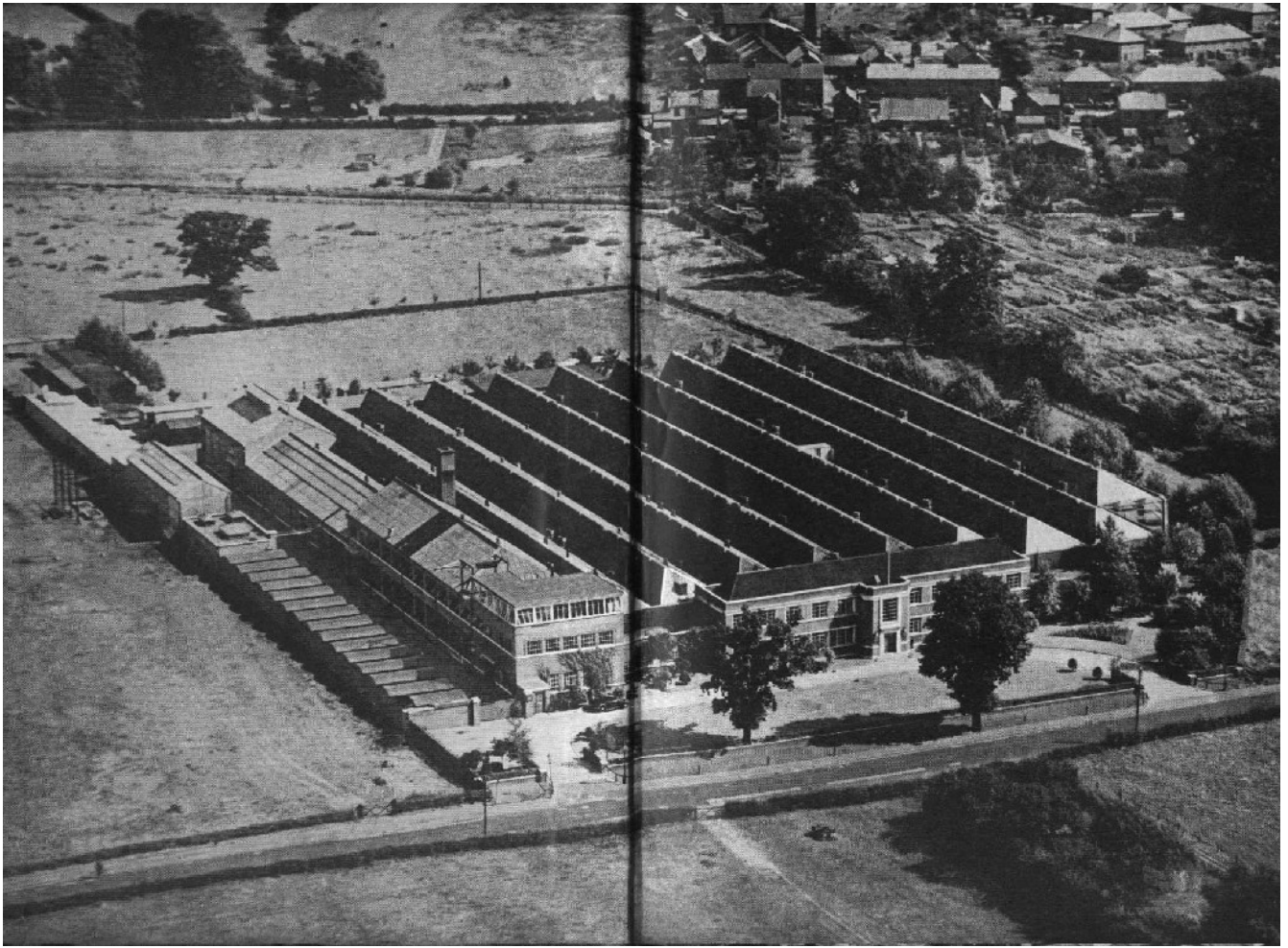


A representative selection of Microscopes may be inspected at the Company's offices at York, at Broadway Court, Westminster, at 21 St. Paul's Square, Birmingham, and at Messrs. Hawksley & Sons, Ltd., 17 New Cavendish Street, London, W.1.

and in South Africa

at the Company's offices at Johannesburg and Cape Town.

Photographs of instruments, or printing blocks when available, will be supplied gladly to authors or publishers of text books or articles for the technical press.

As designs are constantly subject to revision the illustrations herein may not be correct in every detail.

COOKE MICROSCOPES

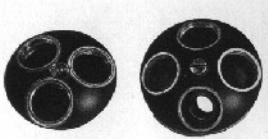
DEVELOPED AND MANUFACTURED BY

Cooke Troughton & Simms LTD

York, London, Birmingham, Cape Town and Johannesburg.

Publication No. CM1000A

OBJECTIVE CHANGING DEVICES



M1313 M1314

A revolving objective changer is included with each of the optical outfits listed on page 100 except K and L, but when a special selection of optical equipment is made it is necessary to order the appropriate changer.

Revolving objective changers sent out with complete sets of objectives are adjusted in order that there may be focal parity between the objectives and also accurate centration. Other objectives may, of course, be used in such changers, but it is unlikely that they will be found to be in focal agreement with those of the set. The adjustment of such objectives will be undertaken by us if they are sent together with the changer to the factory.

The changer is marked either 16, 4, 2, corresponding to the focal lengths of the objectives, or 1, 2, 3, or 1, 2, 3, 4, as the case may be, the objective of the lowest power being inserted in 1, the next in 2, and so forth.

M1311 **Extension tube** for use when no changer is employed, screwed with R.M.S. thread.

M1313 **Triple revolving changer,** screwed with R.M.S. thread.

M1314 **Quadruple revolving changer,** screwed with R.M.S. thread

OBJECTIVES

The details of the achromatic, fluorite and apochromatic objectives available are given in the table on page 106. Any desired combination of objectives can, of course, be supplied with each of the instruments, but for convenience of clients various suggested groups of optical components which are commonly employed are tabulated on page 100, together with the approximate ranges of magnification covered by each group. When ordering, it is sufficient to add the letter denoting the set required to the code number of the microscope, viz: M1110C; the code number alone does not include objectives, objective changer, eyepieces or condenser.

All objectives are suitable for use on any of the four types of stands and are screwed with the standard R.M.S. thread, with the exception of M522, M1481 and M1486 which are designed for use with a catoptric condenser and are illustrated on page 107.

The objectives other than those just referred to are computed for use at an effective tube length of 160 mm., which is the mechanical tube length of stands of the M1000 series (including the objective changer). When, however, the eyepiece is of the inclined type, including M1302 on stand M1000, the mechanical tube length becomes 210 mm. and a corrector lens is incorporated in the body to reduce the effective tube length to 160 mm. The consequence of this is that all inclined bodies possess a magnification factor of 1·5× and this also applies to the binocular attachment M1305.

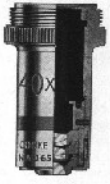
The achromatic objectives M1419, M1421 and M1423 and the apochromatic objectives M1448 and M1451 are suitable only for use with specimens having a cover-glass, and the last mentioned is particularly sensitive to variation in cover-glass thickness, in consequence of which a correction collar is fitted to accommodate for variations from 0·15 mm. to 0·25 mm. Objectives M1419, M1421, M1423 and M1448 are corrected for use with a standard cover-glass thickness of 0·18 mm. M1423, having an exceptionally high numerical aperture, is necessarily critical in respect of variations in cover-glass thickness; the others are not sensitive to moderate variations. Objectives M1420, M1422 and M1486 have been designed for metallurgical work and are not suitable for use with covered specimens. The performance of all other objectives is unaffected by the presence or otherwise of a cover-glass.

All objectives are engraved with the initial magnification produced at 160 mm. tube length, the numerical aperture, the nominal equivalent focal length and the serial number. In order to determine the magnification produced at the eye it is necessary to multiply the initial magnification of the objective by the factor engraved on the eyepiece, and, in the case of any instrument having an inclined eyepiece, or the binocular attachment M1305,

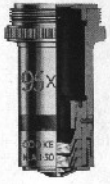
M1401
33 mm. N.A. 0·10

M1406
25 mm. N.A. 0·15

M1411
16 mm. N.A. 0·28

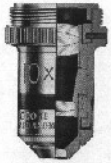


M1421
4 mm. N.A. 0·65

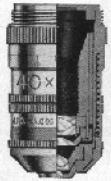


M1431
1·8 mm. N.A. 1·30

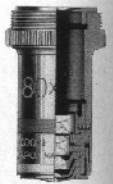
M1436
Fluorite, Immersion
3·75 mm. N.A. 0·95



M1446
Apo. 16 mm. N.A. 0·30



M1451
Apo. 4 mm. N.A. 0·95



M1456
Apo., Immersion
2·2 mm. N.A. 1·32

to multiply the result by the factor engraved upon the body, namely 1·5×, since, as explained in the previous page, the body itself contributes to the power.

