

## THE QUEEN SERIES OF ACME CONTINENTAL MICROSCOPES: AN AMERICAN CONTINENTAL

By James D. Solliday



Recently I became interested in investigating the various Queen ACME Continental microscope stands. The first question that arose was just when did the ACME works begin manufacturing

American agent for C. Reichert of Austria. One of the first things I noticed was the similarity of the new Queen Continental with the contemporary Leitz and Reichert stands. In fact, when I first laid eyes on this Queen I thought it was a Leitz Continental microscope, we all know that Queen did in fact add the Continental pattern to their production, but when did the process begin and how many models were eventually produced? I felt the time had arrived to present a systematic account of the Queen ACME Continental series.

ing the Continental microscope versus the distinctive style of American stands the firm had become so well known for? This question arose from what has become a rather common occurrence, the acquisition of a Queen microscope on eBay. In the past I recalled examining a number of Continental-style Queen stands and the one I now had in hand was noticeably different. My "new" microscope seems much better than the ones I had handled in the past. This, of course, indicates that Queen apparently manufactured a series of Continental stands having different features and different levels of complexity. A little knowledge of the history of the American microscope already made me aware of the pressure in the last part of the 19<sup>th</sup> Century to adopt the Continental pattern. Imports from Germany in particular were now beginning to saturate the country. Also of interest was the fact that in April of 1891 Queen & Co. had become the Sole

Finding information on Queen's production of ACME microscopes is not something one can look up in the Philadelphia Historical Society's literature. Even though Queen & Co. was a major contributor to the American scientific instrument industry, there is not really an abundance of ACME microscopes available for study. In my experience as a collector, I find there are probably twenty or thirty Bausch & Lomb available for every ACME stand located. One fact we can be thankful for is the regularity in which Queen published sales catalogues. On the other hand, original Queen & Co. catalogues are amazingly rare and generally unavailable. In my current efforts to investigate the Queen line of microscopes I found the best source of information to be *The Microscopical Bulletin and Science News*, a bimonthly magazine published by James W. Queen & Co. and edited by Edward Pennock. This informative publication began in December of 1883 and

continued into the early years of the 20th Century. Unfortunately, the issues that I have are not complete but do provide a very good overview of the content provided by the publication. For this reason I will be dating the various models of the Continental production to the year of introduction and will make no attempt to be more specific. Articles that introduce new models are the most valuable but regularly inserted ads were indeed very helpful. I discovered that the ACME models were not necessarily introduced in the order of their model number. For example the ACME Continental No.II was available before the Continental No.I. Furthermore, the first ACME Continental stand did not seem to have a

numerical designation, but the second form of this instrument was designated as the Pattern "B". I will systematically review each model as it was introduced and not necessarily in order of its model number. This review will be limited to the 1890's because that was the time period of the transition and greatest change.

Some time ago I set up an exhibit at the MSSC workshop featuring a number of the ACME stands that were offered by Queen in the early 1880's. After years of looking, I finally acquired an ACME No.4 and now was able to exhibit the No.3, No.4 and No.5. These stands were all of the uniquely American style, which remained

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SOUTHERN CALIFORNIA**

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**MSSC Meeting 17**  
 7:00pm 20th November 2002

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quite distinct from the European Continental types. The origins of the ACME microscope go back to 1878 at the first meeting of the National Microscopical Congress held in Indianapolis, August 14, 1878. One of the main functions of this meeting was to form a National Association. As a result of this meeting, the Congress organized into the "American Society of Microscopists". The name was changed in ca.1891 to the "American Microscopical Society". At the time, Dr. J. Edward Smith of Cleveland was the Vice President of the National Microscopical Congress. It was here that he met John W. Sidle of Philadelphia. The two agreed to devise and produce a new inexpensive microscope stand. Dr. Smith suggested a design for the microscope and in August of 1879 gave it the name "**ACME**". For the first year or so Smith remained associated with the ACME Optical Works. Dr. Smith was also the author of a now very rare book entitled "*How to see with The Microscope*" published in Chicago (1880). In 1879, the firm of Sidle and Poalk delivered their first microscope designed to the specifications of Prof. J. Edwards Smith. At some point in 1880 after a few minor changes, the microscope went into production. In 1881 the ACME works became associated with James W. Queen & Co. According to Mr. Richards (American Optical Company) in 1882, Queen actually purchased the "ACME" works of Sidle & Co. (*Journal of the Royal Microscopical Society*, June-64, pp.125)

After years of collecting I had not yet found an example of a Queen Continental microscope. Finally, one that appeared in rather good condition showed up on eBay. As mentioned, I initially thought it was a Leitz Continental but after reading the description I was pleased to find that it was indeed a Queen of the Continental pattern. After taking delivery, I found it to be a wonderful instrument made to a very high standard. This of course sparked my interest and motivated me to find out all I could about its origin and design.

### The ACME "Continental" Microscope (1891), First Form



### THE ACME "CONTINENTAL" MICROSCOPE

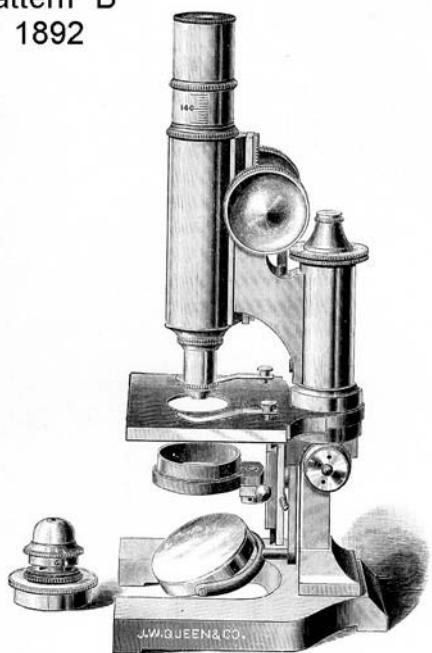
The microscope was signed, *Queen & Co. Philad<sup>a</sup>*, No.15544 (signed on the case). This stand was called, The ACME "Continental" Microscope and was introduced in February of 1891 (*The Microscopical Bulletin and Science News*, Vol.VIII, Feb 1891, No.1, **MBSN**). Queen describes this microscope on page one of the Bulletin in the following manner: "The Continental ACME Microscope. To meet a demand from those who prefer the small European Continental models, we have constructed this instrument. It is the same in size, and in general features of design, as the "Ia" of a well-known German maker (Zeiss). The workmanship is of the well-known ACME standard, and is guaranteed to be perfect in every respect. The instrument is of polished brass throughout. The mirror (plane and concave) are of large size, properly focused, and are mounted

