

The Archives of the Quekett Microscopical Club

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(Second Presidential Address, delivered 10 May 2011)

Summary

The archives of the Quekett Microscopical Club are a unique resource for the history of light microscopy. Since the Club's formation it has maintained a continuous record of its business, and has also attracted donations of works on microscopy and on microscopic life; these form the basis of the archives. They provide an important resource for researchers in the history of microscopy, and some possibilities for making this resource more generally available are proposed.

Introduction

The Quekett Microscopical Club, founded in 1865, is one of the oldest extant microscopical organisations in the world. Whilst the Club has not obtained in a systematic way materials to record developments in microscopy during this time (this is the role of a museum), the collections do provide a unique insight into the Club's history, the activities of its members, and of the wider microscopical community. The collections, held in a secure store at the Natural History Museum in London, can be divided into four main categories. First, there are two main collections of mounted microscope slides; a loan collection available to members by post, and a reserve collection of approximately 18,000 mounts which are currently being digitised to be available as digital images via the Club's website. Second, the Library collections consist of a loan collection of books, VHS video and DVD recordings, and a collection of works held in reserve that are either too valuable historically or too fragile for postal loan. Third, the Club also has a modest collection of historical microscopes and accessories from donations; these often form the basis of displays at the Club's Annual Exhibition. Fourth are the Club's Archives, perhaps the most important collection historically.

The Archives are contained in two secure steel cupboards (Fig.1) and were catalogued by Dr. Brian Bracegirdle in 1990, when he was

Archivist. Collectively they provide a wonderful insight into the people and events that have shaped the Club's history: they contain individual collections of work which provide important records of the taxonomy or biogeography of microscopic organisms, and they contain a significant photographic portrait collection of Victorian and early 20th century microscopists. However, the wider value of this material for microscope historians has generally not been recognised due to lack of awareness of what is there, and to limited access. It is therefore the intention of this account to provide a general description of the Archives, and to provide some suggestions on how this material may be made more generally available in the future.

Records of Club business include Minute Books, membership certificates, contractual agreements, copies of printed programme cards, notices of meetings, and library and slide catalogues. Photographic collections include portraits of members and pictures of Club meetings. A small collection of materials relating to John Quekett is also held. Collections of members' work form an important part of the Archives; this includes notebooks, drawings, correspondence and technical papers. Finally there are those items which defy categorisation but were described by Brian Bracegirdle in his catalogue of the Archives as '3D Objects'.



FIG. 1. Part of an archives cupboard in the store room of the Quekett Microscopical Club.

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June 14 1865

At a meeting held this day at n^o 192 Piccadilly, present Mess^{rs} Hardwicke, Cooke Ruffle, Gibson, Ketteringham, Jaques, Highley Godley, Hailes Marks and Bywater.

It was proposed by Mr Hardwicke seconded by Mr Bywater and carried unanimously that Mr McLooke be Chairman.

It was proposed by Mr Jaques seconded by Mr Hardwicke and carried unanimously that Mr Bywater act as Secretary pro. tem.

After a few preliminary remarks from the Chairman ^(Mr M. C. Cooke) explanatory of the general objects of the meeting, in which, whilst fully recognizing the great usefulness and general efficiency of the Microscopical Society of London, he adverted to the feeling which appeared to be general amongst amateur microscopists, that a society more especially adapted to their requirements was desirable, and which instead of being antagonistic would be a helper to the original Society, by cherishing & developing microscopical pursuits and thus becoming a nursery for the elder and parent Society, of which, the one proposed would in reality be the offspring,

Mr Gibson moved "That this meeting considers it very desirable to establish a

FIG. 2. The first page of the Minutes of the inaugural meeting of the Quekett Microscopical Club, 14 June 1865.

MEETINGS		EXCURSIONS, 1896.	
OF THE			
QUEKETT MICROSCOPICAL CLUB			
FOR 1896-7 AT			
20, HANOVER SQUARE, W.			
ON THE			
<i>First and Third FRIDAYS of every Month.</i>			
1896. Friday, March 6 ... 20	MAR. 28. CHINGFORD.	To meet at Liverpool Street Station.
" April 17	APRIL 18. ROYAL BOTANIC GARDENS, Regent's Park.	To meet at the South Entrance at 3 p.m.
" May 1 ... 15	MAY 2. ESHER.	To meet at Waterloo, Main Line Station.
" June 5 ... 19	MAY 16. WOODSIDE PARK FOR TOTTERIDGE, returning	by Mill Hill. To meet at Broad Street Station.
" July 3 ... 17	MAY 30. LOUGHTON FOR EPPING FOREST.	To meet at Liverpool Street Station.
" August 7 ... 21	JUNE 13. STAINES.	To meet at Waterloo, North Station.
" September 4 ... 18	JUNE 27. ST. MARGARET'S FOR HERTFORD HEATH.	To meet at Liverpool Street Station 15 minutes before the departure of the train. (A reduction of fare is made to parties of not less than ten, and members who purpose going on this excursion should give notice to the Secretary of the Excursions Sub-Committee before June 24th).
" October 2 ... 16	JULY 11. OXSHOTT.	To meet at Waterloo.
" November 6 ... 20	JULY 25. HANWELL.	To meet at Hanwell Station at 3.15 p.m.
" December 4 ... 18	SEPT. 5. DAY EXCURSION, WHITSTABLE.	To meet at Holborn Viaduct Station 20 minutes before the departure of the train leaving at about 10 a.m. (Unless twenty members notify their intention of going on this Excursion a reduction of fare cannot be obtained, and notice must be given to the Secretary of the Excursions Sub-Committee before August 30th).
1897. January 1 ... 15	SEPT. 19. SNARESBROOK, returning from George Lane	Station. To meet at Liverpool Street Station.
" February 5 ... 19*	OCT. 3. HAYES FOR KESTON.	To meet at Cannon Street Station.
" March 5 ... 19		

The Ordinary Meetings are held at 8 p.m. on the *Third* Friday in each month, except July and August; that on February *19th is the ANNUAL GENERAL MEETING.