In order to facilitate the recognition of objectives, and especially when mounted on the changer, the several powers are marked with a colour band, viz: 16 mm. grey, 12 mm. dark blue, 8 mm. light blue, 6 mm. dark green, 4 mm. light green, 3·75 mm. yellow, 1·8 mm. to 2·2 mm. red. The colours have been arranged in order of the spectrum, so that the colours representing the various powers may be the more easily memorised. The fluorite and apochromatic objectives are marked with a second and narrower band of black and white respectively in order that these types may be easily recognised.

The 3·75 mm. Fluorite Oil Immersion Objective

The attention of medical workers is particularly drawn to the fluorite oil immersion 3·75 mm. objective. It is the ideal lens for examining blood films for differential counts and stained films of sputum for tubercle bacilli. It has a large field, long working distance, brilliant detail owing to its high numerical aperture, and great depth of focus. It can be used for much routine bacteriological work, and if a higher power is required to verify detail it is easy to swing in the 1·8 mm. oil immersion lens and return again to the 3·75 mm. objective. This objective is very useful for high power dark-ground illumination as it requires no central stop and is easy to manipulate. Being a fluorite lens the zonal corrections are remarkably good and a much better definition is given than with an ordinary achromatic lens. Moreover, it will stand high power eyepieces and increased magnification can be obtained in this way, thus obviating the use of a 1·8 mm. for dark-ground work.

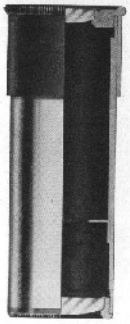
For histology the 3·75 mm. objective is particularly useful. The high numerical aperture gives a more brilliant and crisp field than the dry 4 mm. objective. Cytological details are sharply brought out, and being an oil immersion lens it is not affected by variations in coverglass thickness, as is a dry lens of equal aperture. Its great depth of focus will take in most of the thickness of a 5μ section. For search of tubercle bacilli in sections it has been regarded as unequalled.

This objective has a wide range of uses and we recommend that it finds a place on all microscopes used for medical pathological work.

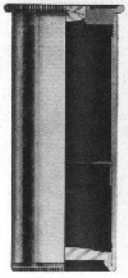
The 16 mm. Achromatic Objective for use with compensating eyepieces.

Low power achromatic objectives are not usually suitable for use with compensating eyepieces, thus, if a set of objectives consists of normal low power achromatic and high power fluorite or apochromatic objectives, it is necessary when changing the objectives also to change the type of eyepiece. A 16 mm. achromatic objective (M1412) has been designed for use with compensating eyepieces which overcomes this objection. This combination also has the merit of giving a flatter field of view than the ordinary 16 mm. objective (M1411) used with a Huyghenian eyepiece. This special objective figures in Optical Outfits G and H.

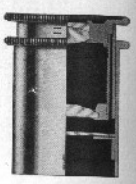
EYEPIECES



M1501
Huyghenian
4×



M1526
Compensating
6×



M1546
Kellner
15×
(showing micrometer M1581)

Three types of eyepieces are supplied, namely, Huyghenian, compensating and Kellner.

The forms most commonly employed are the Huyghenian and compensating, and both consist of two separated lenses or lens systems with a field stop mounted between, in the former the lenses are single and in the latter one or both are compound.

The Huyghenian eyepiece is generally used with low or medium power achromatic objectives, but the oblique image shows some colour fringes with the highest power objectives. The compensating eyepiece has been designed to correct the oblique chromatic errors present in all high power objectives, and it should be used with all fluorite and apochromatic objectives, and preferably with high power achromatic objectives.

All eyepieces have been designed as a series so that the optical tube length of the microscope is unaffected by a change of eyepiece power, and therefore the objective is always used under the most favourable conditions; furthermore, a change of eyepiece power does not appreciably change the focusing adjustment.

The Kellner eyepiece differs from the others in that the image plane does not lie between the components and its advantage is in connection with the use of measuring scales as referred to in the Manual on the Cooke Microscope, page 14.

Single Eyepieces	Pairs of Eyepieces	Type	Power
M1501	M1502	Huyghenian	4×
M1506	M1507	,,	6×
M1511	M1512	,,	8×
M1516	M1517	,,	10×
M1521	M1522	,,	12·5×
M1519	M1520	Compensatg.	4×
M1526	M1527	,,	6×
M1531	M1532	,,	8×
M1536	M1537	,,	10×
M1538	M1539	,,	12·5×
M1533	M1534	,,	15×
M1541	M1542	Kellner	10×

Eyepiece Micrometers

M1572 **Eyepiece Micrometer,** glass, 0·5 cm. divided in 100 parts.

M1574 **Step Micrometer.**

M1575 **Porton Globe and Circle Graticule.**

M1576 **Eyepiece Graticule,** 2 mm. square divided in 0·1 mm. squares.

M1577 **Eyepiece Graticule,** 1 cm. square divided in 0·2 mm. squares.

M1580 **Eyepiece Graticule,** 1 cm. square divided in 0·1 mm. squares with thick line every 0·5 mm.

M1581 **Eyepiece Micrometer** of glass, 1 cm. divided in 100 parts.

M1535 **Eyepiece,** compensating 10×, designed to receive micrometers or graticules in metal mounts.

M1599 Metal mount for any of the above micrometers or graticules when used with M1535.

Stage Micrometers

M1586 **Stage Micrometer** of glass, 1 mm. divided in 100 parts.

M1587 **Stage Micrometer** of glass, 1 mm. divided in 10 parts, the first 0·1 mm. divided into 0·01 mm.

M1591 As M1586 but scale ruled on metal.

M1596 **Objective Test Plate** after Abbe.

CODE No.	TYPE	NOMINAL FOCAL LENGTH in.	NOMINAL FOCAL LENGTH mm.	N.A.	INITIAL POWER	WORKING DISTANCE mm.	COLOUR BAND
*M1401	Achro. dry	1½	33	0·10	3×	43·0	—
M1406		1	25	0·15	5×	17·0	—
M1411			16	0·28	10×	5·0	grey
M1412			16	0·28	10×	4·2	grey
M1416			12	0·42	15×	1·5	dark blue
M1418			8	0·45	20×	2·2	light ,,
aM1419			6	0·65	25×	1·25	dark green
bM1420			4	0·85	40×	0·43	light ,,
aM1421			4	0·65	40×	0·71	,, ,,
bM1422			4	0·65	40×	0·83	,, ,,
aM1423			4	0·85	40×	0·37	,, ,,
M1425	Achro. water imm.	⅓	3·25	1·00	50×	0·5	pale yellow
M1426	Achro. oil imm.	1/10	1·8	1·25	95×	0·12	red
M1431		1/10	1·8	1·30	95×	0·12	,,
M1436	Fluorite oil imm.	⅙	3·75	0·95	45×	0·23	yellow & black
M1441		1/10	1·8	1·30	95×	0·12	red & black
M1446	Apo. dry		16	0·30	10×	5·0	grey & white
aM1448			8	0·65	20×	0·5	blue & white
aM1451			4	0·95	40×	See note	green & white
†M1456	Apo. oil imm.	1/10	2·2	1·32	80×	0·12	red & white
M522	Achro. dry dark ground		16	0·28	11×	4·5	for use with illuminators M1691 & M1731 only
M1481			8	0·45	22×	2·2	
bM1486			4	0·65	45×	0·7	

M1497 Small bottle of oil (supplied with each immersion lens).
M1498 8 oz bottle of immersion oil.

* This objective is not parfocal with the remainder of the range.

† The objective M1456 cannot be fitted with a funnel stop for dark ground illumination.

N.B.—Objectives marked (a) are suitable for use with covered specimens only. Those marked (b) are for use only with uncovered specimens. All other objectives may be used on covered or uncovered specimens.

It is recommended that objectives to be used with normal incident illumination should be coated (see page 5) for which an additional charge is made.

The objective M1451 has a correction collar which may be adjusted for use with cover-glasses varying in thickness between 0·15 mm. and 0·25 mm.

All the above objectives have been designed for use with a tube length of 160 mm., with the exception of M522, M1481 and M1486 which are constructed for use with the dark ground illuminators M1691 and M1731. The initial powers given above are for objectives when working at the tube length for which they have been computed.

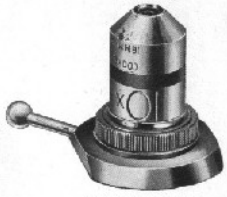
The objective M1412 has been specially designed for use with compensating eyepieces (see note page 105).