upon a sliding arm, having also an ample lateral swing for oblique illumination. The stage is large and very firm. The substage tube is of the standard ACME size, and is removable by a lateral slide, correct centering being provided for. A tube fits into this, carrying diaphragms flush with the surface of the stage; these diaphragms may be instantly changed without removal of the tube, or the latter may be removed and other accessories substituted, as a substage condenser, polarizing apparatus, spot lens, etc. The eyepieces are of our ACME No. 5 standard, fitting into a drawtube, which is graduated to inches and tenths. The rack-&-pinion movement is, of course, the ACME of perfect fitting and smooth working. The fine adjustment slide works upon an accurately milled triangular bar of great solidity and firmness, wear being provided for. The head of the fine adjustment screw is graduated upon a silvered surface, to show hundredths of a millimeter of actual motion of the body." This microscope was also introduced in catalogue "B" of the 74<sup>th</sup> Edition (*Queen Catalogue*, 1891). Condition is excellent and this particular model is rather rare having only been made for about one year. In 1892, Queen introduced a "Pattern B" of this same overall design.

#### **The ACME "Continental" Microscope, Pattern "B" and Pattern "I" (1892)**

In the December (1891) issue of the MBSN (*Microscopical Bulletin and Science News*), Queen advertised the coming of a new Continental form with an adjustable substage. The ad reads as follows: "Do you want an ACME Continental Microscope with movable substage for your own fine work? Look out for it. It is nearly ready" (MBSN, 1891, Dec. ad). The first written account describing this new stand appeared in the April, 1892 issue and refers to it as the Pattern "B". The microscope was introduced as "The New Model ACME Continental microscope" which is now made in two styles, being a modification of the original pattern. The Pattern "B" was said to be "Chiefly for Professional Use". It was described just as the original model but having a more advanced

**First Form  
Pattern "B"  
1892**



**THE ACME "CONTINENTAL" MICROSCOPE  
Pattern "B"**

and sliding substage condenser arrangement. Instead of a fixed sleeve, the new model provided for an adjustable sleeve. There was no longer a dovetail cut in the side of the stage for accepting a fixed substage. Various configurations with different objectives and eyepieces were offered under specific catalogue numbers. Next to the catalogue number this particular stand was offered as "No.3161. The Professional ACME Continental Microscope." Queen recommended this new stand as "admirably suited for physicians use, especially excellent for bacteriological work; it will even show the tubercle bacillus with great clearness."

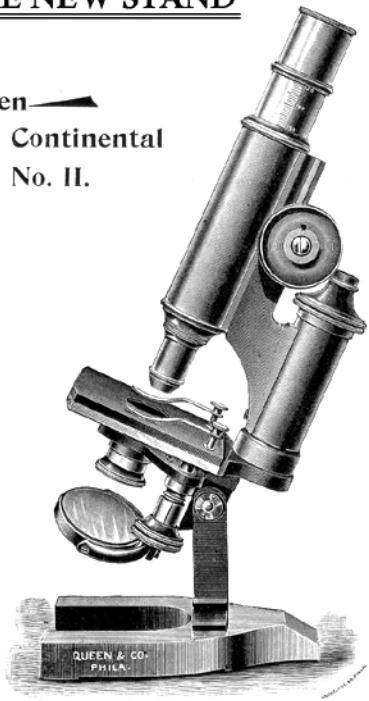
The second new model now available was the Pattern "I" and was offered as "Chiefly for Student's Use." This instrument was the same as Pattern "B" except for the following particulars. The base was of iron, finished in either pearl, dark olive, or black. The mirror and substage were more simply mounted, not being vertically

adjustable as in pattern "B". Both of these new models seem to have replaced the first form and were introduced in 1892. As part of the trend to shift emphasis to the new Continental patterns, Queen changed the illustration on the cover of the *Microscopical Bulletin* from a picture of the ACME No.4 to the new ACME Continental. The first issue of the Bulletin to feature the New Continental was the February, 1893 edition.

### The ACME Continental No. II, 1896

#### THE NEW STAND

Queen  
—  
Continental  
No. II.

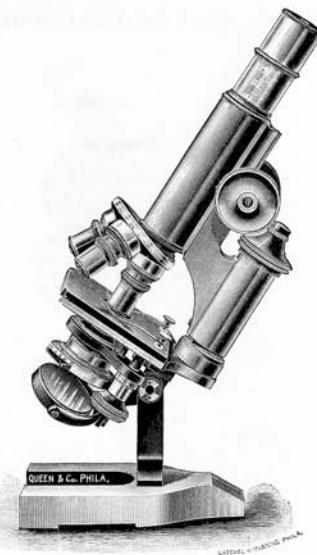


ACME CONTINENTAL, No. II  
1896

In 1896 in yet another move forward, Queen introduced the ACME Continental No. II or what was called *The New Stand* replacing the ACME Continental "Pattern B". This stand was slightly smaller but with the added feature of an adjustable substage system activated by a helical screw. This was an improvement over the Pattern "B" as it did not need to be slid up and down by hand. It could also be swung to the side leaving the illumination to be provided by the mirror alone. A contemporary Queen ad described it as being

manufactured to embody those "features necessary for its convenient and efficient use in the Histological Laboratory; in the Pathological Laboratory; in the laboratory of General Biology; in the Physician's office and in the workroom of the Amateur Scientist." The text went on to describe it as a "stand of medium size, upon an extra large base, finished with the utmost care as to the precise and smooth working of all moving parts. It is especially recommended for laboratory use where the repeated handling by students requires a rigid and firm stand. The objectives and oculars supplied are strictly first-class, being of the same grade as our Choice Selection series." At this time the firm sold their microscopes in what was referred to as "Outfits" which were identified with an associated catalogue number. Each outfit increased in price and was composed of different packages of optics and accessories to accompany the microscope. For example, Catalogue No.3170, was described as an "Outfit for Pathology and Physicians Work including Bacteriological Investigations." Outfit No.3164, featured the ACME Continental No.II, "with sliding substage instead of screw motion" as shown in the cut. This of course indicated the No.II could be ordered with-

