

Titre : Second-hand microscopes and accessories et cetera. Offered subject to being previously unsold, may 1938

Auteur : Watson, W. & sons

Mots-clés : Microscopes; Appareils et instruments scientifiques; Optique*Instruments

Description : 24 p.; 22 cm

Adresse : London : [s.n], 1938

Cote de l'exemplaire : CNAM-MUSEE IS0.4-WAT (Centre de documentation du Musée des arts et métiers)

URL permanente : <http://cnum.cnam.fr/redir?M9974>

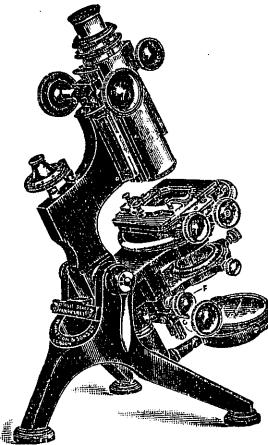


SECOND-HAND
**MICROSCOPES AND
ACCESSORIES**

ET CETERA.

Offered subject to being previously unsold.

MAY, 1938.



Circuit Stage Van Heurck Microscope.

W. WATSON & SONS, LTD.

Microscope and Scientific Instrument Manufacturers

313, High Holborn, LONDON, W.C.1

Telegrams: "Optics, Holb., London."

Telephone: Holborn 2767.

MICROSCOPES—(contd.)

Grand Model Van Heurck Microscope—*continued.*

£ s. d.

In addition there is the interchangeable rackwork substage fitted with complete Swift petrological and ordinary achromatic condensers having sector diaphragm, two revolving selenite holders, four colour-filter holders; it is fitted with centring screws.	
Large-size plane and concave mirrors.	
In order to make the instrument portable the tripod foot on which it is mounted is provided with two hinged legs, but in spite of this it is as rigid as the fixed pattern.	
Eyepieces, Achromatised, one pair "B."	
One pair Zeiss compensating $\times 12$.	
Objectives, Zeiss Achromatic 24-mm., 0.30 N.A., 250-mm. tube length.	
Zeiss 4-mm. 0.95 N.A., with correction collar.	
Powell & Lealand 1/8" with correction collar, dry and immersion fronts.	
Powell & Lealand 1/12" oil-immersion, with correction collar.	
One colour-filter holder.	
Powell & Lealand oil-immersion condenser.	
Watson Universal achro-aplanatic condenser.	
Bull's-eye stand condenser.	
Bull's-eye condenser, mounted for fitting to limb.	
One pair stage forceps.	
One silver side reflector.	
Travis expanding stop.	
Set of stops for Powell & Lealand immersion condenser.	
Double nose-piece, by C. Baker.	
Two compressors.	
Set of dark-ground stops for Universal condenser.	
Set of selenites, dark-ground stops, for Swift condenser.	
Drawing prism to fit on to eyepiece.	
The whole, complete in polished mahogany case with carrying handle, lock and key. Price .. 75 0 0	
The is unique and represents the ideal equipment for any amateur microscopist; it could be adapted to any form of microscopical work.	

Circuit Stage Van Heurck Microscope, by W. Watson & Sons, Ltd., with :—

Interchangeable monocular and Wenham binocular bodies, the monocular body having two draw-tubes, one with rackwork adjustment and the other sliding; the binocular body being fitted with rackwork adjustment for interpupillary distance.
Rackwork coarse adjustment.
Horizontal lever fine adjustment.
Built-in mechanical stage, having rotation through 360° , movements, $1\frac{1}{2}'' \times 1\frac{1}{2}''$, sliding bar.
Rackwork focussing substage with centring screws, fine adjustment focussing motion.
Plane and concave mirrors.
Tripod foot.
One pair eyepieces B $\times 6$.
One pair eyepieces C $\times 8$.
One eyepiece E $\times 12$, best capped pattern.
Objectives, 16-mm. Holoscopic, N.A. 0.45.
12-mm. Holoscopic, N.A. 0.65.
4-mm. Holoscopic, N.A. 0.95.
2-mm. oil-immersion objective, Homogeneous immersion, N.A. 1.25.
All objectives corrected for 250-mm. tube length.

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MICROSCOPES—(contd.)