The Meetings on the *First* Friday in each month and on July 17th and August 21st are for conversation and for the exhibition of objects from 7 to 9.30 p.m. On Good Friday, April 3rd there will be no meeting.

Unless otherwise specified, the departure from town will be by the first train after Two o'clock.

E. T. BROWNE,	C. F. ROUSSELET,	}	Excursions Sub-Committee.
ED. DADSWELL,	JAS. SPENCER,		
J. D. HARDY,	CH. TURNER,		
F. W. HEMBRY,			

FREDK. A. PARSONS, Hon. Sec. Excursions Sub-Committee,
15, Osborne Road, Finsbury Park, N.

FIG. 3. Meetings and Excursion card, 1896.

Club Records

Minute Books form a complete record of the Club's history. The inaugural meeting of the Club was held on 14 June 1865 and is recorded in Minute Book M1; these first Minutes (Fig.2) record the founding members of the Club as being Messrs. Hardwicke, Cooke, Ruffe, Gibson, Kellingham, Jaques, Highley, Godley, Halles, Masks and Bywater, who duly elected M C Cooke as Chairman and Mr. Bywater as Secretary. The format of the Minute Books, as half-bound leather with hand-written Minutes, remained constant for some 90 years; the last book in this style was completed in 1956. Subsequently Minutes were recorded in stationer's lined books and in more recent years as computer-generated documents.

Membership Certificates are held for all those members who until comparatively recently were admitted only by actual ballot. The Club records also contain both hand-written and printed catalogues of the Club's slide collection and library, and copies of meeting programmes. The programme cards (Fig.3) demonstrate that the Club had a very active membership in the London area in the 19th century, with typically over ten excursions a year, including trips to more distant locations such as Whitstable on the Kent coast. These early excursions had high

attendance (Fig.4) and were clearly important social events, often ending in dinner at a local hostelry. A formal dinner was held annually, for several years in Leatherhead; menu cards from some of these dinners were printed and are present in the Archives. Songs were often rendered at the annual dinners and some of these were printed; the archives contain several copies from the 1870s. These songs were a great source of amusement both then and now; one example written under the non de plume of 'A. Victim, Esq.' is reproduced below:

I.

Past twelve o'clock and the Camphine light
Is burning rather blue;
But my 'coarse adjustment' is not right,
Nor my stage rotation true.

II.

My Nichol prism is half destroyed;
All my Rotifers are dead;
There's a crack in my Parabaloid,
That's pretty sure to spread.

III.

My last 'Objective' screws awry;
My Sub-stage is also out;
There's a little spot in my favourite eye,
I'd much rather be without.



FIG. 4. Excursion at
Leatherhead, Surrey, June 13
1874.

IV.

Some time ago, I used to get,
Both sets on Rhomboides;
But now I only find one set;
Though I've cramp in both my knees.

V.

Nubecula puzzles my weary soul;
Obscurum I've never met;
My right eye burns like a lighted coal;
And my left is dim and wet.

VI.

My hands have a strange, metallic smell;
And my elbows are in great pain;
But those checks on Macrum I saw so well,
I'm not able to see again.

VII.

Oh! Cuspidata's a difficult thing;
To see as it should be seen;
Both sets of lines you can seldom bring
Into focus at once, I ween.

VIII.

The lamp burns low, and a horrid wail
Is heard on the midnight air;
For I see the marks on Podura scale;
But the lights, they are not there.

IX.

Twisting and screwing with lever and rack,
And diagonal rays of light;
Oh! Reade's condenser has broken my back;
And Gillet's enfeebled my sight.

X.

Now my state of mind is very bad,
On angular aperture;
And Amphipleura drives me mad;
What more can man endure?

XI.

With slots and reflectors, and diaphragms,
And stages of selenite;
My joints are a series of aches and jams,
And my hair is nearly white.

XII.

Oh! Beware, beware of the Microscope,
And the fell magician Ross;
From Smith and Beck's you'd better elope
At once, or come to loss.

XIII.

Keep out of Baker's dangerous trap,
Near Weston's Music Hall;
Or you'll find yourself without a rap,
For he'll eat you, bones and all.

XIV.

In Powell and Lealand's mystic den,
Waste not away your life;
Avoid those dark, mysterious men;
Return to your anxious wife.

XV.

There are padded rooms at Colney Hatch,
Where you cannot hurt your back;
And they're always ready with bolt and latch,
For the Micro-maniac.