### The Queen Continental Microscope No. II



No. II Improved Form  
1897

out the helical screw motion and was similar to the earlier Continental Pattern "B". In April of 1897 an improved form of the ACME Continental No. II appeared. The only real difference was the presence of a more substantial and larger Abbe substage condenser. The ACME No. II was produced into the 20th Century and is today the most common Queen Continental model found by collectors.

### Queen Continental No. I, 1897

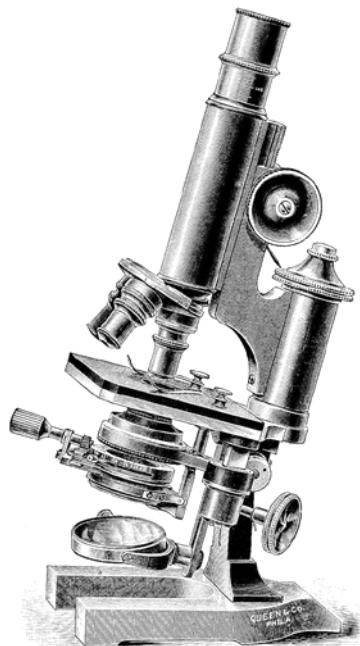
In June of 1897 a full-page ad appeared with the following statement "The last addition to the Queen Continental Series of Microscope is the Queen Continental No. I". The ads indicated that it was "The Perfect Microscope for Physicians and Hospital Use." Queen was most proud of this particular stand as they claimed that it was as perfect as human skill could make and it was intended for those who want only the best. It was a little larger than the No. II and embodied all the modern improvements applied to microscope designs of the time. Besides the stan-

dard feature of a triple nosepiece, it came with a much-improved substage condensing system. Most noticeable was the rack and pinion for adjusting the condenser. This system was side mounted on a triangular bar much like the large Reichert stands. Like the Zeiss stands, this model would allow the diaphragm section of the condenser to be adjusted obliquely by a small thumbscrew. The whole condensing system could be swung to the side after being racked down to the lower limit of the adjustment. This was Queen's finest research model and was available in at least two forms. According to the ad it could be obtained in an "outfit" which was the same as the above but with a revolving graduated stage. This second model was referred to as the Continental No. Ia stand.

### Queen Continental No. IV, 1897 (Laboratory Unit)

This was a smaller and more economical stand and was advertised as being "For Students Use in the Laboratory." It was an upright stand with

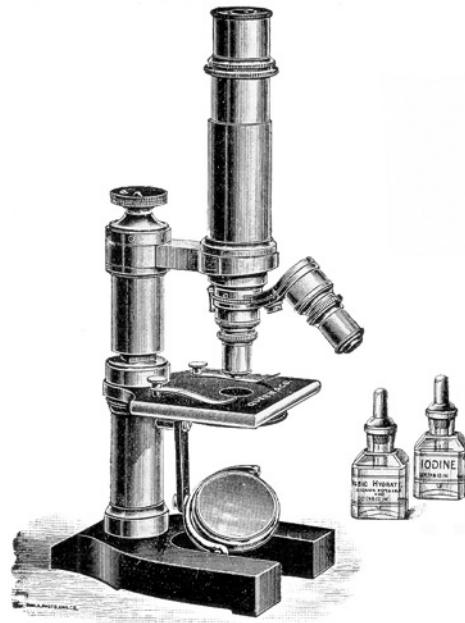
Queen Continental, No. I.



The Perfect Microscope for Physicians and Hospital Use.

ACME CONTINENTAL No. I  
1897

### For Students Use in the Laboratory



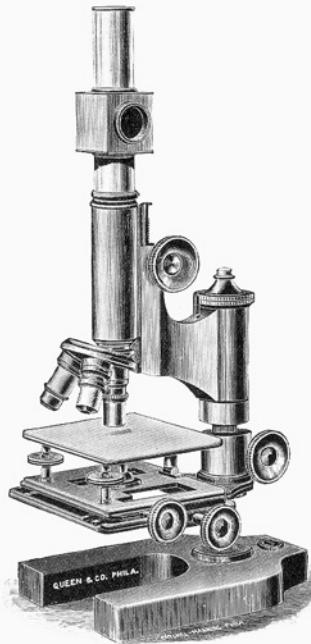
QUEEN CONTINENTAL IV.  
1897

no inclination joint and having a sliding body-tube. A micrometer screw located at the top of the limb provided the fine adjustment. Illumination was provided by a double-sided mirror and a simple substage diaphragm (no optical components). The foot on this stand was much smaller and the pillar and limb are now cylindrical instead of rectangular. It was originally advertised in two outfits, the first with a single Society thread for the nosepiece and the second with the addition of a double nosepiece. One of Queen's ads clearly indicates their desire to compete in the new collage and University market. The ad states, "We are prepared to furnish these instruments to colleges at a special price equal to the lowest obtainable on foreign instruments." A short time later the ads included special prices for High Schools. Queen put together a special outfit that was selected and arranged by Professor Charles E. Bessey of the University of Nebraska. He recommended this package for use in the High Schools throughout the State of Nebraska. The outfit was sold as the "Laboratory Unit" and consisted of the following items: a dissecting kit, one dozen slides with covers, a set of six reagent bottles all with dropping pipettes. The bottles contained the following: Alcohol, Iodine, Potassic Hydrate, Acetic Acid, Glycerine and Eosin. The total price for the above outfit was \$34.25. The Queen No. IV represented the basic and popular Continental pattern and sold well into the 20th Century.

