



drum microscope

<https://mhc.andornot.com/en/permalink/artifact13703>

Accession Number: 010020535 a-al
Collection: Dr. Ralph and Mrs. Olga Crawford Canadian Dental Collection
Category: Basic Science Artifacts
Classification: Basic Science, Laboratory Instrumentation
MeSH Heading: Microscopy -- instrumentation

Description: Monocular drum microscope (a) sits on a brass horseshoe shaped base with the maker's name and address engraved on the top; attached to the base is a circular arm to which the parts of the microscope are attached; just above the base there is a swivel mirror which is flat on one side and concave on the other; mirror is attached to a semi-circular piece of black metal via two metal screws on the end of each arm; mirror attachment is screwed to an arm also made of black metal which can be manually adjusted up and down; above the mirror there is a square stage with a circular hole in the centre; screwed to the underside of the stage is a condenser and a circular iris diaphragm which rotates made of black metal; iris diaphragm has engraved striations around the edge with five different sized holes drilled through it; there are two identical rectangular, silver metal slide clips on top of the stage which have a slight bend in them and are each held in place by a brass pin at the top; tubular aperture is adjustable by sliding through a circular support tube which is attached to the arm by three black metal bars via screws; aperture consists of a long tube with a screw end on the bottom for attaching the lenses; aperture has a decorative lip near the top which then narrows towards the top; microscope comes with two eye pieces (b-c) which slide into the top of the aperture; eyepieces are identical except that (b) is slightly longer than (c) eyepieces have a cylindrical silver metal body with a circular black metal top; top has engraved striations around the edge and a single number painted on it in gold paint; eyepieces slide inside the aperture and have a rim which sticks out slightly; there is a small hole in the centre of the top with a glass lens set inside and each eyepiece has a convex glass lens set into the bottom of each body; there are two metal brass coloured objective lenses (d) is circular in shape with four tiers and narrows towards the flat top; at the base of each tier is a thin edge with engraved vertical striations; the third tier is missing its edge; the inside is threaded so it can screw into the bottom of the aperture of (a) and there is a convex glass lens inside; on the tip, there is a small circular lens made of glass; second objective lens (e) also has threading inside the bottom and has five tiers with the same striated edging; on the top of the lens there is a silver metal tip with a small circular glass lens in the centre; there is no lens in the base; both objective lenses rest in a small rectangular brown leather covered case (f) which opens via a single hinge at the back and is held closed by a gold and copper coloured clasp with decorative filigree; inside there is a brown wooden support with three identical holes drilled into it; bottom of the box is lined with green velvet and the top is lined with a white fabric; there is a green fabric covered rectangular guard which runs around the wooden support; there is a smaller piece of green fabric which covers the hinge; there are 9 identical, rectangular clear glass slides (g-o) and 17 identical, square clear glass cover slips (p-af); cover slips came in a small square paper box (ag-ah); box top (ag) is brown and has a white sticker with a black border around it and is printed on in black ink; box bottom (ah) has a brown base and border made of yellow paper; packet of white rice paper sheets (ai) has a light orange cover and is printed on in gold ink; all items are stored in a rectangular, brown wooden box (aj); box opens via three silver, metal, rectangular hinges which screw into the top and bottom sections; there is a silver, metal, cylindrical latch screwed into the edge of the top section of the box which fits inside a circular silver, metal receptacle screwed to the top edge of the bottom section; inside the box there are different compartments for the various microscope pieces and sections lined with black velvet; stamped into the top edge of the bottom section of the box is a serial number; there is a rectangular wooden door (ak) which fits over a section on the bottom proper right corner; door has a small dark brown wooden rounded handle (al) which has detached.