Circuit Stage Van Heurck Microscope—continued.	<i>£ s. d.</i>
Dustproof triple nose-piece.	
Abbe illuminator in substage mount, with iris diaphragm and stop-carrier.	
Box of dark-ground and oblique-light stops.	
Live box.	
The outfit complete in polished mahogany dust-tight case.	
Price	65 0 0
Grand Model Van Heurck Microscope, by W. Watson & Sons, Ltd.,	
with :—	
Rackwork coarse adjustment.	
Horizontal lever fine adjustment.	
Monocular body with rackwork and plain draw-tubes.	
Interchangeable Wenham binocular body.	
Dustproof triple nose-piece.	
Built-in mechanical stage, with complete rotation, rackwork to rotation, centring screws to rotation, clamp to rotation, sliding-bar to mechanical stage, divisions to movements of mechanical stage, divisions to rotation of stage reading against vernier.	
Rackwork focussing substage with centring screws and provision for hinging-out of the optic axis.	
Fine adjustment to the movements of the mechanical stage controlled from above the stage.	
Large-size plane and concave mirrors.	
Tripod foot.	
One pair eyepieces, No. 2 x 6.	
One pair eyepieces, No. 4 x 10.	
One Huygenian eyepiece, No. 5 x 12.	
One Holoscopic eyepiece x 20.	
Dustproof triple nose-piece.	
Objectives, Watson's former best series 1½".	
Parachromatic 2/3".	
Semi-apochromatic 1/6".	
Universal condenser in substage mount with iris diaphragm and stop-carrier.	
Set of dark-ground and oblique light stops.	
Small size polariser and analyser.	
The whole, complete in polished mahogany case, with carrying handle, lock and key.	
Price	60 0 0
Van Heurck Microscope, Grand Model, by W. Watson & Sons, Ltd.,	
with :—	
Rackwork coarse adjustment.	
Body with plain and rackwork draw-tubes, 1.27-in. diameter eyepiece fitting.	
Horizontal lever fine adjustment.	
Mechanical stage with milled heads on Turrell system.	
Divisions to movements reading by vernier, with sliding bar.	
Complete rotation with rackwork to rotation, centring screws to rotation, clamp and divisions to rotation.	
Compound substage with rackwork focussing, fine adjustment mounted on a level with the plane of the stage.	
Rackwork rotation to substage.	
Plane and concave mirrors.	
Eyepieces, best capped type, 1.27 in. "B" and "D."	
Zeiss compensating eyepiece.	
Objectives, 1½", 2/3", Beck 1/8".	
Aplanatic Abbe illuminator, three-lens type.	
Triple nose-piece.	
Mahogany case.	
Price	60 0 0

MICROSCOPES—(contd.)

MICROSCOPES—(contd.)

" Praxis " Microscope, by <i>W. Watson & Sons, Ltd.</i> , with :—	£	s.	d
Rackwork coarse adjustment.			
Micrometer screw pillar fine adjustment.			
Plain square stage.			
Plain tubular underfitting.			
Eyepiece, No. 3, $\times 8$.			
Objectives, $2/3''$ and $1/6''$.			
Double nose-piece, figure-eight type.			
Simplified Abbe condenser in sleeve iris mount.			
Case.			
Price .. . . . .	. . . . .	10	0
Outfits as above, but with spiral focussing screw underfitting and N.A. 1.20 Abbe illuminator .. . . . .	. . . . .	11	15
Note. —There are a number of "Praxis" outfits as here described available.			
" Fram " Microscope, by <i>W. Watson & Sons, Ltd.</i> , with :—	£	s.	d
Rackwork coarse adjustment.			
Horizontal lever fine adjustment.			
Plain square stage.			
Plain tubular understage fitting.			
Eyepiece, No. 3, $\times 8$.			
Objectives, $2/3''$ and $1/6''$.			
Double nose-piece, figure-eight type.			
Abbe condenser in understage mount, with iris diaphragm and stop-carrier.			
Case.			
Price .. . . . .	. . . . .	10	10
Non-inclinable Microscope ("Praxis," but without inclining joint), by <i>W. Watson & Sons, Ltd.</i> , with :—	£	s.	d
Rackwork coarse adjustment.			
Horizontal lever fine adjustment.			
Body with draw-tube.			
Vulcanite-covered square plain stage.			
Spiral focussing screw underfitting.			
Plane and concave mirrors.			
Flat horseshoe foot.			
Eyepiece, $\times 6$.			
Objectives, $2/3''$, $1/6''$.			
Double nose-piece.			
Sleeve pattern iris diaphragm.			
Case.			
Price .. . . . .	. . . . .	7	0
Portable Microscope, Moginie type, with :—	£	s.	d
Rackwork coarse adjustment.			
Micrometer screw fine adjustment.			
Folding tripod foot.			
Folding plain stage.			
Sleeve pattern iris diaphragm.			
Plane and concave mirrors.			
Draw-tube to body.			
Without eyepieces, objectives or case.			
Price .. . . . .	. . . . .	6	10
School Microscope, by <i>W. Watson & Sons, Ltd.</i> , with :—	£	s.	d
Rackwork coarse adjustment.			
Vulcanite-covered plain stage.			
Eyepiece, $\times 3$.			
Objective, Parachromatic $\frac{1}{2}''$.			
Case.			
Price .. . . . .	. . . . .	4	10

MICROSCOPES—(contd.)

Microscope , by <i>Reichert</i> , with :—	<i>f.</i>	<i>s.</i>	<i>d.</i>
Rackwork coarse adjustment.			
Side fine adjustment.			
Large square metal plain stage covered with vulcanite.			
Rackwork focussing substage.			
Plane and concave mirrors.			
Eyepieces, Nos. 2×6 and 4×10 .			
Objectives, <i>Reichert</i> , No. 3, No. 7a, $1/12"$ oil-immersion, no name of maker, 1.30 N.A.			
Dustproof triple nose-piece.			
Abbe illuminator.			
Complete in case.			
Price	21	0	0

Simple Student's Microscope, by *Reichert*, with :—
Sliding body coarse adjustment.
Micrometer screw fine adjustment.
Wheel diaphragm below stage.
One eyepiece.
Objective, $2/3"$.
Mahogany case.

