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ESTABLISHED 1765.

April, 1938.

**CLASSIFIED LIST of
SECOND-HAND
SCIENTIFIC
INSTRUMENTS**

No. 113

The passing of this List to your friend
will be appreciated.

Telegraphic Address :
"Optivorum,
Holb, London."

Telephone :
Holborn 1427.

TERMS OF BUSINESS.

PRICES.

All prices in this Catalogue are nett for cash.

ACCOUNTS.

Where it is desired to open an account, two references on business houses should be given. Credit is extended for prompt monthly settlement only.

PAYMENTS.

Cheques must be cleared before dispatch of goods, if the customer is unknown to us. Cheques and Postal Orders should be crossed. Overseas customers will find a Banker's Draft, or British Postal Orders the most convenient method of remitting.

DISPATCH.

Goods are sent Carriage Forward by the cheapest route unless otherwise instructed.

SIGNING FOR GOODS.

Customers should sign Carriers' Delivery Note "UNEXAMINED," otherwise no claim for loss or damage will be entertained. Packing should also be kept in case it is desired to inspect same. Carriers should be notified at once of damage or shortage, also the Insurance Company.

PACKING.

All goods are packed by experienced packers and sent at consignees' risk.

APPROVAL.

Goods are forwarded on 3 days' approval in the London area, and 5 days for the provinces against deposit of value of instrument.

We pay Carriage out, but if apparatus is returned, customer must pre-pay cost of return.

NAMES & ADDRESSES.

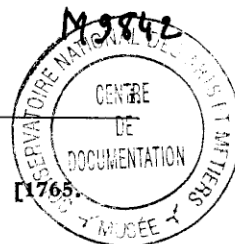
Customers are requested to write clearly their names and addresses. Block letters are preferable. Delay and trouble will thereby be avoided.

TSCHE-BAK

SECOND-HAND DEPARTMENT.

ESTAB.]

C. BAKER.



Partners :

C. LEES CURTIES.

THOS. J. OFFER.

**This Catalogue of USED AND SHOP-SOILED
APPARATUS contains over 3,500 items
and is published APRIL and OCTOBER.**

**IF YOU DESIRE ALL EDITIONS OF THIS LIST TO BE SENT YOU,
PLEASE COMPLETE AND SEND TO US THE POSTCARD.**

**KEEP THIS LIST FOR FUTURE REFERENCE
UNTIL THE NEXT EDITION IS RECEIVED.**

IMPORTANT NOTICE.

STUDY THE SUMMARY CAREFULLY, PAGES III & IV.

In the interests of our customers the Summary has been considerably extended and itemised to enable them to quickly locate the Section and page where the Apparatus they are desirous of purchasing may be found.

GUARANTEE.

We guarantee every instrument to be in good optical and mechanical order. Each item when purchased for stock is subjected to a rigorous examination, and, if found necessary, sent to our works for adjustment or repair.

INSPECTION INVITED.

All instruments except those having an asterisk (*) between the figures composing the designating number are, if still unsold, on the premises; those with an asterisk between the figures can be seen by arrangement only.

SUBMITTED FOR APPROVAL.

Those of our customers who are unable to call at our Showrooms to inspect pieces of apparatus, which, from the description, they think are likely to suit them, can have same on approval for three days on agreeing to pay all transit charges. Those unknown to the Firm can also have instruments under the same conditions, provided a remittance to the value of the apparatus selected and the above charges is forwarded with the application.

REQUIREMENTS NOTED.

Intending buyers who do not find exactly what they want in this list are strongly urged to communicate with us, giving full details of their requirements, as we are adding to our stock daily. If unable to supply from stock, we shall be pleased to advise as soon as the desired piece of apparatus comes to hand.

TERMS.

In addition to offering Second-hand Scientific Instruments for sale we are prepared to buy, or deal with them in any of the following ways :—

APPARATUS PURCHASED, VALUED, SOLD ON COMMISSION, OR DISPOSED OF AT AUCTION.

All Apparatus submitted for our inspection must be left with us for at least two clear days ; if sent by carrier it should be forwarded carriage paid, and a detailed list of the number of articles sent under separate cover.

Large quantities of apparatus inspected in town or country, and a preliminary report furnished at a moderate cost as to the best means of disposing of same.

(1) All offers for apparatus are for cash by return.

(2) Fee for valuation only, 5%.

(3) Commission and charges for selling.†

(A) Payable whether sold or not.

(1) Advertising in this list, 1s. per line per issue for first three issues, afterward, free.

(2) Storage, 5s. per foot floor space per annum. (This charge applies to large articles only).

(B) Payable only if sold.

(1) Commission of 20% on the gross price realised.

Clients leaving instruments with us for sale are strongly advised to have same thoroughly cleaned and overhauled (for which we shall be pleased to estimate), as a small amount spent in this way greatly facilitates sale.

(4) Commission, if sent to auction, including lotting charges, Auctioneers' fees, storage and cartage :—

For each sale, if unsold..... 12½% of the reserve fixed.

If sold 25% of the price realised.

† We cannot accept for sale on commission sundry apparatus of less value than 20s. per piece.

THE FOLLOWING INSTRUMENTS ARE REQUIRED, AND GOOD PRICES WILL BE ALLOWED IF THE APPARATUS IS BY WELL-KNOWN MAKERS, MODERN, AND IN GOOD ORDER. MICROSCOPES, ALL TYPES, OBJECTIVES AND ACCESSORIES, DUMPY LEVELS, STAVES, TELESCOPES WITH 3" TO 12" DIAMETER MIRRORS OR OBJECTIVES, PRISM, BINOCULARS, D.V. SPECTROSCOPES, BALANCES, ETC.

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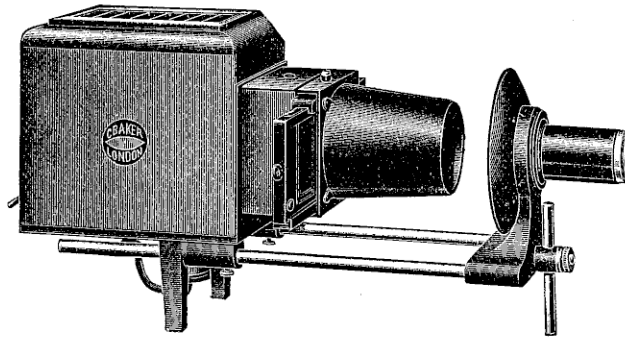
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WE ARE ACTUAL MANUFACTURERS OF MICROSCOPES, MICRO-PROJECTORS, LAMPS, LANTERNS, EPIDIASCOPES AND ALL ACCESSORY APPARATUS.		

The following Lists may be had on application :—

Microscopes and Accessories.	Metron Laboratory Apparatus.
Microscopes, Dissecting and Mounting Apparatus.	Tripod Magnifiers.
Epidiascopes, Episcopes & Lanterns.	Vernier Measuring Microscopes.
Micro-Projectors.	Diagraphic Projectors.
	Surveying and Drawing Office Equipment.

New C.B. Lantern



The New "C.B." Projection Lantern is an instrument designed principally for use in schools, where simplicity of operating, sturdiness of design and absolute reliability are essential.

The lantern is built on two rails after the principle of an Optical Bench and this ensures the different components being always in line. The objectives of 6in., 8in. and 10in. focus are of 1½in. aperture and 2½in. aperture in the longer focal lengths up to 18ins., and all are mounted in helical focussing mounts. They are of the best quality and give critical definition. The condensers are easily accessible and can be removed and cleaned, when necessary, without any difficulty.

A simple tilting device is provided for rooms in which the screen is higher than the lantern. The slide carrier is of the automatic lifting type.

Most interesting is the design of the lamphouse. For some time our projection apparatus has been noted for its coolness and this model is no exception. The lamphouse is built with two walls. Between the two lamphouses cool air is always circulating, so that the outside lamphouse remains quite cool to touch, even when high wattage lamps are being used. The importance of this coolness will be evident to anyone who has touched the body of the usual type of lantern in the dark by mistake after it has been burning for some time.

The lamp adjustments are simple and give adequate movement in all directions.

The instrument will close into a small space for storing, but in spite of this compactness, an extension of 16ins., or more is obtainable on the standard instrument, and lenses from 6in. to 14in. focus can be used. The lantern can be made with a longer extension, however, if it is desired to use longer focal length lenses than this.

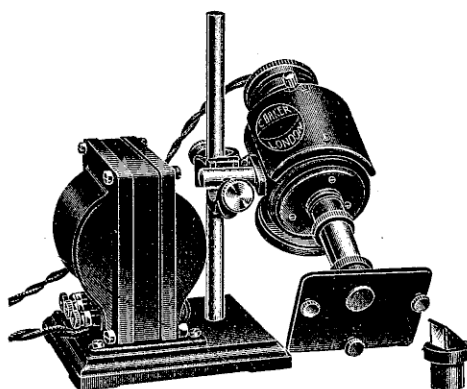
The New "C.B." Lantern is finished in crystalline enamel and nickel-plated, and is as attractive in appearance as it is efficient in practice.

	£	s.	d.
Price with 6in., 8in. or 10in. lenses of 1½in. aperture, without lamp ...	11	11	0
Lenses of 2½in. aperture of longer focus than 10ins., without lamp ...	14	0	0
500 watt Lamp ...	1	4	0
250 " " ...	1	0	0
Case, black pine, with handle ...	1	7	6

Please state voltage of lamp when ordering.

Micro-Projector, for use on above ...	4	5	6
Objective Micro, 3in., N.A. .08 ...	1	19	0
" " 2in., " .1 ...	0	19	6
" " 2in., " .15 ...	2	4	0
" " 1in., " .197 ...	1	17	6

Low Voltage Research Microscope Lamp



The employment of the 6 volt 4.5 ampere bulb lamp has enabled a Microscope Lamp with a very intense illumination to be produced for **Photomicrography**, and especially **Dark Ground Illumination**.

An optical glass rod is fitted in the front of the lamp housing, one end is polished and the other ground. It is from this latter end that the illumination is obtained. By altering the distance between the polished end and the bulb, varying intensities of light can be obtained. On the front of the rod is fitted a plate for carrying coloured filters, and this can be replaced by a right-angle prism for reflecting the light direct into the Substage Condenser or Dark Ground Illuminator. The prism can also be used for illuminating opaque specimens on top of the stage.

For alternating current a transformer is provided fitted to the stand, as illustrated; this also adds to the stability, but for direct current it is necessary to provide a variable resistance.

All necessary movements are provided and the upright is high enough to enable the rod to illuminate the top of the stage of most modern microscopes.

Prices

	£	s.	d.
Research Microscope Lamp , with holder to carry 2in. screens and transformer for alternating current	5	15	6
Ditto , with variable resistance for direct current, 100-250	5	15	6
Ditto , without transformer or resistance, for use with accumulator ...	3	17	0
Right-angle Prism Attachment , for opaque and direct illumination	0	19	6
Set of 9 Wratten Filters, 2in. square, in case	3	14	6
Spare Lamps each	0	6	0

SECTION I.

MICROSCOPES AND MICROSCOPIC APPARATUS.

A. MONOCULAR INSTRUMENTS.

All of which include a case unless otherwise stated.		£	s.	d.
531/24	Powell & Lealand No. 1 Stand, monocular and binocular bodies, Achro condenser, double nosepiece, 1 pair and 1 extra eyepieces, and box for apparatus...	65	0	0
564/28	Powell & Lealand Stand No. 3, no case, very good condition	15	15	0
432-8/9	P. & L., No. 2, mechanical stage, rack and pinion centring substage, in case.....	20	0	0
646/9	Projection Microscope, with coarse and fine adjustments, condensing lens, cooling trough, and Cooke Series III. 1.25in. projection objective, in mahogany case.....	7	15	0
622/139	Reading Microscope, with screw micrometer eyepiece.....	5	0	0
434-2/6	Baker, Large Model Student's, $\frac{1}{4}$ in. objective and 2 eyepieces and bull's-eye condenser.....	7	10	0
681/21	Swift Portable Clinical and Field Microscope, with Abbé condenser and iris, double nosepiece, 1in. and $\frac{1}{2}$ in. objectives, 1 eyepiece, in leather case.....	10	10	0
732/9	Davidson Microscope, with 1 $\frac{1}{2}$ in. objective, 1 eyepiece and lighting attachment, in case.....	2	10	0
902-17/9	Davon Micro Telescope, complete with 1 $\frac{1}{2}$ in., 1in. and $\frac{3}{4}$ in. objectives, 2 eyepieces, table stand, in leather case, as new	5	0	0
883-21/4	Davon Micro Telescope Outfit, in oak case, with $\frac{1}{2}$ plate camera on oak base board and 1 D.D. slide.....	5	10	0
786/22	Swift Portable Field Microscope, with double nosepiece, objectives 1in. and $\frac{1}{2}$ in., 1 eyepiece, in case	9	0	0
922-3/16	Student's Stand, with sliding tube, micrometer screw fine adjustment, 1in. and $\frac{1}{4}$ in. objectives, 1 eyepiece, in case	4	17	6
40/3/17	Measuring Microscope, with 5in. drum, reading to 10,000 of an inch with 1 eyepiece, in case.....	5	10	0
75/4/11	Zeiss Stand 1A, with circular centring rotating mechanical stage, rack focussing substage, Abbé and iris, quadruple nosepiece, objectives A, D and $\frac{1}{2}$ in., eyepieces 2 and 4, in case.....	27	10	0
77/4/11	Leitz Stand (C), with circular centring rotating stage, rack focussing substage, Abbé and iris, triple nosepiece, objectives 3 and 6, eyepieces 1, 3 and 4, in case.....	13	0	0
37/2/10	Beck, with spiral focussing substage, Abbé and iris, double nosepiece, objectives $\frac{3}{4}$ in. and $\frac{1}{2}$ in., eyepieces 1 and 2, in case.....	9	0	0
23/1/6	Parks, with double nosepiece, 2 objectives, 1 eyepiece, in case	2	10	0

Apparatus lotted and sent to auction.

MICROSCOPES AND MICROSCOPIC APPARATUS.—Continued.