Records of Other Microscopical Societies

Microscopical and Natural History Societies flourished in the Victorian era in many provincial towns and cities; few have survived to the present day. The records of some of these amateur microscopy societies and clubs were transferred to the Quekett for preservation. The life of the (national) Photomicrographic Society has been well documented by Brian Bracegirdle [1,2] and need not be repeated here. The Hackney Microscopical and Natural History was a local organisation, holding meetings at the Morley Hall, Triangle, Hackney. Upon its dissolution in 1898 the Quekett obtained one record book (possibly the only one) which is now in the archives. This consists largely of a binding of the published leaflets circulated by Thomas Bolton to accompany his *Living Specimens for the Microscope* (Fig.5). Also present is a microphotograph labelled "Great War 1914-18 Y.M.C.A. Microscopists Exhibition at Houghton Regis 1917. Kodak M.R. Plate Nov 1941". A second label lists the members present in the microphotograph as 'Ogilvy, Pinchin, Russell, Botwell, Bradbury, Fisher Jones, Reid'. Who made the microphotograph is not recorded; surprisingly the image is of the YMCA microscopists in a convoy of motor cars (Fig.6).

Materials Relating to John Quekett

Although John Quekett died some four years before the Club was formed, it is natural that the Club named in his honour would have received some donations relating to the man. In addition

to one of John Quekett's microscopes, the Club holds several other items in the archives. These include a wax medallion of unknown provenance of a profile view of Quekett, and a letter from

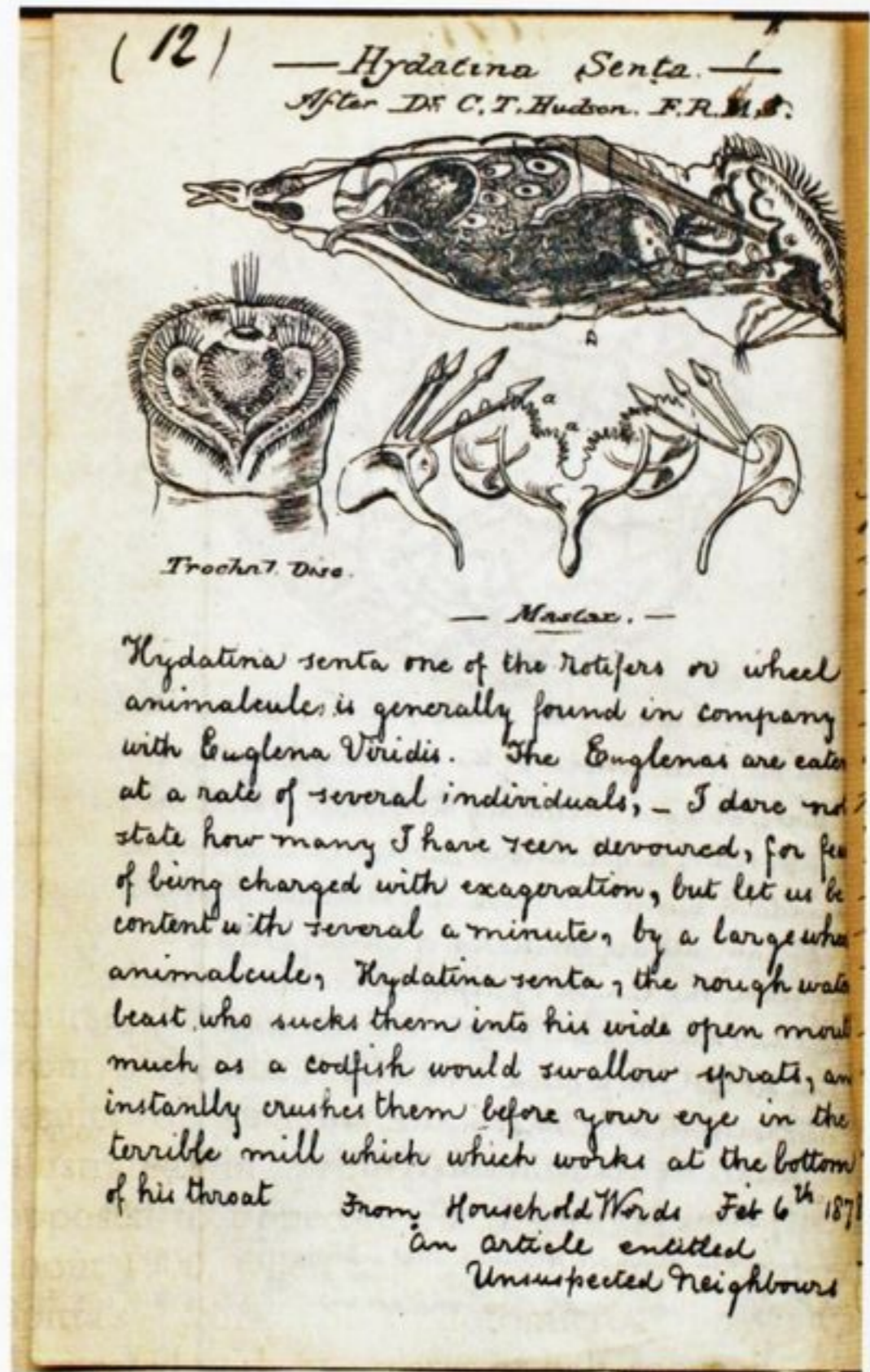


FIG. 5. From a bound volume of Thomas Bolton leaflets, from the Hackney Microscopical and Natural History Society.



FIG. 6. Microphotograph of the YMCA Microscopists Exhibition, Houghton Regis, 1917.

FIG. 7. Letter from John Quekett to Mr. Moginie, 8th July 1858.

Royal College of Surgeons.
London.
(W.C.)
8th day of July 1858.

Dear Sir.