### Queen Continental Microscope for Metal Surfaces, 1899

This stand was obviously intended for metallurgical work but was built on the Queen Continental pattern, thus I have included it in this review. It was advertised as the "Queen Microscope for Examination of Metal Surfaces." At the time it sold for a whopping \$157.50 and was one of Queen's most expensive stands. The first ad that I could find appeared in the MBSN in August of 1899. Although this microscope was built on the Queen Continental model, it had a number of important adaptations. The first noticeable

## QUEEN MICROSCOPE — FOR — EXAMINATION OF METAL SURFACES



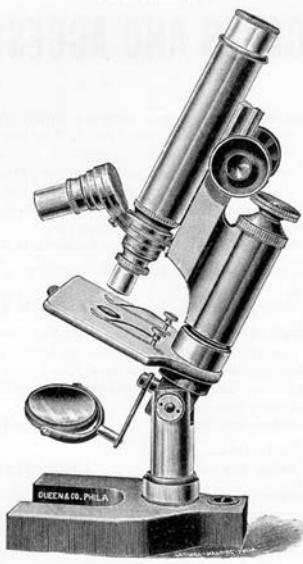
**Patterned after the  
ACME Continental Model  
1899**

adaptation is the extended 210mm tube-length with the beam-splitting epi illuminator high up on the body-tube. The second modification is the use of a large, focusing mechanical stage with an adjustable leveling surface. Perhaps the most unique feature was the fact that the entire stand revolves upon the base, or the stage may be swung out separately. In the typical Continental style, this stand was not inclinable, however, it did feature an extremely large foot.

### Queen Continental Microscope No. III and No. IIIA, 1899

This stand first appeared in December of 1899 and was advertised as "Queen's Latest Microscope, Continental No. III." It was recommended as "a complete instrument for students work in laboratories of normal and pathologic histology, botany or general biology." It could be had with or without a double nosepiece. Queen mentions

**The Queen Continental Microscope  
No. III**



**ACME CONTINENTAL No. III  
1899**

**Queen Continental Microscope  
No. IIIA.**

FOR BACTERIOLOGICAL WORK.



**ACME CONTINENTAL No. IIIA  
1899**

in one of its ads that the No. III was "essentially our Continental No. II model without substage attachments." In this case a simple revolving diaphragm is placed beneath the stage. Actually there are a number of other differences as well - the pillar is cylindrical and the foot is a bit smaller and has a japanned finish.

On the other hand, the Queen Continental No. IIIA did have an adjustable Abbe substage condenser. In every other respect it was identical to the No. III. Instead of being recommended for students, it was recommended for bacteriological work. The objectives that came with this model were of Queen's bacteriological series and provided "unparalleled definition." This statement essentially meant one of the objectives was an oil immersion - in most cases a Queen 1/12<sup>th</sup> inch. The No. III could be purchased with a double or triple nosepiece depending on the outfit ordered. At the time, all the Queen microscopes came in a neat Cherry or hardwood case. The Queen No. III was the final installment of the Continental series in the 19<sup>th</sup> Century. It was manufactured along with the earlier No. II for a number of years into the 20th Century.

**Conclusion:**

Throughout the 1890's Queen was not the only firm to undergo a transition to the Continental style. With few exceptions the entire industry adopted this pattern of construction. For example, by 1900 just about all the models offered by Bausch & Lomb were of the European design. It would be rather safe to say that just about all the firms that survived into the 20th Century conformed to the popularity of the Continental pattern. Clearly Queen responded to public demand in offering their series of Continentals, however, they did not go down easily. Throughout the 1890 as they added to their Continental models Queen continued to produce, promote and sell their standard ACME microscopes. As many ads appeared for the earlier American style ACME No.3, No.4, No.5 and even the very simple No.6 as did for their Continental outfits.

The ACME No.4 continued to be advertised into the early years of the 20th Century. However, it seemed the die was cast and the Continental Microscope was the stand of choice. By the turn of the Century it was no longer the individual buyer that drove the market. It was now the institutional customer that dictated the demand. All over the world new Colleges and Universities were springing up which created increasing numbers of laboratories that needed to be equipped with microscopes. With the recognition of the importance of bacteriology, every hospital and educational institution needed improved laboratories and new instruments. By the end of the first quarter of the 20th Century it seems that only large firms like Spencer and Bausch & Lomb were able to satisfy the expanded demand for the microscope.

#### **Progressive List of Queen Continental Microscopes:**

1891, Queen ACME Continental (First form)  
1892, Queen ACME Continental Pattern B & I (Second form)  
1896, Queen ACME Continental No.II & IIA  
1897, Queen ACME Continental No.I  
1897, Queen ACME Continental No.IV  
1899, Queen ACME Continental Metallurgical Microscope  
1899, Queen ACME Continental No.III & IIIA

#### **References:**

*The Microscopical Bulletin and Science News*, A bi-monthly Magazine. Published by Queen & Co., Incorporated: Philadelphia (Pub. 1883 - ca.1904).



# **WORKSHOP OF THE MICROSCOPICAL SOCIETY OF SOUTHERN CALIFORNIA**

**by: George G. Vitt, Jr.**

**Date: Saturday, 5<sup>th</sup> October 2002**

**Location: Izzy Lieberman's Residence**



**1. Jim Solliday**, President of MSSC, opened the meeting at 9:30 am and made several announcements.

- a) On 26 October 2002, Ed Jones will run a hands-on workshop entitled "Fibers and the Microscope". He will give instructions on the gathering, mounting and preparation of fiber samples – a subject of great importance in forensic microscopy. Jim urged that each attendee bring a stereo microscope.
- b) We should start making plans for our annual Christmas Party, and Pete Teti will be in charge of all arrangements.



