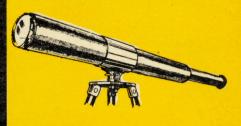
## UNITED TECHNICAL SUPPLIES LTD.

29 TOTTENHAM COURT ROAD LONDON, W.I. LANgham 1116 - 1117 - 5015





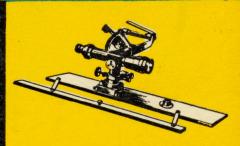


















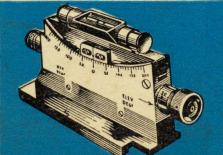
OPTICAL, MECHANICAL and

SCIENTIFIC EQUIPMENT



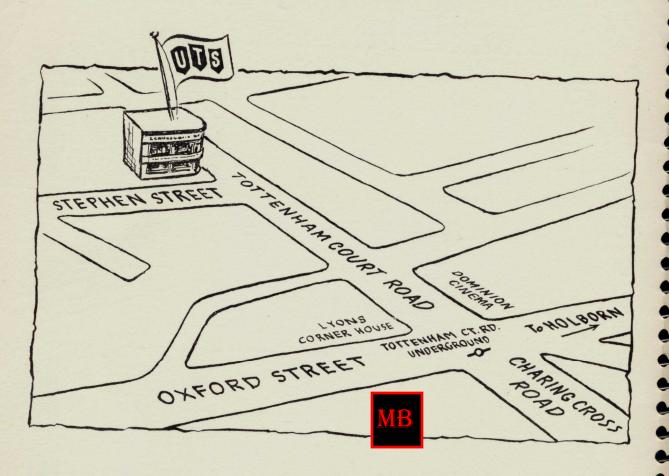
SECOND EDITION











WHEN IN LONDON, BE SURE TO VISIT OUR MAIN BRANCH AT 29 TOTTENHAM COURT ROAD, W.1. Only a minute from Tottenham Court Road Underground Station on the Central and Northern Lines.

Buses:

1, 7, 8, 14, 23, 24, 25, 29, 32, 39, 73, 134, 176.

# UNITED TECHNICAL SUPPLIES LTD. 29 TOTTENHAM COURT ROAD, LONDON, W.1

LANgham 1116 - 1117 - 5015

Cables: SCODIL, LONDON, W.1

Grams : SCODIL, W.1.



CATALOGUE OF



## UNITED TECHNICAL SUPPLIES LTD

AND ASSOCIATED COMPANIES

BRITAIN'S LEADING STOCKISTS

OF GOOD QUALITY

BINOCULARS

- TELESCOPES
- STOPWATCHES
- MICROSCOPES
- SURVEYING EQUIPMENT
- NAVIGATION INSTRUMENTS
- AIRCRAFT INSTRUMENTS
   WATCHES & CLOCKS
  - DRAWING EQUIPMENT
- RIFLE SIGHTS

- LENSES & PRISMS
- OPTICAL, SCIENTIFIC & MECHANICAL EQUIPMENT

MAIN BRANCH:

29 TOTTENHAM COURT ROAD, LONDON, W.1

LANgham 1116, 1117 & 5015



Cables: SCODIL, LONDON, W.1

Grams: SCODIL, W.1

# Britain's greatest

LONDON'S LARGEST SELECTION OF







#### THINKING OF SCIENTIFIC GOODS

We welcome you to visit our main branch at 29 Tottenham Court Road, London, W.1, where we stock only quality optical, mechanical and scientific goods.

# scientific centre

#### OPTICAL AND SCIENTIFIC EQUIPMENT







#### YOU'LL FIND THEM AT U.T.S.

We shall do all we can to make your visit well worth while and can say with justifiable pride that we have many thousands of satisfied customers—that you will buy with confidence knowing that our business has been built mainly on recommendation.

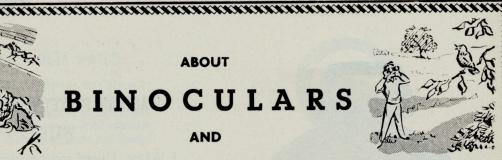




ABOUT

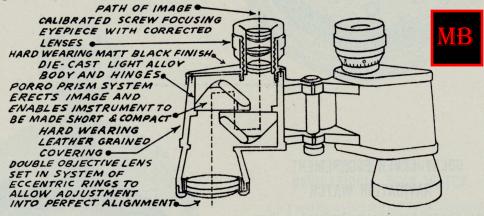
#### BINOCULARS

AND



#### CHOOSE

The most important factor to consider when choosing your binoculars is the purpose for which you intend using them. Different powers and sizes suit different activities. The Yachtsman, for instance, finds the 7 x 50 more suitable as due to its excellent light gathering ability, it is better for use in failing light than a more powerful glass would probably be. The 6 x 30 is often recommended as a spectator sporting glass because of its lightness and compactness. Hefertweetelvit is impossible sporting glass because of its lightness and compactness. Unfortunately it is impossible to combine highest magnification, largest field of view and minimum weight and size in any one binocular so therefore one should either choose a good general purpose glass or one that is designed for a specific purpose.



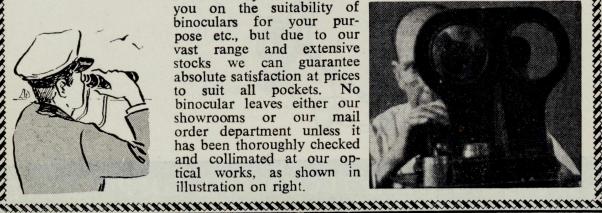
#### Four Points to Remember

1. Be sure the binoculars are comfortable to hold. Long periods of holding uncomfortable binoculars can cause much discomfort and particularly unsteadiness.

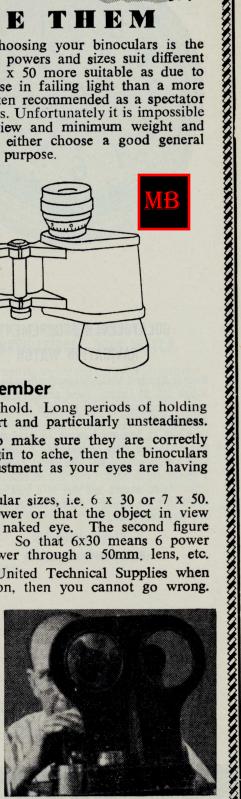
2. Good binoculars do not strain the eyes, so make sure they are correctly aligned. If after half an hour or so your eyes begin to ache, then the binoculars are out of alignment and need accurate optical adjustment as your eyes are having to strain themselves into position.

3. Be sure to know the meaning of the binocular sizes, i.e. 6 x 30 or 7 x 50. The first figure denotes the power, 6x means 6 power or that the object in view appears to be six times the size as seen with the naked eye. The second figure is the diameter of the objective lens in millimetres. So that 6x30 means 6 power through a 30mm, objective lens and 7x50 is 7 power through a 50mm, lens, etc.

The golden rule is to be sure to consult United Technical Supplies when buying your binoculars, either by mail or in person, then you cannot go wrong.



For not only can we advise you on the suitability of binoculars for your pur-pose etc., but due to our vast range and extensive stocks we can guarantee absolute satisfaction at prices to suit all pockets. No binocular leaves either our showrooms or our mail order department unless it has been thoroughly checked and collimated at our optical works, as shown in illustration on right.



#### ROSS 7 x 50 EX NAVAL BINOCULARS





## IN MINT CONDITION COMPARE THESE WITH ANY OTHER SURPLUS BINOCULARS OFFERED TODAY

We have always specialised in the sale of first class optical equipment and we consider this binocular one of the finest glasses we have ever handled. Manufactured by Ross of London for the Admiralty, they are noted for their tremendous light gathering power and wide field of view. Their brilliant definition by day or by night has made them extremely popular with yachtsmen as well as a general purpose glass. Their Linear field of view is over 125 yards—1,000 yards. The ideal glasses for those who require the combination of Lightness, Sturdiness, Compactness and Performance.

IN EXCELLENT CONDITION — ORIGINAL LIST PRICE £48 (approx.)

5 YEAR GUARANTEE

Our Price £19 - 10 - 0

New Solid Hide Case 30/- extra Postage and Packing 3/6

or £3-15-0 DEPOSIT and nine monthly payments of £2-2-10 (incl. case)

PART EXCHANGE. We welcome the opportunity to part exchange your present binoculars for any shown in our catalogue.



#### BINOCULARS





**Admiralty Release** GENUINE

#### BAUSCH & LOMB

NAVAL COMMANDERS 7 x 50 BINOCULARS FULLY BLOOMED

£26-0-0

COMPLETE WITH LEATHER CASE **5 YEARS GUARANTEE** MAKER'S CURRENT PRICE £70

Genuine modern Bausch & Lomb, made to stringent Admiralty specifications. Without doubt, one of the world's finest binoculars. Unequalled for their brilliant day and night definition and

exceptional high light transmissions produced by advanced optical system and precision coated optics. Perfectly balanced, they weigh only  $2\frac{3}{4}$  lbs. and are  $7\frac{1}{2}$ " high. They have an extra wide field of 660 yards at 3 miles (approx.). Fixed focus characteristics ensures use at all distances without refocussing. Absolutely water and weatherproof. Price £26 CASH or £5. 4. 0, deposit and 12 monthly payments of £1.18.2. Money back guarantees

payments of £1 18.2. Money back guarantee.

