CATALOGUE

OF

ACHROMATIC MICROSCOPES, &c.

MANUFACTURED BY

SMITH & BECK,

TO WHOM THE COUNCIL MEDAL OF THE EXHIBITION OF 1851 WAS AWARDED
"FOR THE EXCELLENCE OF THEIR MICROSCOPES,"

6, COLEMAN STREET, LONDON.

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MAY, 1852.

PRICES OF SMITH & BECK'S

ACHROMATIC MICROSCOPES,

EXCLUSIVE OF OBJECT GLASSES AND APPARATUS.

		£	s.	d.
No. 1.	Improved large Microscope, with limb continued under the stage, and cylinder with rackwork, for applying all illuminating apparatus with greater ease and accuracy, mounted on two pillars and cones, with revolving base to tripod; body with quick and slow motions, graduated sliding tube, and two corrected Huyghenian eye-pieces; stage half inch thick, with vertical and horizontal actions (given by rackwork and screw, or lever), sliding and revolving planes and spring clamping piece; diaphragm with revolving and removable fittings; large plane and concave mirrors, with lengthening arm; pliers, joint and forceps, and two glass plates	21	0	0
	Upright Honduras Mahogany Case for ditto, with one box for apparatus	2	10	0
	Ditto, with two boxes	3	3	0
	Solid Spanish ditto, with one box	3	10	0
	Ditto, with two boxes	4	10	0
	Solid Spanish Mahogany Case for ditto, with box for apparatus, 58 drawers for 1248 objects, with numbered knobs and porcelains, one sliding and two folding doors, with glass panels	15	0	0
No. 2.	Improved smaller Microscope, on the same principle as No. 1, but with single pillar, on tripod or firm folding stand	15	15	0
	Solid flat Mahogany Case	1	10	0
	Ditto ditto with drawer	1	15	0
No. 3.	Large Microscope, similar to No. 1, but without limb and cylinder under stage	16	16	0
	Cases the same as for No. 1.			
No. 4.	Smaller Microscope, similar to No. 2, but without limb and cylinder under stage	12	12	0
	Cases the same as for No. 2.			
No. 5.	Best Student's Microscope, with uprights and joints, complete actions, one eye-piece, and case	9	9	0
No. 6.	The above, with plain stage, consisting of sliding piece and clamping spring, one eye-piece, other actions as above, and case	6	6	0
No. 7.	Smaller Student's Microscope, with actions similar to No. 6, and case	5	10	0
No. 8.	Small Microscope for Travelling, with all the actions to stage and body, two eye-pieces, double mirror, and packed in a case 10 inches by 4½ inches, and 3¼ inches deep	10	10	0
No. 9.	The above, with plain stage	7	7	0

		£	s.	d.
No. 10.	Plain Microscope for Hospital use, with quick and slow motions to body, one eye-piece, and packed in mahogany case	3	10	0

No. 11.	Dissecting Achromatic Microscope, double rackwork and limb, $\frac{3}{4}$ inch object glass, two eye-pieces, erecting glasses and case, power from 5 to 100 linear	12	12	0
No. 12.	Darwin's Improved Single Microscope, with one doublet three single lenses, and three Coddington lenses, Dissecting apparatus, complete, and packed in a case .	10	0	0

ACHROMATIC OBJECT GLASSES FOR THE MICROSCOPE.

Focal length.	Linear Magnifying Power, nearly* With Eye-Piece	N°. 1	N°. 2	N°. 3	Angle of aperture about	Price. £	s.	d.	Lieberkuhn additional.
$1\frac{1}{2}$ inch	Draw-tube closed	20	45	80					
	Add for each inch of tube drawn out	4	6	8	13 degrees	3	0	0	15s.
$\frac{2}{3}$ inch	Tube closed.....	60	105	180					
	Add for each inch of tube.....	7	12	20	27 degrees	3	3	0	11s.
$\frac{1}{10}$ inch	Tube closed.....	120	210	350					
	Add for each inch of tube.....	12	20	35	55 degrees	5	5	0	10s.
Ditto	ditto	do.	do.	do.	65 degrees	6	6	0	10s.
$\frac{1}{4}$ inch	Tube closed.....	205	360	620					
	Add for each inch of tube.....	25	35	60	70 degrees	5	5	0	6s.
$\frac{1}{5}$ inch	Tube closed.....	240	430	720					
	Add for each inch of tube.....	30	45	80	85 degrees	6	6	0	
Ditto	ditto	do.	do.	do.	100 degrees	7	7	0	
$\frac{1}{8}$ inch	Tube closed.....	450	760	1300					
	Add for each inch of tube.....	40	60	115	90 degrees	7	7	0	
Ditto	ditto	do.	do.	do.	110 degrees	8	8	0	
$\frac{1}{10}$ inch	Tube closed.....	500	920	1500					
	Add for each inch of tube.....	50	70	130	120 degrees	10	10	0	

* With the $\frac{3}{4}$ inch object glass and the erecting glasses, employing eye-pieces No. 1 and 2, the magnifying power will range from 5 to 150.

APPARATUS,

For the Microscopes No. 1 and 2.