I have been hoping for many weeks past to pay you a visit but my Rheumatism has prevented me I herewith return you the Pseudoscope I borrowed with many thanks and also beg to hand you £1.0.0 for the Photographs all of which (the dozen) I have kept and the bearer will give you the money. I am very much pleased with them and shall have much pleasure if I can be of use in disposing of others.

Yours in haste
John Quekett.

Mr. Moginie.

John Quekett to Mr. Moginie dated 8 July 1858 (Fig.7). A mounted slide by Quekett dated 1839 and a microphotograph of him were both obtained by donation from the estate of the early 20th century collector of microscopes Thomas Court. More recently, an obituary of John Quekett printed in the *Illustrated London News* has been donated to the archives.

Photographic Collections

The archives contain a large number of photographs of Club events, and portraits of individual microscopists. Two superb leather-bound photograph albums (specially bound for donation to the Club), and a further commercially-produced album, contain

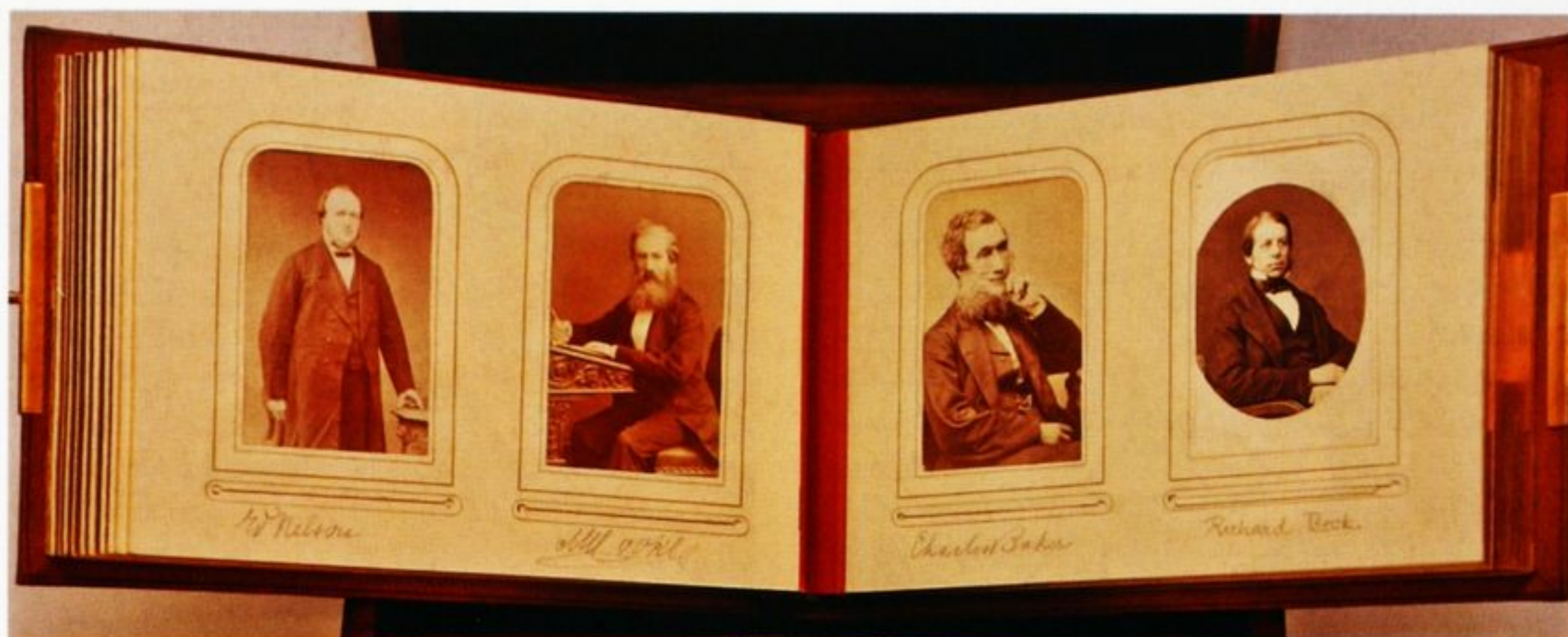


FIG. 8. Leather-bound photographic album, donated by J. W. Goodinge in 1875.

portraits of Club members and other important microscopists from the 19th century (Fig.8). Whilst some of these portraits are known from other sources, many of the photographs in these albums are probably unique and therefore of prime importance to anyone researching the history of individual microscopists; several examples are shown in figs.9-12.

Club events are sporadically recorded in the photographic archives. Collecting excursions have always been a popular aspect of the Club's activities and therefore occur frequently in the photographic archives (e.g. Figs.4,13): these also record important social changes, as when women were admitted to events in the early 20th century. The Club's Centenary Meeting in 1965 was an important milestone in its history, and was celebrated with a special exhibition held in the Central Hall, Westminster, and a Centenary Dinner, held at the National Liberal Club: the archives contain 72 photographs from this event (Figs.14,15).

The Club also holds several hundred 3¼in lantern slides, contained in five boxes. One box contains additional portraits of 19th century microscopists; amongst these are probably the only surviving images of several important individuals. Also present are images of buildings where Club meetings have been held, and some excursions. The remaining four boxes of lantern slides are of microscopic images produced by Flatters & Garnett (and labelled as such by them); these contain both monochrome and hand-coloured images of a wide range of subjects.