The working distance of a dry or immersion objective designed for use with covered objects is defined as the thickness of the air or liquid gap between the mount and the coverglass when the specimen is focused. A standard cover-glass of 0·18 mm. thickness is assumed. In the case of objectives corrected for use with uncovered specimens the working distance given is the distance between the mount and the specimen when the latter is focused.

The dark ground illuminator (page 121) and the universal illuminator (page 123) necessarily occupy a greater amount of the mechanical tube length of the Microscope than the objective changers or the normal incident illuminators M1651-4 (page 119), thus, if the standard objectives are attached to these units through the fitting M1659, the separation between objective and eyepiece is correspondingly increased. This is of no consequence with objectives of 12 mm. focal length or more, but the higher power objectives should be used at the tube length for which they have been designed. Objectives of 8 mm. focal length or less (except the objectives M1448 and M1451) have been so constructed that the stem may be removed and the objective mount proper is connected to the dark ground and universal illuminators by fitting M1660, which has the effect of placing the objective in its proper position with respect to the eyepiece when used on these illuminators.

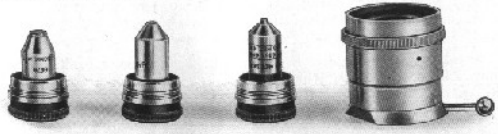
Objective with stain removed

High power objective in fitting M1660



Low power objective in fitting M1659

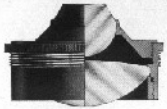
Objectives for dark ground illumination of opaque objects



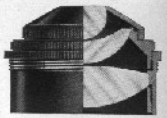
M522 M1481 M1486 Catoptric Condenser

The objectives illustrated above have been designed specially for use in conjunction with the dark ground illuminator described on page 121 and for the same purpose in the Universal Illuminator described on page 123. They are mounted within the catoptric condenser and cannot be used without one or other of these illuminators of which the catoptric condenser forms part. It is possible, however, to use these objectives with transmitted light when they are so mounted; they therefore can be employed to serve in the examination of both translucent or opaque specimens in an instrument suitably equipped.

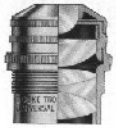
CONDENSERS



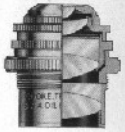
M1382
Abbe Condenser N.A. 1·20



M1383
Aplanatic Condenser N.A. 1·40



M1386
Achromatic Condenser N.A. 1·00



M1391
Achromatic oil immersion Condenser N.A. 1·30

M1398
Adaptor supplied with M1386, M1391 and M1396 for connecting to condenser mounts M1375 or M1376

M1399
Dark Ground Condenser

M1396
Dark Ground Condenser

Condensers for use with transmitted light

Condensers are not usually included with the stand, except in the case of the student's microscope and polarizing instruments, as they are regarded as being part of the optical equipment, and the choice of condenser depends upon the selection of objectives. The appropriate condenser is included with each set of optical equipment (page 100), but if objectives are ordered separately it will be necessary to state which condenser is required. It is usual to supply the Abbe condenser M1382 with achromatic objectives, though the aplanatic condenser M1383 is preferable when an immersion lens is employed.

The aplanatic condenser M1383 should be used with fluorite and apochromatic objectives, unless the more fully corrected achromatic condensers are employed. For optimum results the condenser M1386 is for use with dry objectives, and M1391 with immersion objectives. The latter may be used with dry objectives when the front lens is removed, which reduces the N.A. to 0·65.

Condensers M1382, M1383, M1395 and M1399 are arranged to screw directly into the condenser mounts M1375 or M1376 (page 117), the remainder are screwed with the standard R.M.S. thread and are each provided with adaptors (M1398) for connection with mounts M1375 and M1376, thus all condensers are interchangeable on each instrument.

The mounting of all condensers is arranged so that a stop limits the upward movement of the condenser at a point whereby the upper lens surface is just below the plane of the object stage.

The dark ground condensers can be used in conjunction with the objectives of numerical aperture up to 0·95. The most suitable objectives for this purpose are the 3.75 mm. fluorite oil immersion objective (M1436) or the 4 mm. apochromatic dry objective M1451. Any 2 mm. oil immersion objective (except M1456) can, however, be employed if a funnel stop (M1397) is used to cut down the numerical aperture to 0·95. The slide must always be in immersion contact with the condenser, and the centring condenser mount (M1376) should be used.

M1382 **Abbe type Condenser** (2-lens), N.A. 1·20.
M1383 **Aplanatic Condenser** (3-lens), N.A. 1·40.
M1386 **Achromatic Condenser,** N.A. 1·00.
M1390 **Achromatic Condenser,** long focus, N.A. 1·20.
M1391 **Achromatic Oil Immersion Condenser,** N.A. 1·30.
M1395 **Quartz Condenser** of form similar to M1382.
M1396 **Dark Ground Condenser** with adjustment for slide thickness between 0·75 mm. and 1·5 mm.
M1397 **Funnel stop** for objectives of numerical aperture above 1·00 when used with M1396 and M1399.
M1399 **Dark Ground Condenser** without adjustment for variation in thickness of slides. The condenser is adjusted for slides of 1·25 mm. thickness.

EYEPIECE TUBES
for Stands series M1000.

This stand is normally supplied with a body of fixed length (M1304). If desired, adjustable draw tubes may be substituted which permit the tube length to be varied between 150 mm. and 185 mm. They are readily interchanged and are supplied either with a ring marking the 160 mm. tube length position or graduated throughout in millimetres.

M1304

M1303

M1301

M1301* **Draw tube,** graduated
M1303* **Draw tube,** ungraduated
M1306 Allowance for fixed tube M1304

* These tubes have R.M.S. thread at the lower end to accommodate objectives of very long focal length.

INCLINED MONOCULAR FITTING
for Stands series M1000

An inclined monocular eyepiece attachment may be supplied for use with a M1000 stand already equipped with a straight tube. It is interchangeable with the straight tube, the latter being removed from the body by unscrewing the top collar of the body.

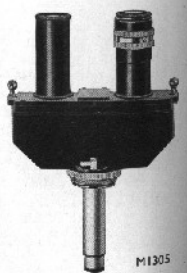
The inclined monocular attachment is mounted in a swivelling head, and for reasons explained on page 103, para. 3, itself provides a magnification factor of 1·5×.

M1302

M1302 Inclined Monocular Attachment for M1000 stands

BINOCULAR EYEPIECE ATTACHMENT
for Stands series M1000.

A straight binocular eyepiece attachment is also available for use on stand M1000. It is attached in a manner similar to that of M1302, and is provided with a graduated interocular adjustment and independent focusing to one eyepiece to accommodate for differences in the observer's eyes. The magnification factor is 1·5×. A small illustration of a microscope fitted with this attachment will be found on page 52.



M1305

M1305 Binocular Attachment for M1000 stands

N.B.—Eyepieces are not included under the code number M1305.

BODIES for Stands M2000, M3000 and M4000

Stands M2000 and M3000 may be supplied with either monocular or binocular bodies or both, all bodies being interchangeable.

They are attached to the coarse focusing element by a dovetail fitting, as shown in the illustration, and are clamped rigidly in position by the small milled screw which can be seen in the illustration on page 70.

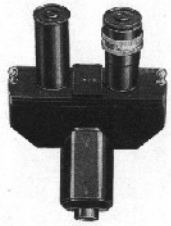
M2301

M2303

The monocular unit is fitted with a swivelling head, and the binocular unit has a graduated interocular adjustment, also one eyepiece can be independently focused.

These units possess within themselves a magnification factor of 1·5×.

A straight body tube for photographic purposes is also offered.



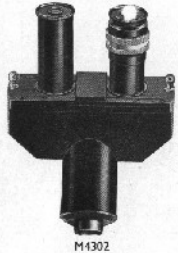
M2302

M2301 Inclined Monocular Body for Stands M2000 and M3000.

M2302 Inclined Binocular Body for Stands M2000 and M3000.

M2303 Straight Tube.

Stand M4000 is provided with a range of body equipment similar to that of Stands M2000 and M3000 described above, except that, owing to the different construction of the instrument, the connecting dovetail slide is on the opposite side of the binocular body.



M4302

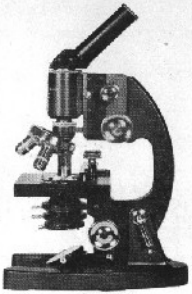
M4301 Inclined Monocular Body for Stand M4000.

M4302 Inclined Binocular Body for Stand M4000.

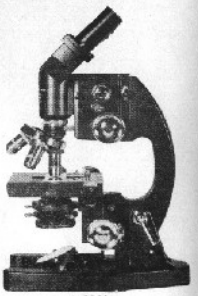
M4303 Straight Tube.