High-power Binocular Microscope, by *Spencer Lens Co.*, with :—
Movement for optional monocular vision to either eye.
Rackwork coarse adjustment.
Vertical lever fine adjustment.
Large square plain stage.
Attachable mechanical stage.
Spiral focussing screw underfitting.
Plane and concave mirrors.
Horseshoe foot.
One pair eyepieces, $\times 6$.
One pair eyepieces, $\times 10$.
Objectives, Spencer, $2/3''$, $1/6''$, $1/12''$ oil-immersion.
Triple nose-piece.
Abbe illuminator.
Case.
Price

Research Microscope, by *Koristka*, of Milan, with :—
High-power binocular body, for use with objectives up to and including $1/12$ " oil-immersion.
The binocular body is fitted with rackwork interpupillary adjustment and independent adjustment for the right eye.
Rackwork coarse adjustment.
Side fine adjustment, controlled by milled heads on both sides of the limb.
Circular fixed stage with mechanical stage
Rackwork focussing substage with centring screws.
Plane and opal reflectors.
The foot is of the tripod pattern.
One pair of eyepieces, No. 2 $\times 6$.
Objectives, $2/3$ ", $1/6$ ".
Dustproof triple nose-piece.
Abbe illuminator in understage mount, with iris diaphragm and stop-carrier.
The whole complete in case.

MICROSCOPES—(contd.)

I.M.S. Microscope of modern production, by *J. Swift & Sons*, £ s. d. with :—

Large-diameter body tube with draw-tube.
Rackwork coarse adjustment.
Fine adjustment controlled from both sides of the limb.
Built-in mechanical stage with 75-mm. horizontal motion, 30-mm.
vertical motion, reading by pointer; horizontal motion detachable.
Rack substage.
Plane and concave mirrors.
Flat horseshoe foot.
Eyespices, Nos. 6 and 10.
Objectives, Swift, $\frac{1}{2}$ ", $\frac{1}{6}$ ", $\frac{1}{12}$ ".
Abbe illuminator.
Dustproof triple nose-piece.
Complete in case.

Microscope, by *J. Swift & Sons*, with :—

- Rackwork coarse adjustment.
- Pillar micrometer screw fine adjustment.
- Body with draw-tube.
- Built-in mechanical stage.
- Compound rack focussing and screw centring substage.
- Plane and concave mirrors.
- Modified tripod foot.
- Eyepieces, 5.5, 6, 7.
- Objectives, Swift, 2/3", 1/6", 1/12" oil-immersion.
- Dustproof triple nose-piece.
- Abbe illuminator.
- Case.

Price 24.00

Microscope, by *J. Swift & Sons*, with :—

Microscope, by J. Swift & Sons, with :—
Rackwork coarse adjustment.
Wales type limb.
Body tube with sliding draw-tube, fitted with connecting flange for photomicrography.
Rackwork coarse adjustment.
Climax type fine adjustment.
Mechanical stage with complete rotation, and double sliding bar.
Rackwork focussing substage with centring screws.
Eyepieces, Nos. 2 x 6 and 4 x 10.
Objectives, 2/3" and 1/6".
Double nose-piece.
Abbe condenser.
Case.

Student's Pattern Microscope, by *J. Swift & Sons*, with :—

Rackwork coarse adjustment.
Pillar micrometer screw fine adjustment.
Body with draw-tube.
One eyepiece, No. 3.
Objectives, $2\frac{1}{3}''$, $1\frac{1}{6}''$.
Dustproof triple nose-piece.
Abbe illuminator, 1.20 N.A., in understage mount, with iris diaphragm and stop-carrier.
The whole complete in polished mahogany case.

MICROSCOPES—(contd.)

Student's Microscope , by <i>J. Swift & Sons</i> , with :—	£ s. d.
Rackwork coarse adjustment.	
Pillar micrometer screw fine adjustment.	
Plain metal stage with simple mechanical stage.	
Spiral focussing screw underfitting.	
Eyepieces, $\times 6$ and $\times 10$.	
Objectives, Swift $2/3''$ and $1/6''$.	
Triple nose-piece.	
Abbe condenser in mount.	
Mahogany case.	
Price	12 10 0
Student's Microscope , by <i>J. Swift & Sons</i> , with :—	
Rackwork coarse adjustment.	
Pillar micrometer screw fine adjustment.	
Plain square stage with Wright's finder.	
Plain understage fitting.	
Eyepieces, Nos. 2×6 and 4×10 .	
Double nose-piece, figure-eight type.	
Simplified Abbe condenser in sleeve iris mount.	
Mahogany case.	
Price	10 0 0
Student's Microscope , by <i>J. Swift & Sons</i> , with :—	
Rackwork coarse adjustment.	
Pillar micrometer screw fine adjustment.	
Square metal plain stage with Wright's finder.	
Plain tubular condenser carrier.	
Plane and concave mirrors.	
Tripod foot.	
Eyepieces, $\times 4$, $\times 5.5$.	
Objectives, $2/3''$, $1/6''$.	
Double nose-piece.	
Sleeve-pattern iris diaphragm.	
Complete in mahogany case.	
A very excellent student's microscope in perfect condition.	
Price	7 0 0
Microscope , by <i>J. Swift & Sons</i> , with :—	
Rackwork coarse adjustment.	
Micrometer screw pillar fine adjustment.	
Square plain stage with Wright's finder.	
Tubular understage fitting.	
Tripod foot.	
Plane and concave mirrors.	
One eyepiece, No. 1.	
Objectives, $2/3''$ and $1/6''$.	
Double nose-piece.	
Wheel of diaphragms.	
In mahogany case.	
Price	6 10 0
"Laboratory" Microscope , by <i>Leitz</i> , with :—	
Rackwork coarse adjustment.	
Pillar micrometer screw fine adjustment.	
Rotating circular stage with centring screws.	
Best form rackwork substage, with rack to iris.	
Eyepiece, $\times 6$.	
Objectives, $2/3''$, $1/6''$.	
Triple nose-piece.	
Abbe condenser.	
Mahogany case.	
Price	14 0 0

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MICROSCOPES—(contd.)