PART EXCHANGE. We welcome the oportunity to part exchange your present binoculars for any shown in our catalogue.

Ex British Army Officers'

#### $6 \times 30$ BINOCULARS

By Leading British Makers

TAYLOR HOBSON, KERSHAW, WATSON-BAKER, etc.

These precision-built British binoculars were originally made to stringent Government specifications for Army Officers' use. Consequently, they will stand up to a great deal of rough usage and are absolutely weatherproof. Individual eyepiece focussing and once focussed, they seldom need resetting. They are ideal for

sporting events due to their crisp definition and high light transmission, birdwatching and general holiday use. Estimated value: £25. Dimensions:  $6'' \times 4\frac{1}{2}''$ . Weight: 28 ozs.



Postage and Packing 2/6 New Hide Leather Case £1-5-0

COMPARE THESE WITH ANY OTHER SURPLUS BINOCULAR OFFER TODAY



D TECHNICAL SUPPLIES LT

29 TOTTENHAM COURT ROAD, LONDON, W.I. LANgham 1116-1117-5015

#### BINOCULARS

#### **FULLY RECONDITIONED**

#### FULL! RECONDITION





COMPARE THESE WITH ANY OTHER SURPLUS BINOCULAR OFFER TODAY

## Ex Admiralty Binoculars by BARR & STROUD

#### 7 x 40 GENERAL PURPOSE

SPECIALLY SUITABLE IN POOR LIGHT

A General Purpose Binocular with high light transmission due to an original optical design. Comfortable to handle. Particularly suitable for use under conditions of poor visibility, by night, at sea or on land.

SPECIFICATIONS

| Magnification  | 7      |
|--|--------|
| Diameter of Objectives   | 43.7mm |
| Aperture of Objectives   | 42mm   |
| , the training and the same and | 1      |

Aperture of Objectives
Diameter of exit pupil
Field of view in degrees
Field of view in yards at 1,000
Height
Width
Weight (approx.)

42mm
6mm
7° 18'
127 yds.
7.7 ins.
6.7 ins.
2 lbs.

APPROX. LIST PRICE £42 OUR PRICE £22-0-0 IN MINT

Including leather case
Postage and Packing 2/6
Also available second hand but optically
perfect £13 - 19 - 6d.

#### BARR & STROUD 7 x 50 BINOCULARS

Another Ex Admiralty binocular by this leading British Maker. Like the 7 x 40 above, but with wider objective lenses, it is ideal for all sporting and general purpose viewing, under almost any visibility conditions.

Complete with leather case

## FOR DAY and NIGHT USE BRILLIANT FIELD OF VIEW

**SPECIFICATIONS** Magnification 50.8mm Dia, of objectives Aperture of objectives 50mm 7mm Dia. of exit pupils Field of view in degrees Field of view in yards of 1,000 121 yds. 9 ins. Height 7 ins. Width 21 lbs. Weight



Also available second hand but optically perfect £13-19-6d.

COMPARE THESE WITH ANY OTHER SURPLUS BINOCULAR OFFER TODAY

UTS UNITED TECHNICAL SUPPLIES LTD.
29 TOTTENHAM COURT ROAD, LONDON, W.I. LANGHAM 1116-1117-5015

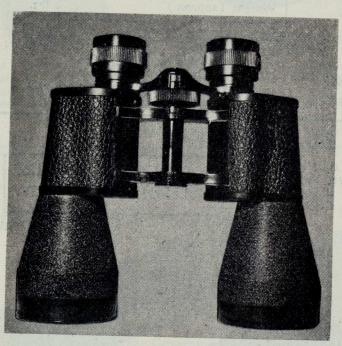


## Latest Releases

# FROM THE LINDERMANN RANGE OF BINOCULARS

For Brighter Viewing With Extra Power

Made to stringent Lindermann specifications, these excellent day and night glasses were designed specially to comply with the constant demand for power without sacrificing field of view and causing discomfort through excessive weight. Most of these models have only been released this year. They are all of ultra modern design, with centre wheel focussing and coated optics. The ideal all round binoculars for bird watching, yachting, all sporting events and general viewing. Three sizes available to suit all individual requirements, at prices to suit all pockets.



#### **SUPERVUE**

10 x 50

Considered to be the finest instrument of its type on the market today, this model is first in the field where quality and price are the first consideration. Coated lenses and unique Super lightweight construction together with excellent light gathering power make this the obvious choice for bird watching, hunting and yachting.

Completely dustproof and capable of withstanding considerable mechanical shock without displacing the optical components.

Dia. of Exit Pupil 5 mm.

Angular Field of View 6°

Sight Value 25

#### PRICE £14-17-6

Solid English Hide Case 32/6 extra Postage and Packing 2/6 or £4 deposit and 9 monthly payments of £1-12-3 (including case).





For those who require extra power plus field of view in a light portable binocular. They are light and easy to handle and have become very popular with bird watchers during the short time they have been on the British market. They have centre wheel focussing giving brilliant definition at all ranges.

Case 32/6 extra

PRICE £14-17-6

SOLID HIDE VELVET
LINED CASE

Postage and Packing 2/6

or £4 deposit and 9 monthly payments of £1-12-3 (including case).



#### **SUPERYUE**

15 x 50

An even more powerful version of the SUPERVUE 12 x 50. Suitable for tripod mounting. Original designed to comply astronomical requirements they have become extremely poular with Ornithologists and for target spotting etc.

PRICE 19-0-0

Complete with case.

Postage and Packing 2/6
H.P. Terms available on application.





# LINDERMANN 12 x 80 TRIPOD MOUNTING BINOCULARS

PRODUCT OF THE SAME SCIENTISTS AND CRAFTSMEN WHO PRODUCE OPTICAL LENSES AND PRECISION INSTRUMENTS FOR INDUSTRY, SCIENCE AND EDUCATION AUTHORITIES THROUGHOUT THE WORLD, THESE BINOCULARS WERE DESIGNED TO FULFIL EVERY REQUIREMENT . . .

YACHTING HUNTING FORESTRY NAVIGATION TRAVELLING SPECTATOR SPORTS RACING TARGET SPOTTING EXPLORATION NATURE STUDY AIRPORT CONTROL BIRD STUDY FIELD TRIALS MOUNTAINEERING NIGHT & GENERAL USE Considered to be the finest 'All Round' Binocular of its type on the market today, it is guaranteed to give a lifetime of service due to the high standard of its optical and mechanical qualities.

#### IMAGE QUALITY AND DEFINITION

Mere Magnification is of little use unless the image is sharp and well defined when magnified. The quality of image definition depends on the excellent standard of optical design, control of materials, precision of manufacture and correct assembly to design specifications. This instrument is noted for its maximum light transmission and Contrast, giving bright close up viewing of distant scenes, (free from distortion, curvature of field and chromatic aberration) with an extra wide field of view. Best results are obtained when mounted on tripod.

MAGNIFICATION: 12 times. Dia. OF OBJECTIVE LENS: 80 mm. FIELD OF VIEW AT 1,000 yards: 70 yds. (4%) EXIT PUPIL: 6.6 mm. RELATIVE BRIGHTNESS: 66.6

ABSOLUTELY BRAND NEW - COMPLETE WITH SOLID HIDE VELVET LINED CASE

PRICE £55 - 0 - 0 (Including Tripod)

WE WELCOME THE OPPORTUNITY TO PART EXCHANGE YOUR PRESENT BINOCULARS FOR ANY SHOWN IN THIS CATALOGUE.

THERE ARE ALSO MANY OTHER TYPES AVAILABLE AT OUR 29 TOTTENHAM COURT ROAD SHOWROOMS WHERE YOU WILL FIND OUR EXPERIENCED SALES STAFF ONLY TOO WILLING TO ADVISE YOU WITH YOUR PURCHASES.



#### BINOCULARS

## Ex Air Ministry 5 x 40 NIGHT BINOCULAR

Manufactured by ROSS, London

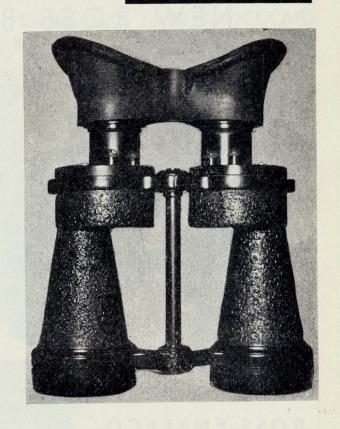
Specially designed to give a wide field of view and high light transmission for use at night these prismatic binoculars have a fixed focus. This makes them not only ideal for general uses but invaluable for sporting events and all other instances where viewing distances are constantly and quickly changing.