Other bodies for M2000, M3000 and M4000 are listed on pages 177 and 179.

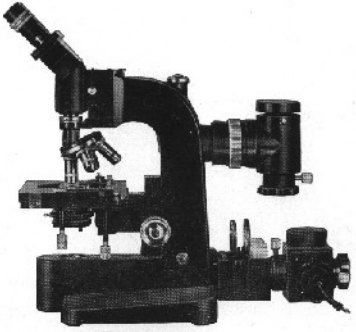
M1000 Series.



M2000 Series.



M3000 Series.



M4000 Series.

TYPES OF COOKE MICROSCOPES

COOKE MICROSCOPES

In this section of the catalogue, five distinct types of stand are described:—

M1005/1025 page 46 — A student's microscope covering the equipment necessary for elementary studies in botany and biology and for the ordinary medical curriculum.

M1000 series page 50 — A general purpose microscope, normally for monocular vision, but which may be fitted with a binocular eyepiece attachment. In addition to transparent objects, solid specimens may be examined with the aid of attachments producing normal or dark ground illumination. Two models in this range—pages 65 and 67—have been designed for use on solid objects exclusively and are provided with a vertical motion to the stage to accommodate large specimens.

M2000 series page 68 — A microscope designed for routine and research investigations in medical and general biological work. This instrument may be equipped for either monocular or binocular vision or both, and it will accommodate the normal incident or dark ground attachments for use on opaque objects.

M3000 series page 82 — This microscope follows generally the lines of the M2000 model, but its utility is widened by the provision of a vertical adjustment to the stage. Both stage and substage may be readily detached, hence a range of stages for different purposes may be provided, whilst the stage may be lowered to the foot of the microscope when the substage is removed, and consequently specimens of unusual bulk may be accommodated.
The coarse and fine focusing unit, together with the microscope body, may also be detached, and therefore may be used apart from the stand as required.

M4000 series page 92 — The universal stand provides complete equipment for visual and photographic examination of opaque and translucent specimens.

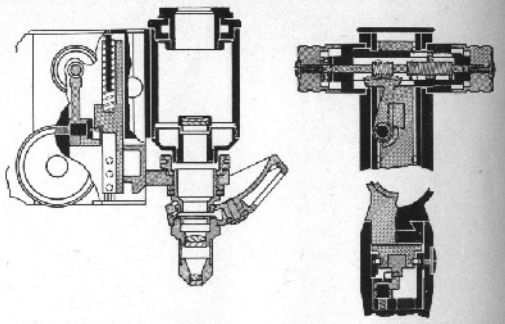
Accessories employed on the foregoing stands are detailed in the section commencing on page 100, followed by descriptions of certain specialised microscope equipment.

RESEARCH MICROSCOPE

M2000 SERIES

This stand is designed for binocular or monocular use. Both types of body are of the inclined form, the eyepieces being at an angle of 45° to the axis of the objective. The other outstanding feature of this instrument is the ball bearing fine focusing mechanism.

The Fine Focusing Motion



The fine focusing mechanism. Patent Nos. 467,926 and 525,970. The hatched portions are those which move on manipulation of the fine focusing.

The fine motion mechanism, which is of novel design, moves in ball bearings and is frictionless and "dead beat" in operation. A sector takes the place of the usual bell crank lever and carries an involute cam which imparts a uniform movement to the slide, a division of the scale thus has exactly the same value throughout the whole range of movement.

It is important that the fine motion mechanism should be relieved of all unnecessary work and of variable loads, and a new form of construction enables the bodies to be attached directly to the limb so that the focusing movement is applied only to the objective changer and objectives, thus

breaking free from the tendency to overload the fine motion mechanism with the weight of the binocular body. By this means the tube length is varied one millimetre each way, which is far too small a change to affect appreciably the performance of even the most sensitive objective.

The limits of movement of the fine motion are clearly defined by means of limit lines, and stops are fitted. The motion is so lightly loaded that accidental contact between the objectives and the slide is unlikely to do any harm to the specimen or objective.

The Coarse Focusing Motion

The coarse slide is of dovetail construction, and the rack teeth are cut obliquely, whilst the pinion is properly generated so that several teeth are simultaneously engaged resulting in smooth and regular movement. Means are provided to adjust the friction in order to prevent any tendency for the body to run down under its own weight.

The usual position of the coarse and fine motion heads are reversed. The direction of movement of both coarse and fine motions is such that the objective rises or falls with the fingers operating the heads.

The Object Stage

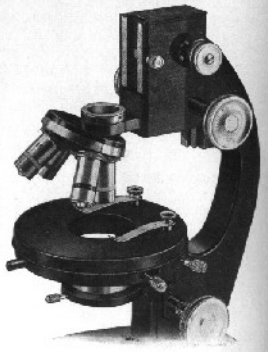
Five types are listed, covering every normal requirement. They are illustrated on the pages which follow and are described on pages 115 and 116.

The Condenser Substage

The focusing movement is operated by a rack and pinion mechanism, the unit containing this being attached to the tail of the limb. The operating head is on the left side of the instrument in accordance with established practice.

For users who desire to interchange condensers frequently there is a device whereby the whole of the condensing unit may be instantly removed and another replaced. This is described on page 117. Each type of instrument is listed alternatively with the plain cylindrical condenser mount fitting and with this device. With the former is included a non-centring condenser mount M1375, and with the latter one having a centring adjustment M1376, but as they are interchangeable either type may be supplied.

Bodies



These are of four types—monocular (M2301) and binocular (M2302), both with inclined eyepieces, a straight tube (M2303) intended for photographic purposes and a straight body for photography with an inclined visual tube (M2304). They are interchangeable and are attached to the stand by the dovetail fitting shown in the illustration, a clamp being provided to ensure rigidity

On the inclined monocular the eyepiece tube is mounted in a revolving head. The binocular is provided with a graduated interocular adjustment and the right eyepiece has an independent focusing adjustment. As explained on page 103, all normal objectives have been computed for a tube length of 160 mm., but as the mechanical tube length with the inclined eyepieces in use is 210 mm. it is necessary to introduce a corrector lens into the body which has the effect of giving it a magnification factor of 1·5×.

Optical Components

Owing to the widely differing requirements of microscopists, objectives, objective changers, eyepieces and condensers are not included in the basic equipments. The range of optical equipment offered is listed on pages 102 to 111. Selected sets of equipment are set out on page 100 and when ordering these it is sufficient to add the appropriate code letter to the number denoting the microscope required.

Sundries

An adjustably mounted plane and concave mirror with clamps for securing both movements is fitted to all models.

The finish of the instrument is in hard black enamel with the bright parts plated.

Each equipment includes a hardwood cabinet (M2642) with fittings for the reception of accessories. If desired, this item can be omitted when a corresponding reduction in price is made.

RESEARCH STAND M2000 series

SUMMARY OF EQUIPMENT OFFERED

in the following pages

CODE*	BODY (page 113)		STAGE (pages 115 to 116)		SUBSTAGE FITTING†	CONDENSER MOUNT (page 117)
M2001	M2301	Monocular	M2321	Plain, square 112 mm.	M1377	M1375
M2010	M2301	,,	,,		M1378/9	M1376
M2020	M2302	Binocular	,,		M1377	M1375
M2030	M2302	,,	,,		M1378/9	M1376
M2040	M2301	Monocular	M1331	Circular, centring & rotating 120 mm. dia.	M1377	M1375
M2050	M2301	,,	,,		M1378/9	M1376
M2060	M2302	Binocular	,,		M1377	M1375
M2070	M2302	,,	,,		M1377	M1376
M2080	M2301	Monocular	M1336	Mechanical, square 114 mm., vertical shafts	M1377	M1375
M2090	M2301	,,	,,		M1378/9	M1376
M2100	M2302	Binocular	,,		M1377	M1375
M2110	M2302	,,	,,		M1378/9	M1376
M2120	M2301	Monocular	M1341	Mechanical, square 114 mm., horizontal shafts	M1377	M1375
M2130	M2301	,,	,,		M1378/9	M1376
M2140	M2302	Binocular	,,		M1377	M1375
M2150	M2302	,,	,,		M1378/9	M1376
M2160	M2301	Monocular	M1346	Mechanical, circular 120 mm. dia. with centring	M1377	M1375
M2170	M2301	,,	,,		M1378/9	M1376
M2180	M2302	Binocular	,,		M1377	M1375
M2190	M2302	,,	,,		M1378/9	M1376

*The code numbers do not include objectives, objective changers, eyepieces or condensers. Typical optical outfits are listed on page 100, or a selection may be made from the complete lists on pages 102 to 111. If one of the outfits on page 100 is selected, it is sufficient, when ordering, to add the appropriate letter to the microscope code number.

† The substage fitting M1377 is the cylindrical type, and M1378/9 the fork and ring type.