MICROSCOPES—(contd.)

£ s. d.

Zentmeyer Model Microscope—continued.

Built-in mechanical stage with double sliding bar and rotation through 270°, rackwork to rotation, with divisions to 5° on silver, reading by pointer.
 Compound rackwork substage with centring screws, rackwork to rotation.
 Instrument finished in all bright brass.
 Double nose-piece.
 Eyepieces, one pair No. $\times 5$, and 2 adapters between standard students size and draw-tube.
 Two-lens Abbe condenser, N.A. 1.20, in substage mount with iris diaphragm and stop-carrier.
 Wooden case.

Price
 This instrument is not of modern construction, but is in excellent condition, and would be eminently suitable for an amateur who wanted a well-made stand with many refinements.

Student's Microscope, by Ross, with :—

Rackwork coarse adjustment.
 Pillar micrometer screw fine adjustment.
 Large square metal stage, vulcanite covered.
 Plain tubular understage fitting.
 Plane and concave mirrors.
 Horseshoe foot.
 Eyepieces, $\times 6$, $\times 8$.
 Objectives, Ross $2/3$ ", $1/6$ ".
 Beck $1/10$ " immersion with correction collar.
 Double nose-piece.
 Sleeve-pattern iris diaphragm.
 Polished mahogany case.

Price
Wenham Binocular Microscope, finished in bright brass, by *Smith and Beck*, with :—

Rackwork coarse adjustment.
 Nose-piece fine adjustment.
 Built-in mechanical stage.
 Compound rackwork focussing substage.
 Eyepieces, 5, two of them fitted with pointers.
 Objectives, $1\frac{1}{2}$ ", $2/3$ " and $1/5$ ", with correction collar.
 Neutral tint reflector, bull's-eye stand condenser.
 Live box, stage forceps, erecting lens, separate draw-tube for use with the instrument as a monocular.
 Achromatic condenser, with wheel of diaphragms.
 Polariser and analyser.
 Mahogany case, with accessories in separate case.

Price
Microscope, by Crouch. Best Research Model, all-bright finish, with :—

Rackwork coarse adjustment.
 Micrometer screw pillar fine adjustment.
 Body with rackwork draw-tube, 160-mm. tube length.
 Built-in mechanical stage with rotation through 270°, rotation fully divided, centring screws to rotation.
 Rackwork focussing substage with centring screws and with provision for moving out of the optic axis.
 Plane and concave mirrors.
 Modified tripod foot.
 Eyepieces, $\times 5$, $\times 10$, Kellner type $\times 10$.
 Polariser and analyser.
 Low-power dark-ground condenser.
 Zeiss clover-leaf triple nose-piece.

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MICROSCOPES—(contd.)

Microscope—continued.	£ s. d.
Abbe illuminator in substage mount.	
Objectives, 1", no name of maker.	
4/10", no name of maker.	
1/6" Swift.	
Case.	
Price .. . . . .	. . . . . 25 0 0
A unique opportunity to obtain a really fine stand.	
Microscope , by <i>Crouch</i> , with :—	
Wenham binocular body convertible into a monocular by dis- placement of the prism.	
Rackwork interpupillary adjustment to eyepieces.	
Rackwork coarse adjustment.	
Differential fine adjustment controlled from below the limb.	
Built-in mechanical stage.	
Compound rack focussing substage, with centring screws acting on dove-tails.	
Plane and concave mirrors.	
Modified tripod foot.	
Two pairs of best capped pattern eyepieces.	
Objectives, 2" <i>Crouch</i> .	
1" <i>Crouch</i> .	
1/8" <i>Ross</i> .	
Double nose-piece.	
Achromatised condenser, with wheel of dark-ground stops.	
The whole complete in polished mahogany case.	
In excellent condition.	
Price .. . . . .	. . . . . 15 0 0
Student's Microscope , by <i>Crouch</i> , with :—	
Rackwork coarse adjustment.	
Pillar micrometer screw fine adjustment.	
Square metal ebonite-covered plain stage.	
Spiral focussing screw underfitting.	
Modified tripod foot.	
Eyepieces, $\times 6$, $\times 10$.	
Objectives, 2/3", 1/6".	
Double nose-piece.	
Mahogany case.	
Price .. . . . .	. . . . . 5 10 0
Student's Microscope , by <i>Crouch</i> , with :—	
Sliding body coarse adjustment.	
Pillar micrometer screw fine adjustment.	
Square metal plain stage.	
Wheel of diaphragms.	
Concave mirror.	
Modified tripod foot.	
Two eyepieces, $\times 6$, $\times 10$.	
Objectives, 2/3", 1/6".	
Double nose-piece.	
Price .. . . . .	. . . . . 3 10 0
"Society of Arts" Pattern Microscope , with :—	
Rackwork coarse adjustment.	
Micrometer screw fine adjustment.	
Square stage, with spring clips and revolving diaphragm.	
No. 2 eyepiece.	
Triple dividing objective, 1", $\frac{1}{2}$ " and $\frac{1}{4}$ ".	
Concave mirror.	
Live cage, stage and hand forceps.	
Mahogany case.	
Price .. . . . .	. . . . . 4 10 0

MICROSCOPES—(contd.)