**2. Ken Gregory** presented for comparison and comment two very similar appearing microscopes; a Verick and a Stiassnie (see photos). Constant Verick was a special student of E. Hartnack and was in business at 2 rue de la Parcheminerie, Paris, from 1870 to 1882. Maurice Stiassnie was the successor to Verick in 1882, first at 43 rue des Ecoles, Paris (1882-c.1905); and then at 204 Boulevard Raspail, Paris (1890-1915). The Stiassnie has the latter address.

The Verick (No. 1975 at edge of case) is a small Continental type microscope with sliding body tube coarse focus and top-of-limb screw fine focus. It has an inclination joint at the top of its square edged pillar. The stage is topped with a black glass plate. The condenser is a collar with sliding cylinder with the condenser lens, mounted below the stage on a dovetail slide. The double-sided mirror is on a slid-

Verick & Stiassnie Stands, 1882-5  
Exhibited by Ken Gregory



ing gimbal. The all-brass microscope is completely lacquered and the script on the heel is quite distinctive.

The Stiassnie, obviously a transition model after the takeover of Verick, is virtually identical in design to the Verick, but about 10% larger in all dimensions. Other major differences concern the condenser, which has a diaphragm on the slide-down swing out carrier. The Stiassnie accepts standard objectives; the Verick smaller diameter objectives with a female thread. The script on the Stiassnie is identical to the Verick. (This text was provided by Ken Gregory).



Detail, Stiassnie Stand, 1882-5,  
Exhibited by Ken Gregory



**3. Stuart Warter** displayed an early, cased, Oberhaeuser Drum microscope, No. 1306. (See photos). It had been owned by Francis H. Storer, Professor of Agricultural Chemistry, and Dean of Bussey Institute, Jamaica Plains, Massachusetts. It is signed by the owner, and is numbered and dated 25-12-43(?) on the base. Prof. Storer is listed in directories as Professor 1884-1905, and as Dean 1887-1889.

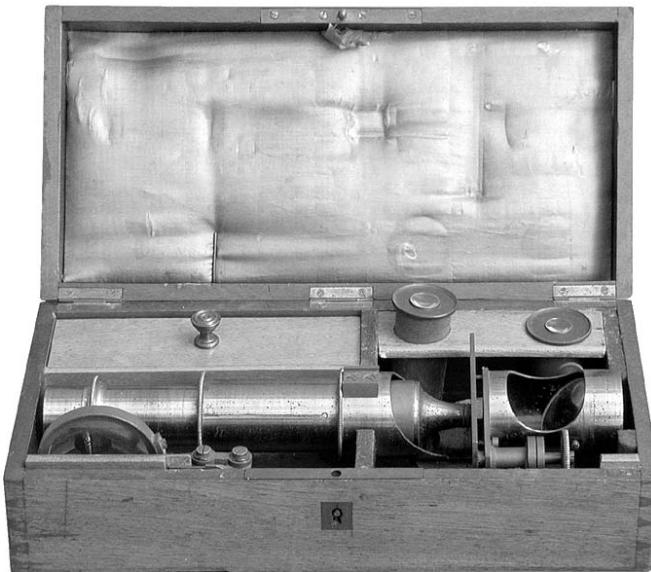
**4. Dario Solares** showed a modern made Japanese style dagger which he recently obtained on a trip to Spain. He stated that the item was made in Toledo.



Cylindrical Drum Style Microscope,  
Oberhaeuser, 1843.  
Exhibited by Stuart Warter

**5. John deHaas** showed a French microscope, probably intended for Ore Analysis (see photo). The original stand has been modified to allow the body assembly to be mounted securely to some custom laboratory apparatus. It features coarse and fine focus, a dovetailed objective mount, epi illumination and provision for synchronously rotating polarizer and analyzer. The new owner is Gaylord Moss.

**6. Jim Solliday** showed a photo of a rare miniature model of a Zeiss "L" stand which features stage focus which set a new direction in 20<sup>th</sup> century microscope design. The stand is only 5" high. According to a conversation Allen Bishop had sometime ago with an Eastern collector, these were made by graduate apprentices in the Zeiss factory. There are no actual optical components. Construction is aluminum. They were often used as award pieces to senior managers and top sales personnel. (see photo). Jim also showed a catalog of currently available tools for camera and instrument repair. It is available, free, from Fargo Enterprises, 800-359-2878, [www.fargo-ent.com](http://www.fargo-ent.com).



Cylindrical Drum Style Microscope, Oberhaeuser, 1843.  
Exhibited by Stuart Warter



Jim then showed a very rare book which was the first publication (1861) dealing with Radiolaria of Barbados Island (with several illustrations of sponge spicules and diatoms). The volume originally belonged to the library of the Quekett Microscope Club. The specimens shown in the book were discovered in 1846. Illustrations were first hand drawn and photos of these drawings were used for publication (see photos). A general discussion followed on the ways and means of making photomicrographs of three dimensional objects, where the region of sharp focus is severely limited by the depth-of-field of the microscope objective.





# POLYCYSTINS,

FIGURES OF REMARKABLE FORMS &c.,

IN THE

BARBADOS CHALK DEPOSIT,

(Chiefly collected by DR. DAVY, and noticed in a Lecture delivered to the Agricultural Society of Barbados, in July, 1846.)

DRAWN BY MRS. BURY,

As seen in her Microscope, on Slides prepared by C. H. JOHNSON, Esq., of LANCASTER, 1860 and 1861.