Complete with Transit Case

£12 - 10 - 0

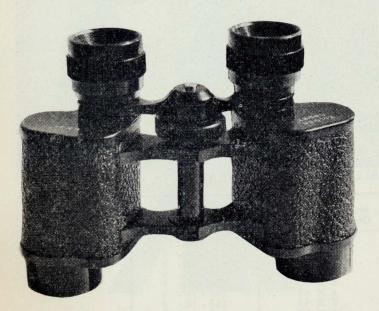
Postage & Packing 2/6





#### PART EXCHANGE

We welcome the opportunity to part exchange your present binoculars for any shown in our catalogue.



## BRAND NEW 8 x 25 BINOCULARS

Compact lightweight Sporting and General Purpose Binoculars by leading optical manufacturers. Magnification 8x, Diameter of Objective Lens 25mm., giving a field of view of 145 yards at 1,000 yards. Diameter of ocular ring 3.1 mm. Light gathering power 9.6.

£7 - 15 - 0

Case 25/- extra
Postage & Packing 2/6

#### BINOCULARS

#### NEW ROSS BINOCULARS

ROSS OF LONDON

ROSS of London have long been associated with top quality optical instruments and we have specially selected these instruments from their comprehensive range



#### SOLAROSS 9 x 35

Super lightweight. Ultra Modern Design with centre wheel focussing and bloomed lenses. Weight 21 oz.

#### PRICE £19 - 15 - 4

Complete with leather case Postage and Packing 3/6

#### OTHER SOLAROSS MODELS

| 7  | X | 42   |       | £25.  | 15. | 4 |
|----|---|------|-------|-------|-----|---|
| 8  | X | 40   |       | £17.  | 17. | 0 |
| 10 | X | 40   |       | £19.  | 19. | 0 |
| 12 | X | 40   |       | £26.  | 0.  | 4 |
| 16 | X | 60   |       | £32.  | 8.  | 8 |
|    | 5 | Spec | tacle | Solar | oss |   |

8 x 35 £28 - 10 - 4

## ROSS-ENBEECO

A high efficiency, central focussing prismatic binocular with special coated optics for better vision. A good choice for those who require high power.

With an exit pupil of 4.6 mm. and the extremely large 60 mm. object glass the linear field of view is 67 yards at 1.000 yards.

#### PRICE £33-16-8

Complete with leather case Postage and Packing 3/6



#### ALSO AVAILABLE FROM THE ROSS RANGE

| Model         | Magnification and Object Glass Dia. | Price         |
|---------------|-------------------------------------|---------------|
| Ross Stepsun  | 12 X 50                             | £57 - 14 - 11 |
| Ross Stepmur  | 10 X 50                             | £56 - 17 - 8  |
| Ross Steplux  | 7 X 50                              | £52 - 9 - 8   |
| Ross Stepruva | 9 X 35                              | £38 - 13 - 4  |
| Ross Steptron | 8 X 30                              | £36 - 10 - 9  |
| Spectaross    | 8 X 40                              | £47 - 11 - 4  |
| Tropical 7    | 7 X 42                              | £53 - 18 - 8  |
| Tropical 10   | 10 X 50                             | £62 - 16 - 8  |

#### BINOCULARS & MONOCULARS

FIRST ADMIRALTY RELEASE

10 x 70 BATTLESHIP BINOCULARS

by Ross, London

5 YEARS GUARANTEE

# SPECIALLY SUITABLE FOR LONG DISTANCE VIEWING FOR TRIPOD MOUNTING

These super naval binoculars have an extra large field of view and wide angle. They are fitted with sun covers and three filters: light Neutral, Dark Neutral, and Russian Yellow. Their 70mm objective lenses and extra power make them ideal for use in practically any visibility condition on land as well as at sea. They have brilliant light gathering power and the individual eyepiece focussing gives an extra sharp image at a long range.

APPROX. LIST PRICE £150

Our Price £45 - 0 - 0

IN MINT CONDITION

(Complete with Tripod)

A few available in good optical condition

£37 - 10 - 0 (without Tripod)



Hire Purchase Terms on application

## LINDERMANN "RANGEMASTER"

TRIPOD MOUNTED PRISMATIC TELESCOPE

22 x 50

A 22 Power Prismatic Telescope with a 50 mm. Objective lens. An instrument of superb performance under all conditions, it is favoured by Bird Watchers, Astronomers and general viewers as well as being widely used for Range Spotting. It has micrometer eyepiece focusing and the composite prism assembly gives extra light and brilliant definition over all distances.

Field of View at 1,000 yards: 25 yards. Angle of View: 1° 25 minutes.

Exit Pupil 2.2 mm. Weight approx. 41 lbs

£22 - 10 - 0
Including Tripod





#### MONOCULARS

## Ex Admiralty TELESCOPE

by Kodak of Canada

A prismatic telescope made to Admiralty specification. Ideal for Lunar and Planetary observations as well as terrestial uses, it is a 7 x 50 instrument fitted with binocular rubber eyepiece guard (with "cut out" for left eye) and filters enabling it to give a superb performance under almost any condition of visibility. Weight 13 lbs. (excluding tripod). Estimated cost to Government:

OUR PRICE £9 - 15 - 0

(Including Tripod)

# Extra Wide Angle 10 x 80 PRISMATIC TELESCOPE

SUITABLE FOR TRIPOD MOUNTING



This fine instrument has only just been released by one of Britain's leading Optical manufacturers.

It is sturdily constructed and contains a composite prism erector system that is only found in the more expensive telescopes. The 80mm. clear aperture Achromatic objective lens has a maximum light intake. This gives an outstanding image sharpness and unequalled contrast and brightness in an extra wide field of view ideal for spotting, birdwatching and general long range observation, sightseeing, etc.

PRICE £27-10-0

TRIPOD £2-10-0

Postage and Packing 5/-

#### MONOCULARS



#### The 'LINDERMANN' SPOTTERSCOPE

20 Power

#### POCKET MONOCULAR

A super light-weight prismatic spotterscope.

Can easily be carried in the pocket at all times and will provide hours of unexpected pleasure that only "close-ups" can give. Specially quick micrometer focussing 20 power. 43 mm. object plass.

Length 61 inches. Weight 9 ozs.

MB

Price £5-17-6

Postage and packing 2/6 Velvet lined leather case 20/-

#### 10x and 20x MONOCULARS

This high quality Monocular is made exclusively for U.T.S. by a leading British Manufacturer.

Compact, lightweight instrument with bloomed optics for maximum light gathering power. Micrometer eyepiece focussing. Available either  $10 \times 50$  or  $20 \times 50$ .

Length 61 inches Weight 12 ozs.

Price £7-10-0
Postage and Packing 2/6
Velvet lined leather case 20/-





ROSS, London

#### 7 x 50 MONOCULAR

This instrument is noted for its excellent light-gathering power and wide field, providing excellent vision at all times even at night or in fading light. In as new condition. Superb value at this price.

Our Price £8-15-0

Postage and Packing 2/6

Lined English leather case £1-0-0 extra



#### MONOCULARS

## "SUPERVUE" HIGH POWER MONOCULARS $10 \times 50$ , $12 \times 50$ or $15 \times 50$

Made in this country to stringent Lindermann specifications. Designed to provide extra power without sacrificing field of view or causing extra weight. Ultra-modern design, bloomed lenses. Ideal for birdwatching, sporting events and general viewing. At a price to suit all pockets.

A choice of three sizes:  $10 \times 50$ ,  $12 \times 50$  or  $15 \times 50$ To suit individual requirements.

Price £8-10-0

Postage and Packing 2/6
Lined English Hide leather case £1 - 0 - 0.



Ex. Govt.
6 x 30 MONOCULAR

by Taylor Hobson, Kershaw, etc.

Light and convenient for the pocket, being only 5" high and weighing 9 ozs. High quality construction, will stand a considerable amount of rough usage.



PRICE £4 - 10 - 0
Postage and Packing 2/6

#### BARR & STROUD MONOCULARS 7 x 40 or 7 x 50

Made by one of Britain's leading optical manufacturers these 7 power general purpose monoculars are noted for their high light transmission as they were specially designed to produce results under poor visibility conditions. Available in two sizes with either 40 mm, or 50 mm, objective lenses.

Prices

7 x 40 £9-15-0

7 x 50 £10-15-0

Postage and Packing 2/6 Lined Leather Case £1-0-0 extra





MAIL ALL ORDERS TO

UNITED TECHNICAL SUPPLIES LTD.

29 TOTTENHAM COURT ROAD, LONDON, W.I. LANgham 1116-1117-5015

#### TELESCOPES

## AMERICAN NAVAL TELESCOPES

16 Power ex U.S. Navy telescope of the highest quality.  $2\frac{1}{2}$  diameter object glass gives maximum clarity and wide field of view. Brilliant definition can be obtained with the graduated eyepiece focusing system. Length 30". Weight 12 lbs.

Our Price £11 - 15 - 0

Tripod £1-0-0 extra



#### ROSS 10 x 70 MONOCULAR

This monocular is fitted with three filters: Yellow, Light Neutral and Dark Neutral which together with its 70 mm. objective lens, precision eyepiece focussing and an excellent prism system, make it ideal for use under almost any condition of visibility on land or at sea.