889-15/30	Powell & Lealand No. 1, long and short monocular, and long binocular body, each with rack and pinion, fine adjustment to substage in case	£	s.	d.
		55	0	0
909-28/5	Microscope, for measuring thicknesses, with $7\frac{3}{4}$ in. track, divided on silver reading to $\frac{1}{3}$ of m/m.....	2	10	0
4/5/17	Watson Edinburgh H, with analyser in body, built in mechanical stage, rack focussing centring substage, achromatic condenser and iris, double nosepiece, 1 eyepiece, in case.....	15	0	0
33/4/11	Leitz , with Abbé and iris, double nosepiece, 3 and 7 objectives, 1 eyepiece, in case	10	0	0
939-12/S	Bausch & Lomb , with glass stage, sliding substage, condenser, wheel diaphragm, can be used either inverted, or as an ordinary Microscope, 1 eyepiece, no case	10	0	0
New	Baker II.A, with spiral focussing substage, Abbé and iris, double nosepiece, objectives 3 and 6, eyepieces 2 and 4, complete in mahogany case.....	14	19	0
New	Baker II.A, with iris diaphragm, double nosepiece, 3 and 6 objectives, eyepieces 2 and 4, in mahogany case.....	11	19	3
New	Baker II.B, with rack focussing substage, Abbé and iris, triple nosepiece, objectives 3 and 6, eyepieces 2 and 4, in mahogany case.....	17	18	6
New	Baker II.A, with spiral focussing substage, Abbé and iris, triple nosepiece, 3, 6 and $\frac{1}{12}$ in. o.i. objectives, eyepieces 2 and 4, in mahogany case.....	20	15	3
New	Baker II.B, with rack focussing substage, Abbé and iris triple nosepiece, objectives 3, 6 and $\frac{1}{12}$ o.i., eyepieces 2 and 4, complete in mahogany case.....	23	7	6
76/3/11	Baker D.P.H., with built-in mechanical stage, rack focussing substage, Abbé and iris, triple nosepiece, objectives 3, 6 and $\frac{1}{12}$ in., eyepieces 2 and 4, in case.....	25	0	0
77/3/10	Beck London (29), with Abbé and iris, double nosepiece, objectives $\frac{3}{8}$ in. and $\frac{1}{4}$ in., 1 eyepiece, in case.....	9	10	0
78/3/11	Watson Fram, with built-in mechanical stage, rack focussing centring substage, Abbé and iris, double nosepiece, objectives 3 and 6, 2 Holo eyepieces, in case	16	0	0
78/4/11	Reichert , with spiral focussing substage Abbé iris and stop carrier, triple nosepiece, objectives 3 and 7A, eyepieces 2 and 4, in case.....	12	10	0
79/3/11	Baker II.A, with spiral focussing substage, Abbé and iris, triple nosepiece, objectives 3 and $\frac{1}{4}$ in., eyepieces 2 and 4, in case.....	12	10	0
965-4/10	Baker , with rack focussing substage, achromatic condenser with iris and stop carrier, double nosepiece, in case	10	0	0

Apparatus Exchanged for other Goods.

B. BINOCULAR STANDS.**B BINOCULAR.**

All of which have rack and pinion coarse and micrometer screw fine adjustments, and mahogany case, unless otherwise stated.

868-24/24	Powell & Lealand No. 1, (1895), with monocular body, high and low power prisms, fine adjustment to substage, rack and pinion to secondary body, in perfect condition, in mahogany case.....	£	s.	d.
		55	0	0
581/23	Powell & Lealand, No. 1, with monocular body, high and low power prisms, achromatic condenser with wheel diaphragm objectives $\frac{1}{2}$ in., $\frac{1}{4}$ in. and $\frac{1}{8}$ in., 6 pairs of capped eyepieces, stage bull's-eye, substage selenite carrier, paraboloid, in mahogany case.....	50	0	0
453-11/30	Powell & Lealand, No. 1 Stand, in splendid condition (ring stage model) monocular, body with rack and pinion draw tube, fine adjustment to substage, low, high power prisms, double nosepiece, 2 compressors light filter, 2 pairs of eyepieces, 1 single in mahogany case, with extra case for apparatus.....	65	0	0
550/S	Baker Binocular, with rotating stage, 2 in., 1 in., and $\frac{1}{2}$ in. objectives, spot lens, live box, and 1 pair eyepieces on wooden base, with glass shade.....	7	10	0
843-2/23	Swift Portable Binocular, with compound substage, low power condenser, polariscope, double nosepiece, pair of capped eyepieces, in case, very good condition	18	0	0
530/28	Swift "Challenge," special fine adjustment, 1 pair of eyepieces, rotating stage with sliding plate, no case.....	12	12	0
564/18	Powell & Lealand No. 1 (Ring Stage Model), monocular body, rack focussing centring substage, achromatic condenser with wheel diaphragm, double nosepiece, 1 in., $\frac{1}{2}$ in., $\frac{1}{4}$ in., $\frac{1}{8}$ in. and $\frac{1}{16}$ in. objectives, 2 pairs capped eyepieces, substage selenite carrier and 3 selenites, paraboloid, compressor, live box, camera lucida, stage forceps, in case, with separate case for apparatus	60	0	0
774-3/4	Crouch Binocular Stand, with circular rotating stage, low power condenser with wheel of stops, spot lens, 2 pairs capped eyepieces, in case	7	0	0
939-10/S	Browning Stephenson Binocular, with pair of eyepieces, 2", 1", $\frac{1}{2}$" and $\frac{1}{4}$" objectives.....	14	0	0
939-11/S	Ross Binocular Aquarium Microscope, with rack and pinion, adjustments in all directions, with pair of eyepieces, 2" and 1" objectives	12	0	0

Apparatus let out on Hire, see page 36.

B. BINOCULAR STANDS—Continued.		£	s.	d.
960-2/4	Swift Challenge, with rotating mechanical stage, rack focussing centring substage, low power condenser, double nosepiece, 2in., 1in. and $\frac{1}{4}$ in. objectives, 5 capped eyepieces, in case	8	0	0
10/7/4	Beck Popular, with 2in., 1in. and $\frac{1}{4}$ in. objectives, 2 pairs of eyepieces, spot lens, in case.....	8	10	0
11/7/18	Collins , with rotating mechanical stage, rack focussing substage, condenser, iris diaphragm, double nosepiece, objectives 1in., $\frac{4}{10}$ in. and $\frac{1}{8}$ in., pair of eyepieces, in case	9	10	0

PLEASE DO NOT ASSUME THAT BECAUSE THE APPARATUS LISTED IN THIS CATALOGUE IS SECOND-HAND, THAT IT IS POSSIBLY IN BAD CONDITION OR OUT OF ORDER. A VERY LARGE PROPORTION IS PRACTICALLY IN NEW CONDITION AND ALL IS FULLY GUARANTEED TO BE IN PERFECT MECHANICAL AND OPTICAL ORDER.

Our Second-hand Catalogue is never complete—we are constantly adding.

C. OBJECTIVES.

(a) Achromatic—Dry. (b) Achromatic—Water Immersion. (c) Achromatic—Oil Immersion. (d) Apochromatic. (e) Projection.

1C (a) 131 ACHROMATIC—Dry.			£	s.	d.
3 inch	595/131	Un-named	1	0	0
	2/11	Dolland	1	0	0
	7/11	Swift	1	5	0
	948-6	Powell & Lealand	1	5	0
	8/11/131	Beck	0	15	0
	960-3	Swift, 4in.	1	0	0
	4/10/131	4in. Objective	1	0	0
	9/11/131	Baker	1	0	0
2 inch	8/12	Zeiss, A.O.	1	5	0
	948-7	Powell & Lealand	1	10	0
	14/12/131	2in. Objective	1	0	0
	15/12/131	Crouch	1	0	0
1½ inch	1/12/131	Zeiss A.1	1	0	0
	696/131	Zeiss, A*.....	1	5	0
	11/13	Zeiss, A*	1	10	0
	18/13	Zeiss, A*	2	5	0
1 inch	19/13	Zeiss, A*	1	10	0
	New	Baker, N.A. 0-17	1	15	0
	8/14/131	Watson, Argus	0	17	6
	10/14/131	Watson, 24 m/m, Holos, N.A. 24, 160 m/m tube	2	0	0
	13/14/131	Powell & Lealand	1	5	0
	21/13/131	Reichert, No. 2.....	1	0	0
	19/14/131	Beck	1	0	0
	21/14/131	Powell & Lealand	1	5	0
	14/14/131	Reichert, 1A.	1	0	0
	16/14/131	Leitz, No. 1	1	0	0
	17/14/131	Ross	1	5	0
¾ inch	456-7/131	Powell & Lealand	2	10	0
	833/131	Zeiss, A.A.	1	10	0
	868-7/131	Smith & Beck	1	5	0
	871-2/131	Zeiss, A.	1	10	0
	903-12/131	Ross, ¾in.	1	0	0
	1/15/131	Reichert, No. 3	1	5	0
	26/15	Leitz, No. 3	1	5	0
	29/15	Leitz, No. 3	1	5	0
	31/15	Reichert, No. 3.....	1	5	0
	34/15	Zeiss, A	1	5	0
	35/15	Beck, 16 m/m	1	0	0
	42/15	Zeiss, A	1	5	0
	45/15	Swift	1	5	0
	46/15	Leitz	1	5	0
	51/15	No Name, ¾in.	0	17	6
	52/15	Zeiss, A.A., for metallurgy	2	10	0
	59/15	Watson Para	1	5	0
	60/15	Baker, ¾in.....	1	5	0
	61/15	Ross, N.A. 30, with Lieberkuhn.....	1	5	0
	62/15	Leitz, No. 3	1	5	0
½ inch	831-5/131	Gundlach.....	1	10	0
	*841-24/131	Powell & Lealand.....	2	10	0
	903-13/131	Ross	1	5	0
	8/16	No Name	1	0	0
	10/16	Beck	1	0	0

* With Correction Collar.

Apparatus sold on Commission.

OBJECTIVES.—Continued.			£	s.	d.
19/16/131	Swift	.....	1	10	0
18/16/131	Leitz, No. 4	.....	2	0	0
14/16	Watson, 12 m/m, Holos N.A. .65, 250 m/m tube	.....	3	10	0
12/16	Leitz, No. 4	.....	2	0	0
15/16	Reichert, No. 2	.....	1	10	0
16/16	Swift	.....	1	10	0
17/16	Beck	.....	1	0	0
4/10 inch	*694-16	Collins	2	0	0
1/17/131	Dallmayer	.....	1	5	0
948-9	Ross	.....	1	10	0
1/18/131	Watson, 8 m/m, Holos N.A. .65, 200 m/m tube...	.....	4	0	0
2/17/131	Beck*	.....	1	0	0
3/17/131	Ross, 4/10in.*	.....	1	0	0
1/4 inch	546-6/131	.....	2	0	0
876-4/131	Zeiss, C	.....	2	10	0
898-4/131	Watson, 6 m/m, N.A. 0.74, 160 m/m tube.....	.....	4	0	0
7/19	Watson, 6 m/m Holos, N.A. .95, 160 m/m tube...	.....	4	0	0
948-11	Zeiss, C.	.....	2	10	0
5/19	Zeiss, C.	.....	2	10	0
9/19	Baker	.....	2	0	0
10/19	Zeiss, C.	.....	2	0	0
959-2/	Zeiss, C.	.....	2	0	0
12/19	Collins*	.....	1	10	0
1/5 inch	*694-19	.....	2	0	0
*693	Beck	.....	1	0	0
1/6 inch	55	Watson, Holos 4 m/m, N.A. 0.95, 250 m/m tube...	4	0	0
54	Watson, Holos, 4 m/m, N.A. 0.95, 200 m/m tube	.....	4	0	0
947	Watson, 4 m/m Holos, N.A. 0.95, 250 m/m tube...	.....	4	0	0
72/131	Zeiss, D.D.	.....	3	0	0
80/131	Zeiss, D.D.	.....	3	0	0
83/131	Zeiss, D.D.	.....	3	0	0
895-10/131	Leitz, 6A.	.....	2	0	0
15/21	Zeiss, D.	.....	2	10	0
18/21	Zeiss, D.	.....	2	10	0
20/21	Leitz, No. 6.	.....	2	10	0
25/21	Zeiss, D.D., Fluorite*	.....	5	0	0
26/21	Zeiss, D., for metallurgy.	.....	3	10	0
44/21/131	Watson, N.A. 0.74	.....	2	5	0
35/21/131	Swift, N.A. 0.85	.....	2	10	0
37/21/131	Beck	.....	2	5	0
38/21/131	Swift, N.A. 0.83	.....	2	10	0
39/21/131	Zeiss, D.D.	.....	2	10	0
41/21/131	Zeiss, D.D.*	.....	2	5	0
40/21/131	Bausch & Lomb	.....	2	10	0
1/8 inch	878/131	Spencer, 3 m/m.	2	5	0
546-5/131	.....	.....	2	10	0
623-6/131	Gundlach	.....	3	0	0
*693-19	Swift	.....	2	10	0
887/131	Swift, N.A. 0.92.	.....	2	10	0
1/22/131	Reichert, No. 7	.....	2	5	0
939-8/131	Loudon*	.....	1	10	0
19/22	Leitz, No. 7.	.....	2	10	0
948-10	Leitz, No. 7	.....	2	10	0
26/22	Leitz, No. 7	.....	2	10	0
27/22	Leitz, No. 7	.....	2	10	0
29/22	Beck*	.....	2	0	0
30/22/131	Baker, N.A. 0.85	.....	2	5	0
31/22/131	Watson, N.A. .88	.....	2	10	0

* With Correction Collar.

Apparatus lotted and sent to Auction.

SECOND-HAND DEPARTMENT.