PETROLOGICAL MICROSCOPES

PHOTOMICROGRAPHIC CAMERAS and PROJECTION APPARATUS

Photomicrographic Camera, by Zeiss, eyepiece type, for roll films, £ s. d.
with extension body to carry 9 x 12 cm. plates or film pack, one
metal dark slide and one film-pack adapter 18 0 0

Gordon's Photomicro. Camera, by Beck 3 0 0

Universal Projection Apparatus, for :—

1.—Microscopic objects under high, magnifications

- 1.—Microscopic objects under high, medium, and low magnifications.
- 2.—Lantern slides.
- 3.—Small opaque objects.

The apparatus consists of a "Service" Microscope with rackwork coarse and vertical lever fine adjustments, with sliding drawtube, "Service" pattern attachable mechanical stage, compound rack substage with centring screws, dustproof triple nose-piece, with 1", $\frac{1}{2}$ " and $\frac{1}{4}$ " Parachromatic objectives, eyepieces $\times 6$ and $\times 10$. The microscope is mounted in a horizontal position, on saddle fittings on a triangular bar.

The accessories for transparent and opaque projection are as follows:—

Large cooling trough.

Double lantern-slide holder.

Auxiliary condenser.

2" diameter lantern-slide projection lens, in rack focussing mount with adjustable reflex mirror.

Adjustable platform for small opaque objects.

3" diameter projection lens for opaque objects.
10-amp. arc lamp, with mechanical adjustments, housed in metal lantern body, with 8 $\frac{1}{2}$ diameter compound lantern condenser.
The illumination for all three methods of projection is by means of

The illumination for all three methods of projection is by means of the 10-amp. arc lamp and the change over from one to the other is extremely quick and simple. The apparatus is mounted on an adjustable cast-iron stand.

The apparatus is mounted on an adjustable cast-iron stand.

Price 50 0 0

Baker School Micro-projector, complete with Nature Microscope,
spare focussing sleeve, projection lens, etc... 7 10 0

Projection Lantern, suitable for a science laboratory, consisting of an adjustable baseboard, having metal mounting thereon, body of lantern is made of mahogany; there is a cooling trough and alternative illuminants, consisting of arc lamp (without resistance), high-wattage electric lamp and reflector, adjustable condenser, wide-aperture lantern projection lens, microscope body with revolving fitting for three eyepieces, dustproof triple nose-piece, built-in iris diaphragm with fine adjustment, and separate saddle carrying mechanical stage 10 0 0

Edinger Apparatus, by Leitz, for projection drawing, and micro-projection, complete with stand, arc lamp, etc. 10 0 0

Metal Microscope Floor Stand, by Ogilvy. Consisting of Watson-Conrady illuminating system for visual work, a triangular bar and metal table, mounted on heavy metal tripod foot. The triangular bar carries five saddles, the first of which holds a cylindrical metal lamp-housing, suitable for a ribbon filament lamp. This housing is fitted with an iris diaphragm, and can be moved either in a vertical or a horizontal direction by means of rack and pinion. The second saddle holds a Watson-Conrady Aplanatic-Achromatic

PHOTOMICROGRAPHIC CAMERAS and PROJECTION APPARATUS—(contd.)

Metal Microscope Floor Stand—continued.

condensing system in a centring mount, and is fitted with an iris diaphragm, while the third saddle carries a filter-holder for three filters, each of which can be brought into the optic axis by a sliding motion of the attachment. The fourth saddle holds a bi-concave parallelising lens in a centring mount, and this mount is fitted with an iris diaphragm. The last saddle is empty, and is supplied as an extra, should it be needed. The metal table is made to accommodate the microscope and the whole system can be raised and lowered as desired, by chain gear, and can be clamped into position. In addition to this, the triangular bar can be set at any angle through a radial movement, and clamped. Offered for the special price of 37 10 0

£ s. d.

OBJECTIVES

Immersion

2 mm.	ZEISS.					
3 mm.	Apochromatic	2 mm. N.A. 1.30, tube length 250 mm.	..	..	10	0
		2 mm. N.A. 1.30, " 160 mm.	..	..	10	10
		3 mm. N.A. 1.40, " 250 mm.	..	..	14	10
	WATSON.					
	Holoscopic	2 mm. N.A. 1.37, tube length 160 mm.	..	..	7	10
		2 mm. N.A. 1.37, " 200 mm.	..	..	7	10
	REICHERT.	1/15" Homo-immersion	..	..	3	10
	BECK.	2 mm.	..	..	4	0
	KORISTKA.	1/15" N.A. 1.30	..	..	4	0
	SWIFT.	1/12" N.A. 1.30	..	..	3	10
	BAUSCH & LOMB.	1/12"	..	..	3	0
	POWELL & LEALAND.					
	Apochromatic	1/12" N.A. 1.40, with correction collar	..	..	3	10
	WINKEL-ZEISS.					
		1.8 mm. N.A. 1.30	..	..	4	0
	LEITZ.	1/16" N.A. 1.30	..	..	4	0
	SPENCER LENS CO.					
		1.8 mm. N.A. 1.25	..	..	3	10
	NO NAME.	1/12" N.A. 1.30, of Continental manufacture	..	..	3	10
	WINKEL.	1.8 mm. N.A. 1.30	..	..	3	10
	CROUCH.	1/12" N.A. 1.30, tube length 170 mm	..	..	3	0
	SWIFT.	1/8" water-immersion, with correction collar	..	..	1	10

