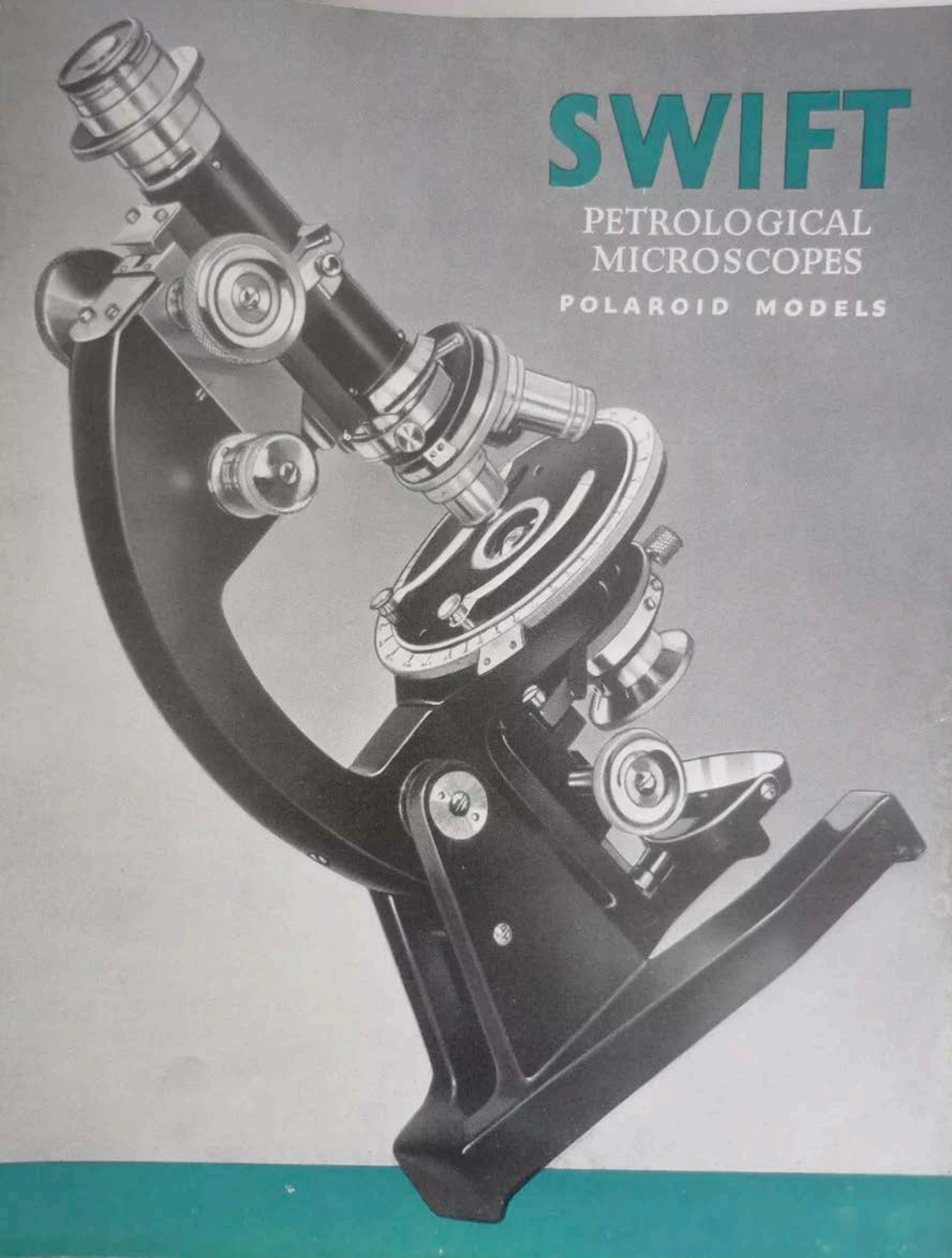