The condenser mount M1375 is the non-centring type, and M1376 the centring type, both are illustrated on page 117. Instruments offered with M1375 may be supplied with M1376 in lieu and vice versa.

Stages

	£ s		£ s		£ s
M1321	1 4	M1331	4 4	M1346	23 2
M1326	7 16	M1336	8 6	M1351	25 6
M1327	7 -	M1337	7 16	M1360	- 4 pr
M1328	7 16	M1341	14 16		

Illuminators, Lamps. etc.

	£ s		£ s		£ s d
M1651	14 -	M1696	- 2	E848	2 12
M1652	14 14	M1698	- 10	E850	- 16
M1653	10 -	M1699	- 10	M1816	34 8
M1654	10 14	M1731	30 -	M1820	34 8
M1655	1 10	M1732	35 -	M1824	46 10
M1657	12 4	M1736	5 -	M1828	48 18
M1658	14 14	M1751	3 16	M1833	- 12
M1659	- 8	M1752	4 10	M591	2 -
M1660	- 8	M597	1 -	M592	2 -
M1661	- 4	M1763	- 8	M598	
M1662	2 10	M1764	- 8	M1845	46 14
M1663	2 10	M1765	- 4	M1849	45 14
M1691	23 -	M1792	10 14	M1804	- 16
M1692	18 -	M1793	12 4	M593	- 7 8
M1694	- 4	M1804	- 16	M594	- 8
M1695	- 4	E845	2 12		

Cameras, fixed

	£ s		£ s		£ s
M1861	11 12	M1865	13 18	M1891	1 4
M1863	27 16	M1867	29 16	M1892	1 16
				M1906	- 12

Cameras for M4000

	£ s		£ s		£ s
M1871	24 12	M4304	7 10	M559	7 10
M1873	42 16	M4305	3 16	M560	7 -
M1900	2 6	M4342	3 16	M1903	5 6
M4303	3 16	M557	8 18	M1904	4 10
				M1905	4 10

Cameras, Extensible

	£ s		£ s		£ s
M1876	33 -	M1878	51 -	M2303	3 -
				M2304	7 10

Macro Stand

	£ s		£ s		£ s
M1881	19 -	M556	9 18	M557	8 18

Macro Stand (contd.)

	£ s		£ s		£ s
M559	7 10	M1903	5 6	M1905	4 10
M560	7 -	M1904	4 10	M1910	2 10
				M1911	3 -

Vickers Projection Microscope

	£ s		£ s		£ s
M500	412 -	M533	4 10	M587	1 10
M501	412 -	M534	6 16	M588	1 16
M502	427 -	M535	6 16	M591	2 -
M503	427 -	M540	19 12	M592	2 -
M504	398 -	M544	12 16	M593	- 7
M505	398 -	M546	24 4	M594	- 8
M511	3 4	M547	7 2	M595/6	3 8
M512	3 4	M548	12 2	M597	1 -
M513	3 10	M551	5 -	M1382	1 14
M514	4 2	M552	3 12	M1383	4 14
M516	10 10	M553	2 14	M1386	7 10
M517	11 16	M554	- 18	M1391	8 12
M518	20 6	M555	11 18	M1396/7	9 10
M519	22 14	M556	9 8	M1501	1 -
M520	20 12	M557	8 18	M1506	1 -
M521	29 14	M558	8 14	M1511	1 -
M522	2 16	M571	18 18	M1516	1 -
M523	4 6	M574	1 10	M1526	1 10
M524	5 -	M575	1 4	M1531	1 10
M526	5 10	M576	1 -	M1536	1 10
M527	20 6	M581	4 8	M1538	1 10
M528	5 2	M582	2 -	M1541	1 12
M529	5 16	M583	- 14	M1546	1 12
M530	10 16	M584	1 6	M1581	- 14
M531	5 2	M585	4 10	M1586	1 10
M532	5 16	M586	1 14	M1591	4 10

Metallurgical Polishing Machine

	£ s		£ s		£ s
M700	45 -	M720	- 12	M724	- 16
M705	38 -	M721	- 8	M725	- 12
M714	- 8	M722	2 -	M726	- 12
M715	- 10	M723	1 2	M727	- 8
				M740	- 4
				M741	- 2

B.C.I.R.A. Polishing Cream

8 oz.	1 16	16 oz.	3 -	80 oz.	13 6
2 oz.	2 10	40 oz.	7 -	200 oz.	30 -

COOKE, TROUGHTON AND SIMMS, LIMITED
KINGSWAY NORTH,
Y O R K

TEMPORARY PRICE LIST
April, 1946
(B4)

M I C R O S C O P E S

The prices quoted in this list are those current for delivery in April 1946. In view of unsettled trading conditions, it is regretted that these prices must be regarded as subject to confirmation at time of delivery.

Prices are for delivery at Factory, packing and delivery extra at cost.

Microscope Stands

	£	s		£	s		£	s
M1001	19	6	M2060	76	-	M4040	253	-
M1010	24	10	M2070	79	12	M4050	250	-
M1020	21	-	M2080	63	16	M4060	265	-
M1030	22	4	M2090	67	8	✗M6001	55	-
M1040	26	4	M2100	79	18	✗M6010	48	18
M1050	27	8	M2110	83	10	✗M6020	59	4
M1060	24	-	M2120	70	6	✗M6030	50	16
M1070	25	4	M2130	73	18	✗M6040	62	6
M1080	29	4	M2140	86	8	✗M6050	53	18
M1090	30	8	M2150	90	-	✗M6060	66	10
M1100	28	2	M2160	78	12	✗M6070	58	2
M1110	29	6	M2170	82	4	✗M6080	67	6
M1120	33	6	M2180	94	14	✗M6090	56	18
M1130	34	10	M2190	98	6	✗M6100	71	10
M1140	34	12	M3001	68	-	✗M6110	63	2
M1150	35	16	M3010	81	2	xM6120	36	15
M1160	39	16	M3020	84	2	xM6130	41	-
M1170	41	-	M3030	97	4	xM6140	36	-
M1180	42	18	M3040	70	8	x✗6150	40	4
M1190	44	2	M3050	63	10	M7001	35	10
M1200	48	2	M3060	86	10	M7010	35	10
M1210	49	6	M3070	99	12	M7020	39	10
M1220	19	12	M3080	80	16	M7021	57	10
M1225	34	6	M3090	93	18	M7030	49	10
M1230	24	16	M3100	96	18	M7031	57	10
M1235	39	10	M3110	110	-	M7035	57	10
~~xM1240~~	~~7~~	~~12~~	M3120	91	6	M7040	63	-
~~xM1250~~	~~8~~	~~8~~	M3130	104	8	M7050	63	-
M2001	57	10	M3140	107	8	M7060	63	-
M2010	61	2	M3150	120	10	M7065	63	-
M2020	73	12	M4001	220	-	M7070	63	-
M2030	77	4	M4010	232	4	M7080	71	-
M2040	59	18	M4020	247	4	M7090	71	-
M2050	63	10	M4030	238	-	M7100	71	-
						M7110	71	-

The above prices do not include objectives, objective changers, eyepieces or condensers.

xPrices do not include boxes

✗ " now " "

Optical Outfits

	£	s		£	s		£	s
A	10	16	F2	27	-	J	85	18
B	13	-	G	28	-	J2	91	18
C	12	10	G2	41	-	K	9	-
D	14	14	H	51	2	K2	11	-
E	21	6	H2	57	2	L	18	10
F	25	-				L2	20	10

Extras & alternatives for M1000 series stands

	£	s			£	s
M1301	-	16	M1370 in lieu M1369		2	2
M1302	5	12	M1376 " " M1375		1	10
M1303	-	10	M1379		-	15
M1304	-	2	" "		-	1
M1305	19	12	M1548 box for M1240/50		1	12

Extras & alternatives for M2000 series stands

	£	s		£	s
M1376 in lieu M1375	1	10	M2302	23	16
M2301	7	14	M2303	3	-
No cabinet, less	5	-	M1379	-	16

Extras & alternatives for M3000 series stands

	£	s
As M2000 above, and M3362 in lieu M3361	2	2
No cabinet, less	6	6

	£	s		£	s
Objective changers M1313	1	16	M1314	1	16

Extras & alternatives for M4000 series stands

	£	s		£	s		£	s
M1657	12	4	M1691	23	-	M1731	30	-
M1658	14	14	M1692	18	-	M1732	35	-
Without M4301, less			7	14				
" M4302 "			23	16				
" M4303 "			3	-				

Extras & alternatives for M6000 series stands

	£	s		£	s		£	s
M6360	-	8	M6385	4	6	M6390	2	12
M6381	-	18	M6386	-	10			
Without M6641, less			6	10				
" M6642 "			5	12				