Although originally designed for long distance viewing, it is noted for its extra large field of view and wide angle and gives an extra sharp image at all ranges. Ideal for Photograph, Birdwatching and General Purpose viewing.

TODAY'S VALUE OVER £75



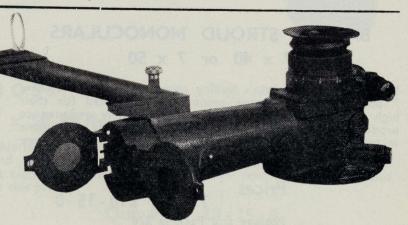
Postage and Packing 5/-

OUR PRICE £22 - 10 - 0
Ex Government Tripod available £2 - 10 - 0

COOKE,
TROUGHTON
& SIMMS

#### ELBOW TELESCOPE No. 14

Ideal for taking bearings on stars, moonwatching, etc., this instrument was originally constructed as a sighting telescope. It has a Helical Focussing Eyepiece, illuminated graticules and built-on filters. Complete with sighting unit. Sturdy construction. In excellent condition. First class optical components.



Price £6 - 10 - 0
Postage and Packing\*5/-

UNITED TECHNICAL SUPPLIES LTD.
29 TOTTENHAM COURT ROAD, LONDON, W.I. LANGHAM 1116-1117-5015

**TELESCOPES** 

# Ex ARMY THREE DRAW RECONNAISSANCE TELESCOPE

#### IN MINT CONDITION

OUR PRICE

£8 - 15 - 0

Complete with Brand New Leather Sling Case



This 25 power signalling telescope was originally issued to the Intelligence Corps. It extends to a length of 30 inches and conveniently closes down to 11 inches. The diameter of the object glass is 2" and the weight 2 lbs. The unequalled definition, compactness and tropicalised body construction, make this an ideal instrument for all purposes, from shooting to amateur astronomy.

# THE "ORION" 6 inch f8 NEWTONIAN ASTRONOMICAL TELESCOPE

A new design that has been proved to be the finest of its type offered in England today, capable of very serious work and of accommodating very high magnification if necessary.

It consists of an impregnated laminated plastic tube, with a cork mounted aluminised parabolic mirror which has been polished to  $\frac{1}{8}$  of a waveband, an aluminised diagonal  $\frac{1}{4}$ " thick, the minor axis being  $1\frac{1}{2}$ " and an eyepiece unit that has rack and pinion fine focussing for a length of 1 inch plus a draw tube for quick positioning when changing power. Designed to take the American type 1.250 inch diameter eyepieces it also has a simple screw adapter for conversion to English standard screw fitting of 1.250 inch diameter x 16 t.p.i.

The Orthoscopic eyepiece of 0.766" (19.5mm) focus, with the 48" focus primary mirror, gives an approx. magnification of 60x. Eyepieces of other powers and types can be supplied for use on this instrument. It has a light, robust and easily handled azimuth mount, and the Finder, which is mounted on the main tube, has an adjustable crossline graticule.





PRICE £175 - 0 - 0



#### ASTRONOMICAL TELESCOPES

#### Latest Release

#### LINDERMANN

3" ALTAZIMUTH MOUNTED ASTRONOMICAL TELESCOPE

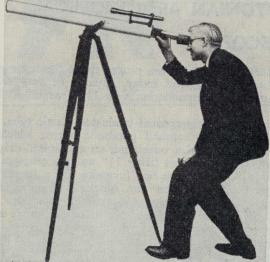


The latest addition to our astro section, this 3" Astronomical Telescope has already proved an outstanding success. This is not only due to its excellent performance for Astronomical use, but for its adaptability for use as a high powered terrestrial telescope, this means that the object will be the right way up for land viewing.

Its extremely high quality optical components consist of a 3 inch clear aperture objective lens with a 45 inch focal length and three eyepieces threaded 1½" (16 T.P.I.) which give 45 power, 72 power and 180 power magnifications. The tube is mounted on a superior metal adjustable tripod complete with altazimuth mounting.

Course focusing is by draw-tube and a special feature is the helical fine focusing. It is finished in white stove enamel with brass parts nickel plated and the stand head finished black stove enamel.

A star finder is provided and also a prismatic erector system is added for terrestrial viewing.



PRICE £57 - 10 - 0

COMPLETE WITH TRIPOD

Carriage Paid



# COMPONENTS FOR THE ASTRONOMICAL TELESCOPE BUILDER

#### **ASTRO MIRRORS**

| 4 inch Mirror and Diagonal Flat. Focal length 31". Both Aluminised  | £3-0-0   |
|---|----------|
| 6 inch Parabolised Mirror and Elliptical Flat. Focal length 48". Both Aluminised. From Low expansion Pyrex glass to \( \frac{1}{4} \) wave. Minor |          |
| Axis 1.4"   | £11-10-0 |
| 73/4 inch Mirror and Elliptical Flat. As above but with 64" focal length  |          |
| and minor axis of 1.9"  | £25-0-0  |
| (Plus 7/6 Postage, Packing and Insurance)   |          |
| 10 inch, 12 inch, 14 inch and 18 inch mirrors are also available. Prices on application.  |          |

#### ASTRO OBJECTIVE LENSES

| 3 inch Clear Aperture Objective Lens. Balsamed, unmo Focal length 45" |         |
|---|---------|
| Postage, Packing and Insurance 7/6                                    |         |
| Anodised mount  | £3-15-0 |
| 4 inch Clear Aperture Objective Lens, Balsamed, unmo Focal length 47" |         |
| Anodised mount  | £4-5-0  |

#### ASTRO EYEPIECES

The following astro eyepieces are in anodised duralumin mounts with standard  $l_4^{\perp n}$  astro, thread:—

| 1 "   | Ramsden | <br> | <br> | 75/- |
|-------|---------|------|------|------|
| 3"    | Huyghen | <br> | <br> | 65/- |
| 5"    | ,,      | <br> |      | 65/- |
| 1"    | ,,      | <br> | <br> | 65/- |
| 11/2" | ,,      | <br> | <br> | 65/- |



#### 6 inch ASTRO TELESCOPE TUBES

Welded Steel tubes 7" dia., 48" long with aluminium castings for mirror mount and spider. Price on application.







# Starmaster 4 inch REFLECTOR BUILD IT YOURSELF

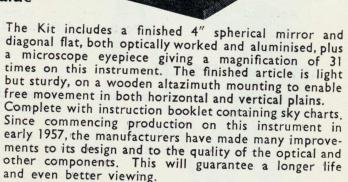
READY GROUND MIRROR
WITH TOP QUALITY
COMPONENTS

MB

EASY TO ASSEMBLE

FOR ALL

Exceptional Educational Value



£6-17-6
Postage and Packing 5/-

Additional 78x Eyepieces for increased magnification: £2-5-6

The "Starmaster" can be supplied completely assembled and ready for use at £11-17-6

MAIL ALL ORDERS TO :-



#### JOURNEY into SPACE

The Starmaster was originally designed to comply with the increasing current demand for an Astronomical Telescope to suit the requirements of both beginner and expert at a price within reach of all pockets. However, during the short time it has been on the market, not only has it been a great success with Astronomers, but photographers too.

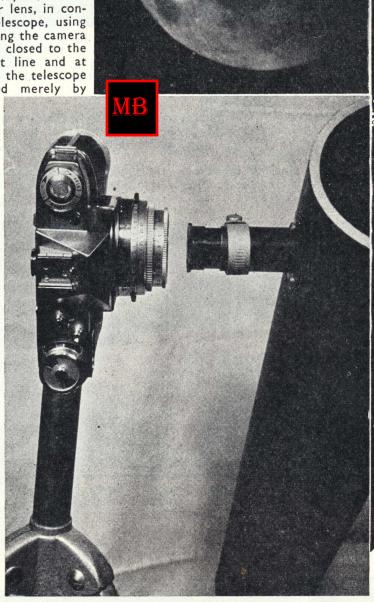
One of the leading photography magazines, "35 mm. Photographing" published an interesting article by K. N. Harris entitled "Journey into Space" in their October 1960 issue. This shows how results (illustrated on right and overleaf) were obtained by photographing the moon with a Retina Reflex Camera, fitted with the standard 50 mm. f/2.8 Xenar lens, in conjunction with the Starmaster Telescope, using the 31 power eyepiece. By adjusting the camera tripod so that the camera lens is closed to the telescope eye-piece in a straight line and at right-angles to the centre line of the telescope tube, correct focus is obtained merely by

adjusting the telescope eyepiece. The camera lens being focussed at infinity and opened to its maximum aperture plays no part in the formation of the image.