Number Of Parts: 38

Part Names:	a - microscope - Size: Length 24.4 cm x Width 8.5 cm x Depth 8.3 cm b - eyepiece - Size: Length 4.9 cm x Diam 2.8 cm c - eyepiece - Size: Length 4.2 cm x Diam 2.8 cm d - objective lens - Size: Length 2.7 cm x Diam 1.8 cm e - objective lens - Size: Length 2.8 cm x Diam 1.8 cm f - lens case - Size: Length 7.2 cm x Width 3.5 cm x Depth 4.0 cm g - slide - Size: Length 7.6 cm x Width 2.6 cm x Depth 0.2 cm h - slide - Size: Length 7.6 cm x Width 2.6 cm x Depth 0.2 cm i - slide - Size: Length 7.6 cm x Width 2.6 cm x Depth 0.2 cm j - slide - Size: Length 7.6 cm x Width 2.6 cm x Depth 0.2 cm k - slide - Size: Length 7.6 cm x Width 2.6 cm x Depth 0.2 cm l - slide - Size: Length 7.6 cm x Width 2.6 cm x Depth 0.2 cm m - slide - Size: Length 7.6 cm x Width 2.6 cm x Depth 0.2 cm n - slide - Size: Length 7.6 cm x Width 2.6 cm x Depth 0.2 cm o - slide - Size: Length 7.6 cm x Width 2.6 cm x Depth 0.2 cm p - cover slip - Size: Length 1.9 cm x Width 1.9 cm x Depth 0.1 cm q - cover slip - Size: Length 1.9 cm x Width 1.9 cm x Depth 0.1 cm r - cover slip - Size: Length 1.9 cm x Width 1.9 cm x Depth 0.1 cm s - cover slip - Size: Length 1.9 cm x Width 1.9 cm x Depth 0.1 cm t - cover slip - Size: Length 1.9 cm x Width 1.9 cm x Depth 0.1 cm u - cover slip - Size: Length 1.9 cm x Width 1.9 cm x Depth 0.1 cm v - cover slip - Size: Length 1.9 cm x Width 1.9 cm x Depth 0.1 cm w - cover slip - Size: Length 1.9 cm x Width 1.9 cm x Depth 0.1 cm x - cover slip - Size: Length 1.9 cm x Width 1.9 cm x Depth 0.1 cm y - cover slip - Size: Length 1.9 cm x Width 1.9 cm x Depth 0.1 cm z - cover slip - Size: Length 1.9 cm x Width 1.9 cm x Depth 0.1 cm aa - cover slip - Size: Length 1.9 cm x Width 1.9 cm x Depth 0.1 cm ab - cover slip - Size: Length 1.9 cm x Width 1.9 cm x Depth 0.1 cm ac - cover slip - Size: Length 1.9 cm x Width 1.9 cm x Depth 0.1 cm ad - cover slip - Size: Length 1.9 cm x Width 1.9 cm x Depth 0.1 cm ae - cover slip - Size: Length 1.9 cm x Width 1.9 cm x Depth 0.1 cm af - cover slip - Size: Length 1.9 cm x Width 1.9 cm x Depth 0.1 cm ag - box top - Size: Length 2.7 cm x Width 2.7 cm x Depth 0.8 cm ah - box bottom - Size: Length 2.6 cm x Width 2.6 cm x Depth 1.4 cm ai - rice paper - Size: Length 7.5 cm x Width 5.0 cm x Depth 0.9 cm aj - microscope box - Size: Length 24.1 cm x Width 13.6 cm x Depth 10.8 cm ak - compartment door - Size: Length 13.0 cm x Width 8.3 cm x Depth 0.5 cm al - Size: Length cm x Width cm x Depth cm
Provenance:	Transfer from the Dental Canada Fund; previously housed in the Dentistry Canada Museum (Ottawa); this item was used by by Dr. F.A. Stevenson at Harvard University and at his practice in Montreal; it was then given to Dr. Erwin Burbank
Maker:	C. Reichert
Site Made (City):	Bennogasse
Site Made (Country):	Austria
Dates:	1875 1885 circa 1875-1885
Date Remarks:	Date based on maker's information and donor's remarks
Material:	metal: yellow, silver, black glass: clear wood: brown paper: white, orange, brown, yellow ink: yellow, black fabric: green, white
Inscriptions:	Engraved on base of (a): "C. Reichert Wien VIII. Bennogasse 26"; painted on the top of (b): "2"; painted on the top of (c): "4"; engraved onto bottom tier of (d): "3"; engraved on the bottom tier of (e): "7a"; printed on (ag): "59 Stü[c]k // 22 m / m // 7/8" the first line is crossed out in black marker; printed on the front flap of (ai): "SUPREME"; printed on the back of (ai): "FINESSE & SOLIDITE // PAPIER de RIZ // DOUCEUR"; stamped into edge of (aj): "No 4208"
Permanent Location:	Storage Room 0007 0007-B1-2

Condition Remarks: (a) shows slight signs of use; scratches present on the base; mirror has small streaks and scratches on both sides; very small amount of corrosion on the top of each slide clip; seven slides and one cover slip were broken; box top has two sides that have detached

Copy Type: Original

Reference Types: Internet
JPG

Reference Comments: "Canadian Dental Association" website; "Mikroskop Museum" website; "Powerhouse Museum" website; CD #5

Research Facts: Dr Ralph and Mrs Olga Crawford donated their extensive Canadian dental collection to the DCF to create the museum in 1997; further donations were received while Dr Crawford was Curator Emeritus at the Dental Canada Museum until its closure in 2008; this item was donated by Mrs. Joan Burbank of Victoria British Columbia; Dr. A.F. Stevenson graduated from Harvard in 1888 and then joined Dr. George Beers' dental practice in Montreal; Dr. Stevenson was the first president of the Canadian Dental Association; Mrs. Burbank's husband Dr. Erwin Burbank took over Dr. Stevenson's practice in 1928; Carl Reichert (1851-1922) began manufacturing microscopes in Vienna in 1874; each microscope made by Reichert has a unique serial number with this one being numbered 4208

Images



