibiscus, in *The Annals of Botany*. This included several plates showing photomicrographs of plant sections, undoubtedly prepared and photographed by Gunnery (Figure 5). Two years later, Gunnery published another paper, on predicting yields from *Hevea* plants, in *The Journal of Rubber Research*.

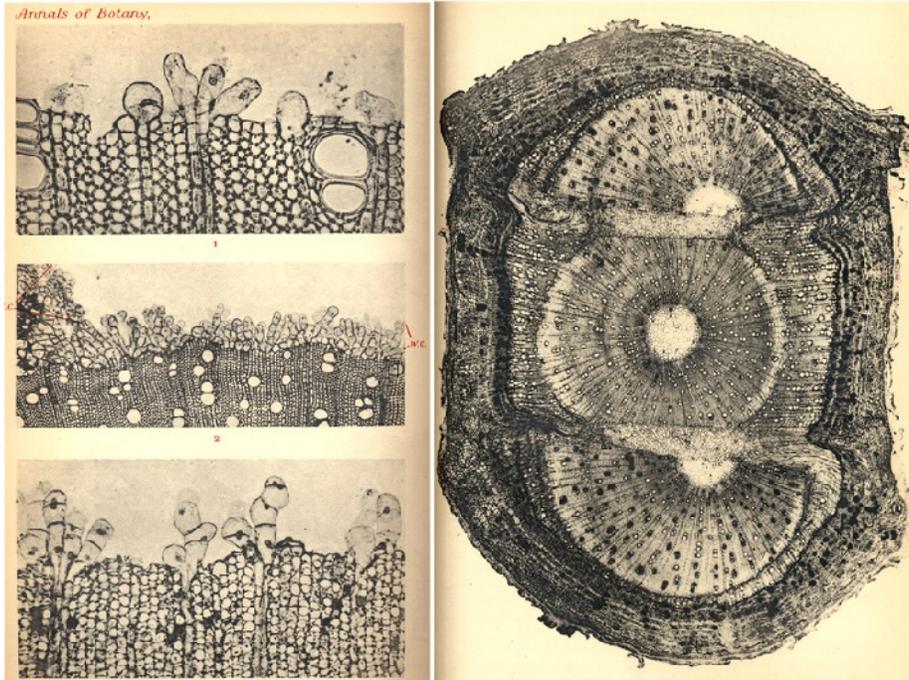


Figure 5. Photomicrographs of plant sections, from Sharples and Gunnery, 1933.

Sharples published *Diseases and Pests of the Rubber Tree* in 1936, and wrote in the preface that “the illustrations should prove of the utmost value to any planter interested in rubber diseases. For the microphotographs, and a large number of the ordinary photographs, I am indebted entirely to Mr. H. Gunnery. It has been my personal feeling for many years that a great progressive step would be made if it could be impressed upon agricultural research workers that it would be of the greatest value if a closer touch could be maintained with the finer phases of microscopical work. Tropical research workers are more especially in mind. Mr. Gunnery was attached to my division for a period of twelve months, and I can confidently state that, owing to his activities, the research work of the division went forward very satisfactorily. All the intimate details, relating to the fungi associated with the various diseases of rubber trees, which could be dealt with during a short period were disclosed and new facts were obtained in every single instance”.

Herbert and Jennie traveled together from Malaysia to England in 1935, arriving in Southampton on August 14. Shortly thereafter, “Herbert J. Gunnery, of Manchester, England .. joined the staff of Ward's Natural Science Establishment, in charge of the microscope slide department”. Ward's was located in Rochester, New York, USA. Jennie sailed on the *Queen Mary* to join her husband in December, 1936.

That venture did not last long, as Herbert and Jennie arrived back in Southampton, England, from New York, on December 29, 1937. They again gave their home address as 20 Church Road, Longsight, Manchester.

The records of the California marine biologist Edward Ricketts (who was made famous by John Steinbeck's *Cannery Row* and *Sea of Cortez*) indicate that he received letters from Herbert Gunnery in 1937.

Herbert's occupation(s) for the remainder of his life is as-yet unknown. The Gunnerys moved to London by 1942. In that year, Herbert Gunnery was elected to be a Fellow of the Royal Microscopical Society. In 1848, he joined the Quekett Microscopical Club. At that time, his address was 7 Chester Court, Monks Drive, London W3.

Jennie Gunnery died in Pwllheli, Caernarvonshire, Wales during the summer of 1957. Herbert died in early 1978 in Macclesfield, Cheshire, at the age of 95.

This and other illustrated biographies of historical microscopists can also be read at the author's web site.

<http://microscopist.net>

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