Dry

3 mm.	ZEISS.	3 mm. N.A. 0.95, tube length 250 mm., with correction collar	..	..	10	0	0
1/2"		E, 2.9 mm. N.A. 0.90	..	..	2	10	0
	WATSON.						
	Apochromatic	3 mm. N.A. 0.95, tube length 200 mm.	..	..	7	0	0
	BECK.	3 mm.	..	..	2	0	0
	LEITZ.	No. 8	..	..	2	0	0
	REICHERT.	No. 7a	..	..	2	0	0

OBJECTIVES—(contd.)

					£	s.	d.
4 mm.	WATSON.						
1/2"	Holoscopic	4 mm. N.A. 0.95, tube-length 250 mm.	..	..	4	0	0
		4 mm. N.A. 0.95, " " 180 mm.	..	..	4	0	0
		4 mm. N.A. 0.90, " " 250 mm.	..	..	3	10	0
	Parachromatic	1/6" 0.87 ..	..	..	1	15	0
		1/6" 0.74 ..	..	..	2	5	0
	Argus	1/6" 0.65 ..	..	..	1	15	0
	ZEISS.						
	Apochromatic	4 mm. N.A. 0.95, correction collar, tube length 250 mm.	..	..	6	0	0
	ZEISS.	D, very early pattern ..	..	..	1	5	0
	ROSS.	1/6" ..	..	..	1	10	0
6 mm.	WATSON.						
1/4"	Holoscopic	6 mm. N.A. 0.95, tube length 160 mm.	..	..	3	15	0
	SWIFT.	1/4" early pattern ..	..	..	1	5	0
	ZEISS.						
	Apochromatic	6 mm. N.A. 0.95, tube-length 250 mm., with correction collar ..	..	..	5	0	0
8 mm.	LEITZ.						
1/2"	Apochromatic	8 mm. N.A. 0.65 ..	..	..	5	0	0
	ZEISS.						
	Apochromatic	8 mm. N.A. 0.65, tube length 250 mm.	..	..	5	10	0
	ZEISS.	C, very early pattern, no box ..	..	..	1	0	0
12 mm.	ZEISS.						
1/2"	Apochromatic	12 mm. N.A. 0.65, tube length 250 mm.	..	..	5	10	0
		12 mm. N.A. 0.65, with built-in iris diaphragm. (The objective is not engraved with maker's name, etc., but is quite obviously by Zeiss ..	..	..	5	0	0
		" B " ..	..	..	1	5	0
	NEGRETTI & ZAMBRA.						
		1/2" ..	..	..	0	15	0
	BAKER.	1/2", early pattern, with correction collar ..	..	..	0	17	6
	SEIBERT.	No. 4, 1/2" ..	..	..	1	5	0
16 mm.	REICHERT.						
1/2"	Apochromatic	16 mm. N.A. 0.30, tube length 160 mm.	..	..	4	0	0
	WATSON.						
	Holoscopic	16 mm. N.A. 0.45, tube length 160 mm.	..	..	3	10	0
	WANDS.	2/3" ..	..	..	0	13	6
	ZEISS.	A, very early pattern, no box ..	..	..	0	12	6
	ROSS.	1" ..	..	..	0	10	0
Low Powers	REICHERT.	1b variable ..	..	..	1	2	6
	ZEISS.						
	Achromatic	36 mm. ..	..	..	1	10	0
	MOGINE.	2" ..	..	..	0	17	6
	WATSON.						
	Wands	2" ..	..	..	0	10	0
	BAKER.	3" ..	..	..	1	5	0
	WATSON.						
	Parachromatic	3" ..	..	..	1	5	0
	WRAY.	4" ..	..	..	0	15	0
		5" ..	..	..	0	15	0

EYEPieces

	£	s.	d.
Porro Prism Erector, with special securing clamp for use on dissecting microscope, standard size fitting	2	5	0
Binocular Stereoscopic Eyepiece for low powers, by Reichert, with one pair No. 5 eyepieces, in case	5	10	0
Binocular Stereoscopic Eyepiece for low powers, by Reichert, with two pairs eyepieces, Nos. 2 and 5, in case	6	0	0
WATSON.			
Penfold Design Angle Eyepiece, double prism system, giving inclination at all angles to the optic axis of the microscope from vertical to horizontal. New price £5 10s. Offered for	3	5	0
Will carry standard student size eyepieces and fit standard student size tubes.			
Holoscopic. Best capped, 1.27" X 5	1	10	0
" " " " " "	1	10	0
" " " " " " X 10	1	10	0
" " " " " " X 14	1	10	0
" " " " " " X 20	1	10	0
" " " " " " .9173" X 7 and X 10, each	1	0	0
Compensating .9173" X 4	0	17	6
" " " " " X 6	0	17	6
" " " " " X 8	0	17	6
Huygenian, Capped 1.27" X 5	0	15	0
" " " " " X 6	0	15	0
" " " " " X 8	0	15	0
" " " " " X 10	0	15	0
" " " " " X 12" X 4	0	15	0
" " " " " X 6	0	15	0
" " " " " X 8	0	15	0
" " " " " X 10	0	15	0
ZEISS.			
Compensating .9173 size, X 4, X 6, X 8 and X 18, each	1	0	0
" " " " " X 12" size, X 18	1	5	0
Homal IV f=20 mm., for Photomicrography	1	5	0
Homal III f=20 mm., "	1	5	0
Odd Compensating .9173" X 7	0	17	6
WATSON.			
Eyepiece Analyser, for Petrology, 1.27"	3	0	0
" " " " .9173"	2	15	0
RAMSDEN.			
Micrometer, Ramsden, screw type, 1.27", in aluminium	4	0	0
Micrometer, Ramsden, screw type, by Ross, in brass, .9173"	3	10	0
Ramsden Eyepiece X 6, by Zeiss, 1.32" size	0	15	0
Micrometer, No. 3 X 8, by Zeiss, .9173" size	0	10	6
" " " " No. 4 X 8, " .9173" size	0	10	6
Projection X 4, 1.27" size	1	5	0
LEITZ.			
One pair A5 Eyepieces, for Leitz low-power binocular magnifier, per pair	1	15	0