7

OBJECTIVES.—Continued.			£	s.	d.
1/9 inch	799-26	Zeiss, E.	3	10	0
	874	Voigtlander, No. 8	3	0	0
	871	Zeiss, E.	3	10	0
	734-10	Zeiss, E.	3	10	0
	880	Zeiss, E.	3	10	0
	881/131	Leitz, No. 8	3	0	0
	840	Katera, No. 8	2	10	0
	7/23/131	Zeiss, E.	3	0	0
	883/131	Leitz, No. 8	3	0	0
	884/131	Zeiss, E.	3	10	0
	3/23	Zeiss, EF.*	7	0	0
	4/23	Watson	2	15	0
	847-13/131	Zeiss, E.	3	10	0
	887/131	Zeiss, E.	3	10	0
	1/23/131	Zeiss, E.	3	10	0
	2/23	Watson, Para.	2	15	0
	5/23/131	Reichert, No. 8.	2	10	0
1/10 in.*841-23/131		Ross	2	10	0
	816/131	Watson	2	10	0
1/12 inch	360-10	Natchet	2	10	0
	*413-16	Reichert, IX.	4	0	0
	599-7	Reichert, No. 9	3	10	0
	1/25	Leitz, No. 9	4	10	0
1/14 in.	833/131	Zeiss, F.	4	10	0
	847-14/131	Zeiss, F.	3	10	0
	885-23/131	Zeiss, F.	4	10	0
	834/131	Zeiss, F.	4	10	0
1C (b) 133 ACHROMATIC—Water Immersion.					
1 inch	563/133	Swift, 25 m/m	1	10	0
	908-22/133	Zeiss, 33 m/m, Plankton	1	10	0
	1/27	Zeiss, Plankton	2	10	0
1/4 inch	*544/133	Powell & Lealand	5	0	0
1/6 inch	New	Baker, $\frac{1}{2}$ in.	5	10	0
	847-15/133	Zeiss, D.*	4	10	0
	908-20/133	Zeiss, D.*	4	10	0
	1/29	Zeiss, D.*	4	0	0
1/12 inch	D43	Powell & Lealand, N.A. 0.99. Catalogue price, £12	4	10	0
1/14 inch	*416-8	Powell & Lealand, N.A. 1.21. Catalogue price, £18	6	0	0
1/16 inch	286-2	Powell & Lealand	6	0	0
1/20 inch	520/133	Zeiss, L.	8	0	0
1C (c) 133 ACHROMATIC—Oil Immersion.					
1/10 in.	*357-23	Powell & Lealand	5	10	0
	613	Pillischer, $\frac{1}{2}$ in.	1	10	0
	775/133	Beck, 4 m/m, in short mount for metallurgy	2	10	0
	908-19/133	Zeiss, 1/7, N.A. 0.9	4	10	0
	*948-13	Beck	2	10	0
1/12 inch	24/35/133	Swift, N.A. 1.30.	4	10	0
	29/35	Beck, 2 m/m, N.A. 1.25	3	10	0
	1/33	Powell & Lealand, N.A. 1.40	10	0	0
	631/133	Powell & Lealand	9	0	0
	*612	Powell & Lealand, N.A. 1.50	15	0	0
	57/35	Beck, 2 m/m	4	0	0

* With Correction Collar.

Apparatus let out on Hire, see page 36.

OBJECTIVES.—Continued.			£	s.	d.
1/12 inch	37/35	Reichert, N.A. 1.25	4	0	0
	41/35	Swift, N.A. 1.30	4	10	0
	43/35	Baker	4	0	0
	44/35	Beck	4	0	0
58/35/133		Continental	3	0	0
	57/35	Beck, 2 m/m	4	0	0
	64/35	Zeiss, N.A. 1.25	4	0	0
	66/35	Swift, N.A. 1.30	4	0	0
	47/35	Bausch & Lomb, N.A. 1.30	4	10	0
	54/35	Prior, N.A. 1.30	4	0	0
	55/35	Leitz, N.A. 1.30	4	10	0
1/16 in.	458-26/133	Baker, N.A. 1.32	5	10	0
	583/133	Swift, N.A. 1.30	4	10	0
	617	Reichert, $\frac{1}{8}$ in., N.A. 1.25	3	5	0
	620	Leitz, N.A. 1.30, 170 m/m tube	5	0	0
	677	Beck, 1.5 m/m	3	10	0
	695/133	Reichert, $\frac{1}{8}$ in., N.A. 1.25	3	5	0
	731/133	Koristka, $\frac{1}{8}$ in. semi-appo., N.A. 1.30	6	10	0
1/36/133		Leitz Fluorite, N.A. 1.32	7	10	0
1/18 inch	603	Reichert	4	10	0
	822-9/133	Reichert, N.A. 1.30	7	0	0
	737/133	Reichert, o.i., N.A. 1.30	4	15	0
	748/133	Koristka, semi-appo., N.A. 1.30	5	17	6
	1/37/133	Himmeler, 1.4 m/m, N.A. 1.30	3	10	0
1C (d) 133 APOCHROMATIC. For long tube, unless otherwise noted.					
	642/133	Leitz, 2 m/m, N.A. 1.40, 160 m/m tube	12	10	0
	691/133	Zeiss, 12 m/m, N.A. 0.65, 250 m/m tube	9	0	0
	*724/133	Zeiss, 6 m/m, N.A. 0.95, 250 m/m tube	7	10	0
	*626/133	Powell & Lealand, oil immersion, N.A. 1.40	10	0	0
	286-2/133	Powell & Lealand, $\frac{1}{8}$ in.	6	0	0
	*316-2/133	Powell & Lealand, $\frac{1}{8}$ in., N.A. 1.40	7	0	0
	640	Zeiss, 24 m/m, N.A. 0.30	9	9	0
359-10/133		Zeiss, 12 m/m, N.A. 0.65	10	10	0
†583/133		Leitz, 2 m/m, N.A. 1.32	12	10	0
	662	Zeiss, 3 m/m, N.A. 0.95, 160 m/m tube	8	15	0
	673	Zeiss, 3 m/m, N.A. 0.95, 250 m/m tube	8	10	0
799-8		Zeiss, 4 m/m, N.A. 0.95, 250 m/m tube	6	10	0
708		Zeiss, 3 m/m, N.A. 0.95, 160 m/m tube	8	0	0
383		Zeiss, 2 m/m, N.A. 1.30, 190 m/m tube, in short mount for metallurgy	12	0	0
*716-8		Zeiss, 3 m/m, N.A. 0.95, 160 m/m tube	7	0	0
703		Zeiss, 12 m/m, N.A. 0.65, 250 m/m tube	9	0	0
720/133		Zeiss, 3 m/m, N.A. 0.95, 160 m/m tube, with funnel stop	8	10	0
*721/133		Zeiss, 4 m/m, N.A. 0.95, 250 m/m tube	7	0	0
850-6/133		Hartnack, 2 m/m	3	0	0
868-9/133		Zeiss, 6 m/m, N.A. 0.95, 250 m/m tube	7	10	0
868-10/133		Zeiss, 24 m/m, N.A. 0.30, 250 m/m tube	9	0	0
868-11/133		Zeiss, 12 m/m, N.A. 0.65, 250 m/m tube	9	0	0
868-14/133		Zeiss, 3 m/m, N.A. 1.40, 250 m/m tube	12	10	0
872/18/133		Zeiss, 24 m/m, N.A. 0.30, 250 m/m tube	9	0	0
872/19/133		Zeiss, 12 m/m, N.A. 0.65, 250 m/m tube	9	0	0
877-10/133		Leitz, 8 m/m, N.A. 0.65, 160 m/m tube	6	0	0
885-17/133		Zeiss, 4 m/m, N.A. 0.95, 160 m/m tube	8	0	0
15/38/133		Watson, 16 m/m, N.A. .30, 160 m/m tube	3	0	0
965-6		Zeiss, 4 m/m, N.A. 0.95, 190 m/m tube for metallurgy	6	15	0
* With Correction Collar.					

Apparatus Purchased for Cash.

		OBJECTIVES.—Continued.	£	s.	d.
1C (d) 133	73	Zeiss, 4 m/m, N.A. 0·95, 160 m/m tube	8	0	0
	10/38	Zeiss, 3 m/m, N.A. 0·95, 160 m/m tube, dry	9	0	0
	11/38	Watson, 4 m/m, N.A. ·85, 200 m/m tube.....	4	10	0
	12/38	Zeiss, X., N.A. 0·85, 160 m/m tube, suitable for darkground illumination	5	10	0
	13/38	Zeiss, 2 m/m, N.A. 1·40, 160 m/m tube.....	12	10	0
	950-5	Zeiss, 2 m/m, N.A. 1·30, 160 m/m tube.....	10	10	0
	14/38	Zeiss, 60 H.1, N.A. 1·0-07, with iris, 160 m/m tube	9	0	0
	952-1/133	Zeiss, 2 m/m, N.A. 1·40, 160 m/m tube.....	12	10	0
	*952-2/133	Zeiss, 4 m/m, N.A. 0·95, 160 m/m tube.....	8	0	0
	952-3/133	Zeiss, 8 m/m, N.A. 0·65, 160 m/m tube.....	6	0	0
	3/38	Zeiss, 8 m/m, N.A. 0·65, 160 m/m tube.....	6	10	0
	930-7	Watson, 4 m/m, N.A. ·85, 200 m/m tube.....	5	10	0
	4/38	Zeiss, 2 m/m, N.A. 1·30, 160 m/m tube.....	12	0	0
	885-22/133	Zeiss, 16 m/m, N.A. 0·30, 160 m/m tube.....	4	0	0
	885-18/133	Zeiss, 1·5 m/m, N.A. 1·30, 250 m/m tube.....	10	0	0
	5/38/133	Zeiss, 8 m/m, N.A. 0·65, 160 m/m tube.....	6	0	0
	6/38/133	Zeiss, 4 m/m, N.A. 0·95, 160 m/m tube.....	6	10	0
	885-20/133	Zeiss, 2·5 m/m, W.1, N.A. 1·25, 160 m/m tube...	10	0	0
	8/38/133	Beck, 8 m/m, N.A. 0·65, 160 m/m tube.....	6	0	0
	905-7/133	Zeiss, 2 m/m, N.A. 1·40, 160 m/m tube.....	10	10	0
	905-8/133	Zeiss, 3 m/m, N.A. 0·95, 160 m/m tube.....	12	0	0
	905-9/133	Zeiss, 3 m/m, N.A. 1·30, 250 m/m tube.....	12	0	0
	903-16/133	Zeiss, 2 m/m, N.A. 1·30, 250 m/m tube.....	10	0	0
	908-17/133	Zeiss, 8 m/m, N.A. 0·65, 160 m/m tube.....	6	0	0
	915-12/133	Zeiss, 16 m/m, N.A. 0·30, 160 m/m tube.....	4	0	0
	915-13/133	Zeiss, 8 m/m, N.A. 0·65, 160 m/m tube.....	6	0	0
	915-14/133	Zeiss, 3 m/m, N.A. 0·95, 160 m/m tube.....	8	0	0
	915-16/133	Zeiss, 1·5 m/m, N.A. 1·30, 160 m/m tube.....	10	0	0
	885-21/133	Zeiss, 2·5 m/m, W.1, N.A. 1·25, 250 m/m tube...	10	0	0
	737/133	Leitz, 8 m/m	5	0	0
1C (e) PROJECTION. For use without eyepiece.					
	524/133	Zeiss, 35 m/m.....	1	15	0
	529	Voigtlander, 38 m/m, Euryscop.....	1	10	0
	868-12/133	Zeiss, 70 m/m	1	15	0
	534/133	Voigtlander, 38 m/m, Euryscop	1	10	0
	535/133	Zeiss, 35 m/m	1	15	0
	2/39/133	Aldis, 3in. Anastigmat F/6·5	2	0	0
	4/39/133	Zeiss, Planar, F/4·5, 20 m/m.....	4	10	0
	5/39/133	Voigtlander Projection Lens	10	6	

D. EYEPIECES.

(a) Huyghenian. (b) Compensating. (c) Projection. (d) Special.

1D (a) HUYGHENIAN.		£	s.	d.
72/133	No. 2, 23·2 m/m gauge.....	0	6	0
399-5	No. 3, 23·2 m/m gauge	0	7	0
458-3/133	Baker, No. 1, 23·2 m/m gauge	0	7	0
458-10/133	No. 2, 23·2 m/m gauge.....	0	7	0

* With Correction Collar.

Our Second-hand Catalogue is never complete—we are constantly adding.

EYEPIECES—Continued.

			£	s.	d.
1D (a)	838	No. 3, 23·4 m/m gauge	0	7	0
	849	No. 3, 24·5 m/m gauge	0	7	0
	959/133	No. 3 ocular, 23·2 m/m	0	8	6
	961/133	Baker, B capped Eyepieces	0	7	6
458-12/133	Baker, No. 2, 23·2 m/m	0	7	0	
	920/133	Pair capped, A power, 34·7 m/m	1	5	0
	35/133	No. 3, 23·2 m/m gauge	0	7	0
	127/133	No. 3, 23·2 m/m gauge.....	0	6	0
	976	B. Eyepiece, 23·2 m/m gauge.....	0	6	6
	149/133	Messter, No. 3, 23·2 m/m gauge.....	0	7	0
	47/133	Leitz, No. 3, 23·2 m/m gauge	0	7	6
	94	No. 2, 23·2 m/m gauge	0	6	0
	84	Beck, No. 1, 23·2 m/m gauge	0	7	0
	86/40	Zeiss, No. 3, 23·2 m/m gauge	0	8	0
	89/40	Zeiss, No. 1, 23·2 m/m gauge	0	8	0
	72/40	No. 2 Eyepiece, 23·2 m/m gauge.....	0	6	0
	921-9/133	No. 4 Eyepiece, 23·2 m/m gauge	0	6	0
	921-10/133	No. 2 Eyepiece, 23·2 m/m gauge	0	6	0
	75/40	No. 2, 23·2 m/m gauge	0	6	0
	77/40	No. 3, 23·2 m/m gauge	0	6	0
	61	No. 2, 23·2 m/m gauge.....	0	6	0
	152/133	Leitz, No. 2, 23·2 m/m gauge.....	0	6	0
	82/40	No. 3, 23·2 m/m gauge.....	0	6	0
	83/40	Beck, × 15, 23·2 m/m gauge	0	8	6
	84/40	Zeiss, No. 4, 23·2 m/m gauge.....	0	6	0
	85/40	Zeiss, × 5, 23·2 m/m gauge	0	6	0
	150/133	No. 1, 23·2 m/m gauge	0	6	0
	177/133	No. 3 Eyepiece, 23·2 m/m gauge.....	0	6	0
	182/133	Zeiss, × 5, 23·2 m/m gauge	0	7	0
	184/133	Pair of Leitz, 12·5, 23·2 m/m gauge.....	0	15	0
	188/133	Zeiss, No. 3, 23·2 m/m gauge.....	0	6	0
	190/133	No. 0, 23·2 m/m gauge.....	0	6	0
	1/40/133	No. 2, 23·2 m/m gauge.....	0	6	0
	2/40/133	No. 3, 23·2 m/m gauge.....	0	6	0

1D (b) EYEPIECES (COMPENSATING).