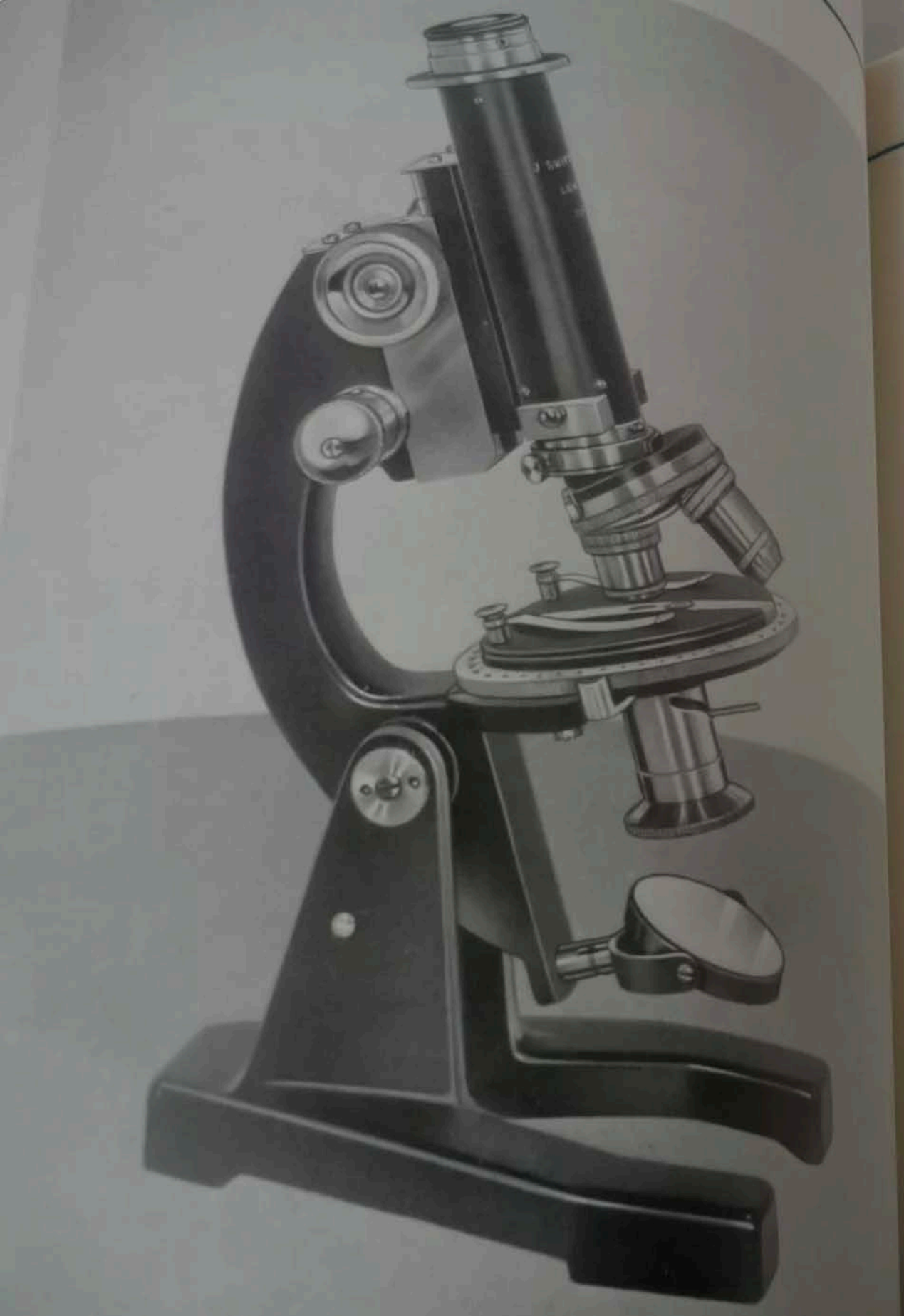