3-Dimensional Objects

Several objects in the archives defy easy classification or groupings; Brian Bracegirdle's inventory grouped these as '3D' objects.

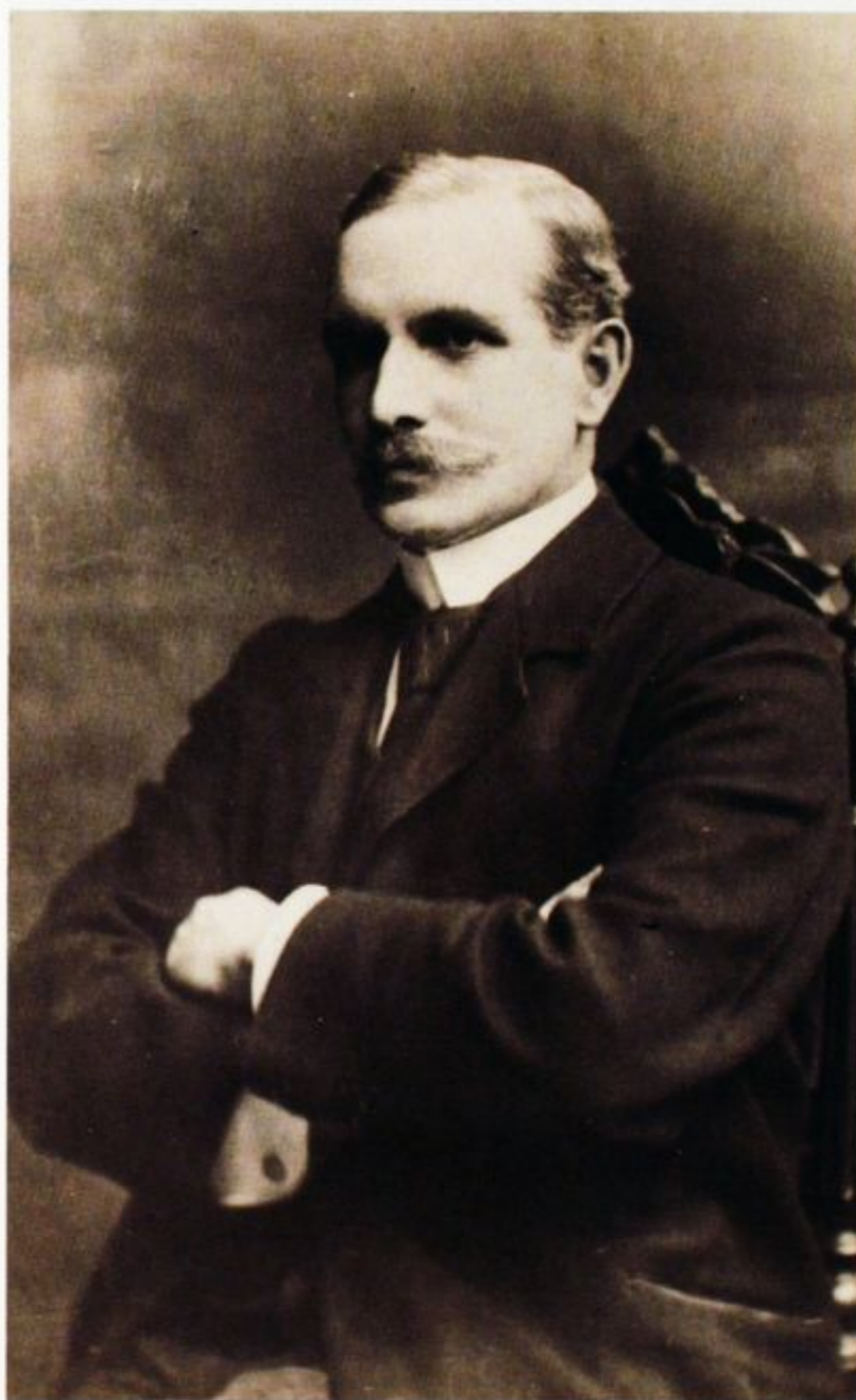


FIG. 9. William Firth



FIG. 10. David Scourfield

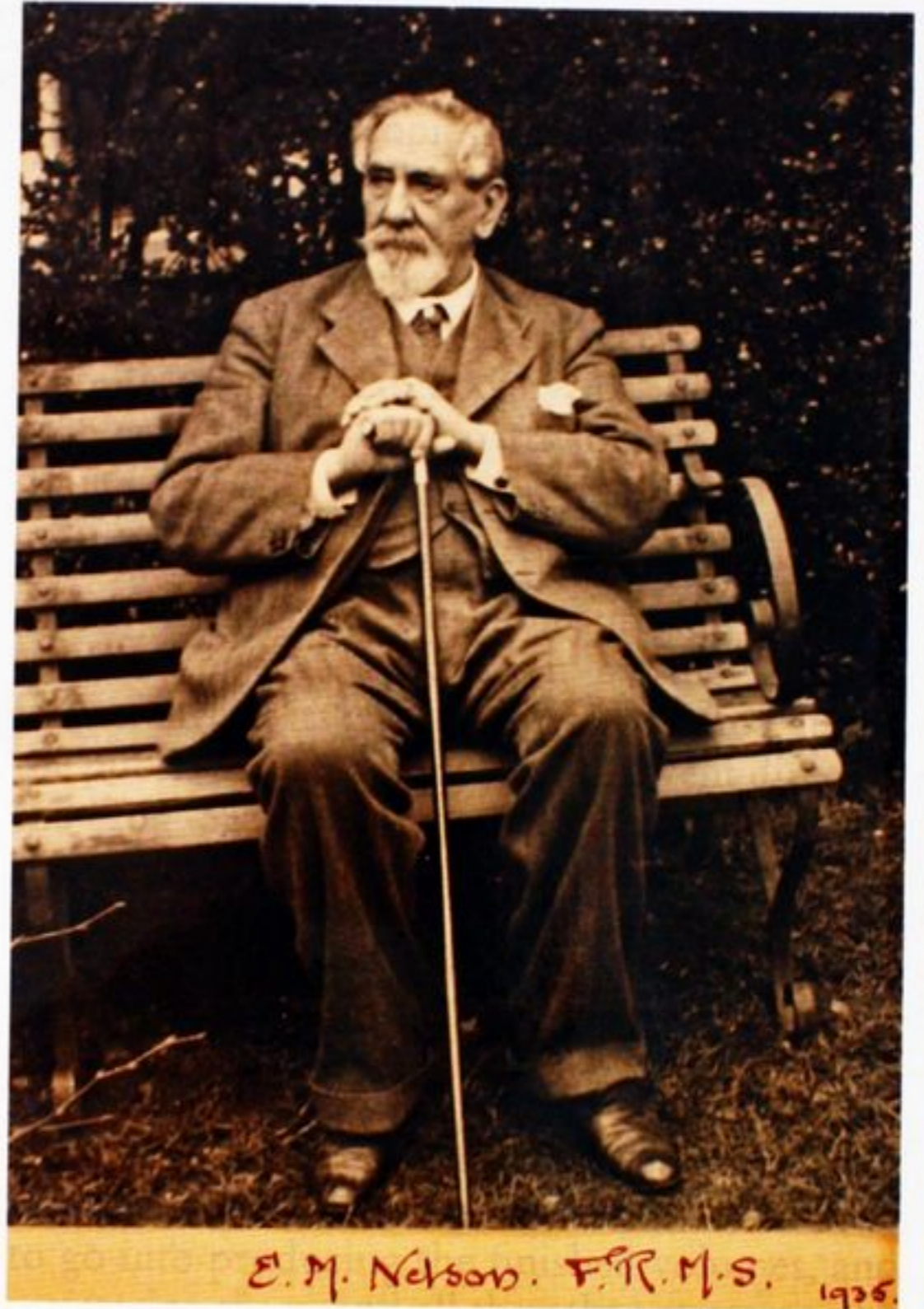


FIG. 11. E M Nelson

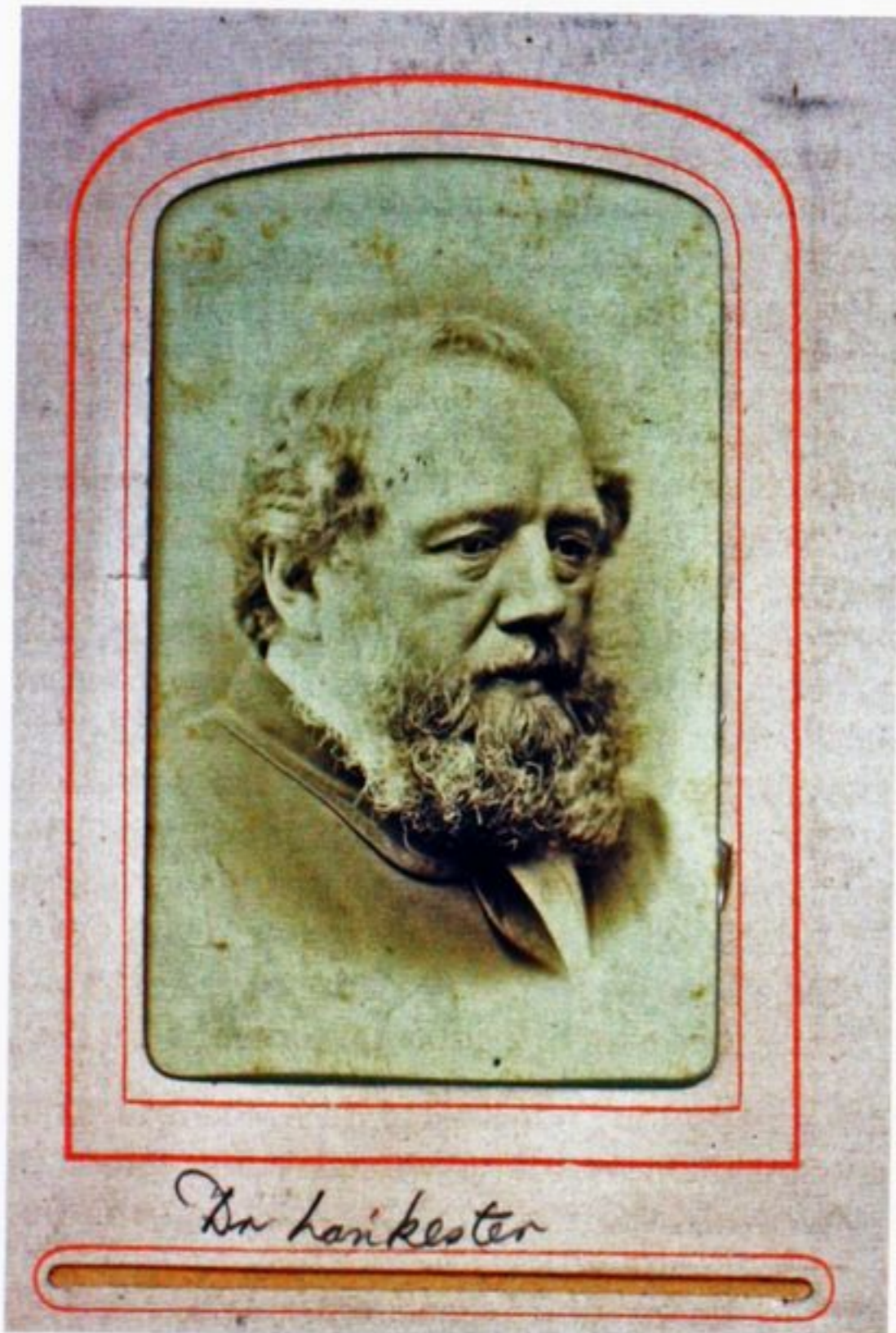


FIG. 12. Dr Lankester

Included within this category are a bronze medal given to the Club by the New York Microscopical Society in celebration of their Centennial in 1977, and a painting of microscopic aquatic life, entitled "Maxime Mirande in Minimis", painted by H C Richter and donated to the Club by C Lees Curies and M G L Curties. However, the most iconic item in this category is the Quekett horn (Fig.16) which was used to call members in from the field for meals during Club excursions in the 1870s, and is still in use today to announce the opening of the Annual Exhibition.

Collections of Member's Work

The archives contain several collections of members' work; these are most interesting in recording the interests and abilities of amateur microscopists over the last century or so.

Charles Rousselet was well-known for his work on rotifers and he published many papers on the subject in the Quekett and other journals.