(Of lower price, on account of their more simple adaptation to those instruments.)

	£	s.	d.
Brasswork of Achromatic Condenser, with adjustments	1	0	0
Combination of lenses for ditto, with 60° of aperture	1	10	0
Ditto ditto ditto 75° „	2	10	0
Ditto ditto ditto ditto „ with revolving diaphragm for regulating the aperture	4	0	0
Wenham's Glass Parabolic Reflector, with adjusting stop, and fittings	1	15	0
Amici's Prism for oblique light	1	10	0
Polarizing Apparatus, with selenite of one tint, and with revolving fitting	2	10	0
Darker's Series of Selenites, extra to ditto	1	5	0
Bundle of Thin Glass for polarizing by reflection or transmission	1	1	0

ADDITIONAL APPARATUS FOR THE MICROSCOPES IN GENERAL.

	£	s.	d.
Extra Eye-piece for large instruments	0	17	6
Ditto for smaller ditto	0	15	0
Ditto for Hospital ditto	0	13	0
Indicator to Eye-piece	0	5	0
Erecting Glasses, for varying power, and for dissection	1	0	0
Brasswork for Achromatic Condenser	1	10	0
Combination of Lenses for ditto from	1	10	0
Right-angled Prism	1	10	0
Nachet's Prism	0	18	0
Wenham's Glass Parabolic Reflector, with adjusting stop	1	12	6
Rackwork Fitting for ditto	2	2	0
Sliding ditto ditto	0	15	0
Bull's-eye Lens, on stand	1	1	0
Side Silver Reflector	1	1	0
Side Condenser, with ball and socket fitting	0	18	0
Ditto on stand	0	12	0
Polarizing Apparatus, with selenite	2	10	0
Darker's Selenite Stage	2	2	0
Double Image Prism, with fitting to eye-piece	0	15	0
Two ditto, ditto, with selenite, and brass plate with holes	2	2	0
Crystals to shew rings round the optic axis, and fitted to eye-piece each	0	10	6
Tourmalines from	0	10	6
Wollaston's Camera Lucida, and fittings	1	0	0
Steel Disc ditto	0	15	0
Micrometer for Stage, mounted in brass	0	10	0
Ditto ditto, unmounted	0	5	0
Ditto for Eye-piece with fittings and adjusting screw	1	0	0
Three Dark Wells, and holder	0	12	6
Compressorium	1	0	0
Wenham's ditto for Parabolic Reflector	0	7	6
Screw Live Box	0	14	6
Large Live Box	0	8	6
Small ditto	0	6	6
Large Glass Trough, with wedge and spring complete	0	8	6
Small ditto	0	5	0
Frog plate and bag	0	10	6

	£	s.	d.
Set of three Glass Tubes	0	2	6
Glass Plates, with hollows and ledges, from	0	1	6
Three-pronged Forceps and Joint	0	14	0
Usual Forceps, with joint	0	8	6
Large Brass Pliers, and smaller ditto, 0 5 0 and	0	2	6
Best Argand Lamp, with blue chimney	1	5	0
Small Camphine ditto, on improved principle	1	15	0
Iron Table, with revolving top for the Microscope	5	5	0

MICROSCOPIC OBJECTS.

Vegetable Preparations:—			
Recent: Cells, Cuticles, Ducts, Fibre, Membrane, Spores, Sporules, Tissues, Spiral and other Vessels, Hairs, Leaves, Petals, Fungi, Sections of Woods, &c. each specimen	0	1	6
Fossil: Sections of various exogenous and endogenous Woods each section	0	1	6
Slides, with two and three sections, 0 3 0 and	0	4	6
Desmidieæ and Algæ each slide	0	1	6
Diatomaceæ:—*Recent:* Several hundred varieties, including species of Campilodiscus, Cocconema, Epithemia, Navicula, Surirella, Synedra, &c.—*Fossil:* Specimens from various localities in the British Islands, Germany, Italy, North America, the East and West Indies, New Zealand, &c.	0	1	6
Spicules and Gemmules of Sponges and Gorgonias	0	1	6
Zoophites, many species	0	2	0
Shells, sections of various species	0	1	6
Echinus Spines, Sections in great variety	0	1	6
Entomological Preparations:—			
Antennæ, Eyes, Feet, Hairs, Scales. Skins, Spiracles, Stings, Stomachs, Tongues, Tracheæ, Wings, &c. Specimens of numerous Acari and Parasites	0	1	6
Hairs, Whiskers of various Animals mounted whole or in section, Quills, Feathers of Birds, &c.	0	1	6
Objects from human and other Bodies	0	1	6
Anatomical Preparations:—			
Blood Discs, Pigment Cells, Skin, Muscular Fibre, Tissues, &c. from	0	1	6
Bones:—			
Transverse and Vertical Sections of 60 or 70 Recent and Fossil Mammals, Birds, Reptiles, and Fishes each slide	0	1	6
Teeth:—			
Transverse and Vertical Sections of about 30 varieties, Recent and Fossil each	0	2	0
Injected Preparations from	0	2	6
Polariscope Objects, about 100, selected from Animal, Vegetable, and Mineral Substances each	0	1	6
Mineralogical:—			
Sections of Limestones, Oolites, Flints, Agates, &c. each from	0	1	6

CABINETS FOR OBJECTS,

In which the Specimens lie flat, and with porcelain Labels to the Drawers.