#### LENGTH OF EXPOSURE

This depends on the speed of the emulsion employed, phase of the moon and weather conditions, i.e. 1/30 sec. exposure on mediumspeed film is satisfactory with a full moon in good viewing conditions. But during the first or last quarter of the moon (when only half of its face is illuminated), 1/8 sec. exposure is necessary with similar film and conditions. The illumination falloff is explained by the fact that in the latter condition, the light, which originates from the sun, is being reflected at 90° instead of being returned almost parallel to its original direction (as at full moon). Likewise, the crescent moon would require not less than 2 secs. on medium speed film. Faster emulsions can be used to reduce times proportionally, i.e. a 400 ASA film allowing a ½ sec. exposure in the case of the crescent moon. The aim is to keep exposure time to absolute minimum for much the same reason that high shutter speeds are used with action subjects, for

Continued



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LANgham 1116, 1117, 5015



The gibbous moon. A few days after full moon there is still sufficient light for a relatively brief exposure. 1/5th sec, on Plus-X.

(Photograph by 35mm. PHOTOGRAPHY Magazine)

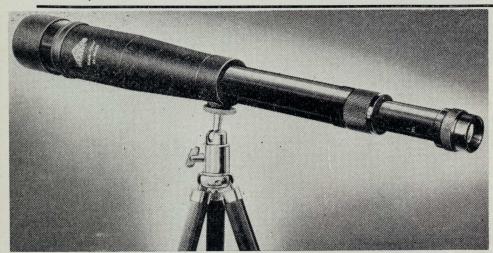


although the moon seems stationary it is nevertheless constantly in motion in relation to earth — and telescopes. The Starmaster's field of view with the standard 31 power eyepiece, is a little over two diameters of the moon's disc, and the moon will pass completely across the field of view, from edge to edge, in approximately four minutes and ten seconds.

#### FLASH OF A METEOR

Having attempted this form of photography, photographers are finding Astronomy an engrossing second hobby. Having obtained good sharp close-ups of the moon in monochrome, they are trying again with the new high speed colour reversal films, as projected transparencies in natural colour are most impressive.

There are other things to shoot with a telescope besides the moon, for instance the capturing of the flash of a meteor as it streaks across the sky, or when bigger and better satellites are in orbit, you will be able to record their tracks as they move against a backcloth of near-stationary stars.



## THE HERTEL & REUSS 'TELE-VARI'

BRAND NEW
MULTI-PURPOSE
TELESCOPE WITH 5
MAGNIFICATIONS

25x 30x 40x 50x 60x

£39 - 8 - 6

Complete with leather case

| Magnifi-<br>cation | Exit-<br>Pupil | Lumi-<br>nosity | Dawn<br>power | Field of view at 1000 m. |
|--------------------|----------------|-----------------|---------------|--------------------------|
| 25x                | 2.4            | 5.8             | 38.73         | 23.3                     |
| 30x                | 2              | 4.0             | 42.43         | 23.3                     |
| 40x                | 1.5            | 2.3             | 48.99         | 20.0                     |
| 50x                | 1.2            | 1.5             | 54.77         | 16.5                     |
| 60x                | 1              | 1.0             | 60.00         | 14.7                     |

A high precision instrument for Astronomy, General uses, and especially for checking buildings, bridges, high tension wires and all other objects which cannot easily be reached or are of long range. It has an 18 mm. dia. eyepiece and a 60 mm. objective lens. TRIPOD £6-0-0.



#### SPECIAL TELESCOPE OFFER

#### 'THE SCOUTER' 25 POWER

ARMY PATTERN

General Purpose Telescope

Made exclusively for U.T.S. and based on the famous "Scout Telescope", as used by the British Forces in World War II.



SUPER LIGHTWEIGHT

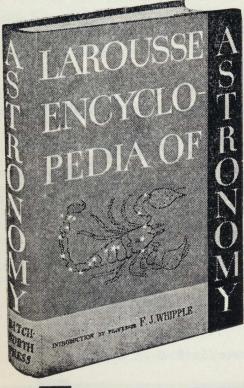
FULLY
BLOOMED
LENSES
THROUGHOUT

PRICE £8 - 15 - 0

Postage and packing 2/6.

A truly remarkable instrument for the price, this 3-draw telescope is beautifully finished in English chrome leather. The lenses are fully bloomed throughout, and all metal parts are anodized.

The magnification is 25 times and through the 52mm. objective lens this gives an extra wide clear picture with excellent light value. It is extremely light and compact; weighing less than 2 lbs. it is 34" long when extended and closes down to only 11½".



## OF ASTRONOMY

An immensely important work on a subject without parallel in mystery, beauty and interest. An up-to-date survey for expert or laymen. 572 pages, more than 800 illustrations.

Price 3 Gns.

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#### SIGHTS



#### 2x TELESCOPIC SIGHT M.38

An excellent Ex.-Govt. Sight, strongly constructed. Only  $5\frac{1}{4}$ " in length and  $1\frac{1}{4}$ " dia. Weight I lb. 6 ozs. Ideal for all calibres. Objective: Achromatic Triplet Focal length 53mm. Dia. 24.5 Part cemented GRATICULE: Wide and short horizontal lines numbered 1, 2 and 3. 2 Porro Abbe Left Hand Prisms 18 mm. long 9 mm. wide uncemented, mounted in cradle 20 mm. dia. EYEPIECE: Achro Doublet Focal length 80mm. Diameter 12mm.

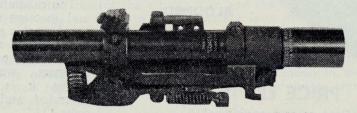
#### Price £2-5-0

Postage and Packing 2/6

#### RIFLE SIGHT No. 42

Good luminosity combined with outstanding definition are the main features of this Ex. Government sight. It is absolutely weatherproof and is suitable for all calibres from .22 to .303. Magnification  $3\frac{1}{2}x$ , Eye relief 3", Body Tube Dia. 1", Weight 17 ozs., Length 11", Eye Lens dia.  $\frac{13}{16}$ ". Object glass dia.  $\frac{1}{16}$ ". Single line graticule.

Our Price 45/- (Also with Cross line Graticule 65/-)
Postage and Packing 2/6



#### TELESCOPIC SIGHT M.45

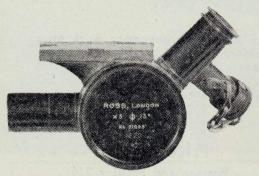
A solidly constructed sight with 2x magnification. The body tube is  $\frac{7}{8}$ " dia. and the object glass  $\frac{3}{8}$ ". Weight 10 ozs., Eye relief 3". The Graticule has short vertical and horizontal graduations. Ex. Government, IN NEW CONDITION.



#### Our Price 45/-

Postage and Packing 2/6

## x3½ PRISMATIC ELBOW TELESCOPE by ROSS & OTTWAY, LONDON



Containing: Achro. Doublet, F: 60 mm. clear aperture 15 mm. wide, Graticule, plain cross on disc 16.5 dia., in threaded cell. Two Achro. doublets F: 38.2 mm. dia. making an eyepiece 19.5 mm. focal length. Total weight: 1 lb. 12 ozs. Magnification x3. The high degree of accuracy incorporated in this instrument, i.e., the Cross Graticule and large field of view, make this an ideal instrument for conversion into an optical level

Price £4-15-0

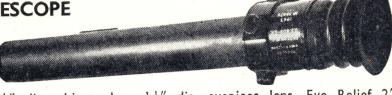
Postage and Packing 2/6

Also available: -Ottway, with focussing eyepiece £5-15-0. P. & P. 2/6.

SIGHT

#### SIGHTING TANK TELESCOPE

An excellent instrument for both industrial and amateur research. The optical system consists of five high quality achromats. AVERAGE SPECI-



FICATION:  $2\frac{1}{2}x$  magnification,  $1\frac{1}{2}$  dia. object glass,  $1\frac{1}{2}$  dia. eyepiece lens, Eye Relief 2" approx., Weight  $6\frac{1}{2}$  lbs., Length 16", Crossline Graticule.

Our Price 25/-Postage and Packing 2/6

#### 2/1 TANK ALIGNING SIGHT

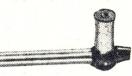
#### ELBOW SIGHT FITTED TO STAINLESS STEEL ALIGNING TUBE

A precision instrument with many applications, constantly used in industry, consisting of :-

OBJECTIVE GLASS: Achromatic Doublet in threaded cell, 50 mm. focal length, 9 mm. clear aperture. (10 mm. lens).

PRISM:  $90^{\circ} \times 45^{\circ} \times 45^{\circ}$ , Hypotenuse 18 x 12 mm. RAMSDEN EYEPIECE: Focal Length 25 mm. (Suitable for Microscope or Astro Telescope, etc.).





#### Price £3-15-0

Postage and Packing 3/6 Complete with wooden case

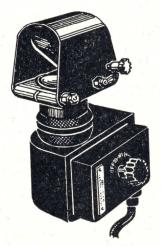
#### **GUNSIGHT** ILLUMINATED

Projects an illuminated graticule consisting of two circles, out into the air. Each circle is broken in four places and centre dot. The light is bent at right angles by a transparent glass reflector plate and reticle appears on target about one inch in diameter regardless of distance. It is used by sighting through the gunsight with one eye and keeping the other eye open.