SWIFT
PETROLOGICAL
MICROSCOPES
POLAROID MODELS



LONDON

"LAPIDEX" PETROLOGICAL MICRO

POLAROID MODEL

This microscope is of new design and has been evolved in order to combine, in the simplest manner, and mechanical efficiency with strength and rigidity. The design embraces the minimum number of parts, but these are of correct mechanical form and of adequate proportions so that the instrument may wi prolonged hard wear. These features render it particularly suitable for use by elementary and intermediate s

Coarse Adjustment by diagonal rack and pinion, with **Fine Adjustment** by twin milled heads,one side of the limb.

Rotating Stage divided on the edge to 360° and reading against an index.

Polaroid Analyser sliding in and out of the optic axis through the lower end of the body tube. divided to every 45° and has a spring catch to indicate extinction position.

Polaroid Polariser, arranged to swing out of the optic axis, and with complete rotation.

Convergent System, is a doublet embracing 1.0 n.a. dry or 1.2 n.a. immersed. The top len a dovetail slide running through the thickness of the stage and can, with a touch, be removed from yielding an instantaneous change from convergent to nearly parallel illumination. The lower lens up and down by means of a lever in order to focus the system.

Slot with dustproof cover is cut through the body tube just below the analyser at 45° to the eyepiece.

Eyepiece of large diameter and specially designed to give a wide flat field. Its power is X6 with cross lines, which may be sharply focused by means of the adjustable eye lens. The upp has a large flange to carry a cap analyser or Becke lens.

No Bertrand lens is provided but interference figures may be observed by removing the e down into the tube, which operation is facilitated by the use of a pin hole stop in place o enlarged image of the interference figure is obtained by use of a Becke Lens which is mounted

NO.	
1733.	Stand as dsecribed with cross lined ocular, polariser, analyser, centring nosepi convergent system in cabinet .. ..
414.	Rotating Polaroid Analyser to work over eyepiece .. ..
474.	Becke Lens .. ..
392.	Pinhole Stop .. ..
391.	Extra Ocular with Micrometer, 10 mm. in 100 parts .. ..
411.	Iris Diaphragm to lower rim of polariser .. ..

No objectives are included with the above microscope. For lists of Objectives pages 10 and 11.



"ADVANCED STUDENT" PETROLOGICAL MICROSCOPE

POLAROID MODEL

This is the most universally adopted Petrological Microscope manufactured. It is in use in the majority of Geological Surveys and has been supplied, generally in large numbers, to practically every University, University College, Museum and Technical Institute, etc., in the United Kingdom and Overseas Dominions, as well as to many in America and other countries.

Coarse Adjustment by diagonal rack and pinion, with **Fine Adjustment** by twin milled heads, one on each side of the limb.

Rotating Stage divided on the edge to 360° and read by a vernier to 5′.

Polaroid Analyser sliding in and out of the optic axis through the lower end of the body tube.

Polaroid Polariser with divided flange and spring catch to indicate extinction position. It is mounted on a swing arm and so can instantly be thrown out of the optic axis when not required.

Substage focused by means of a rack and pinion movement.

Convergent System, or condenser, mounted in an iris diaphragm, is a compound system embracing 1.0 n.a. dry or 1.2 n.a. immersed. By moving a lever its top lens is instantly swung aside out of the optic axis, for use with low and medium powers when highly convergent illumination is not required.

Slot with dust proof cover is cut through the body tube just below the anaylser at 45° to the cross lines in the eyepiece, with similar slot cut through the eyepiece itself.