FIG. 13. Club excursion, Keston Park, Bromley 1922.



FIG. 14. Centenary Exhibition, Central Hall, Westminster, 1965.

Below
FIG. 15. Centenary Dinner, National Liberal Club, 1965.





FIG. 16. The Quekett horn, used to call members in for meals from excursions.

In addition to a slide cabinet of his rotifer fluid mounts, the Club holds three volumes of "Drawings and Photographs of Drawings of Rotifers" presented by C F Rousselet in December 1916. The three volumes are arranged alphabetically by genus and contain a large number of original drawings, photographs, notes and copies of letters (Fig.17). A single bound volume of notes on rotifers by C F Cocks is superbly illustrated with coloured drawings (Fig.18); each species is accompanied by a page of taxonomic notes, a listing of localities where the author found each species, and key morphological measurements. This is a detailed work, illustrating what the skilled amateur can achieve. A small card case with leather carrying-handle contains a series of approximately 80 loose copies of drawings of rotifers presented by Groom in 1914 (Fig.19). Several volumes (bound exercise books) by C L Oldham contain

more general notes, drawings and photomicrographs of pond life; whilst the black and white photomicrographs are of poor quality, the drawings are generally good and a wide range of freshwater species of Algae and Protozoa are recorded.

Although the Club's reserve library holds many works on diatoms, illustrating microscopists' fascination with these organisms, surprisingly few examples of members' work on the group have been donated to the archives. Only one major collection is present, consisting of one bound volume. Unlike much of the material donated to the archives, the first page of this volume provides a full description of its provenance:

The gift of Mrs. MacLean, daughter of the late Mr. Gerald Stuart.

40 original drawings on 39 cards and one engraver's trial, from which the plates were engraved, illustrating a series of articles entitled "On a Fossil marine Diatomaceous Deposit from Oamaru, Otaga, New Zealand", by Edmund Grove and Gerald Stuart, FfRMS, appearing in the *Journal of the Quekett Microscopical Club*, Ser. 2, Vols 2 & 3, 1886-1887.

It is not known who executed these drawings which are only a small portion of the whole and are confined to plates numbered 10 to 14.

Other, more minor collections of members' works are also present in the archives, and recently the original notebooks of D S Spence have been obtained on behalf of the Club and will be added to the archives.