All of which are for the long tube, unless otherwise stated
(23·2 m/m gauge—short tube).

	838/133	Zeiss, No. 18, 30·5 m/m gauge.....	1	0	0
	840/133	Zeiss, No. 4, 30·5 m/m gauge.....	1	0	0
	841/133	Zeiss, No. 2, 30·5 m/m gauge.....	1	0	0
843-6/133	Zeiss, No. 12, 26·3 m/m gauge.....	1	5	0	
	694/133	× 10 power, 23·2 m/m gauge.....	1	10	0
	659	No. 8 power, 23·2 m/m gauge.....	1	10	0
696/667/665-663	No. 4, 23·2 m/m gauge.....	1	0	0	
	723-8	No. 12, 31·2 m/m gauge	0	15	0
	684	No. 12, 23·2 m/m gauge	1	7	6
468-14/133	Compensating ocular, No. 0, 23·2 m/m gauge	1	1	0	
	857/133	Zeiss, No. 8, 23·2 m/m gauge.....	1	5	0
	859/133	Reichert, No. 6, 23·2 m/m gauge	0	18	0
	905-12/133	Zeiss, No. 6, 23·2 m/m gauge.....	0	18	0
	915-1/133	Zeiss, No. 8, 23·2 m/m gauge.....	1	0	0
	915-3/133	Zeiss, × 3, 23·2 m/m gauge.....	1	0	0
	965-9	Zeiss, K.12, × 15, 23·2 m/m gauge	1	5	0

Our Second-hand Catalogue is never complete—we are constantly adding.

EYEPieces (COMPENSATING).—Continued.

1D (b)		£ s. d.
915-7/133	Zeiss, No. 2, 23·2 m/m gauge.....	1 0 0
861/133	Zeiss, No. 4, 30·5 m/m gauge.....	1 0 0
706/133	Swift, 23·2 m/m gauge	1 0 0
548	Zeiss, No. 8, 30·6 m/m gauge	2 10 0
576/133	No. 2, power, 30·6 m/m gauge. Catalogue price, £2 ...	1 8 0
730	Zeiss, No. 4, 30·7 m/m gauge, 250 m/m tube	2 0 0
638	Swift, No. 12 power, 31·2 m/m gauge	1 10 0
664	Zeiss, No. 8, 33·2 m/m gauge	2 5 0
624	Zeiss, No. 12 power, 32·2 m/m gauge.....	2 0 0
612/133	Zeiss, × 8 power, 32·84 m/m gauge	2 5 0
639	Swift, No. 12, 31·2 m/m gauge	1 10 0
658	No. 27, 31·2 m/m gauge	1 15 0
626	Zeiss, No. 18, 30·5 m/m gauge	1 10 0
780	Crouch, × 8, 23·2 m/m gauge	0 15 0
20/41/133	Zeiss, × 5, 23·2 m/m gauge	1 0 0
950-8	Zeiss, No. 6, 23·2 m/m gauge	0 18 6
950-13	Zeiss, No. 2, 23·2 m/m gauge	0 18 6
9/41	Zeiss, K.2, × 3, 23·2 m/m gauge	1 0 0
10/41	Zeiss, K.5, 23·2 m/m gauge	1 0 0
12/41	Zeiss, K.12, × 15, 23·2 m/m gauge	1 5 0
14/41	Zeiss, K.4, × 6, 23·2 m/m gauge	1 0 0
16/41	Zeiss, K.7, 23·2 m/m gauge	1 0 0
17/41	Zeiss, No. 4, 23·2 m/m gauge	0 18 6
19/41	Zeiss, No. 3, 23·2 m/m gauge	0 18 6
800	Zeiss, No. 4, 23·2 m/m gauge	0 15 0
799-9	Set of 4 Zeiss Nos. 4, 8, 12 and 18, 30·3 m/m gauge ...	5 0 0
2/41	Zeiss, No. 27, 30·5 m/m gauge.....	1 0 0
930-12	× 14, 23·2 m/m gauge.....	1 0 0
930-13	× 10, 23·2 m/m gauge.....	1 0 0
931-4	No. 6, 23·2 m/m gauge	1 0 0
4/41	Beck, 22 m/m, 23·2 m/m gauge	1 0 0
814/133	Zeiss, No. 4, 23·2 m/m gauge	0 18 6
815	Leitz, No. 4, 23·2 m/m gauge.....	0 16 0
816	Leitz, No. 12, 23·2 m/m gauge.....	1 0 0
817	Leitz, No. 6, 23·2 m/m gauge.....	0 16 0
8/41/133	No. 12, 23·2 m/m gauge	0 15 0
6/41	Zeiss, No. 12, 30·6 m/m gauge	1 0 0
711	Swift, No. 4, 23·2 m/m gauge	1 2 6
708	Powell & Lealand, No. 5, 23·2 m/m gauge	0 18 6
776	Reichert, No. 4, 23·2 m/m gauge	0 15 0
777	Reichert, No. 8, 23·2 m/m gauge	1 0 0
779	Zeiss, No. 4, 23·2 m/m gauge	0 16 6
755	No. 8, 23·2 m/m gauge.....	0 15 0
714-13	Zeiss, No. 4, 23·2 m/m gauge	0 18 0
833/133	Messter, No. 12, 23·2 m/m gauge.....	0 18 0
761/133	Baker, No. 4, 23·2 m/m gauge.....	0 18 6
761-16	Zeiss, No. 4, 23·2 m/m gauge.....	0 15 0
820-12/133	Zeiss, No. 27, Compensating Ocular, 30·5 m/m gauge...	1 15 0
766	Swift, × 8, 23·2 m/m gauge	1 0 0
792	Powell & Lealand, × 20, capped, 23·2 m/m gauge	1 15 0
783	Zeiss, No. 12, 33·2 m/m gauge.....	2 0 0
848/133	Zeiss, No. 2, 23·2 m/m gauge.....	1 0 0
849/133	Reichert, No. 12, 23·2 m/m gauge.....	0 18 0
851/133	Zeiss, No. 6, 23·2 m/m gauge	0 16 0

Apparatus Sold on Commission.

EYEPieces (COMPENSATING).—Continued.

1D (b)		f	s.	d.
852/133	Crouch, $\times 12$, 23.2 m/m gauge.....	0	15	0
873-8/133	$\times 12$, 23.2 m/m gauge.....	0	15	0
873-10/133	$\times 8$, 23.2 m/m gauge	1	0	0
873-16/133	Zeiss, No. 18, 30.5 m/m gauge.....	1	0	0
873-17/133	Zeiss, No. 27, 30.5 m/m gauge.....	1	0	0
713/133	Winkel, No. 2, 23.2 m/m gauge	0	18	6
716/133	Winkel, No. 6, 23.2 m/m gauge	0	18	6
771	Zeiss, No. 4, 23.2 m/m gauge	0	16	6
749	Reichert, No. 12, 23.2 m/m gauge.....	1	0	0
425-21	No. 4, 23.2 m/m gauge.....	1	5	0
729	Zeiss, No. 8, 30.7 m/m gauge.....	2	0	0
723/133	Zeiss, No. 6, 23.2 m/m gauge.....	0	18	0
885-27/133	Zeiss, No. 6, 23.2 m/m gauge.....	0	18	0
1/41/133	Zeiss, No. 1, 23.2 m/m gauge.....	1	0	0
829	Zeiss, No. 27, Compensating Ocular, 33.3 m/m gauge...	2	0	0
819	Leitz, No. 4, 23.2 m/m gauge.....	0	16	0
820	Leitz, No. 8, 23.2 m/m gauge.....	1	0	0
823	Leitz, No. 4, 23.2 m/m gauge.....	0	16	0
824	Leitz, No. 6, 23.2 m/m gauge	0	16	0
952-4	Leitz, No. 2, 23.2 m/m gauge	1	0	0
952-5	Leitz, No. 4, 23.2 m/m gauge	1	0	0
952-6	Leitz, No. 6, 23.2 m/m gauge	1	0	0
952-7	Leitz, No. 8, 23.2 m/m gauge	1	0	0
952-8	Leitz, No. 12, 23.2 m/m gauge	1	0	0
952-9	Leitz, No. 18, 23.2 m/m gauge.....	1	0	0
827	No. 8, 23.2 m/m gauge.....	0	15	0
714/133	Swift, No. 12, 23.2 m/m gauge.....	1	5	0
715/133	Swift, $\times 8$, 23.2 m/m gauge	1	5	0
719/133	Zeiss, No. 4, 250 m/m tube	1	0	0
598-5/133	Swift, No. 4, 30.5 m/m gauge	1	5	0
598-6/133	Swift, No. 12, 30.5 m/m gauge	1	5	0
789	Zeiss, No. 4, 23.2 m/m gauge	0	16	6
799	Zeiss, No. 18, 36 m/m gauge	2	0	0
812/133	Koristka, No. 4, 23.2 m/m gauge.....	0	15	0
817-7	Leitz No. 4, 23.2 m/m gauge.....	0	15	0
847/133	Reichert, No. 8, 23.2 m/m gauge.....	0	18	6
845/133	Reichert, No. 7, 23.2 m/m gauge	0	18	0
889-17/133	Zeiss, No. 4, eyepiece, 23.2 m/m gauge.....	0	18	6
D (c) 133 PROJECTION.				
287-13	Zeiss, No. 6, 36.5 m/m gauge	2	10	0
526	Swift, No. 6, 36.4 m/m gauge	2	0	0
403-7	Zeiss, No. 3, 29.3 m/m gauge	2	10	0
527/133	Watson, projection, 33.2 m/m gauge	2	0	0
541	Leitz, No. 2, 23.2 m/m gauge.....	2	10	0
684-28/133	Zeiss, No. 3, 30.5 m/m gauge	2	0	0
813-13/133	Zeiss No. 2, 23.2 m/m gauge.....	2	10	0
820-10/133	Zeiss, No. 3, 30.5 m/m gauge	2	0	0
1/42	Zeiss, No. 2, 30.5 m/m gauge	2	0	0
931-3	Watson, 23.2 m/m gauge	1	0	0
D (d) SPECIAL.				
780/133	Pair of Kellner C. Capped Eyepieces, 33 m/m gauge.....	2	0	0
566/133	P. & L., $\times 7\frac{1}{2}$ on Nelson formula	1	1	0
27/43	Zeiss, $\times 7$, Orthoscopic, 23.2 m/m gauge	1	0	0
28/43	Watson, $\times 20$, Holos 23.2 m/m gauge.....	1	5	0
29/43	$\times 15$ Periscopic Eyepiece, 23.2 m/m gauge.....	0	15	0

Apparatus Sold on Commission.

EYEPIECES.—Continued.

D (d) SPECIAL

		£	s.	d.
535	Pair Beck C Eyepieces, with micrometer	1	6	0
513/133	Achro. A Eyepiece, 30.5 m/m	1	0	0
357-26/133	Pair P. & L. Kellner B Eyepieces, 36.4	2	2	0
832/133	Watson, × 7 Holos, 32 m/m gauge.....	1	10	0
413-23/133	Orthoscopic, No. 6, 23.2 m/m	1	0	0
719/133	B. Capped Eyepiece, 33.2 m/m	0	10	6
727/133	Pair of B. Capped Eyepieces, 32 m/m gauge	1	1	0
721	A. Capped Eyepiece, 30.5 m/m gauge	0	10	6
710/133	Holos, × 7, 32.5 m/m gauge	1	10	0
704/133	Media Ocular, × 12	1	10	0
14/43	Pair of Leitz Orthoscopic Kellner Eyepieces, F/15, 23.2 m/m gauge	2	0	0
15/43	Pair of Leitz, F/18 Kellner Orthoscopic Eyepieces, 23.2 m/m gauge	2	0	0
842/133	Orthoscopic Kellner Eyepiece, F/18, 23.2 m/m gauge	1	0	0
739-5	Holos, × 10, 32.5 m/m gauge.....	1	10	0
758	Ross-Kellner Eyepiece, C., 33.5 m/m gauge	1	0	0
757	Holos, × 7, with cross lines, 32 m/m gauge	2	0	0
768	Holos, × 5, 32 m/m gauge	1	15	0
553	Eyepiece, 33.8 m/m gauge	0	6	6
NEW	Watson, Holos, × 7, 32.3 m/m gauge	1	15	0
732	B. Capped Eyepiece, 23.2 m/m gauge.....	0	10	6
786	Centring Eyepiece	0	15	0
787	Centring Eyepiece	0	15	0
783	A. Capped Eyepiece, 30.5 m/m gauge.....	0	10	6
782	Capped Eyepiece, No. 5, 23.2 m/m gauge.....	0	7	6
799-14	Ross Kellner, C., 33 m/m gauge	1	0	0
800-5	B. Capped Eyepiece, 33 m/m gauge.....	0	12	6
799/133	Low Power, Capped Eyepiece, 31.3 m/m gauge.....	0	10	6
787-15	Capped Eyepiece, 32.5 m/m gauge.....	0	10	6
807	Leitz Bertrand Bi-quartz Eyepiece.....	1	10	0
6/43	Leitz No. 2 Demonstration Eyepiece, in case.....	3	0	0
777	Holos, × 10 Eyepiece, 32 m/m gauge	1	5	0
826-7/133	E. Capped Eyepiece, 30.5 m/m gauge	0	10	0
826-8/133	Kellner's Orthoscopic Eyepiece, 33.2 m/m gauge	0	15	0
826-9/133	B. Capped Eyepiece, 30.5 m/m gauge.....	0	10	0
826-10/133	Centring Eyepiece	0	15	0
828/133	Pair of Zeiss, 12.5 Orthoscopic, 23.2 m/m gauge.....	1	10	0
827-5/133	Ross-Kellner, C. Capped Eyepiece, 1.27 inch gauge...	1	0	0
788	Centring Eyepiece	0	15	0
773	Pair Zeiss, No. 4, Orthomorphic Eyepieces, 23.2 m/m gauge	1	1	0
734	Pair A. Capped Eyepieces, 32.3 m/m gauge	1	1	0
474-1/133	Gifford Ramsden, 25.4 m/m, 23.2 m/m gauge.....each	2	2	0
474-2/133	Two Gifford Ramsden, 12.7 m/m, 23.2 m/m.....each	2	2	0
797/133	Gifford Eyepiece, 37.5 m/m gauge, huyghenian	0	15	0
806-18	Gifford Eyepiece, 28.5 focus, 30.5 m/m gauge, ortho- chromatic	1	0	0
776	Holos, × 7 Eyepiece, 32 m/m gauge	0	15	0
784	A. Capped Eyepiece, 32 m/m gauge	0	10	6
781	B. Capped Eyepiece, 23.2 m/m gauge	0	7	6
NEW	Leitz Comparison Eyepiece, in case	9	18	0
20/43	Pair of Zeiss, × 26, Orthoscopic, 23.2 m/m gauge	2	10	0

Apparatus Purchased for Cash.