Extras & alternatives for M7000 series stands

	£	s		£	s		£	s
M7312	5	-	M7361	3	4	M7368	2	4
M7316	-	12	M7362	5	16	M7657	15	8
M7332	5	10	M7363	9	-	M7658	17	8
M7360	6	16	M7364	6	16	M7659	-	10

Objectives

	£	s		£	s		£	s	
M1401	2	4	M1424	3	2	M1486	5	-	
M1406	2	4	M1425	6	15	M6406	6	10	pr.
M1411	2	10	M1426	8	16	M6411	6	10	pr.
M1412	2	14	M1431	9	10	M6416	6	16	pr.
M1413	1	18	M1436	11	16	M6421	6	16	pr.
M1416	3	2	M1441	19	12	M7418	4	18	
M1418	3	10	M1446	10	16	M7420	7	4	
M1419	3	16	M1448	14	6	M7421	5	18	
M1420	5	16	M1451	19	12	M7422	5	18	
M1421	4	10	M1456	28	14	M7423	7	4	
M1422	4	10	M522	2	18	M7431	10	18	
M1423	5	16	M1481	4	6				

Eyepieces

	£	s		£	s		£	s	
M1501	1	-	M1522	2	-	pr.	M1542	3	4	pr.
M1502	2	-	pr. M1523	1	-		M1546	1	12	
M1506	1	-	M1524	2	-	pr.	M1547	3	4	pr.
M1507	2	-	pr. M1526	1	10		M6507	5	-	pr.
M1509	2	-	pr. M1527	3	-	pr.	M6512	5	-	pr.
M1510	-	18	M1531	1	10		M6516	2	10	
M1511	1	-	M1532	3	-	pr.	M6517	5	-	pr.
M1512	2	-	pr. M1536	1	10		M6521	2	10	
M1516	1	-	M1537	3	-	pr.	M6522	5	-	pr.
M1517	2	-	pr. M1538	1	10		M7506	4	8	
M1518	-	18	M1539	3	-	pr.	M7508	3	12	
M1521	1	-	M1541	1	12		M7511	5	2	
							M7516	3	12	

Condensers

	£	s		£	s		£	s
M1382	1	14	M1391	8	12	M1399	7	14
M1383	4	14	M1395	5	-			
M1386	7	6	M1396/7	9	10			

Page		£	s.	d.		£	s.	d.		£	s.	d.
180	M1881	21	18	0	M560	8	2	0	M1910	2	18	0
	M556	11	0	0	M1903	6	2	0	M1911	3	8	0
	M557	10	8	0	M1904	5	4	0	M1914	3	8	0
	M559	8	14	0	M1905	5	4	0				
181	M1751	3	4	0	M1759		8	0	M1763		8	0
	M1752	4	6	0	M1760		8	0	M1764		8	0
	M1756		2	7	M1761		8	0	M1765		4	0
	M1758		8	0	M1762		8	0	M608		18	0
182	M1805	7	14	0	E845	3	0	0	E850		9	5
	M1806	9	14	0	E848	3	0	0				
183	M1816	40	16	0	M1839	28	0	0	M592	2	10	0
	M1820	40	16	0	M1833		12	0	M598	11	13	6
	M1824	53	16	0	M591	2	10	0	M1813	2	0	0
	M1828	56	10	0								
184	M1845	54	0	0	M1804		16	0	M593		8	0
	M1849	54	0	0					M594		8	0
188	M700	52	0	0	M724	1	0	0	M780	3	0	0
	M705	43	2	0	M725		12	0	M781		2	0
	M714		8	0	M726		12	0	M783		16	0
	M715		6	0	M727		8	0	M785		6	0
	M720		12	0	M740		4	0	M786		2	0
	M721		8	0	M741		2	0	M787		1	0
	M722	2	8	0	M771				M788		6	0
	M723	1	6	0	8 oz.	1	16	0				
					12 oz.	2	10	0				
					16 oz.	3	0	0				
					40 oz.	7	0	0				
					80 oz.	13	6	0				
					200 oz.	30	0	0				

VICKERS PROJECTION MICROSCOPE, Cat. No. CM500A
For prices, see under Catalogue No. CM1000A, pages 38—42.

STUDENT'S MICROSCOPE, Cat. No. CM1005
For prices, see under Catalogue No. CM1000A, page 49.

PHASE CONTRAST MICROSCOPE, Cat. No. CM1741
For prices, see under Catalogue No. CM1000A, page 128.

FLUORESCENCE MICROSCOPY, Cat. No. CM1766
For prices, see under Catalogue No. CM1000A, page 130.

STEREOSCOPIC MICROSCOPES, Cat. No. CM6000A
For prices, see under Catalogue No. CM1000A, pages 137—143.

POLARIZING MICROSCOPES, Cat. No. CM7000B
For prices, see under Catalogue No. CM1000A, pages 147—171.

(27445)

Cooke Troughton & Simms LTD
YORK, ENGLAND

MICROSCOPES

(88)

PRICE LIST

11th AUGUST, 1948

The prices quoted in this list are for delivery at the factory. The cost of packing, carriage and insurance is payable by the purchaser. Every precaution is taken in packing, but goods in transit are at the risk of the purchaser.

GENERAL MICROSCOPE CATALOGUE No. CM1000A

(For prices of items in separate leaflets, see last page of this list)

Prices of microscope stands do not include optical outfits, except in the case of the Student's model (M1005/M1025) where the prices cover the complete equipment.

Page		£	s.	d.		£	s.	d.		£	s.	d.
38	M500	476	2	0	M502	483	8	0	M504	460	0	0
	M501	476	2	0	M503	483	8	0	M505	460	0	0
39	*M511	4	0	0	M1497		2	0	M1541	1	18	0
	*M512	4	10	0	M1498		18	0	M1502	1	16	0
	*M513	4	18	0	M1501		18	0	M1507	1	16	0
	*M514	6	0	0	M1506		18	0	M1512	1	16	0
	*M533	6	10	0	M1511		18	0	M1517	1	16	0
	*M534	8	2	0	M1516		18	0	M1520	3	8	0
	*M516	13	18	0	M1519	1	14	0	M1527	3	8	0
	*M517	16	4	0	M1526	1	14	0	M1532	3	8	0
	*M518	26	18	0	M1531	1	14	0	M1537	3	8	0
	*M519	29	14	0	M1536	1	14	0	M1539	3	8	0
	*M520	27	6	0	M1538	1	14	0	M1534	3	8	0
	*M521	39	18	0	M1533	1	14	0	M1542	3	16	0
									M540	22	14	0
40	M544	14	16	0	M553	3	2	0	M574	1	14	0
	*M522	4	2	0	M554	1	2	0	M1382	2	0	0
	*M523	6	4	0	M555	13	4	0	M1383	5	8	0
	*M524	7	2	0	M556	11	0	0	M1386	8	12	0
	M547	8	4	0	M557	10	8	0	M1391	9	18	0
	M551	5	16	0	M558	10	4	0	M1396	11	0	0
	M552	5	6	0	M571	22	16	0	M1397			

*Objective Lenses are coated (see p. 5 of cat.)

Page		£	s.	d.		£	s.	d.		£	s.	d.
41	*M511	4	0	0	*M516	13	18	0	M577	1	4	0
	*M512	4	10	0	*M517	16	4	0	*M528	7	4	0
	*M513	4	18	0	M527	23	8	0	*M529	8	0	0
	*M514	6	0	0	*M520	27	6	0	*M530	14	6	0
	*M533	6	10	0	*M521	39	18	0	M531	5	18	0
	M526	6	6	0	M575	1	8	0	M532	6	14	0
	M535	7	16	0	M576	1	4	0				
42	M581	5	2	0	M588	2	0	0	M593		8	0
	M582	2	8	0	M650	3	0	0	M594		8	0
	M1386	8	12	0	M651	4	0	0	M595	4	0	0
	M584	1	10	0	M652	3	0	0	M596	6	0	0
	M585	5	4	0	M589	2	2	0	M598	13	0	0
	M586	1	18	0	M591	2	10	0	M608		18	0
	M587	1	14	0	M592	2	10	0				
49	M1005Y	30	4	0	M1025Z	40	10	0	M1326	8	18	0
	M1025Y	32	10	0	M1401	2	12	0	M1327	8	0	0
55	M1030	22	12	0	M1301		16	0	M1326	8	18	0
	M1050	29	0	0	M1303		6	0	M1370	2	8	0
					M1305	22	14	0	M1376	1	2	0
57	M1070	30	2	0	M1301		16	0	M1370	2	8	0
	M1090	36	10	0	M1303		6	0	M1376	1	2	0
					M1305	22	14	0				
59	M1110	33	4	0	M1301		16	0	M1370	2	8	0
	M1130	39	12	0	M1303		6	0	M1376	1	2	0
					M1305	22	14	0				
61	M1150	39	18	0	M1301		16	0	M1370	2	8	0
	M1170	46	6	0	M1303		6	0	M1376	1	2	0
					M1305	22	14	0				
63	M1190	53	16	0	M1301		16	0	M1370	2	8	0
	M1210	60	4	0	M1303		6	0	M1376	1	2	0
					M1305	22	14	0				