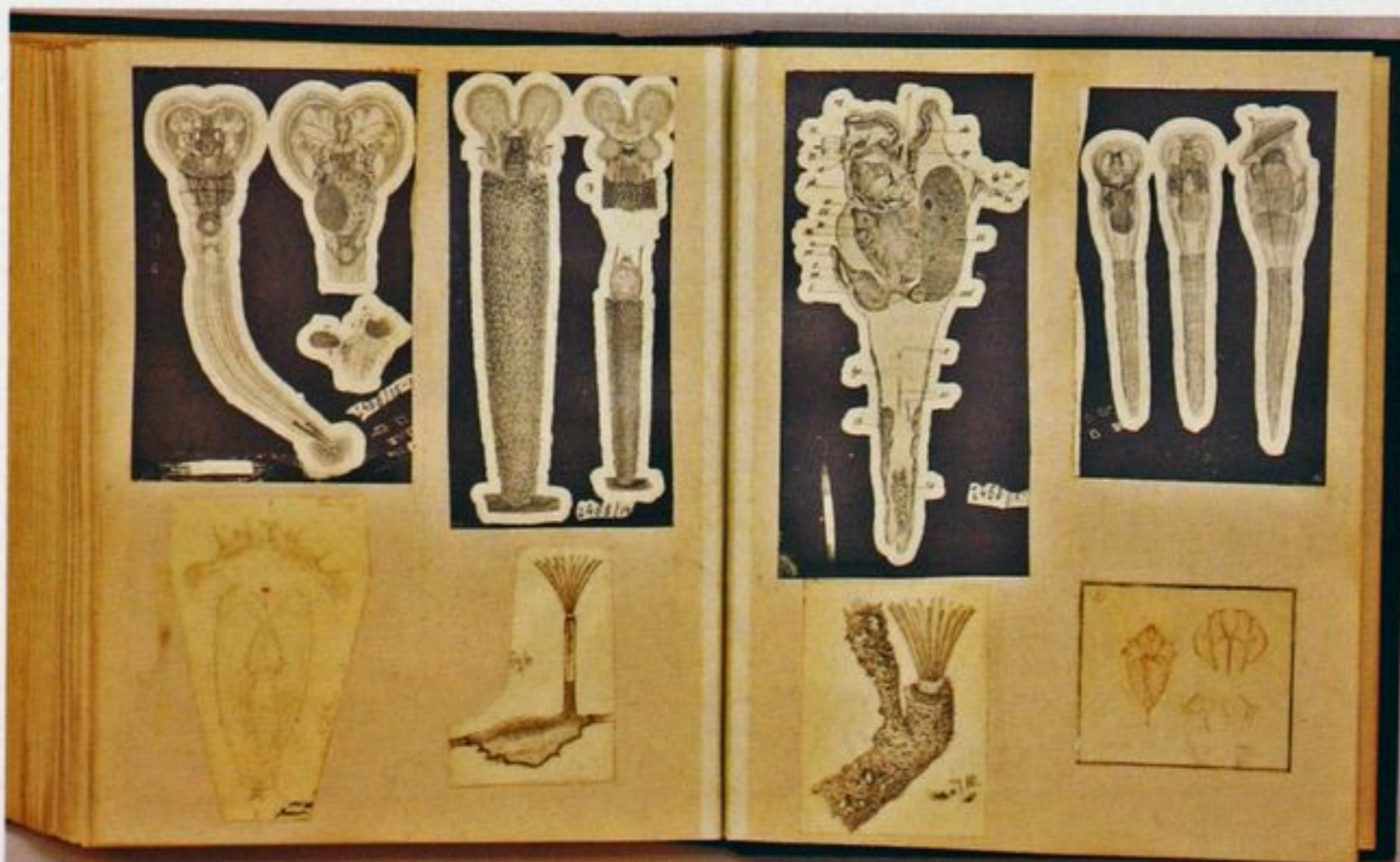


FIG. 17. Plates from C. F. Rousselet's collection of drawing and notes on rotifers, donated in 1916.



FIG. 18. Rotifer drawings by C. F. Cocks.



FIG. 19. Drawing from a portfolio of approximately 80 rotifer drawings presented by Groom in 1914.



FIG. 20. Woodward photomicrograph of the diatom *Pleurosigma angulatum*.

The Woodward Collection

Lieutenant Colonel Joseph Janvier Woodward served in the US Civil War as an army Assistant Surgeon; he later performed the autopsy on Abraham Lincoln. He was also a pioneer in the development of photo-micrography, and donated collections of his photomicrographs to both the Royal Microscopical Society and the Quekett. The Quekett's collection of Woodward photomicrographs comprises approximately 60 plates mounted on card (Fig.20), each with a full description of the optics employed; his subject-matter includes both human pathology and resolution test objects. Woodward is perhaps best known in the microscopy community for his photomicrographs of Nobert's test plates, and the Club's collection includes a significant number of these images (Fig.21).

Challenges and Opportunities – The Future of the Archives

The Club's archives represent a unique collection in the history of light microscopy and contain many unique items of importance to researchers.



FIG. 21. Woodward photomicrograph of Nobert's test bands numbers 16 to 19.

It is hoped that, through this Address, what is present is more widely known and used, and that the archives continue to attract donations of members' work and other items of historical significance.

The digital revolution has however, brought both challenges and opportunities to the Club's archives. The nature of how we record, share and store information has changed significantly in recent years. Whilst paper has been the preferred medium for many centuries, and photographic prints for over 150 years, for the

last 10 to 20 years many records and images have been made and stored digitally on computer discs and memory. The Club has not been immune to this change, and the archives already contain several computer memory discs. The long-term stability of such media is not yet established and, more importantly, the hardware required to read such data continues to change rapidly such that storage of only a few years ago can no longer be 'read' by current-generation computers. Whilst it would be possible to save 'readers' from each generation of media, these often fail in use and spares are soon obsolete.

The Club needs to consider carefully what should be preserved for future generations, and how these records are held to ensure 'futureproofing'. However, the digital age offers a major opportunity both to safeguard the archives and make the more important material generally available via the internet. It is hoped that the Committee will be able to achieve these benefits by digitisation of the major works and photographs in the archives and to then make these available using a search engine on the Club's website. Only then can the true value of the Quekett Microscopical Club's archives be fully understood and utilised.

Acknowledgements

My thanks are due to Dr. Brian Bracegirdle, firstly for his efforts in organising and cataloguing the archives in 1990, and more recently for his assistance with this article.

References

1. B Bracegirdle (2002) – The Photomicrographic Society: 1911-1951, *Quekett J. Microsc.* 39: 225-237.
2. B Bracegirdle – *A history of photography with the light microscope*. London: Quekett Microscopical Club, 2010.

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4 COMBE COMMON COTTAGES
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