E. ILLUMINATING APPARATUS.

- (a) Lamps and other illuminants. (b) Substage Condensers—Chromatic
 (c) Substage Condensers—Achromatic. (d) Substage Condensers—
 Apochromatic. (e) Substage Condensers—Immersion. (f) Substage
 Illuminators and Fittings—Various. (g) Bull's-eye Condensers on
 Stands. (h) Condensers, Reflectors, etc., for opaque Illumination.
 (j) Micro-Polarisation Apparatus.

1E (a) LAMPS AND OTHER ILLUMINANTS.		£	s.	d.
606/140	Oil Lamp, with porcelain chimney, no case	0	15	0
609/144	D.C. Pointolite Resistance, with lamp holder and flex...	3	10	0
804-19/140	Oil Lamp, in case.....	1	0	0
614	Ogilvy 5 Amp. Resistance for Arc Lamp, 100 v.....	0	15	0
616	Ediswan Pointolite Resistance, 30 c.p., 100 v., D.C. ...	1	10	0
821-7/141	Oil Lamp, in case.....	0	10	0
618	Ediswan Pointolite Resistance, 30 c.p., 240 v., D.C.....	1	10	0
626/143	Bulb Lamp, on stand	0	10	0
873-1/146	Oil Lamp, in case	1	0	0
633/141	Baker Oil Lamp	1	0	0
894-7/140	Leitz Tubular Resistance, 200 v., 4.5 amp.....	1	5	0
888-23/143	Incandescent Bulb Lamp	0	10	0
888-32/143	Incandescent Bulb Lamp	0	10	0
5/44/142	Leitz Monla Lamp, with resistance 230v.	4	0	0
6/44/144	8-volt Resistance for 100 v. circuit.....	1	5	0
940-3/148	A.C. Pointolite bulb and resistance, 230-250 v., 150 C.P.	3	10	0
888-34/140	Mercury Vapour Lamp, complete with resistance.....	5	0	0
903-23/140	Nernst Lamp, on stand, with filter carrier.....	1	0	0
9/44/140	Oil Lamp, in case.....	0	10	0
10/44/140	Oil Lamp, in case.....	0	15	0
12/44/140	Projection Lamp, on stand, with 230 v., 250 w. lamp	1	15	0

32 Mar.

1E (b) SUBSTAGE CONDENSERS—CHROMATIC.

All of universal gauge, 38.786 m/m (1.527in.) unless otherwise stated.

713/132	Low Power Condenser, with sliding stop.....	0	15	0
720/132	3-lens Condenser, with supplementary lens for lower power work (optical part only).....	2	0	0
667/132	Low Power Condenser, with wheel diaphragm.....	0	17	6
724/132	Low Power Condenser, with iris and wheel of stops (to fit above substage)	1	5	0
621/132	Hislop Condenser	1	10	0
	New Spectacle Lens Condenser.....	0	15	0
	New Baker Nelson Low Power Condenser.....	2	0	0
541-12	3-lens Abbé, mounted for substage, with rack and stop carrier	3	0	0
826-13/132	Low Power Condenser, 30.6 m/m gauge	1	5	0
5/45/132	Low Power Condenser (optical part only).....	0	17	6
9/45/132	Watson Macro Illuminator.....	1	15	0
10/45/132	Spectacle Lens Condenser	7	6	

Apparatus Purchased for Cash.

ILLUMINATING APPARATUS.—Continued.

£ s. d.

1E (c) SUBSTAGE CONDENSERS—ACHROMATIC.

All of universal gauge, 38·786 m/m (1·527in.) unless otherwise stated.

566/138	Pillischer, 36·3 m/m gauge.....	3	0	0
595/138	Achromatic Condenser, with iris and stop carrier.....	4	10	0
598/138	Baker Achromatic Condenser (optical part only).....	3	15	0
583/138	Powell & Lealand Low Power Condenser and wheel of stops	4	0	0
585/138	Powell & Lealand Achromatic Condenser, with wheel of stops	4	4	0
609/138	Swift Achromatic Condenser, with iris and set of stops	4	10	0
605/138	Powell & Lealand, with wheel of stops.....	4	0	0
694-21/138	Powell & Lealand, in substage mount, with wheel of stops	4	0	0
850-7/138	Baker Achromatic Condenser, with iris and stop carrier	4	0	0
639/138	Baker Quekett Pond Life Condenser (optical part only)	3	10	0
799-21/138	Achromatic Condenser (optical part only).....	2	15	0
868-17/138	Powell & Lealand Achromatic Condenser, with wheel diaphragm	4	4	0
877-12/138	Baker Achro Condenser with iris and stop carrier	3	15	0
4/46/138	Swift, with iris and stop carrier.....	4	4	0
889-19/138	Powell & Lealand Achromatic Condenser, with iris and stop carrier	3	15	0
916-5/138	Beck (optical part only).....	3	10	0
650/138	Achromatic Condenser (optical part only).....	3	15	0
5/46/138	Watson, Para Condenser (optical part only).....	4	0	0
960-6/138	Zeiss Achromatic Condenser, N.A. 1·0, with iris, in case	3	0	0
6/46/138	Watson Universal, with iris and stop carrier.....	4	10	0

1E (d) SUBSTAGE CONDENSERS—APOCHROMATIC.

All of universal gauge, 38·786 m/m (1·527in.) unless otherwise stated.

504/138	Powell & Lealand, with wheel diaphragm	4	10	0
694-20/138	Powell & Lealand, optical part only.....	4	10	0
905-11/137	Powell & Lealand, with wheel diaphragm.....	4	0	0

1E (e) SUBSTAGE CONDENSERS—IMMERSION.

All of universal gauge, 38·786 m/m (1·527in.) unless otherwise stated.

555/137	Powell & Lealand Oil Immersion Condenser, with iris and stop carrier	2	10	0
376-19/137	Powell & Lealand Chromatic Oil Immersion	2	10	0
540/137	Powell & Lealand Chromatic (optical part only)	2	10	0
551/137	Powell & Lealand Truncated Condenser.....	1	10	0
868-23/137	Powell & Lealand Oil Immersion Condenser (optical part only)	4	0	0
559/137	Oil Immersion Condenser, with iris and stop carrier.....	3	15	0
887-15/137	Powell & Lealand Apo. Oil Condenser, with wheel of stops	4	0	0
2/48/137	Powell & Lealand, with wheel diaphragm.....	2	10	0

Apparatus let out on hire, see page 36.

ILLUMINATING APPARATUS.—Continued.

£ s. d.

1E (f) SUBSTAGE ILLUMINATORS AND FITTINGS—Various.

All of universal gauge, 38·786 m/m (1·527in.) unless otherwise stated.		
779/137	Spot Lens, in standard mount	0 15 0
780/137	Spot Lens, in sliding tube	0 15 0
782/137	Watson Electric Substage Illuminator.....	1 5 0
785/137	Watson Immersion Paraboloid, optical part only.....	1 0 0
789/137	Paraboloid.....	0 10 6
790/137	Paraboloid Condenser	0 15 0
763/137	Darkground Condenser	1 5 0
654/137	Leitz Cylinder Diaphragm	0 5 0
625/137	Cylinder Diaphragm	0 7 6
704/137	Set of Dark Wells and Holder	0 12 6
709/137	Large Spot Lens.....	0 7 6
751/137	Spot Lens	0 12 6
718/137	Wenham Immersion Paraboloid	1 5 0
720/137	Oil Immersion Paraboloid	1 0 0
721/137	Oil Immersion Paraboloid	1 0 0
734/137	Paraboloid.....	0 15 0
735/137	Set of Dark Wells and Holder.....	0 10 0
827-11/137	Prism Illuminator, mounted in substage fitting.....	0 15 0
794/137	Spot Lens, in standard mount	0 15 0
856-5/137	Zeiss Paraboloid, in case.....	1 5 0
799/137	Baker Nelson D.G.I., optical part only.....	1 0 0
872-9/137	Ogilvy Substage Illuminator, with iris and lamp.....	1 0 0
9/49/137	Spot Lens	0 15 0
950-15/137	Zeiss Paraboloid	1 0 0
805-137	Spot Lens	0 15 0
903-20/137	Zeiss Darkground Condenser	1 0 0
925-16/137	Watson Holos Immersion Paraboloid.....	1 0 0
804/137	Substage Mount, with iris and stop carrier	0 15 0
2/49	Ogilvy Electric Substage Illuminator, with iris and lamp	1 0 0
800/137	Zeiss Paraboloid with iris, to fit above substage.....	1 10 0
741/137	Small Spot Lens	0 7 6
744/137	Spot Lens	0 7 6
747/137	Nelson low power Condenser	1 5 0
753/137	Light Modifier	0 7 6
755/137	Swift low power Condenser, N.A. 0·50, optical part only.....	2 5 0
368-7	Edmund's Immersion Paraboloid.....	1 5 0
554-10	Prism Illuminator, mounted in substage fitting.....	0 15 0
453-13	Achromatic Condenser, with wheel of stops.....	3 0 0
679	Wheel of Stops, in substage mount.....	0 7 6
674-8	Set of Darkwells and Holder.....	0 12 6
671-12	Set of Darkwells and Holder.....	0 12 6
775/137	Zeiss Paraboloid	1 5 0
670/137	Zeiss Paraboloid, in case.....	1 5 0
4/49/137	Zeiss Paraboloid, in case.....	1 5 0
11/49/137	Leitz D.G.I., in centring mount N.A. 1·20, as new.....	3 10 0
12/49/137	Leitz D.G.I., in centring mount.....	2 10 0
960-5/137	Zeiss Cardioid Condenser, in case.....	2 10 0

1E (g) BULL'S-EYE CONDENSERS ON STANDS.

788/140	4½in. Bull's-eye Condenser.....	1 5 0
791-6/140	2½in. Bull's-eye Condenser, on stand	1 7 6
710/140	Amici Prism, on stand.....	1 5 0
17/50/141	1½in. Bull's-eye Condenser, on stand.....	0 10 0
18/50/141	2in. Bull's-eye Condenser, with universal joints, on stand	0 12 6
959-4/142	2in. Bull's-eye Condenser, on stand.....	0 12 6

Apparatus let out on Hire, see page 36.

1E (g)	ILLUMINATING APPARATUS.—Continued.	£	s.	d.
821-8/140	3in. Collective Lens, on stand.....	0	10	0
796/140	Prism for oblique Illuminator.....	0	10	0
861-6/140	2½in. Bull's-eye Condenser, on stand.....	1	10	0
869-4/137	Baker Filter Carrier	1	0	0
554-8	Amici Prism, on stand, with universal movement.....	1	5	0
815-5	4in. Bull's-eye Condenser, on stand.....	1	10	0
11/50/141	4in. Zeiss Bull's-eye Condenser, on stand	2	5	0
14/50/141	Zeiss Collective Lens, with iris, on stand	2	5	0

1E (h) CONDENSERS, REFLECTORS, etc., for Opaque Illumination.

531/138	Top Light Illuminators	0	15	0
568/138	Watson Vertical Illuminator, with iris diaphragm	1	15	0
570/138	Beal's Neutral Reflector	0	6	6
950-17/138	Silverside Reflector	0	12	6
5/51/138	Zeiss Prism Vertical Illuminator	1	10	0
6/51/138	Silverside Reflector	0	12	6
687-24/138	Silverside Reflector	1	1	0
607/138	Silverside Reflector	0	15	0
609/138	Leitz Combined Cover Glass and Prism Vertical Illumina- tor, with iris diaphragm. New price £5 5s. 0d.....	3	15	0
604/138	Silverside Reflector, in case.....	1	1	0
605/138	Silverside Reflector.....	0	15	0
844-14/138	Silverside Reflector, in case	0	15	0
617/138	Reichert Florence's Opaque Illuminator, with iris diaphragm, condensing lens, filter holder, adjustable mirror for daylight use, 2 spare bulbs, complete in case	3	15	0
846-17/138	Beals' Neutral Reflector.....	0	6	6
874-29/138	Silverside Reflector	0	15	0
2/51	Reichert Opaque Illuminator, with iris diaphragm, detachable mirror for daylight use, 2 spare bulbs, ½in. and ¼in. objectives in short mounts, and quick change objective holder, in case	6	10	0
888-18/138	Sorby's Silverside Reflector, in case	0	15	0
912-2/138	Swift Coverglass Vertical Illuminator, with electrical attachment	3	10	0
8/51/138	Baker Electric Coverglass Vertical Illuminator.....	2	15	0
10/51/138	Zeiss Prism Vertical Illuminator, with iris, in case.....	1	15	0
11/51/138	Watson Prism Vertical Illuminator.....	1	0	0
965-7	Zeiss Coverglass Vertical Illuminator, with iris (Beck type)	1	15	0

1E (j) MICRO POLARISATION APPARATUS.

828/132	Zeiss No. 2 Abbé Analyser Eyepiece, with divided drum	2	15	0
841-9/132	Rotating Polariser	1	10	0
834/132	Tourmaline, ½in. aperture, suitable for mounting over eyepiece	2	0	0
663/132	Stage Polariser, by Bausch & Lomb	1	15	0
—	Unmounted Nicol Prisms .....15s. to	1	10	0
809/132	Large Nicol Polariser.....	7	10	0
806-17	Tourmaline, 24 m/m × 17 m/m.....	5	0	0
790/132	Substage Selenite Carrier, with 3 selenites, to fit substage, 44 m/m diameter.....	1	15	0
22/52/132	Analyser, to fit capped eyepiece.....	0	12	6

Apparatus Purchased for Cash.