Prices of above stands with optical outfits:—

	£	s.	d.		£	s.	d.		£	s.	d.		£	s.	d.
M1030C	37	0	0	M1030D	39	12	0	M1030E	46	16	0	M1030F	51	6	0
M1050C	43	8	0	M1050D	46	0	0	M1050E	53	4	0	M1050F	57	14	0
M1070C	44	10	0	M1070D	47	2	0	M1070E	54	6	0	M1070F	58	16	0
M1090C	50	18	0	M1090D	53	10	0	M1090E	60	14	0	M1090F	65	4	0
M1110C	47	12	0	M1110D	50	4	0	M1110E	57	8	0	M1110F	61	18	0
M1130C	54	0	0	M1130D	56	12	0	M1130E	63	16	0	M1130F	68	6	0
M1150C	54	6	0	M1150D	56	18	0	M1150E	64	2	0	M1150F	68	12	0
M1170C	60	14	0	M1170D	63	6	0	M1170E	70	10	0	M1170F	75	0	
												M1190F	82	10	
												M1210F	88	18	

*Objective Lenses are coated (see p. 5 of cat.

Page		£	s.	d.		£	s.	d.		£	s.	d.
65	M1220	24	14	0	M1328	8	18	0	M1731	34	12	0
	M1230	31	2	0	M1651	14	16	0	M1732	40	6	0
	M1301		16	0	M1652	15	8	0	M7657	17	16	0
	M1303		6	0	M1691	25	6	0	M7362	6	14	0
	M1305	22	14	0								
67	M1225	39	14	0	M1301		16	0	M1328	8	18	0
	M1235	45	14	0	M1303		6	0	M1662	2	18	0
									M1663	2	18	0
73	M2001	66	8	0	M2020	85	0	0	M1376	1	2	0
	M2010	70	12	0	M2030	89	4	0	M2301	8	18	0
									M2303	3	8	0
75	M2040	69	4	0	M2060	87	16	0	M1376	1	2	0
	M2050	73	8	0	M2070	92	0	0	M2301	8	18	0
									M2303	3	8	0
77	M2080	73	14	0	M2100	92	6	0	M1376	1	2	0
	M2090	77	18	0	M2110	96	10	0	M2301	8	18	0
									M2303	3	8	0
79	M2120	81	6	0	M2140	99	18	0	M1376	1	2	0
	M2130	85	10	0	M2150	104	2	0	M2301	8	18	0
									M2303	3	8	0
81	M2160	90	16	0	M2180	109	8	0	M1376	1	2	0
	M2170	95	0	0	M2190	113	12	0	M2301	8	18	0
									M2303	3	8	0

Prices of above stands with optical outfits:—

	£	s.	d.		£	s.	d.		£	s.	d.		£	s.	d.
M2001F	95	2	0	M2001G	110	12	0	M2001H	125	14	0	M2001J	165	14	0
M2010F	99	6	0	M2010G	114	16	0	M2010H	129	18	0	M2010J	169	18	0
M2020F2	115	10	0	M2020G2	132	12	0	M2020H2	151	2	0	M2020J2	191	2	0
M2030F2	119	14	0	M2030G2	136	16	0	M2030H2	155	6	0	M2030J2	195	6	0
M2040F	97	18	0	M2040G	113	8	0	M2040H	128	10	0	M2040J	168	10	0
M2050F	104	2	0	M2050G	117	12	0	M2050H	132	14	0	M2050J	172	14	0
M2060F2	118	6	0	M2060G2	135	8	0	M2060H2	153	18	0	M2060J2	193	18	0
M2070F2	122	10	0	M2070G2	139	12	0	M2070H2	158	2	0	M2070J2	198	2	0
M2080F	102	8	0	M2080G	117	18	0	M2080H	133	0	0	M2080J	173	0	0
M2090F	106	12	0	M2090G	122	2	0	M2090H	137	4	0	M2090J	177	4	0
M2100F2	122	16	0	M2100G2	139	18	0	M2100H2	158	8	0	M2100J2	198	8	0
M2110F2	127	0	0	M2110G2	144	2	0	M2110H2	162	12	0	M2110J2	202	12	0
M2120F	110	0	0	M2120G	125	10	0	M2120H	140	12	0	M2120J	180	12	0
M2130F	114	4	0	M2130G	129	14	0	M2130H	144	16	0	M2130J	184	16	0
M2140F2	130	8	0	M2140G2	147	10	0	M2140H2	166	0	0	M2140J2	206	0	0
M2150F2	134	12	0	M2150G2	151	14	0	M2150H2	170	4	0	M2150J2	210	4	0
M2160F	119	10	0	M2160G	135	0	0	M2160H	150	2	0	M2160J	190	2	0
M2170F	123	14	0	M2170G	139	4	0	M2170H	154	6	0	M2170J	194	6	0
M2180F2	139	18	0	M2180G2	157	0	0	M2180H2	175	10	0	M2180J2	215	10	0
M2190F2	144	2	0	M2190G2	161	4	0	M2190H2	179	14	0	M2190J2	219	14	0

Page		£	s.	d.		£	s.	d.		£	s.	d.
85	M3001	78	12	0	M3030	112	8	0	M2303	3	8	0
	M3010	93	16	0	M1376	1	2	0	M3364	2	10	0
	M3020	97	4	0	M2301	8	18	0				

Page		£	s.	d.		£	s.	d.		£	s.	d.
137	M6001	59	2	0	M6416	7	6	0	M6517	5	8	0
	M6010	50	2	0	M6418	7	6	0	M6522	5	8	0
	M6020	63	12	0	M6419	7	6	0	M6360		8	0
	M6030	54	12	0	M6421	7	6	0	M6381	1	10	0
	M6080	72	6	0	M1509	1	16	0	M6385	4	12	0
	M6090	63	6	0	M1517	1	16	0	M6390	2	16	0
	M6100	76	18	0	M1522	1	16	0	M6391		10	0
	M6110	67	16	0	M1524	1	16	0	M6443	4	6	0
	M6406	7	0	0	M6507	5	8	0	E125	1	14	0
	M6411	7	0	0	M6512	5	8	0	E230			5
									M6581	1	10	0
138	M6120	39	12	0	M6140	38	14	0	M6150	43	4	0
	M6130	44	2	0								

N.B.—The prices of M6120, M6130, M6140 and M6150 do not include a case.
M6646 Case for microscope part and accessories only. £1 10 0

139	M6502	5	8	0	M6512	5	8	0	M6522	5	8	0
	M6507	5	8	0	M6517	5	8	0				
141	M6200	24	18	0	E125	1	14	0	M6250	32	12	0
	M6210	21	8	0	E230			5	M6255	52	2	0
	M6443	4	6	0	M6581	1	4	0	M6455	3	0	0
	M6391		10	0	M7513	6	16	0	M6456		6	0

N.B.—The prices of M6200, M6210, M6250 and M6255 do not include a case.
M6643 Case for M6200 £1 10 0
M6644 „ „ M6210 £1 10 0
M6647 „ „ M6250 or M6255
(microscope part and accessories only) £1 16 0

142	M6220	27	8	0	M6221	29	6	0	M6222	34	6	0

N.B.—The prices of M6220, M6221 and M6222 do not include a case.
M6645 Case for M6220, M6221 or M6222 £2 6 0

143	M6230	26	12	0	M6444	9	14	0	M6445	7	16	0
	M6240	25	12	0								

N.B.—The prices of M6230 and M6240 do not include a case.
M6647 Case for microscope part and accessories only £1 16 0

147	M7001	41	2	0	M7659		10	0	M7368	2	12	0
	M7010	41	2	0								
150	M7020	57	4	0	M7031	66	8	0	M7659		10	0
	M7021	66	8	0	M7306	10	6	0	M7734	12	18	0
	M7030	57	4	0								
154	M7040	72	16	0	M7080	82	0	0	M7306	10	8	0
	M7050	72	16	0	M7090	82	0	0	M7316		12	0
	M7060	72	16	0	M7100	82	0	0	M7734	12	18	0
	M7070	72	16	0	M7110	82	0	0				
159	M7120	127	2	0	M7701	4	12	0	M7316		12	0
	M7130	127	2	0	M7702	4	12	0	M7734	12	18	0
	M7140	145	16	0	M7725	13	18	0	M7735	19	4	0
	M7150	145	16	0	M7726	13	18	0	M7736	5	6	0
	M7160	145	16	0	M7306	10	8	0	M7762	2	10	0
	M7170	145	16	0								