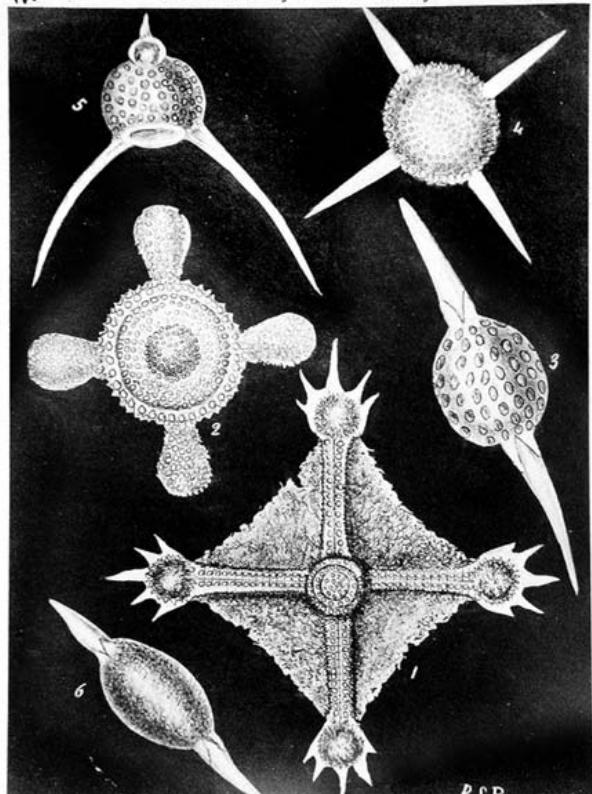
SECOND EDITION,

EDITED BY M. C. COOKE.

PUBLISHED BY W. WHELDON, 38, GREAT QUEEN STREET, LONDON. W.C.

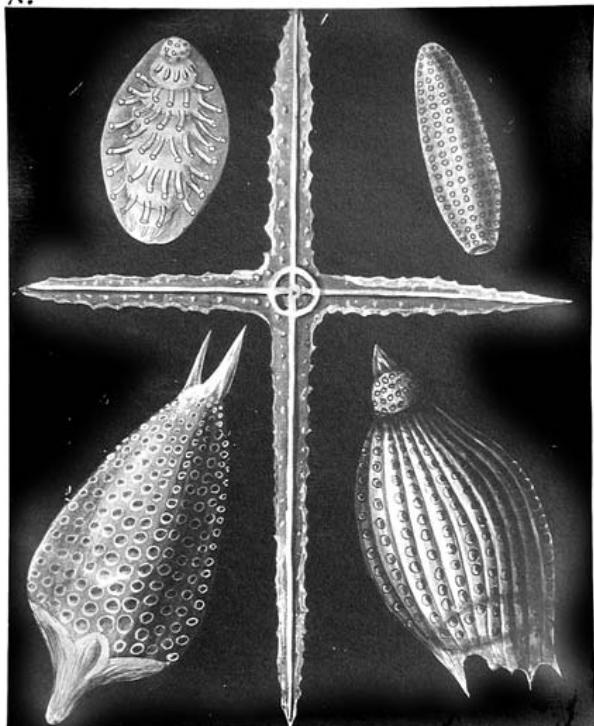
Exhibited by Jim Solliday

IV. Exhibited by Jim Solliday



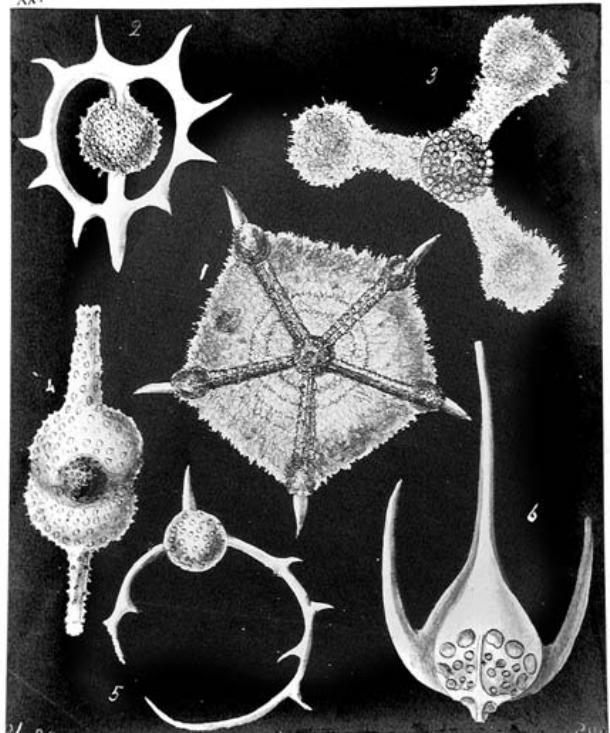
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Exhibited by Jim Solliday

XX. Exhibited by Jim Solliday



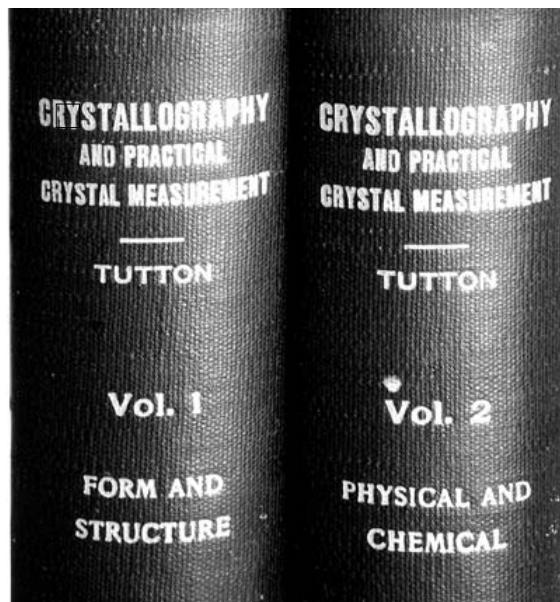
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7. John Fedel described some current software which produces a sharp image of a microscopic specimen by the computer superposition of several photomicrographs, each taken in a different zone of the specimen encompassed by the depth of field of the particular objective being used. The software is called CombineZ and is available for free at [www.hadleyweb.pwp.blueyonder.co.uk/CombineZ/combinez.htm](http://www.hadleyweb.pwp.blueyonder.co.uk/CombineZ/combinez.htm).