1E (j)	ILLUMINATING APPARATUS.—Continued.	£	s.	d.
853/132	Rotating Selenite Stage, with 3 selenites	2	5	0
873-6/132	Rotating Selenite Stage, with 3 selenites.....	2	5	0
862/132	Rotating Selenite Stage, with 3 selenites	2	5	0
863/132	Mica Selenite Stage, with 3 selenites.....	1	10	0
864/132	Polariser and Analyser.....	2	10	0
898-22/132	Rotating Polariser	1	0	0
872/132	Tourmaline, 20 × 25 m/m.....	4	0	0
3/52	Large Polariser, with nicol, 25 m/m × 16 m/m × 45 m/m and converging system	7	10	0
6/52/132	Polariser with large nicol and divided drum.....	2	5	0
7/52/132	Watson Eyepiece Analyser, with divided drum.....	3	0	0
8/52/132	Selenite Stage, with 3 selenites	2	0	0
9/52/132	Leitz Eyepiece Analyser, with divided drum, mount to clamp on to draw tube with divisions, Polariser with converging system, complete in case, as new.....	5	15	0
11/52	Zeiss Dichroscope	1	1	0
950-7	Rotating Polariser	1	0	0
16/52/132	Polariser and Analyser	1	15	0
815-10/132	Rotating Selenite Stage	2	0	0
827-7/132	Substage Selenite Carrier, with 3 selenites to fit substage 44 m/m dia.....	1	15	0
813-12/132	Polariser and Analyser	2	10	0
527/89	Feild's Differential Polariscope, with large nicol prism, 35 m/m × 25 m/m, aperture, condensing lens, rack rotation to selenites, in mahogany case, with stand.....	20	0	0
17/52/132	Darkers Substage Selenite Carrier, with 3 selenites.....	1	15	0
19/52/132	Polariser and Analyser	2	0	0
21/52/132	Rotating Polariser	1	0	0

F. MECHANICAL ACCESSORIES.

(a) For the body. (b) For the stage. (c) For the substage.

1F (a) FOR THE BODY.	£	s.	d.
770/137 Objective Slide, with 3 adaptors.....	1	0	0
794/137 Powell & Lealand High Power Prism	2	5	0
889-11/137 Set of 6 Zeiss Objective Changers, in case	4	10	0
908-23/137 Set of 6 Zeiss Objective Changers, with tube slide, in case	4	10	0
906-9 3 Zeiss Objective Changers.....	2	5	0
909-33/137 4 Zeiss Objective Changers, in case	3	0	0
17/53/137 9 Zeiss Objective Changers, each	0	15	0
20/53/137 Davis Shutter	0	8	6
24/53/137 Set of 4 Zeiss Objective Changers, with tube slide.....	2	15	0
1F (b) FOR THE STAGE.			
683/135 Moist Chamber	0	8	6
663/135 Leitz Moist Chamber, to put on stage of microscope, in case	1	0	0

Apparatus Valued.

SECOND-HAND DEPARTMENT.

19

1F (b)		£ s. d.
MECHANICAL ACCESSORIES—Continued.		
649/135	Stage Forceps	0 7 6
627/135	Watson Electric Stage, with platinum electrodes on vulcanite	2 0 0
628/135	Electric Stage, with 2 platinum electrodes.....	2 0 0
655/135	Zeiss Safety Focussing Stage, to slide on mechanical stage	1 0 0
573/137	Setting Stage	0 6 6
631/135	Four Special Spring Clips	0 8 0
645/135	Stage Forceps	0 7 6
653/135	Stage Forceps	0 6 6
598-26/135	Watson Opaque Disc Revolver.....	1 15 0
747-12/135	Opaque Disc Revolver	1 15 0
	SS Student's Attachable Mechanical Stage.....	2 10 0
910-21/135	Swift Electric Warm Stage	1 10 0
910-22/135	Swift Warm Stage.....	1 0 0
2/54/135	Reversible Life Cell	0 10 6
4/54/135	Baker Attachable Mechanical Stage for Diagnostic Microscope	3 0 0
930-22/135	Baker Attachable Mechanical Stage for Diagnostic Microscope.....	3 0 0
12/54/135	Swift Attachable Mechanical Stage	4 0 0
13/54/135	Spencer Attachable Mechanical Stage	4 10 0
17/54/135	Spencer Attachable Mechanical Stage.....	4 10 0
18/54/135	Reichert Attachable Mechanical Stage.....	3 10 0

1F (c) FOR THE SUBSTAGE.

G. APPARATUS FOR RECORDING OBSERVATIONS.

(a) Finders. (b) Micrometric. (c) Drawing. (d) Photographic.

1G (a) FINDERS.		£ s. d.
521/136	Maltwood Finder	0 7 6
1G (b) MICROMETRIC.		
601/136	Jackson Micrometer Eyepiece, 33·8 m/m	1 0 0
639/136	Micrometer Eyepiece, 33·3 m/m	0 14 6
650/136	Zeiss Compensating Micrometer Eyepiece No. 6, without scale	1 0 0
654/136	Nachet Micrometer Eyepiece, with micrometer.....	0 15 0
697/136	Micrometer Eyepiece, 30·5 m/m gauge	0 15 0
662-5/133	Screw Micrometer Eyepiece, 36 m/m gauge	1 15 0
	3in. x 2in. Glass Slips, with ruling 50 m/m x 24 m/m, divided into 2 m/m squares.....	0 3 0
775-1/136	Powell & Lealand Screw Micrometer Eyepiece, 33 m/m gauge	4 4 0
750-14/136	Zeiss Abbé Apertometer, in case	5 10 0
821/16/136	Zeiss Abbé Apertometer, in case.....	3 15 0
136-14/136	Ramsden Micrometer Eyepiece, with scale, 33·2 m/m gauge	0 15 0
745/136	Capped Micrometer Eyepiece, 35·5 m/m gauge.....	0 10 0
757/136	Powell & Lealand Screw Micrometer Eyepiece, 36·5 m/m gauge	4 0 0
853/133	Zeiss No. 6 Comp. Micrometer Eyepiece, with 5 m/m scale, 1 line into 50 parts.....	1 10 0
764/136	No. 2 Micrometer Eyepiece, with scale 1 line into 50 parts	0 15 0
2/57	Zeiss Screw Micrometer Stage, in case.....	5 0 0
36/57	Screw Micrometer Eyepiece, 32 m/m gauge.....	4 0 0
37/57	Zeiss 10 m/m, Stage Micrometer.....	0 6 0

Apparatus Sold on Commission.

APPARATUS FOR RECORDING OBSERVATIONS.—Continued. £ s. d.

1/57/135	Zeiss No. 6 Compensated Screw Micrometer Eyepiece, 23.2 m/m gauge	6	0	0
950-16	Zeiss Abbé Test Plate	0	17	6
18/57/136	Stage Micrometer, 50 m/m	0	6	0
21/57/136	Zeiss Screw Micrometer Stage, in case	7	0	0
32/57/136	Screw Micrometer Eyepiece	4	0	0
34/57/136	Zeiss Diffraction Apparatus, with nosepiece adapter ...	0	15	0

1G (c) DRAWING.

623/136	Rightangle Prism, in mount	0	10	6
750-20/137	Zeiss Drawing Prism, as new.....	1	10	0
800-12/136	Chevalier Speculum Camera Lucida	1	5	0
New	Baker Drawing Eyepiece.....	2	10	0
567	Drawing Prism	2	0	0
903-22/136	Amici Prism, on stand.....	0	15	0
2/58/140	Zeiss Adjustable Drawing Table.....	1	5	0
3/58/136	Zeiss Right Angle Prism.....	0	10	0
6/58/136	Watson Drawing Eyepiece, 23.2 m/m gauge	1	10	0
11/58/136	Zeiss Small Abbé Drawing Apparatus	1	1	0
12/58/136	Zeiss Abbé Drawing Apparatus	5	5	0

1G (d) PHOTOGRAPHIC.

311-18/136	Dark Glass, to fit over eyepiece	0	5	6
542/135	Gordon's Photomicro Camera	2	10	0
334-9/135	Set of 3 Dark Glasses	0	15	0
580/135	"Davonex" Photomicrographic Attachment with condenser, revolving diaphragm, 3in. objective, complete in case	3	0	0
4/59/135	Set of 9 Wratten M 2" Square Filters, in case	2	10	0
6/59/135	Zeiss Greenough Camera, complete with shutter and 2 dark slides.....	8	10	0
7/59/S	Baker $\frac{1}{4}$ -plate Horizontal and Vertical Photomicrographic Camera, with 1 double darkslide.....	10	0	0
727-13/135	2 Wratten Filters, to fit standard size stop carrier...each	0	4	6
	Set of Gelatine Screens, 3 x 3	0	1	3
403-25	Lantern Body and Base.....	10	0	0
578/135	Wratten M Stand to hold 1 or 2 square filters.....	0	10	0
574/135	Gordon's Photomicro Camera, complete in case.....	2	10	0
904-19/135	Focussing Magnifier.....	0	7	6
8/59/135	Leitz Photo Micro Attachment (for Leica Camera)	7	10	0

H. APPARATUS FOR COLLECTING, REPAIRING, MOUNTING AND STORING SPECIMENS.

(a) Pond Life Apparatus. (b) Dissecting Microscopes and Apparatus. (c) Microtomes. (d) Microtome Accessories. (e) Mounting Sundries. (f) Specimen Cabinets.

1H (a) POND LIFE APPARATUS.

		£	s.	d.
574/541/136	Frog Plate	0	7	6
376-21/136	Frog Plates	0	7	6
666/136	Compressor	1	5	0
562/136	Frog Plate	0	7	6
718/136	Frog Plate.....	0	5	0
	New Rousselet Live Box	0	17	6

Apparatus lotted and sent to Auction.

MOUNTING AND STORING SPECIMENS.—Continued. £ s. d.

1H (b) DISSECTING MICROSCOPES AND APPARATUS.

681/151	Zeiss Dissecting Arm, with lens holder, on heavy base...	0	10	0
685/150	Simple Dissecting Arm, with lens holder.....	0	7	6
703/144	Spencer Dissecting Microscope, with rack and pinion focussing and doublet lens.....	3	0	0
722/139	Dissecting Arm, with universal joint, to take dissecting lens, on stand	0	15	0
786-18/136	Brücke Lens	0	15	0
882-19/139	Zeiss , × 12 Loupe Magnifier	0	12	6
783/139 (6)	Leitz Simple Dissecting Arm to carry lens, with focussing screw.....	0	7	6
790/142	Reichert Dissecting Microscope, with 10 doublet, in case	3	10	0
4/61/139	Zeiss Universal Greenough Stand.....	14	0	0
7/61/139	Zeiss , × 6, Dissecting Aplanat	0	15	0
8/61/139	Zeiss Verant Lens, on handle	1	5	0
12/61/139	Zeiss × 6 Dissecting Aplanat	0	15	0
15/61/139	Zeiss Dissecting Microscope, with Porro prism erector, 1 eyepiece	7	10	0
18/61/139	Zeiss Rack and Pinion Jointed Arm.....	2	0	0
20/61/139	Zeiss Spectacle Magnifiers, in case	2	5	0
882-20/139	Zeiss , × 5 Doublet	0	5	0
619/136	Head Band, with holders for Magnifiers.....	0	7	6
780/139	Leitz Simple Dissecting Stages	0	5	0
877-17/139	Zeiss Binocular Loupe, with pair of × 3 lenses	3	0	0
877-19/139	Zeiss Combination Dissecting Lens	1	5	0
24/61/S	Baker Friction Dissecting Microscope, with × 10 doublet and × 20 aplanat, in case.....	2	10	0
27/61/139	Leitz Dissecting Microscope, with × 8 and × 20 aplanats, in case	3	15	0
959-3/139	Zeiss , × 6 Dissecting Aplanat.....	0	15	0
28/61/139	Leitz , × 10 Dissecting Aplanat.....	0	15	0
29/61/139	Leitz Dissecting Stage.....	0	7	6

1H (c) MICROTOMES.

New	Cambridge Rocking Pattern	7	5	0
19/62/142	Cathcart Microtome	2	0	0
20/62/142	Cambridge Rocker Microtome	4	0	0

SPECIAL OFFER

IVES KROMOSCOPE VIEWER MONOCULAR PICTURE

£2 0 0

IVES KROMOSCOPE VIEWER STEREOSCOPIC
PICTURE £4 0 0

A VERY LARGE SELECTION OF FINE TRANSPARENCIES

Apparatus let out on Hire, see page 36;

MOUNTING AND STORING SPECIMENS—Continued.

1H (d) MICROTOME ACCESSORIES.		£	s.	d.
535/141	Microtome Knife for the Minot Microtome, in case	1	5	0
537/141	Valentine Knife, in case	0	7	6
886-12/141	Valentine Knife, in case	0	7	6
3/63/141	14in. Microtome Knife for Jung Sledge Microtome	4	0	0
1H (e) MOUNTING SUNDRIES.				
11/64/141	Beck Turntable	0	10	6
1H (f) SPECIMEN CABINETS.				
566/SR	Glass Cabinet for microscope, with beaded edges, lock and key, 20in. high, 15in. wide, 13in. long	2	0	0
539/12	Mahogany Slide Cabinet, to hold 288 specimens	5	10	0
804-21	Mahogany Cabinet, with 31 drawers, holding 750 slides... ..	6	10	0
17/65	Pine Cabinet, with 17 drawers, to hold 200 specimens	0	18	6
7/65/SR	Pine Cabinet, with 28 drawers, to hold 1,000 specimens... ..	3	15	0
20/65/23	Pine Cabinet, with 22 drawers to take 500 specimens	2	10	0

J. SPECIMENS.

600-7/136	Moller Type Plate, without list	3	0	0
811/136	Butterfly Scales, arranged as Group of Flowers and Plants	4	10	0
774/136	Proboscis of a Blowfly	0	10	6
776/136	Proboscis of a Blowfly	0	10	6
784/136	Butterfly scales, arranged as Birds and Vase, by Dalton... ..	3	0	0
806-28	Nine Entomological Anatomy Slides	0	15	0
797/136	Type Slide Foraminifera, 50 species	1	5	0
893-12/136	Proboscis of a Blowfly by Topping	0	10	6
804/136	Type Slide of Foraminifera, 20 forms, with list	0	4	0
805/136	Type Slide of Foraminifera, 10 forms, with list	0	3	6
806/136	Butterfly Scales, arranged as Cock, Hen and Chicks	2	0	0
807/136	Butterfly Scales, arranged as Men Boxing	1	0	0
810/136	Butterfly Scales arranged as Vase of Flowers and Butterflies	4	10	0
2/66/136	Type Slide Foraminifera, 20 species, with list	0	6	6
6/66/136	Group of Diatoms	0	10	6
13/66/136	Diatom Slide, 50 species, with list	0	17	6
18/66/136	Zeiss Centring Glass	0	5	0
20/66	Butterfly Scales arranged as Flowers and Cross	0	15	0
21/66	Scales arranged as Monogram	1	0	0
23/66	Fairy Fly by Enoch	0	10	6
28/66	Zeiss Abbé Test Plate, in case	0	17	6
29/66	Moller Type Slide, 400 diatoms, with names photographed	4	0	0
30/66	Nobert's Ruling, 7 lines	3	0	0
31/66	Moller Type Slide, 80 diatoms, with names photographed	1	15	0
32/66	Tongue of Blowfly, by Topping	0	10	6
33/66	Proboscis of Blowfly	0	10	6
34/66	Type Slide of Holothuridae, by Moller, with list	0	5	0
36/66	Type Slide, 50 diatoms	1	0	0

Theodolites of all makes Repaired.