Page		£	s.	d.		£	s.	d.		£	s.	d.
163	M7200	161	16	0	M7240	180	10	0	M7316		12	0
	M7210	161	16	0	M7250	180	10	0	M7734	12	18	0
	M7220	180	10	0	M3341	21	6	0	M7764	2	10	0
	M7230	180	10	0	M7306	10	8	0				
166	M7657	17	16	0	M7332	6	6	0	E850		9	5
	M7658	20	2	0	M1806	9	14	0	M7035	66	8	0
	M7659		10	0	E845	3	0	0	M7065	72	16	0
	M7316		12	0	E848	3	0	0				
168	M7361	3	14	0	M7360	7	16	0	M7363	10	8	0
	M7362	6	14	0	M7364	7	16	0				
169	M7801	3	2	0	M7821	5	18	0	M7920	8	14	0
	M7806	3	2	0	M7822	5	18	0	M7921	7	8	0
	M7811	3	8	0	M7823	7	4	0	M7922	7	8	0
	M7816	4	0	0	M7831	11	8	0	M7923	8	14	0
	M7818	4	12	0	M7906	4	12	0	M7931	12	18	0
	M7820	7	4	0	M7918	6	2	0				
170	M7508	4	4	0	M7513	6	16	0	M7592	2	4	0
	M7509	5	6	0	M6516	2	14	0	M7593	1	16	0
	M7516	4	4	0	M6521	2	14	0	M7882	2	10	0
	M7517	5	6	0	M7585	4	12	0	M7883	5	18	0
	M1521		18	0	M7586	1	14	0	M7886	9	2	0
	M1522	1	16	0	M7587	1	6	0	M7891	10	8	0
	M7506	5	2	0	M7590	6	18	0				
	M7511	5	18	0	M7591	3	10	0				
171	M7570	15	0	0	M7571	6	18	0	M7572		16	0
172	M578	4	10	0								
175	M1865	16	0	0	M1870	8	10	0	M1906		12	0
	M1867	34	10	0	M1900	2	14	0				
177	M1871	27	8	0	M4304	8	14	0	M560	8	2	0
	M1873	49	10	0	M4305	4	8	0	M1903	6	2	0
	M1900	2	14	0	M4342	4	8	0	M1904	5	4	0
	M4303	3	8	0	M557	10	8	0	M1905	5	4	0
					M559	8	14	0				
179	M1876	38	4	0	M1808	9	14	0	M1830	56	10	0
	M1878	58	18	0	M1818	40	16	0	M1840	28	0	0
	M2303	3	8	0	M1822	40	16	0	M1847	54	0	0
	M2304	8	14	0	M1826	53	16	0	M1851	54	0	0
	M1807	7	14	0								

Page		£	s.	d.		£	s.	d.		£	s.	d.
137	M6001	59	2	0	M6416	7	6	0	M6517	5	8	0
	M6010	50	2	0	M6418	7	6	0	M6522	5	8	0
	M6020	63	12	0	M6419	7	6	0	M6360		8	0
	M6030	54	12	0	M6421	7	6	0	M6381	1	10	0
	M6080	72	6	0	M1509	1	16	0	M6385	4	12	0
	M6090	63	6	0	M1517	1	16	0	M6390	2	16	0
	M6100	76	18	0	M1522	1	16	0	M6391		10	0
	M6110	67	16	0	M1524	1	16	0	M6443	4	6	0
	M6406	7	0	0	M6507	5	8	0	E125	1	14	0
	M6411	7	0	0	M6512	5	8	0	E230			5
									M6581	1	10	0
138	M6120	39	12	0	M6140	38	14	0	M6150	43	4	0
	M6130	44	2	0								

N.B.—The prices of M6120, M6130, M6140 and M6150 do not include a case.
M6646 Case for microscope part and accessories only. £1 10 0

139	M6502	5	8	0	M6512	5	8	0	M6522	5	8	0
	M6507	5	8	0	M6517	5	8	0				
141	M6200	24	18	0	E125	1	14	0	M6250	32	12	0
	M6210	21	8	0	E230			5	M6255	52	2	0
	M6443	4	6	0	M6581	1	4	0	M6455	3	0	0
	M6391		10	0	M7513	6	16	0	M6456		6	0

N.B.—The prices of M6200, M6210, M6250 and M6255 do not include a case.
M6643 Case for M6200 £1 10 0
M6644 „ „ M6210 £1 10 0
M6647 „ „ M6250 or M6255
(microscope part and accessories only) £1 16 0

142	M6220	27	8	0	M6221	29	6	0	M6222	34	6	0

N.B.—The prices of M6220, M6221 and M6222 do not include a case.
M6645 Case for M6220, M6221 or M6222 £2 6 0

143	M6230	26	12	0	M6444	9	14	0	M6445	7	16	0
	M6240	25	12	0								

N.B.—The prices of M6230 and M6240 do not include a case.
M6647 Case for microscope part and accessories only £1 16 0

147	M7001	41	2	0	M7659		10	0	M7368	2	12	0
	M7010	41	2	0								
150	M7020	57	4	0	M7031	66	8	0	M7659		10	0
	M7021	66	8	0	M7306	10	6	0	M7734	12	18	0
	M7030	57	4	0								
154	M7040	72	16	0	M7080	82	0	0	M7306	10	8	0
	M7050	72	16	0	M7090	82	0	0	M7316		12	0
	M7060	72	16	0	M7100	82	0	0	M7734	12	18	0
	M7070	72	16	0	M7110	82	0	0				
159	M7120	127	2	0	M7701	4	12	0	M7316		12	0
	M7130	127	2	0	M7702	4	12	0	M7734	12	18	0
	M7140	145	16	0	M7725	13	18	0	M7735	19	4	0
	M7150	145	16	0	M7726	13	18	0	M7736	5	6	0
	M7160	145	16	0	M7306	10	8	0	M7762	2	10	0
	M7170	145	16	0								

Page		£	s.	d.		£	s.	d.		£	s.	d.
163	M7200	161	16	0	M7240	180	10	0	M7316		12	0
	M7210	161	16	0	M7250	180	10	0	M7734	12	18	0
	M7220	180	10	0	M3341	21	6	0	M7764	2	10	0
	M7230	180	10	0	M7306	10	8	0				
166	M7657	17	16	0	M7332	6	6	0	E850		9	5
	M7658	20	2	0	M1806	9	14	0	M7035	66	8	0
	M7659		10	0	E845	3	0	0	M7065	72	16	0
	M7316		12	0	E848	3	0	0				
168	M7361	3	14	0	M7360	7	16	0	M7363	10	8	0
	M7362	6	14	0	M7364	7	16	0				
169	M7801	3	2	0	M7821	5	18	0	M7920	8	14	0
	M7806	3	2	0	M7822	5	18	0	M7921	7	8	0
	M7811	3	8	0	M7823	7	4	0	M7922	7	8	0
	M7816	4	0	0	M7831	11	8	0	M7923	8	14	0
	M7818	4	12	0	M7906	4	12	0	M7931	12	18	0
	M7820	7	4	0	M7918	6	2	0				
170	M7508	4	4	0	M7513	6	16	0	M7592	2	4	0
	M7509	5	6	0	M6516	2	14	0	M7593	1	16	0
	M7516	4	4	0	M6521	2	14	0	M7882	2	10	0
	M7517	5	6	0	M7585	4	12	0	M7883	5	18	0
	M1521		18	0	M7586	1	14	0	M7886	9	2	0
	M1522	1	16	0	M7587	1	6	0	M7891	10	8	0
	M7506	5	2	0	M7590	6	18	0				
	M7511	5	18	0	M7591	3	10	0				
171	M7570	15	0	0	M7571	6	18	0	M7572		16	0
172	M578	4	10	0								
175	M1865	16	0	0	M1870	8	10	0	M1906		12	0
	M1867	34	10	0	M1900	2	14	0				
177	M1871	27	8	0	M4304	8	14	0	M560	8	2	0
	M1873	49	10	0	M4305	4	8	0	M1903	6	2	0
	M1900	2	14	0	M4342	4	8	0	M1904	5	4	0
	M4303	3	8	0	M557	10	8	0	M1905	5	4	0
					M559	8	14	0				
179	M1876	38	4	0	M1808	9	14	0	M1830	56	10	0
	M1878	58	18	0	M1818	40	16	0	M1840	28	0	0
	M2303	3	8	0	M1822	40	16	0	M1847	54	0	0
	M2304	8	14	0	M1826	53	16	0	M1851	54	0	0
	M1807	7	14	0								