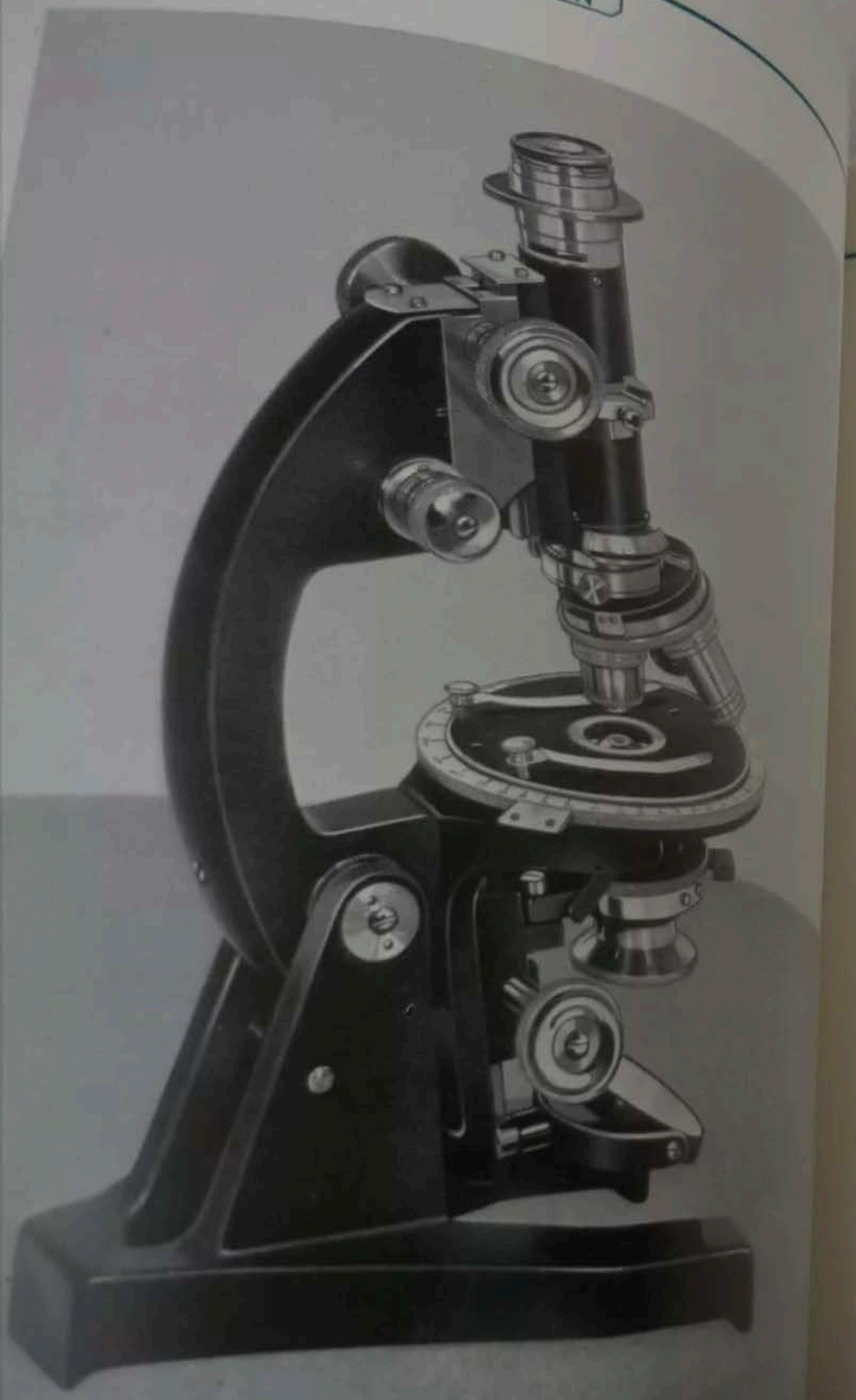
Bertrand Lens in a focusing mount is fitted through the upper end of the body. By this means the interference figures of crystals can be critically focused and examined. When not required, the lens can be pushed out of the optic axis and the path of rays left unobstructed.

Eyepiece of large diameter and specially designed to give a wide flat field. Its power is X6 and it is provided with cross lines, which may be sharply focused by means of the adjustable eye lens. The upper end of the body has a large flange to carry a cap analyser or Becke lens.

Centring Nosepiece of the most rigid construction, quite free from any tremor or backlash. If an attachable mechanical stage is ordered with this instrument, we recommend the use of centring objective changers in place of a double or triple rotating nosepiece in order to obtain complete rotation of the stage.