SPECIMENS.—Continued.

		£	s.	d.
25/66	Moller Type Slide, 100 forms	1	10	0
26/66	Set of 100 Prof. Sigmund Physiological specimens, with books of instructions	6	0	0
27/66	Set of 100 Prof. Sigmund Pathological specimens, with books of instructions	6	0	0

K. BACTERIOLOGICAL, HÆMATOLOGICAL APPARATUS, ETC.

THE FOLLOWING ITEMS ARE OF EXCEPTIONAL INTEREST TO
BACTERIOLOGICAL LABORATORIES.

K (a) BACTERIOLOGICAL.

		£	s.	d.
549	Baird & Tatlock Copper Bath for agglutination test, capsule controlled	2	10	0
573/20	Hearson Copper Vaccine Bath, for oil, to take 24 test tubes, 10in. dia., depth 8½in.	3	7	6
574/12	Hearson Water Bath, for agglutination, for oil, with 10 racks	3	15	0
575/26	Copper Embedding Oven, for oil, to take 12 test tubes, 6in. × 4½in. × 8in.	1	15	0
576/20	6in. Copper Sterilizer, 3½in. dia.	0	7	6
905-23/21	Copper Instrument Sterilizer, 10in. × 6in. × 5in.	1	5	0
7/67	Hearson Electric Incubator, 6in. × 6in. × 8in., 200 v.	5	0	0
3/67/159	Baird & Tatlock Incubator, for gas, 9 × 9 × 12in.	4	0	0
958-1/159	Hearson Incubator, for gas, 12in. × 12in. × 14in.	8	10	0
958-2/28	Hearson Centrifuge, 200 v. D.C., with 4 tubes.	12	10	0

K (b) HÆMATOLOGICAL.

551	Dudgeon's Sphygmograph, in case.	3	0	0
403-11/132	Set of 8 Blood Tubes.	1	15	0
448-6/22	Electric Centrifuge, 2 tubes, 5-speed, 100 to 110 volts ...	7	10	0
562/132	Down's Sphygmograph, in case.	3	0	0
881-13/132	Dudgeon's Sphygmograph, in case.	3	0	0
2/68/132	Thoma Counting Chamber	0	12	6

IF YOU DO NOT SEE

the actual instrument you are desirous of purchasing mentioned in this Catalogue, please remember the stock is changing daily, consequently it is advisable to let us have details of your requirements, as it is more than possible we have such an item in our stock.

Let us quote for your Repairs.

L. SUNDRY APPARATUS—SECTION I. £ s. d.

667/97	Pearson Head Spanner	0	15	0
800-17/18	Well seasoned Mahogany Cabinet, suitable for P. and L., or similar microscope.....	1	10	0
578	Erector	0	10	6
520/137	Erecting Prism, for microscope	2	5	0
580/137	Oblique Illuminator.....	0	7	6
778-8/136	Zeiss Amici Prism	1	5	3
609-5	Set of Operating Instruments, in mahogany case.....	9	0	0
513/137	Protecting Rings, for coarse adjustment.....	0	2	6
566/84	Soloid Water Analysis Case.....	1	10	0
873-32/139	Mahogany Rotating Table for Microscope.....	0	7	6
873-38/SR	Mahogany Glazed Cabinet, 9in. × 10in. × 15in. high	1	10	0
676/137	Lever Cover Glass Gauge, on stand	0	15	0
512/144	Baker School Projector, complete on stand.....	5	10	0
503/143	Leitz School Projector, with 210V. resistance.....	5	5	0
863-13/137	Zeiss Greenough Prism Rotator, in case.....	3	10	0
863-14/137	Zeiss Greenough Capillary Rotator, in case.....	2	10	0
863-15/140	Filter Carrier, on stand.....	0	7	6
898-5/15	Large Microscope Cover, 22in. × 12in. × 17in., wooden frame with celluloid windows.....	0	15	0
886-16/94	Diamond Cover Glass Cutter.....	0	15	0
888-22/142	Small Air Pump	0	15	0
905-13/136	Winkel Object Marker.....	2	0	0
905-17/136	Object Marker	0	7	6
678/	Baker Metron Reflex Drawing Apparatus, with lamp 210v.	4	0	0
679/142	Baker Substage Projector.....	4	0	0
908-6/S	Model of Head, with movable brain	1	10	0
5/69/147	Baker Substage Projector, with Transformer, 200-250v.	5	10	0
516/145	Baker School Projector, with resistance, 100-250v.	6	10	0
8/69/137	Zeiss Prism Rotator, in case.....	3	10	0
9/69/137	Zeiss Capillary Rotator, in case	2	10	0
10/69/137	Zeiss Object Holder	0	15	0
908-10/S	Model of Larynx	1	10	0
908-12/S	Phantom Larynx.....	1	10	0
908-13/S	Model of Foot	0	10	0
908-14/S	Model of Lower Jaw.....	0	10	0
1/69/144	Baker Projector Lamphouse, on stand	2	5	0
4/69/142	Disarticulated Skull	2	5	0
11/69/142	Small Air Pump.....	0	12	6
960-3/142	Articulated Skull	3	10	0

SECOND-HAND MICROSCOPICAL SPECIMENS.

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OUR STOCK IS CHANGING DAILY, PLEASE WRITE US GIVING
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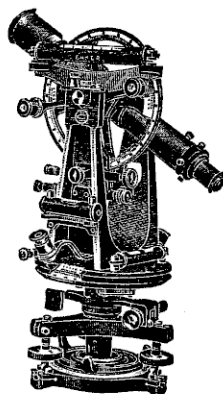
Levels Hired out for the Day or Week.

SECTION II. SURVEYING AND DRAWING INSTRUMENTS.

A. THEODOLITES.

(a) Transits. (b) Y Instruments. (c) Everest Pattern. (d) Theodolite Parts
2a (A) TRANSITS.

All of which are divided on silver, reading by verniers and microscope,
and packed in mahogany cases unless otherwise stated.



ADJUSTMENT AND REPAIRS TO SURVEYING APPARATUS.

INDEPENDENT of our main works at Balham, we have a workshop in the Holborn, specially equipped for repairing, cleaning and adjusting all kinds of Surveying Apparatus.

We are thus enabled to give each individual order our personal attention whilst in the workshop, and also ensure prompt delivery.

All Theodolites and Levels should be packed in an outer wooden case if being sent by rail.

Estimates will be submitted if requested.

			£	s.	d.
3½ inch	New	Baker Traveller's Theodolite and Telescopic Tripod	16	10	0
4 inch	13/68	Elliott Omnimeter, reading to 1 minute, 3 levelling screws, diaphragm fitted with web, trough compass, plumb-bob, locking plate.....	30	0	0
	112/68	Casella, 3 screw, glass diaphragm, reading by vernier to 1 minute, no vertical circle, bubble on telescope, in case, with accessories and tripod...	15	0	0
4½ inch	152/72	Adie, 4-screw, reading to 30 seconds, with circular compass, web diaphragm, no vertical circle, spare eyepiece, in case, with tripod.....	12	0	0
	142/74	Elliott, 3-screw, non-transit, reading to 20 seconds, web diaphragm, trough compass, in case, with tripod	15	0	0
	22/70	Adie, 4-screw, reading to 20 seconds, web diaphragm, circular compass, no vertical circle, case	15	0	0
5 inch	156/69	Street, 4-screw, reading to 20 seconds, web diaphragm, circular compass, complete in case, with tripod	25	0	0
	21/70	Stanley, 3-screw, with circular compass, reading to 20 seconds, web diaphragm, 1in. aperture telescope, bubble on telescope, clamp and tangent, case and tripod.....	30	0	0

Apparatus Purchased for Cash.

SURVEYING AND DRAWING INSTRUMENTS.—Continued.			£	s.	d.
5 inch	91/72	Troughton & Simms, 4-screw, web diaphragm, reading by vernier to 1 minute, trough compass and wall plate, in case, with tripod	20	0	0
	722-1/71	Troughton & Simms, 4-screw, web diaphragm, reading by verniers to 30 seconds, trough compass, striding bubble, erecting eyepiece, lamp, plummet, wall plate, in case, with tripod and outer leather travelling case.....	15	0	0
	130/72	Pastorell 4-screw, web diaphragm, reading by vernier to 20 seconds, in case, with tripod	15	0	0
	136/65	4-screw Elliott, reading to 20 seconds, with erecting and inverting eyepiece, plumb-bob, in case, with tripod	20	0	0
	138/71	Elliott, 3-screw, transit, reading to 20 seconds, trough compass, lamp, plumb-bob, in case, with tripod.....	30	0	0
	12/70	Baker, 4-screw, with circular compass, reading by vernier to 20 seconds, with diaphragm, in case and tripod	17	10	0
	14/70	Elliott, 4-screw, with circular compass, web diaphragm, reading to 20 seconds, in case and tripod	17	10	0
	19/70	Stanley, 3-screw, reading to 1 minute with mechanical centring stage, web diaphragm, telescopic compass, case and tripod.....	20	0	0
6 inch	764-13/69	Troughton & Simms, 3-screw, web diaphragm, circular compass, diagonal eyepiece, lamp and plumb-bob, in case, with tripod	25	0	0
	95/90	Troughton, reading to 10 seconds, 4 levelling screws, diaphragm fitted with web, open stand, trough compass, diagonal eyepieces, pierced axis, striding bubble, lantern, plumb-bob, 2 cases, shifting head to tripod.....	42	0	0
	8/70/	Troughton & Simms, 3-screw, Micrometer reading to 5 seconds, with glass diaphragm, striding level, mining lamp, spare diaphragm, leather covered case and tripod.....	47	10	0
	154/68	7in. Troughton & Simms, 3-screw, with 3 verniers reading to 10 seconds, bubble on vernier and telescope, web diaphragm, sliding centring baseplate, striding level, diagonal eyepiece, in 2 cases, with tripod.....	18	0	0
	83/65	7½in. Elliott, without vertical arc, reading to 1 minute, with 2 extra readers and 1 extra eyepiece, in case, with tripod.....	17	10	0
	644-5/68	6in. Troughton & Simms, 4-screw, with fine adjustment, in case, with tripod with shifting head	25	0	0
	85/69	6in., 3-screw, Tacheometer, stadia glass diaphragm, trough compass, reading by vernier to 20 seconds, spare striding bubble, in case with open lath tripod	17	10	0

Apparatus Purchased for Cash.

SECOND-HAND DEPARTMENT.

27

SURVEYING AND DRAWING INSTRUMENTS.—Continued.			£	s.	d.
6 inch	680-14/71	Troughton & Simms, 4-screw, web diaphragm, luminated axis, reading to 10 seconds, spare striding bubble, in case, with tripod.....	25	0	0
	765-6/69	Street, 4-screw, web diaphragm, circular compass, reading by vernier to 1 minute, plumb-bob, extra eyepiece, and wall plate, in case, with tripod	25	0	0
	137/71	Elliott, Dalrymple Hay curve meter, in case, with tripod.....	30	0	0
	139/71	Troughton & Simms, web diaphragm, enclosed circles, 3 vernier pattern, with accessories, in case, with tripod.....	35	0	0
	940-2/	Troughton & Simms, 3-screw Micrometer, reading 5 seconds to horizontal circle, vertical circle divided centesimally to 400, bubble on telescope, aperture of object glass 1½in., focus 14in., with web diaphragm, dew cap, diagonal eyepiece, sun cap, striding bubble, in 2 cases, and open frame tripod	40	0	0

2A (b) Y INSTRUMENTS.

All of which are divided on silver, reading by verniers and microscope, and packed in mahogany cases, unless otherwise stated.

5 inch	519-2/71	Troughton & Simms, 4-screw, in case, no tripod	12	12	0
	40/68	4-screw Cary, reading to 1 minute, in case, with tripod.....	10	0	0
	3/71/70	Stanley, 4-screw, half-circle, reading to 1 minute, with web diaphragm, circular compass, case and tripod	9	10	0
	4/71/70	Troughton & Simms, 4-screw, half circle, reading to 1 minute, web diaphragm, case and tripod	10	10	0
	5/71/70	4½in. Stanley, 4-screw, with circular compass, glass diaphragm, reading to 30 seconds, in case and tripod	9	15	0
6 inch	42/71	Negretti & Zambra, 4-screw, with circular compass, vernier reading to 20 seconds, no case, with tripod	18	10	0
8 inch	39/71	4-screw, Jones, reading to 20 seconds, web diaphragm, in case, with tripod	15	0	0

2A (c) EVEREST PATTERN.

All of which are divided on silver, reading by verniers and microscope, and packed in mahogany cases, unless otherwise stated.

2A (d) THEODOLITE PARTS.

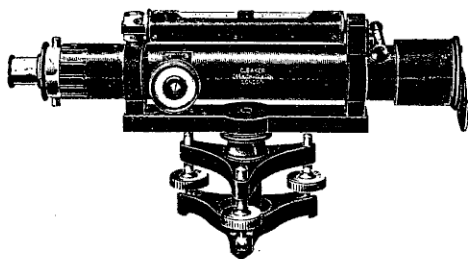
B. MINING DIALS AND CIRCUMFERENTORS, ETC.