Substage Condensers and Mounts

	£	s.	d.
Achromatic Condenser, by Beck, in centring mount, with wheel of diaphragms and wheel of daylight blue filters	3	10	0
Abbe Illuminator in substage mounting, with iris diaphragm (make unknown)	1	10	0
Nelson Dark-ground Oil-immersion Condenser, in substage mount, complete with centring screws	2	0	0
Nelson Cassegrain Condenser, No. 2, optical part	2	0	0

Substage Condensers and Mounts—(contd.)

		£	s.	d.
		0	10	0
Spot Lens	.. . . . .		
Plain Underfitting, with provision for swinging-out of the optic axis, suitable for early type "Service" microscope	.. . . . .	0	7	6
Sleeve Iris Mount	.. . . . .	0	7	6
Mica-Selenite Stage, suitable for Swift microscope	.. . . . .	1	15	0
Wratten Filter, No. 78, blue, for Leitz condenser	.. . . . .	0	4	0
Wratten Filter, No. 44, blue-green, for Leitz condenser	.. . . . .	0	4	0
Koristka Catoptric Ultra-Microscope Condenser	.. . . . .	4	0	0
Holos. Immersion Paraboloid, optical part	.. . . . .	1	10	0
Beck Achromatic Condenser, 7 mm., optical part only, R.M.S. thread	.. . . . .	3	10	0
Ross Selenite Mount, to fit standard substage	.. . . . .	1	5	0

ILLUMINATING APPARATUS

Stand Condensers, Lamps, etc.

MICROTOMES

Cathcart-Darlaston Microtome, for freezing and embedding ..	3	10	0
Cole's Pattern Section Knife, with steel handle ..	0	5	0
Strop, leather on handle ..	0	1	6
Cole's Pattern Hand Microtome, for clamping to table ..	1	5	0
Hand-type Microtome, in heavy brass mounting, in case ..	0	12	6
Schanze Microtome, sledge type, with wax holder and freezing attachments, with two large knives, in case ..	8	10	0
Section Cutter, by R. & J. Beck, for embedded or frozen material, with glass plates ..	1	10	0
Jung-Thoma Microtome and knife ..	4	10	0
Simple Stand Section Cutter ..	0	5	0