It uses a 24 volt lamp, double-contact bayonet base. Approx. size of unit:  $6'' \times 3\frac{3}{6}'' \times 3\frac{3}{6}''$ .

Ideal for adaptation as an astronomical telescope finder.

Our Price 35/-Postage and Packing 2/-



#### 4x TELESCOPE Image Reversed

L to R in one position and reversed top to bottom when rotated 90°.

Comprises of:

A. OBJECT GLASS — Focal length 75 mm in a threaded cell clear aperture 14.5 mm.

For image CEMENTED PRISM ASSEMBLY.

reversal 52 mm long-15 mm wide.

Consisting of 2 Achromatic Doublets 18 mm diameter and 36.5 mm focal

IDEAL for Optical Instruction, Industry, etc.



**Price 75/-**Postage and Packing 2/6

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#### **MISCELLANEOUS**

### GOVERNMENT SURPLUS SIGHTING EQUIPMENT

- ROSS 3 POWER 13° ANGLE SIGHT SE 67885. Containing: Achro. Doublet, f: 60 mm. clear aperture 15 mm. wide, Graticule, plain cross on disc 16.5 dia., in threaded cell. Two Achro, doublets f: 38.2 mm. 18 mm, dia. making an eyepiece 19.5 mm, focal length.
- OTTWAY Waterproof Airtight TELESCOPE SE 368. Consisting: of six Achro. doublets: f: 84 mm.—36.5 mm. dia., f: 71 mm.—36.5 mm. dia., f: 69 mm.—33 mm. clear aperture, f: 69 mm.—29 mm. clear aperture, and two f: 69 mm.—34 mm. dia. which form the eyepiece (focal length 39 mm.). The clear aperture Achro. doublets forming the erector system. Total weight: 2 lbs. 12 ozs.

  PRICE £4-15-0.
- PRISMATIC MONOCULAR GUNSIGHT TELESCOPE SE 355. Containing: Achro. doublet, f: 256 mm. 49 mm. clear aperture, in cell. Two Neutral Filters, one yellow and one dark green, all 30.5 clear aperture. Field lens 38 mm. clear aperture with engraved graticule on plano face. Achro. doublet f: 48.5 mm. clear aperture 22 mm. PRICE £8-15-0.
- OTTWAY SIGHT SE 354. Containing: Achro. doublet f: 256 mm. 49 mm. clear aperture, in cell, Four Filters each 30.5 mm. clear aperture, two Neutral, one Dark Green and one Yellow. Two Porro Abbe Prisms, 38 mm. clear aperture, a field lens 38 mm. clear aperture with engraved graticule on plano face and an Achro. doublet, 148.5 mm. 22 mm. clear aperture. Total weight: 15 lbs 12 ozs. PRICE 49.10.0 PRICE £8 - 15 - 0. f: 48.5 mm., 22 mm. clear aperture. Total weight: 15 lbs. 12 ozs.
- aperture (2 Yellow, 2 Light Neutral and 2 Dark Neutral), Two Achro. doublets (air spaced) f:118 mm. Clear aperture 22 mm. Two Roof prisms, incident face 26 mm. wide, Straight line graticule, 21 mm. aperture (approx.), Two Plano-Convex lenses, f:47 mm. 26 mm. clear aperture. Two Achro. doublets f:45 mm. 14 mm. clear f:47 mm., 26 mm. clear aperture, Two Achro. doublets f:45 mm. 14 mm. clear aperture. These last four items form an achromatic Ramsden eyepiece, focal length
- GUN SIGHTING TELESCOPE SE 345. Containing: Plain Window 21 mm. clear aperture, in threaded cell. Four Achro. doublets f:53 mm. 21 mm. clear aperture, two in threaded cells and two in plain cells, and a Graticule-cross with two ellipses and radial lines. Total weight: 12 ozs.

  PRICE £6-15-0.
- OTTWAY BINO SIGHT. SE 2001. Containing: Two yellow, two neutral and two black 30 mm. aperture Filters. Two Achro. doublets f: 184 mm. 40 mm. clear aperture (in threaded cells). Two Roof prisms, roof face 50 mm. long, incident faces 60 x 41 mm. Graticule, 31 mm. aperture, broken horizontal line (R.H. side only). Graticule, 31 mm. aperture, straight line (R.H. side only). Two Plano/convex lenses, f: 67 mm. approx. 34 mm. dia., two Achro. doublets f:43 mm. 20 mm. clear aperture (in threaded cell). Weight:
- OTTWAY BINO. DIRECTOR SIGHT. SE 2003. Containing: Six 30 mm. aperture Filters (2 Black, 2 Yellow and 2 Neutral), two Achro. doublets f: 184 mm. 40 mm. clear aperture in threaded cell. Two Roof Prisms, roof face 50 mm. long, incident face 60 x 41 mm. Graticle, 31 mm. dia. straight line (R.H. side only). Two Plano/convex lenses f: 67 mm. approx. 34 mm. dia. Two Achro. doublets, f: 43 mm. 20 mm. clear aperture, in threaded cells. Weight: 6 lbs. 8 ozs.

  PRICE £21 - 0 - 0. (8 x 40 BINOCULARS)

ORIGINALLY COSTING £75 - £200 TO PRODUCE THESE ITEMS HAVE BEEN FOUND TO BE INVALUABLE FOR INSTRUCTIONAL PURPOSES AS WELL AS FOR INDUSTRIAL APPLICATIONS—STRIPPING DOWN FOR OPTICAL PARTS, ETC.



#### **MISCELLANEOUS**

#### GOVERNMENT SURPLUS SIGHTING EQUIPMENT

OFFERED AT A FRACTION OF THEIR ORIGINAL COST THESE EX-SERVICES SIGHTS AND TELESCOPES WERE MANU-FACTURED TO STRINGENT GOVERNMENT SPECIFICATIONS BY LEADING INSTRUMENT MAKERS AND CONTAIN SOME OF THE FINEST OPTICAL COMPONENTS EVER ISSUED

- OTTWAY SE 1915. H.A. Containing: Achro. doublet f: 260 mm., 35 mm. clear aperture. Bi-convex lens f:72 mm. 35 mm. clear aperture. Achro. doublet f:80 mm. 19.5 mm. clear aperture. Eyepiece complete (Spun together) E.F.L. 80 mm. and Viewing prism. PRICE £3 - 10 - 0.
- ROSS x 3½ BINO, GUNSIGHT. SE 372F. Containing: Two 52 mm. dia. Light neutral filters and two dark neutral filters 52 mm. dia., Two Achro. doublets f:100 mm. 24 mm. clear aperture, Two Porro Abbe prisms L.H. 26 mm. clear aperture and two right hand, Graticule 32 mm. aperture crossline and circle, Four Achro. doublets f:76 mm. 42 mm. dia., Two Plano/convex lenses f:93 mm. Dia. 37.5 mm. Total weight: 11 lbs. 4 ozs. PRICE £12 - 15 - 0.
- OTTWAY 20° THROW-OFF ATTACHMENTS SE 2050. Two 20° Deflection Prisms-incident face 19 x 38 mm., Two Green Filters 1" dia. Total weight: 3 lbs. PRICE £1 - 15 - 0.
- VARIABLE POWER TELESCOPE for H.A. GUN. Magnification: 5-15 x. An excellent general purpose tripod mounting telescope containing: Achro. doublet, f:270 mm. clear aperture 44 mm., Bi-convex lens f:80 mm. clear aperture 43 mm., Bi-convex lens f:80 mm. clear aperture 16 mm. (Making a "zoom" erector system), Plano/convex f:68 mm., clear aperture 37 mm. lens, Achro. doublet lens f:50 mm. clear aperture 13.5 mm. Prism 45° x 112° x 22.5°, incident of face 32 x 37 mm. Total weight: 14 lbs. PRICE £9 - 15 - 0.
- ROSS 7 x 50 MONO GUNSIGHT SE 353a. Containing: Achro. doublet f: 280 mm., clear aperture 49 mm. Two Porro Abbe prisms, 36 mm. aperture, Plano-convex lens with plain cross graticule, Achro. doublet, f: 46 mm., clear aperture 25mm. Total weight 12 lbs. 12 ozs. PRICE £9 - 15 - 0.
- POWER 3 GUNSIGHT SE 1663. Containing: Achro. doublet, f:73 mm. clear aperture, in threaded cell. Bi-convex lens f:72 mm. clear aperture, in threaded cell, Plano/ convex lens f:72 mm. 35 mm. clear aperture, in threaded cell, Bi-convex lens f:64 mm. (approx.) 37.5 mm. dia. (approx.), Achro. doublet f:54 mm. 13 mm. clear aperture, in threaded cell. Total weight: 6 lbs. 12 ozs. PRICE £6 - 15 - 0.
- OTTWAY VARIABLE POWER 7 x SIGHT for HH. GUN SE 350. Containing: Achro. doublet f:300 mm. 48 mm. clear aperture, Roof prism 105 mm. long, Incident faces at 60° to roof. Approx. 35 mm. aperture, Achro. doublet f:82 mm. 20 mm. clear aperture, Achro. doublet f:70 mm. 32.5 mm. clear aperture. PRICE £9 - 15 - 0.