Best Spanish Mahogany Cabinet, with glass panel, and to hold 1000 objects	7	0	0
Honduras ditto, without glass panel	6	6	0
Best Spanish Mahogany Cabinet, with glass panel, and to hold 750 objects	5	15	0
Honduras ditto, without glass panel	5	0	0

	£	s.	d.
Best Spanish Mahogany Cabinet, with glass panel, and to hold 500 objects	4	4	0
Honduras ditto, without glass panel	3	10	0

Cabinets made to any size, and of every description.

Cardboard Boxes, to hold two dozen objects — each	0	1	0
Ditto ditto one dozen ditto — „	0	0	9
Ditto ditto half dozen ditto — „	0	0	6
Single Mahogany Racks, for objects — per foot	0	0	6
Double ditto ditto — „	0	1	0

INSTRUMENTS USED IN PREPARING OBJECTS.

Wood-cutting Machine, with knife	1	1	0
Instrument for Cutting Circles of thin Glass	1	5	0
Diamond for Cutting thin Glass	0	15	0
Ditto for plate and window Glass	0	12	0
Ditto for Writing — 5s. 6d. &	0	7	6
Instrument for Making Cells of gold size and other fluids	0	7	6
Page's Wooden Forceps, for holding the glass slides when warmed	0	5	0
Quekett's Forceps for deep jars	0	7	6
Iron-work of Dredge, for deep water fishing	1	5	0
Small collecting Bottles — per doz. 1s. 6d. to	0	3	0
Small Dissecting Knives — each	0	3	0
Valentine's Knife, for making sections of soft substances	0	15	0

Spring Scissors, 7s. 6d.; Curved ditto, 5s.; Straight ditto, 3s.
Needle Holders, 5s.; Hooks, 2s. 6d.; Points, 1s. 6d.
Cutting Forceps, 5s. 6d.; Spring ditto, 3s.

Combination of Lenses, mounted in tortoiseshell, for pocket hand magnifiers	0	10	6
Ditto, with small brass stand	0	18	0
Coddington Lenses, in various mountings — from	0	6	6

MATERIALS USED IN MOUNTING OBJECTS.

Canada Balsam, Asphalt, Gold Size, Glycerine, &c. 1s. and 2s. bottles.
Thin-Glass, in circles, 6s. per oz.; in squares, 4s. per oz.; ditto, mixed, 5s.
Plate-glass Slips, 3 inches by 1 inch, with ground edges, 1s. per dozen.
Glass Cells, square, round, oblong, oval, and with solid bottoms, 2s. 6d. and 3s. per dozen.
Labels for covering objects, 3s. per hundred.

WOODWARD'S TABLE AND HYDRO-OXYGEN

POLARISCOPE AND MICROSCOPE.

	£	s.	d.
Woodward's Table Polariscope and Microscope, with polarizing bundle, black glass, silvered reflector, and ground glass shade; large stage, with complete fittings, and two powers with rackwork motions, smaller stage for crystals; and box as stand, with complete fittings for apparatus	10	0	0
The above fitted as a Hydro-Oxygen Apparatus, with lantern, safety jet, bladders, and pressure boards; the Polariscope and Microscope Condensers, and an eye-lens to adapt to the lowest power — extra	15	0	0
Clock for the Movement of Lime Cylinder	4	4	0
Lime Cylinders — per dozen	0	3	6
Tourmalines for the above instrument — from	1	0	0

SELENITE OBJECTS.

	£ s. d.	£ s. d.
Gothic Window, in imitation of stained glas	from 1 0 0	to 10 0 0
Parrot, Pheasant, or Peacock	„ 0 15 0	to 6 0 0
Bird of Paradise	„ 2 10 0	to 4 0 0
Jem Crow, Changeable Lady, Casper, Harlequin, or Robin Hood	„ 1 0 0	to 2 0 0
Miller turned Sweep, or Bunch of Grapes	„ 0 15 0	to 1 0 0
Chameleon	„ 0 7 6	to 0 15 0
Butterfly or Heartsease		0 10 0
Shamrock, motto "Erin-go-bragh;" or Thistle, motto "Dinna forget"		0 7 6
The Flower Forget-me-not, motto "Forget-me-not"		0 10 0
Flag (Iris) or Rose		0 7 6
Tulip, or Rosette		0 5 0
Uneven tints of Selenite, 1s.; Even ditto, 5s.		
Single wedges, 5s.; double ditto, 7s. 6d.		
Rings (Newton's)	from 0 5 0	to 0 7 6
Crosses and Discs of various colors for superposing		0 10 0
Crystals cut to show rings round the optic axis, in sets of six	from 0 18 0	to 3 0 0
Glass, Quartz, and other Prisms; together with all matters relating to Polarization.		
Butterflies, Insects, and parts of ditto, Ferns, Mosses, Sections of Woods, &c. for the Microscope	from 0 1 6	to 0 5 0

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