SUNDRY APPARATUS

		£	s.	d.
Mechanical Stage from "H" Edinburgh Student's Microscope	..	8	10	0
Saddle fitting for triangular bar	.. .. .. .. ..	0	10	0
Table Board, covered green baize, to take Microscope and Lamp	..	0	10	0
Double Nose-piece, dustproof type	.. .. .. .. ..	0	15	0
Double Nose-piece, figure-eight type	.. .. .. .. ..	0	8	0
Sloan Objective Changer and 2 holders, by Beck	.. .. .. ..	1	5	0
Three Sloan Objective-holders, by Beck, in case	.. .. .. ..	1	0	0
Colorimeter, Duboscq type, internal illumination, complete with one pair brackets, double rackwork scales and reading mirror. New.				
No name of maker	.. .. .. .. ..	18	10	0
Thoma-Zeiss Hæmacytometer	.. .. .. .. ..	1	0	0
Sahli Hæmaglobinometer	.. .. .. .. ..	1	0	0
Abbe Camera Lucida, by Watson, to fit 1.27" size tube	.. .. .. ..	3	0	0
Zeiss Drawing Prism to fit over eyepiece	.. .. .. ..	1	0	0
Apparatus for demonstrating polarisation phenomena, exhibited by glass under stress, consisting of : stressing clamp, 2 blocks of glass in wooden frames, and 4 other blocks of glass. With this apparatus, demonstrations of polarised light can be obtained and shows phenomena similar to those of the Coker Torsion outfit	.. .. .. ..	2	15	0
Drawing Table, for use with Abbe camera lucida	.. .. .. ..	0	17	6
Sliding Bar, suitable for stage 9.2 cm. square	.. .. .. ..	0	15	0
Pair of Metal Tuning Forks, on wooden stands, with mallet for sound resonance experiments	.. .. .. .. ..	0	10	0
Beale type Camera Lucida, mounted in cap, to fit over capped eyepiece	.. .. .. .. ..	0	3	6
Drawing Prism, by Baker, to fit over eyepiece	.. .. .. .. ..	0	17	6
Beale type Camera Lucida, but with prism instead of neutral tint disc	.. .. .. .. ..	1	0	0
Brass Syringe, by Beck, in case	.. .. .. .. ..	0	15	0
Glass Specimen Jar, with glass stopper, 4" x 2 $\frac{3}{4}$"	.. .. .. .. ..	0	1	6
Glass Jar, with glass stopper and dipper, 5" x 1 $\frac{3}{4}$"	.. .. .. .. ..	0	1	6
Cross Line Disc, for eyepiece	.. .. .. .. ..	0	3	6
5-cm. Scale, divided to .5 mm., on 3 x 1"	.. .. .. .. ..	0	5	0
Stage Micrometer, on 3 x 1" slip, divided to 1/100th and 1/1,000th of an inch	.. .. .. .. ..	0	5	0
Maltwood Finder, by Beck	.. .. .. .. ..	0	4	0
Mahogany Cabinet, to hold 1,350 slides in 30 drawers, each drawer containing 45 specimens in 3 rows, drawers of wood with wooden cases. The cabinet is mounted on a plinth, and has a glass front, lock and key. There is an additional extra deep drawer for apparatus	.. .. .. .. ..	15	0	0
Mahogany Cabinet, to hold 1,008 slides in 21 trays, glass front, lock and key (carriage 2s. 6d. extra)	.. .. .. .. ..	3	10	0
Hand Centrifuge, with 2 buckets and table clamp	.. .. .. .. ..	1	5	0
Davis Shutter	.. .. .. .. ..	0	14	6
Travis Expanding Stop, Abbe size, in brass box	.. .. .. .. ..	0	14	6
One Gram Grubler's Ponceau Stain	.. .. .. .. ..	0	1	0
Pocket Magnifier, in folding metal mount, Platyscopic x 8	.. .. .. ..	0	8	6
Pocket Magnifier, in folding metal mount, $\frac{3}{4}$ " diameter, doublet lens, x 10	.. .. .. .. ..	0	7	6
Ditto, x 12	.. .. .. .. ..	0	8	9
Coddington Lenses, in metal mounts with handles, in three diameters, $\frac{3}{4}$ ", 1", $\frac{5}{8}$"	.. .. .. .. .. each	0	6	0

SUNDRY APPARATUS—(*contd.*)

	£	s.	d.
Akehurst Pond-life Tank, rectangular shape, for use with Greenough Microscope and water-immersion objective	1	0	0
Chrome Loop, in glass handle, for bacteria	0	8	6
Metal Box, for carrying blood smears on 3" x 1" slips	0	3	6
Hypodermic Syringe, India Office pattern, 1 c.c., in hinged nickel-plated metal case, complete with 2 platinum-iridium needles, made in glass	1	1	0
Sykes' Hydrometer, solid turned brass float, Bates' metal weights, ivory thermometer, complete in mahogany case	2	0	0
Morton Non-luminous Ophthalmoscope, with full set of lenses and 3 mirrors, complete with condensing lens and colour test handle, in case	1	10	0
Couper's Non-luminous Ophthalmoscope, full set of lenses, 2 mirrors, in case	1	5	0
Desk Barometers , with thermometers of unique design in chromium. Each	0	18	6
Wall Barometers , modern design, excellent instruments. Each ..	1	10	0
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Minifex . The smallest precision camera in the world, weight 5 oz., length 3½", width 2", thickness 1½". Takes film, 36 exposures, Compur shutter with delayed action, f/3.5 Trioplan lens. New ..	5	0	0
9 x 12 cm. Folding Focal-plane Camera , Dynar f/6 lens, 12 single slides, leather case. Good condition. Worth double	5	10	0
6½ x 4½ Sanderson Camera , field type, 1 slide	2	0	0
Combination Set , consisting of clock and aneroid barometer, each 12" face, recording barograph, and Sixes maximum and minimum thermometer, in ebonised wood case, measuring 24" wide, 12" high, and 6" deep. This is of early manufacture, is accurate in working, and forms an attractive piece of furniture	12	0	0
Browning Spectroscope, with focussing adjustment to eye-lens, glass cover to slit, giving a very fine broad spectrum	2	10	0
Browning Spectroscope, with adjustable slit and comparison prism, with wave-length scale. It can be mounted for use with the Microscope Ashe-Finlayson Comparascope, by R. & J. Beck, with instructions ..	1	10	0
	2	0	0

BOOKS

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Schmidt's Atlas of the Diatomaceæ, Parts 1 to 42 and Part 45, each part containing the full complement of plates. In good condition	25	0	0
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BOOKS—(contd.)

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OTHER BOOKS AVAILABLE

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The second portion of the volume is occupied with a catalogue and illustrations of the instruments in the possession of the Royal Microscopical Society, together with a bibliography of the original authorities to be found in the library of that Society.

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This book was written in 1921 as an introductory work on the subject, in an endeavour to include only information needed for the actual working conditions and to express that information as free from technicality as possible. It is divided into eight chapters: (1) Lenses and the Origin of the Microscope, (2) The Simple Microscope, (3) The Compound Microscope, (4) The Optical System of the Microscope, (5) The Substage Condenser, (6) How to Use the Microscope, (7) Preparation and Mounting of Micro Objects, (8) Photography with the Microscope. Originally published at 5s. 6d., it is offered for **2s. 0d.**

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