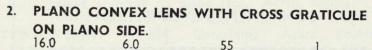
PRICES DO NOT INCLUDE POSTAGE AND PACKING

#### SIGHTS

4X Optical sight with numerous applications. 360° rotating head, worm gear, driven scales (one fixed and one adjustable). Graduated in single degrees and numbered in multiples in 10. A quick release trigger enables the head to be swung to any position rapidly. The 18 mm. diameter Orthoscopic Eyepiece has a focal length of 36 mm. The dial sight comprises the following optical components:—

#### 1. ACHROMATIC DOUBLETS.

| Dia. | Substance | Focal Length | Qty. |
|------|-----------|--------------|------|
| mm.  | mm.       | mm.          |      |
| 17.8 | 6.4       | 74           | 3    |
| 18.5 | 7.0       | 35           | 1    |
| 18.5 | 7.5       | 35           | i    |



#### 3. WINDOWS.

| Width | Length | Thickness |
|-------|--------|-----------|
| mm.   | mm.    | mm.       |
| 41.4  | 25.5   | 3.0       |

4. 1st SURFACED SILVERED MIRROR.

35.6 19.0 2.6

PLAIN FACE PRISMS, 90° x 45° x 45°
 Hypotenuse 23.7 mm, long. 18.0 mm, wide.

6. DOVE PRISM.

Backlaying Face. 64 mm. long x 45 mm. wide. Incident face 21 mm. long.

7. SCANNING PRISM.

Reflecting faces silvered 30° to incident face 22.5 mm. long x 17.8 mm. wide. Incident face 48 mm. long.



ORIGINAL COST

OVER £150

IN PERFECT

CONDITION.

COMPLETE IN STOUT

LEATHER CASE.

OUR PRICE £5 - 15 - 0

Postage, Packing and Insurance 12/6 (U.K.)

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CAN BE USED AS EQUATORIAL TELESCOPE MOUNTING

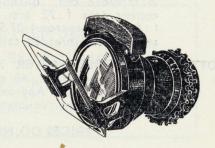
#### REFLECTOR GUN SIGHT

4 Lens system with additional graticuled lens at rear. Central lens is a  $3\frac{1}{4}$ " diameter achromatic pair. Can be used as a powerful viewing magnifier by cutting the mount  $2\frac{3}{4}$ " from the front lens and removing the meniscus lens.

Parts can be used for constructing enlargers, slide viewers, etc.

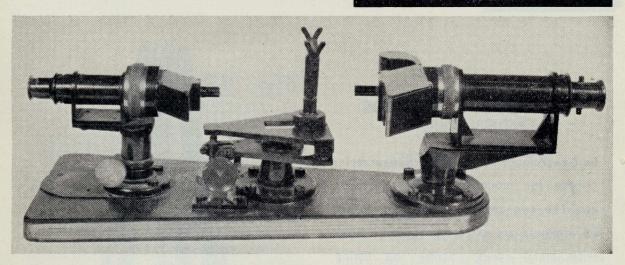
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Post and Packing 3/-





#### COLLIMATORS etc.



#### BINOCULAR COLLIMATOR

A double rhomboid bench-type binocular collimator. Complete with adjusting cradle and fittings. Originally designed for  $6 \times 30$  binocular collimation, it is widely used in industry for constructing and checking other optical instruments.

APPROXIMATE LIST PRICE OVER £250

Our Price £50-0-0



#### GENERAL PURPOSE COLLIMATOR A READY MADE 6X TELESCOPE FINDER

Originally designed as a general purpose collimator for checking service instruments, now used in industry for similar purposes and also for the fine optical components it contains.

OBJECTIVE LENS: 128 mm clear aperture, 27 mm focus. In screw focus mount. EYEPIECE: 19 mm comprising 2 Achro Doublets, 36 mm focus, Diameter 18 mm. Plain cross graticule on glass disc, approximately 15 mm clear aperture. Cross levels. Fitted with an eyeshield to avoid squinting when used for long periods. Length:  $7\frac{1}{4}$ " x  $1\frac{1}{4}$ " dia. (approx.).

COST OVER £30

Our Price £7 - 10 - 0 Postage and Packing Free 

#### **ACCESSORIES**

- BINOCULAR MOUNTINGS for Ross 7 x 50 and similar type binoculars with centre bar. Can be fitted to light tripods or walking sticks, etc. Horizontal and vertical adjustments with locking devices. Postage and packing 1/6. PRICE 7/6 each.
- BINOCULAR FILTERS. Sets of 4 filters to fit standard 6 x 30 binocular eyepieces. Complete with sturdy leather case. PRICE 7/6. Postage and Packing 1/6.



12 MONTHS GUARANTEE ON ALL MICROSCOPES



The World Famous

## ZEISS WINKEL

IN 'AS NEW' CONDITION

THESE ITEMS CAN BE VIEWED AT OUR SHOW-ROOMS OR SENT ON APPROVAL

Made in Germany by the world's leading microscope manufacturers, these instruments have two oculars and three matched objectives: 1/6, 2/3 and 1/12 oil immersion. Each one is as new and is fully guaranteed having undergone thorough rigorous checking from every aspect, mechanically and optically.

Normally these instruments would cost approx. £150 but due to an outstanding purchase direct from the Government, we can offer them at :-

H.P. TERMS AVAILABLE ON APPLICATION

£57 - 10 - 0

Complete with fitted case (With moving stage: £62-10-0)

#### The BECK 'CRESCENT' DISSECTING MICROSCOPE



Complete with beautifully finished hardwood carrying case, with lock and key. EX-GOVERNMENT UNISSUED

Constructed to provide stability, heavy cast base with two uprights directly under the hard wood hand rests to avoid any tendency to tip regardless of weight and pressure upon them. The lenses are on a swinging arm, focussed by a rack and pinion, actuated by a conveniently placed milled head. Focusing motion is over 3" to enable material of a considerable thickness to be accommodated. Below the thick plate glass stag is a mirror, silvered on one side and opal glass on the other. Three achromatic dissecting magnifiers are provided giving a flat field of view free from colour defects:—

Dia. of field Working Magnification of view distance 1.4" .5" x5 x12 x20

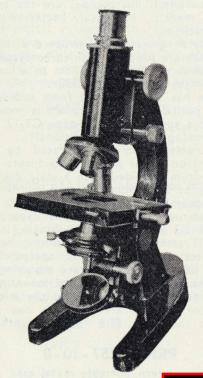
List Price £24 (approx.)

Our Price £15-0-0

Including Postage and Packing

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Catalogues of Binoculars, Telescopes, Sights, Watches, Stopwatches and Chronometers also available on application.



## WATSON "SERVICE" MODEL

One of the finest all-round microscopes ever manufactured in this country, the Watson "Service" Model is noted for its first class optical components and precision focusing arrangements.

We have purchased a quantity of these instruments direct from Government departments, in absolute mint condition. They have three objectives: 2/3, 1/6 and 1/12 oil immersion, and two oculars. A separate moving stage with a rack and pinion substage mounted below, which has a converging system and iris diaphragm. In fitted case.

Originally cost over £100

Our Price £62 - 10 - 0
12 Months Guarantee

Hire Purchase Terms available on application



# BRITISH WAR - SURPLUS MICROSCOPES by C. Baker

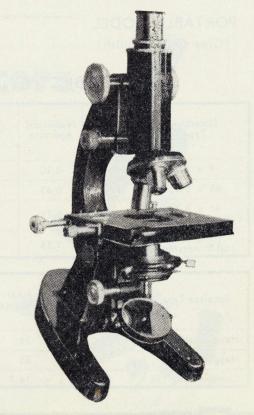
Each of these excellent instruments is in absolute mint condition, both optically and mechanically. Stand with diagonal Rack and Pinion Coarse and Fine adjustment actuated by milled heads placed at the side of the limb. Built in moving stage under which is mounted a rack and pinion substage with a converging system and iris diaphragm.

THREE OBJECTIVES: 2/3, 1/6 and 1/12 oil immersion. 2 Oculars. Originally over £100.

COMPLETE IN FITTED CASE

Our Price £62-10-0
12 Months Guarantee

Hire Purchase Terms available on application





JNITED TECHNICAL SUPPLIES LTD.

29 TOTTENHAM COURT ROAD, LONDON, W.I. LANgham 1116-1117-5015

## PORTABLE MODEL (Grey Crackle finish)

#### MICROSCOPES

#### AS EXHIBITED AT THE SOVIET

These ultra-modern microscopes are the type used in Russian medical, biological, bacteriological and other laboratories.

Beautifully designed and constructed with absolute precision they are supplied with three eyepieces and four objectives which enable them to achieve magnification ranges from 56x to 1,350x.

The stage has a right-angled form and stationary horizontal position. The specimen is moved with the help of a specimen driver type CT-12 attached to the microscope (This is additional)

to the microscope. (This is additional).