NO.		CODE
1732.	Stand as described, with cross lined slotted ocular, Polariser, Analyser, Centring Nosepiece, Bertrand Lens, Convergent System and Iris Diaphragm in cabinet	*Advspol*
411.	Additional Iris Diaphragm to lower rim of Polariser	*Rimiris*
414.	Rotating Polaroid Analyser to work over eyepiece	*Polcapa*
474.	Becke Lens	*Beklen*
417.	Millimeter Scale to Coarse Adjustment	*Corscal*
419.	Millimeter Scale to Bertrand Lens	*Berscal*
402.	Clamp to rotation of stage.	*Pestela*

No objectives are included with the above microscope. For lists of Objectives and Complete Outfits, s
pages 10 and 11.



"SURVEY" PETROLOGICAL MICROSCOPE

POLAROID MODEL

This instrument was specially designed to meet the need of those who require a microscope of the rotating stage type, suitable for the most advanced and critical research.

The limb and stage of this instrument are designed so that a Universal Stage can be accommodated.

Coarse Adjustment by diagonal rack and pinion, with **Fine Adjustment** by twin milled heads, one on each side of the limb.

Rotating Stage divided on the edge to 360° and read by a vernier to 5′ with clamp to rotation.

Polaroid Analyser sliding in and out of the optic axis through the lower end of the body tube and rotating through 90° against a divided quadrant.

Polaroid Polariser with divided flange and spring catch to indicate extinction position. It is mounted on a swing arm and so can instantly be thrown out of the optic axis when not required.

Substage focused by means of a rack and pinion movement and provided with centring screws to enable the condenser to be brought into perfect collimation with any objective in use.

Condenser is a highly corrected achromatic system embracing 1.0 n.a. dry and 1.25 n.a. immersed and is mounted above an iris diaphragm. The top lens is so mounted that by moving a lever it can be thrown out of the optic axis, yielding an instantaneous change from highly convergent to nearly parallel illumination. Immediately below the iris diaphragm is a swing out arm which has a rotating cell to carry stops for dark ground or oblique illumination, compensators mounted in metal rings, etc.

The condenser is carried in the iris diaphragm by the R.M.S. standard objective screw and so can easily be removed and replaced by special condensers such as an achromatic oil immersion system n.a. 1.40 or concentric dark ground illuminator for the examination of colloidal solutions, etc.

Slot with dust proof cover is cut through the body tube just below the analyser at 45° to the cross lines in the eyepiece, with similar slot cut through the eyepiece itself.

Bertrand Lens, with an iris diaphragm, carried in a focusing mount fitted through the upper end of the body. By this means the interference figures of crystals can be critically focused and examined. When not required, the lens can be pushed out of the optic axis and the path of rays left unobstructed.

Eyepiece of large diameter and specially designed to give a wide flat field. Its power is X6 and it is provided with cross lines, which may be sharply focused by means of the adjustable eye lens. The upper end of the body has a large flange to carry a cap analyser or Becke lens.

Centring Nosepiece of the most rigid construction, quite free from any tremor or backlash. If an attachable mechanical stage is ordered with this instrument, we recommend the use of centring objective changers in place of a double or triple rotating nosepiece in order to obtain complete rotation of the stage.

NO.		CODE
1731.	Stand as described, with cross lined slotted ocular, Polariser, Analyser, Achromatic Condenser, Iris Diaphragm, Centring Nosepiece and Bertrand Lens in cabinet	*Survpol*
414.	Rotating Polaroid Analyser, to work over eyepiece	*Polcapa*
411.	Additional Iris Diaphragm to lower rim of polariser	*Rimiris*
474.	Becke Lens	*Beklen*
219.	Achromatic Oil Immersion Condenser n.a. 1.40	*Perapim*
242.	Concentric High Power Dark Ground Illuminator	*Occult*
424.	Box of Dark Ground and Oblique Light Stops	*Petstop*
417.	Millimeter Scale to Coarse Adjustment	*Corscal*
419.	Millimeter Scale to Bertrand Lens	*Berscal*

No objectives are included with the above microscope. For lists of Objectives and Complete Outfits, see pages 10 and 11.