Dark field Condenser by Wild. Exhibited by John Fedel

8. Alan deHaas showed a scarce two-volume set of books "Crystallography and Practical Crystal Measurement", by A.E.H. Tutton, Macmillan & Co. Ltd., London, 1922. (see photos) □



Exhibited by Alan de Haas

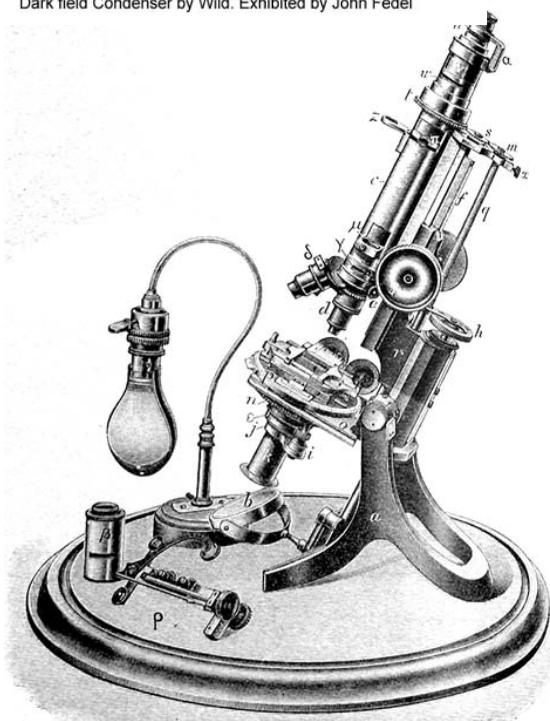


FIG. 821.—The Dick Crystallographic Microscope constructed by Swift, fitted with Measuring Stage.

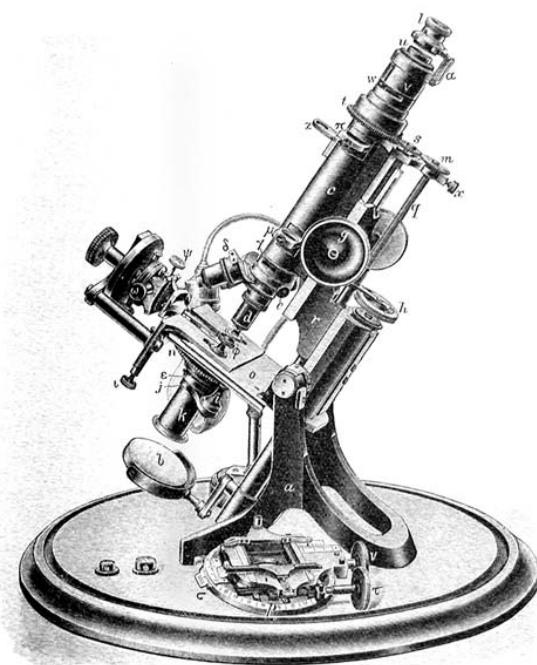


FIG. 822.—The Dick Microscope fitted with the Miers Stage Goniometer.

Illustrations from Tutton, Exhibited by Alan de Haas

# MSSC MEETING

Reported by Leonie Fedel,  
Meeting photos by George G. Vitt Jr.

7:00pm 16<sup>th</sup> October 2002 at New Roads School.

Jim Solliday opened the meeting. He updated members on Gary Legel's progress, which unfortunately was not good as he was back in hospital again.\*

Jim announced that the next workshop would be at Izzy Leiberman's at 9:00am on Saturday 2<sup>nd</sup> November 2002, with the following one at Ken Gregory's on Saturday 7<sup>th</sup> December 2002. The annual exhibition meeting would be on Wednesday 20<sup>th</sup> November

2002 at New Roads School. Jim encouraged all members to attend the exhibition meeting, at which following past traditions, a prize would be given to the best exhibit.

Lastly, Jim reminded members about the forthcoming practical workshop being facilitated by Ed Jones on mounting fibers on Saturday 26<sup>th</sup> October 2002 at New Roads School. Jim asked for any volunteer to present future practical workshops. John deHaas offered to provide one on staining protozoa.

Jim then handed the meeting over to Ken Gregory who gave a presentation on Anatomy and Histology of the Human Urinary System. Ken's presentation was supported by a number of microscope slides showing the macroscopic and microscopic anatomy of the human kidney, using different staining and other mountings to highlight the various as-



Ken Gregory lecturing on the human urinary system

pects of a kidney's function. Stuart Warter contributed to the presentation by further elaborating on renal function.

Following Ken's presentation, the meeting was treated to another lecture from the series *The Microscope and its Methods* by Alan deHaas. This lecture focused on Köhler and Nelsonian "critical" illumination which was first described ca 1880,

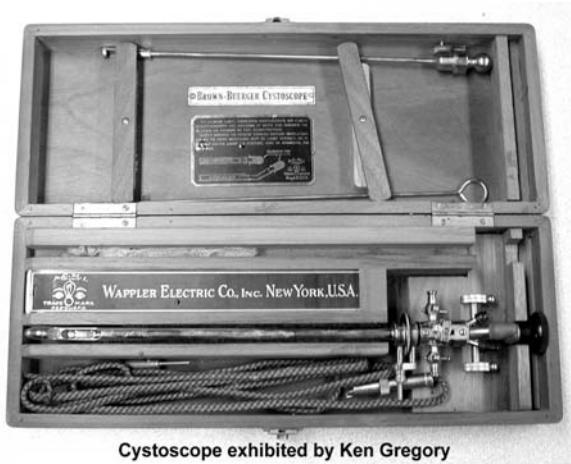


\* Long-time member, Gary Legal passed away on October 5<sup>th</sup> 2002, The Editor

but is now virtually unused. Exceptionally high resolution photomicrographs of diatoms were produced using this illumination method. □



Urethral sounds exhibited by Ken Gregory



Cystoscope exhibited by Ken Gregory

Members were asked to come equipped to the workshop with a stereo microscope, microscope slides, coverslips, two forceps or one forcep and a teasing needle, scissors and labels for slides. A transmitted light brightfield or polarized light scope was also suggested for those wishing to view the finished product at the workshop. Ed provided over two dozen different natural and synthetic fibers and introduced members to fourteen reference books on the subject.