The micromechanism is operated by turning thumbscrews on either side, and to ensure accurate focusing a drum provided with a scale divided into 50 divisions of 0.002 mm. is fitted on to the axle of the left thumbscrew.

The condenser is of two lens type with an aperture of 1.2 with an iris diaphragm, the upper lens being removable when working with low power objectives, reducing the aperture to 0.3. The lower part of the condenser mounting is provided with a collapsible frame for mounting a daylight filter (dull blue) attached to the microscope.

The mirror surfaces are plane on one side and concave on the other (for lower magnifications).

#### PRICE £57 - 10 - 0

(In modern portable metal case with lock and two keys)

H.P. TERMS ON APPLICATION

#### OBJECTIVE and EYEPIECE DATA

| Objective<br>Type              | Magni-<br>fication | Numerical<br>Aperture | Focal<br>Length<br>mm | Free<br>Distance<br>mm | Microscope Field of View with 10x Eyepiece mm | Maximum Resolving Power with Direct Illumination, microns. |
|--------------------------------|--------------------|-----------------------|-----------------------|------------------------|---|--|
| 9 × 0.20                       | 9×                 | 0.20                  | 15.5                  | 12.8                   | 1.55  | 1.47   |
| 40 × 0.65                      | 40x                | 0.65                  | 4.3                   | 0.40                   | 0.35  | 0.45   |
| 40 x 0.75<br>(water immersion) | 40×                | 0.75                  | 4.3                   | 1.6                    | 0.39  | 0.39   |
| 90 x 1.25<br>(oil immersion)   | 90×                | 1.25                  | 1.9                   | 0.10                   | 0.15  | 0.24   |

| Eyepiece Type    | Magnification | Focal<br>Distance | Linear Field of View | Microscope Total Magnification (with objectives) |       |      |
|------------------|---------------|-------------------|----------------------|--|-------|------|
|                  |               |                   | mm                   | 9×   | 40x   | 90×  |
| Huyghenian 7x    | 7×            | 36                | 18                   | 63   | 1 280 | 630  |
| Huyghenian 10x   | 10x           | 25                | 14                   | 90   | 400   | 900  |
| Compensating 15x | 15x           | 16.7              | 11                   | 135  | 600   | 1350 |



#### from the U.S.S.R.

INDUSTRIAL EXHIBITION

THE LABORATORY MODEL

Almost identical in design to the portable model shown on the opposite page. It has only three objectives, the 40 x 0.75 (water immersion) being omitted. Grey crackle finish. Complete with polished wooden carrying case. Otherwise all data

PRICE £55-0-0

H.P. TERMS ON APPLICATION

CT-12 MOVING STAGE (Optional for both models)

One of the most convenient and simple devices for the specimen movement on the stage in two mutually perpendicular directions and for the determination of the object position. The position of a definite point of the object can be determinated with an accuracy of up to 0.1 by means of scales, verniers and centering plate. Up to 30mm in one direction and up to 80mm in the

PRICE £10-10-0

(subject to availability)



LABORATORY MODEL

RUSSIAN STUDENT **MICROSCOPE** 

Designed primarily as a training appliance for studying natural sciences this excellent student's microscope set consists of a stand with drawtube and mirror with objectives 8 x .20, 20 x .40 and eyepieces 7x, 10x and 15x giving magnifications from 56x to 300x. It is sturdily constructed and has top quality optical components.

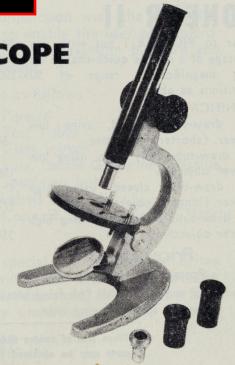
The objectives and eyepieces are interchangeable and screw into the drawtube with a standard thread enabling those from other microscopes to be used on this one.

Shifting of the drawtube is effected by means of a rack-and-pinion mechanism.

COMPLETE IN WOODEN CARRYING CASE

PRICE 16 Gns.

Postage and packing 3/6





TECHNICAL SUPPLIES LT

#### MICROSCOPES



for the younger Student

# Britex PIONEER MICROSCOPES

with POLAROID

Unique, scientifically constructed microscopes with telescopic draw tubes, each has a selection of filters in a sub-stage rotator, one of which consists of a special polarising material; which when used with the abalysing eye-cap, produces amazing results, because different colours will be seen according to the make-up and thickness of the specimen.

#### PIONEER

Height (fully extended) ... ... 10''Height (closed) ... ... 7''Stage dimensions ... ...  $2\frac{1}{2}'' \times 2\frac{1}{2}''$ 



MAGNIFICATION 50x - 150x

Price £5-19-6

Postage and Packing 3/6

In stout box complete with Polarising attachment and special crystal slide.

#### PIONEER II

Similar to PIONEER I but with the added advantage of a double quick-change nosepiece giving magnification range of 50x-350x. Dimensions as above.

#### MAGNIFICATIONS

With draw-tube closed, using low power (shorter) objective 50x
With draw-tube fully open, using low power objective 100x
With draw-tube closed, using high power (longer) objective 175x
With draw-tube fully open, using high power objective 350x

#### Price £6-19-6

Postage and Packing 3/6

In stout box complete with Polarising attachment and special crystal slide.



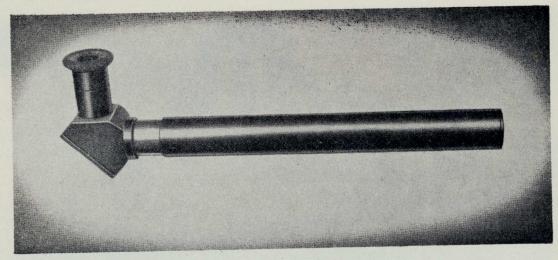
Three sets of twelve slides all different—of Insect and Spider parts may be obtained for these instruments at 15/- a set.



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#### MISCELLANEOUS



THE AVIMO
MICRO-VIEWING
FIXED FOCUS
TELESCOPES

BRAND NEW



This telescope is designed for use by the operator who requires a clear and undistorted view of a vernier or dial gauge at any fixed distance between 3 feet and 35 feet from him.

The lenses are positioned and locked within the telescope for a given range at our Works before despatch and no further adjustment is necessary.

The telescope is of robust construction with bloomed lenses and focusing eyepiece for individual dioptre setting.

Please supply details of any unusual operating conditions (vibration, excessive dust, etc.) that the telescope may be subjected to, in order that we may simulate and overcome these conditions during the manufacture and final testing of the instrument.

PRICE £135 - 0 - 0

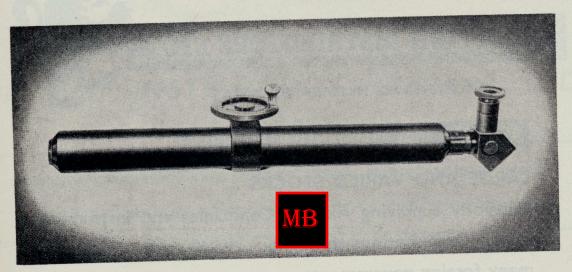
Postage and Packing 3/6



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#### MISCELLANEOUS



#### THE AVIMO MICRO-VIEWING ADJUSTABLE FOCUS TELESCOPES

BRAND NEW

Originally designed for use on giant boring machines, this telescope is ideal for keeping a close-up watch on traversing dials or verniers.

Designed so that magnification increases proportionately with the distance of the object being viewed, the size of the image is automatically kept constant as the handwheel is turned for focusing.

The standard telescope can be used with a traverse of 15 feet with a minimum range of 3 feet or a maximum range of 35 feet.

If required for easier viewing, these telescopes can be produced with the axis of the eyepiece set at any angle with respect to the main axis of the telescope.

This telescope is ideal for such diverse uses as enabling fermentation to be watched or viewing the action of an atomic process, or wherever direct access is not possible. It will provide a close-up view free from distortion or occasional failure such as occurs with the use of television circuits, and will give trouble free service year after year wthout maintenance.

PRICE £235 - 0 - 0

Postage and Packing 3/6



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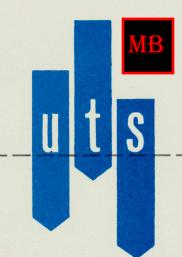
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#### United Technical Supplies Ltd.

29 TOTTENHAM COURT ROAD LONDON W1

25th April, 1963.

W.N. Marske Esq., 1120 Buffalo Street, Michigan City, INDIANAN, U.S.A.

Dear Mr Marske,

Further to your request, please find a copy of the second edition of our catalogue enclosed herewith. I am extremely sorry for the delay but as you will appreciate, it takes a considerable time to compile a catalogue of this nature.

It would be difficult to show our full range of stock in one catalogue of this size but there is a larger selection available at our showrooms at 29 Tottenham Court Road. Also, please do not hesitate to contact me if your requirements are not shown or if there is any further information you may require.

I have enclosed a stamped and addressed postcard for any of your colleagues you may think would also like to receive a copy.

Assuring you of our personal attention at all times,

Yours sincerely,

Director.