He began the workshop with a brief and informative overview on the growth and structure of natural hair, fur and synthetic fibers. The collection included specimens of silkworm fibers from Mongolia, Japan, India and China and animal hairs from Yak, Llama, goat, sheep, camel and rabbit among others.

Ed then illustrated the proper procedure for preparing a fiber specimen for mounting on a slide. The left side of the glass slide should have attached a self-adhesive tag that on which the specimen, date, slide maker and other information is recorded. On the right side, a center point should be marked to identify where the specimen will be mounted. A small drop of xylene is then placed on the slide, and using tweezers a few fibers are placed into the xylene and carefully manipulated into the preferred arrangement. When the xylene has fully evaporated, a drop of permanent mounting cement is applied on top of the fiber so as to completely cover the specimen. Next a coverslip is placed over the specimen using the following method. Start with one side of the coverslip touching the liquid, then slowly lower the coverslip to spread out the liquid and squeeze out any trapped air bubbles. Finally, the slide is set aside on a flat surface to dry evenly. By the end of the workshop, with Ed's personal attention, each member had completed some five to eight fully mounted fiber slides.

The society wishes to express its thanks to Ed for his expertise and patience in helping educate the membership in successful techniques for mounting fibers on microscopes slides. □

## PRACTICAL WORKSHOP - MOUNTING FIBERS

**Presented by Edwin Jones,  
reported by Pete Teti**

On Saturday 26<sup>th</sup> October 2002 at New Roads School, Edwin Jones, a member of the MSSC directed an excellent hands-on workshop on how to mount fibers on microscope slides. Ed is an employee of the Ventura County Sheriff Forensic Laboratory. He has developed considerable experience in this field and gained respect nationally for his expert forensic knowledge.

# SATURDAY WORKSHOP ANNOUNCEMENT

9:00am 2<sup>nd</sup> November 2002  
At the home of Izzy Lieberman

3300 Corinth Avenue  
Los Angeles CA 90066  
310-391-6076



This workshop will be held at Izzy Leiberman's. Activities will start at 9:00am. As usual, this is a chance for good friends and fellow microscopists to talk about our favorite subject. You are invited to bring any manner of items related to microscopy to share it with the fellowship. If you have something you would like to sell, please feel free to bring it and set it up at the sales table. All are encouraged to participate and join in the fun.

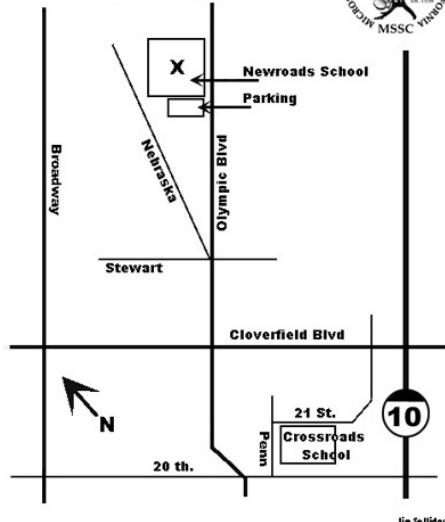
Lunch after the workshop will be at the local Coco's. If you have any questions please send me a message. I look forward to seeing all of you at the workshop...

Jim Solliday (MSSC President).

# MSSC MEETING ANNOUNCEMENT

7:00pm 20<sup>th</sup> November 2002  
at New Roads School

Meeting location for MSSC  
New Roads High School  
3131 Olympic Boulevard  
Santa Monica, CA 90404



This will be the annual exhibition meeting of the Society. Please bring along an exhibit to display. If you have not yet thought of something to show, please do not let that hold you back from participation. A simple microscope with your favorite slide mount will do just fine. Posters and display boards are also encouraged, along with the usual sales table. Please remember to bring a label or piece of paper with a brief description of your exhibit.

During the evening each exhibit will be allocated a number and those in attendance will vote to decide which exhibit was seen as the best by the membership. A certificate of free membership for one year will be given to the best exhibit.

Dinner beforehand at Coco's restaurant at 5:30pm (near Ocean and Bundy, Santa Monica).

## EDITOR'S NOTE

Please send any articles, photos, member profiles, notifications of forthcoming events and website summaries for inclusion in forthcoming journals to me at:



Leonie Fedel  
10945 Rose Avenue #209  
Los Angeles CA 90034  
(310) 839-9881,  
email: [mssc@attbi.com](mailto:mssc@attbi.com)

The preferred route is via email, with text and graphics as attachments. Text in the following formats: plain/rich text format/word documents, graphics in the form of jpgs. If you need any help in converting information to these formats, please contact the Editor, who would be happy to help.

*The MSSC Editorial Committee makes decisions concerning Journal content and style and consists of:*

*Jim Solliday (President)  
Pete Teti (Printing & Distribution)  
Alan deHass (Education Chair)  
Leonie Fedel (Layout Editor)  
George Vitt (Image Editor)  
Allen Bishop (Copy Editor) □*

## WANT TO ADVERTISE IN THE JOURNAL?

We are also happy to include advertisements within the Journal either from individual members wanting to sell an item to other members, or from companies wishing to promote their products and services to the MSSC membership. If you wish to place such an advert, please contact our Treasurer, Dave Hirsch for further details and charges.

Dave Hirsch  
11815 Indianapolis St.  
Los Angeles, CA 90066  
(310) 397-8357  
email: [dave.hirsch@verizon.net](mailto:dave.hirsch@verizon.net) □



Drawing by Nirvan Mullick

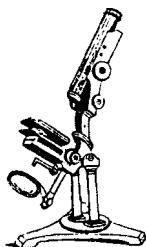
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