(a) Mining Dials. (b) Circumferentors. (c) Pocket Compasses, with Sights.

2B (a) MINING DIALS.			£	s.	d.
All of which are packed in cases and provided with tripod stand, unless otherwise stated.					
4 inch	16/69	Barrow Card Dial.....	2	0	0
	409-1/69	Archbutt, folding sights, ball and socket joint tripod, all in cases.....	4	10	0

Apparatus Valued.

MINING DIALS AND CIRCUMFERENTORS.—Continued.				£	s.	d.
4 inch	845-1/83	6in. Stanley Cranked Gimbal Dial, circle reading by vernier to 1 minute, point diaphragm, Hoffman ball head, telescope and hinged sights, in case, with sliding leg tripod.....		27	10	0
	944-5/82	Watts, with folding sights, ball and socket joint, in case.....		2	10	0
4½ inch	590-5/82	Mining Dial, by Ash, complete in case, with tripod, also 5in. circular brass protractor.....		4	15	0
5 inch	35/82	Davis, 4-screw, ball joint, plain sights, telescopic sights, in case, with long and short tripods		9	10	0
	32/82	Miners' Dial, with rack and pinion rotation, bubbles both ends, vane sights, in case.....		3	0	0
	1/74/82	Hall, with vertical arc telescope, plain sights, in case, and tripod with ball and socket joint		8	0	0
2B (b) CIRCUMFERENTORS.						
	1/75/82	Circumferentor, with compass, in case and tripod ...		2	2	0
	2/75/82	Stanley Circumferentor, with compass, in case and tripod		2	2	0

**C. LEVELS.**

- (a) Dumpy Instruments.
- (b) Y Instruments.
- (c) Drainage Instruments.

2C (a) DUMPY INSTRUMENTS.

All of which are provided with the usual pattern round tripod and packed in mahogany case, unless otherwise stated.				£	s.	d.
10 inch	58/70	10in. Spencer, 4-screw, builders, with web diaphragm, case and tripod.....		4	0	0
12 inch	30/76	Stanley 4-screw, with circular compass, web diaphragm, case and tripod		8	15	0
	61/76	Elliott, 4-screw, with web diaphragm, case and tripod		8	10	0
14 inch	268/64	Short, 4-screw, Gradiometer, with circular compass, web diaphragm, in case, with tripod...		15	10	0
	21/76	Short, 4-screw, with circular compass, web diaphragm, case and tripod		8	10	0
	310/69	Stanley Gradiometer, with stadia glass diaphragm, circular compass, clamp and tangent screw, spare eyepiece, spare point diaphragm, plumb bob, in case, with tripod.....		25	0	0
	41/76	Troughton & Simms, 4-screw, with circular compass, web diaphragm, case and tripod		9	10	0
	62/76	Hall, 4-screw, with web diaphragm, case and tripod		9	10	0
	65/76	Wilson, 3-screw, with circular compass, stadia point diaphragm, case and tripod.....		14	10	0
	958-9/76	Chadburn, 4-screw, with web diaphragm, case and tripod		8	0	0

Apparatus Valued.

SECOND-HAND DEPARTMENT.

29

C. LEVELS—Continued.			£ s. d.		
14 inch	57/76	4-screw, with circular compass, web diaphragm, case and tripod.....	9	10	0
	59/76	Stanley, 3-screw, quick-set engineer's, with spherical ball joint, stadia point diaphragm, clamp and tangent, case and tripod.....	20	0	0
15 inch	76/71	Cary, 4 levelling screws.....	12	12	0
	64/76	Stanley, 4-screw, web diaphragm, case and tripod	10	10	0

2C (b) Y INSTRUMENTS.

14 inch	18/90	Holmes, 4 levelling screws, diaphragm fitted with web compass, no tripod	8	9	0
	47/64	4-screw, Troughton & Simms, with web diaphragm, in case, with tripod	10	0	0
	43/63	4-screw, Jones, with clamp and tangent, circular compass, no case or tripod.....	4	0	0
	4/77/67	12in. Cary, 4-screw, with circular compass, web diaphragm, clamp and tangent, case and tripod	7	10	0
	5/77/68	Troughton & Simms, 3-screw, with clamp and tangent, web diaphragm, case and tripod.....	14	0	0

2C (c) DRAINAGE INSTRUMENTS.

All of which are provided with the usual pattern round tripod and packed in mahogany case, unless otherwise stated.

D. ACCESSORIES FOR THEODOLITES AND LEVELS, ETC.

(a) Tripod Stands. (b) Staves. (c) Cases for Staves and Stands.
(d) Chains, Tapes and other Appliances for measuring distance by traversing it.

2D (a) TRIPOD STANDS.			£ s. d.		
	23/157	Open Framed Stand, for 8in. theodolite, with 3-screw adjustment	3	0	0
	54/157	Round Mahogany Tripod, suitable for level or theodolite	2	0	0
	55/157	Tripod, suitable for mining dial	1	10	0
	5/79/157	3ft. Round Form Mahogany Tripod, for level or theodolite	2	0	0
	6/79/157	2ft. Frame Tripod for level or theodolite	1	15	0

2D (b) STAVES

	174/70	18ft. Sopwith Staff	2	0	0
		1 Set 3 Sections Enamelled Metal Staff Plates, Feet and Hundredths.....	1	10	0
	924-10/70	16ft. Sopwith Staff	2	10	0
	167/70	16ft. Folding Sopwith Staff.....	1	10	0
	26/80	16ft. Sopwith Staff.....	2	15	0
	944-21/70	15ft. Scotch Staff.....	1	0	0

2D (c) CASES FOR STAVES AND STANDS.

2D (d) CHAINS, TAPES and other Appliances for measuring distance by traversing it.

	101/S	20 Metre Steel Band Chain, fully divided to millimetres throughout.....	0	15	6
	103/S	100 metre Studded Steel Band Chain.....	2	0	0
	2/81/S	4-Pole Band Chain	0	12	6
	944-19/S	66ft. Land Chain.....	0	15	0
	8/81/S	66ft. Chesterman Steel Tape	0	15	0

Quotations for Traveller's Sextants on Request.

E. MINOR INSTRUMENTS FOR THE DETERMINATION OF HORIZONTAL ANGLES.

(a) Box Sextants. (b) Plane Tables. (c) Prismatic Compasses.
(e) Tripods for Prismatic Compasses. (f) Optical Squares
and Cross Staff Heads.

2E (a) BOX SEXTANTS.

All of which are divided on silver, reading by vernier to 1 minute, and packed in solid leather case with shoulder strap, unless otherwise stated.

		£	s.	d.
108/81	Elliott Box Sextant, in case.....	2	0	0
566-4/81	Stanley, in case	1	0	0
103/81	Elliott, without case	1	5	0
113/81	Swain, with telescope, in case	2	10	0
3/82/81	Thornton, complete with telescope, in case	3	0	0
4/82/81	Troughton & Simms, with telescope, in case	2	0	0
5/82/81	Troughton & Simms, in case	1	0	0
891-8/81	Box Sextant, with telescope, in case.....	3	0	0
114/S	Stanley, in case	2	10	0
956-14/81	Heath, without telescope, in case.....	2	15	0
6/82/81	Troughton & Simms, with telescope	2	15	0
7/82/81	Elliott, with telescope, in case.....	3	0	0

2E (b) PLANE TABLES AND PARTS.

638-6/77	Telescopic Alidade, by Morin, new condition, in case	4	10	0
792-19/77	Stanley, Telescopic Alidade, full circle, glass diaphragm, trough compass, in case	7	10	0
2/83/77	18in. Boxwood Alidade, with folding sights, in case.....	1	0	0
944-20/77	Plane Table and Tripod, with 18in. boxwood Alidade, in canvas case	5	10	0

2E (c) PRISMATIC COMPASSES.

All of which have card dial, and are packed in solid leather case with shoulder strap, unless otherwise stated.

2½ inch	891-3/81	Barker, 2½in. Prismatic Compass and Clinometer in case.....	2	15	0
	41/84/81	Mark VII., Service Prismatic	2	10	0
	44/84/81	Mark VII., Liquid Prismatic Compass, in case...	4	15	0
	942/16/81	Steward Liquid Compass	2	5	0
	34/84/81	Mark VII., Service Prismatic	2	10	0
	50/84	Service Prismatic, in case	1	15	0
3 inch	365-6/81	Hicks, Prismatic Compass and Clinometer.....	3	10	0
	6/84/81	3½in. Stanley, in case.....	1	10	0
	31/84/81	4in. Stanley, with aluminium ring dial, in case.....	2	0	0
	36/84/81	3½in. Pastorelli, with card dial, in case	1	5	0
	944/3/81	Cooke, with metal tripod	3	10	0
	52/84/	Creagh-Osborne Liquid Compass	2	10	0
5 inch	131/81	Potter, card dial, in box	2	0	0

2E (d) COMPASSES.

	60/81	Night Marching Compass.....	1	7	6
	89/122	Creagh-Osborne "Air" Liquid Compass.....	2	0	0
	47/81	Trough Compass, in mahogany case	0	15	0
	107/S	Trough Compass	0	7	6
	118/81	Stoppani Sighting Compass, in case	2	10	0
	126/81	Marching Compass.....	0	17	6
	1/85/S	Stewart Night Marching Compass, in case.....	1	0	0
	3/85/S	Watkins Compass and Clinometer, by Hicks, in case	2	0	0
	5/85	Compass and Clinometer, in case.....	2	0	0
	6/85	Negretti & Zambra Compass and Clinometer.....	2	0	0
	8/85/81	Hicks Compass and Clinometer, in case.....	1	10	0
	944-11/81	Trough Compass, in case	0	10	0

Apparatus Purchased for Cash.

E. MINOR INSTRUMENTS—Continued.

£ s. d.

2E (f) OPTICAL SQUARES AND CROSS STAFF HEADS.

47/81	Combined Optical Square, 45° and 90°	1	0	0
33/80	10in. Open Form Cross Staff Head, by Cary, in mahogany case, with tripod, as new	2	15	0
53/81	Small Stanley Electrum Optical Square.....	0	10	0
913-2/81	Optical Square	1	0	0
1/86/81	Cross Staff Head, circular, with rack and pinion, divided to take any angle, compass, in case.....	2	10	0
2/86/81	Stanley Optical Square, in case.....	1	0	0
924-1/81	Stanley Optical Square.....	1	0	0
924-18/81	Cross Staff Head, in case	1	5	0
7/86/81	French Cross Staff and Compass	0	12	6
10/86/81	Troughton & Simms Optical Square.....	1	0	0

F. MINOR INSTRUMENTS FOR THE DETERMINATION OF VERTICAL ANGLES.

(a) Nautical Sextants. (b) Sextant Stands. (c) Repeating Circles. (d) Artificial Horizons. (e) Clinometers. (f) Levels with Sights. (g) Levels without Sights.

2F (a) NAUTICAL SEXTANTS.

£ s. d.

All of which read by vernier with microscope and are packed in mahogany case, unless otherwise stated.

5 inch	58/85	Cary, divided on silver, in mahogany case (new price, £14 10 0)	6	6	0
6½ inch	4/87/86	Sextant, reading to 10 seconds, complete with accessories, in case.....	4	10	0
	951-2/86	Stanley, reading to 30 seconds, with star telescope, in case	4	15	0
	8/87/86	7in. Spinelli & Mahur, reading to 15 seconds, complete in case, with certificate.....	7	10	0
	7/87/86	7in. Cox, reading to 10 seconds, complete in case, with accessories.....	4	15	0
8 inch	57/85	Porter Prism Nadir Sextant, by Cary, in case.....	5	5	0

2F (b) SEXTANT STANDS.

2/98	Sextant Stand, by Cary, in case.....	2	10	0
3/96	Sextant Stand, in mahogany case	2	0	0

A NEW LEVELLING STAFF.

(Prov. Patented.)

We are pleased to announce that we have succeeded in producing a Levelling Staff fitted with Enamelled Figured Metallic Scales.

Such a Staff has long been desired, but the high cost of production has hitherto prevented its introduction. We have now produced such Scales at a marketable price, as our quotations will show.

Sopwith 14 foot Levelling Staff, fitted with Enamelled Metal Scales, best quality Staff £4 10s. 0d.

Set of the Metal Scales to fit any 14ft. Sopwith Staff £2 2s. 0d.

Easily fixed.

PERMANENT, WASHABLE AND EASILY READ.

Our Second-hand Catalogue is never complete—we are constantly adding.

F MINOR INSTRUMENTS.—Continued.			£	s.	d.
2F (c) REPEATING CIRCLES.					
2/82	Troughton & Simms, 10in. diameter, divided on silver, with verniers and microscopes reading to 20 seconds, in mahogany case.....		8	0	0
2F (d) ARTIFICIAL HORIZONS.					
Mercury 3/81	Cary, Reeve's patent, made of aluminium.....		2	0	0
653-4/82	Porter's Artificial Horizon, by Cary, in case.....		3	15	0
818-3/82	Roof Pattern Artificial Horizon, in case.....		1	5	0
866-19/82	Rectangular Artificial Horizon, with levelling screws, in case.....		1	10	0
924-19/82	Artificial Horizon, with black glass reflector, levelling screws, spirit level, in case.....		1	10	0
2F (e) CLINOMETERS.					
30/77	Clinometer, for 10 pdr. gun, in case.....		5	0	0
New	Clinometer and Compass combined, prismatic reading, in leather sling case.....		5	10	0
New	Brunton Clinometer and Compass.....		6	10	0
New	Verschoye Pocket Transit.....		8	0	0
SS	Watkins' Clinometer, with drum		1	10	0
43/81	Troughton & Simms Delisle Improved Combined Reflecting Level and Clinometer.....		2	10	0
792/13/77	Cassastelli, Indian Pattern, in leather sling case...		1	10	0
880-9/81	Boxwood Rule-form Clinometer, with compass, level and graduated joint in case.....		2	0	0
880-13/81	Watkin Clinometer by Elliott.....		1	0	0
880-20/81	Compass and Clinometer, with universal joint and stand socket, in case.....		2	10	0
48/81	Watkin Clinometer by Hicks, in case		1	0	0
45/81	Harling Theodolite, in case		3	0	0
55/81	Balance Circle Chronometer, in case.....		0	10	0
1/91/81	Steward Gun Clinometer, with level, in case.....		1	10	0
942-17/81	Casella Theodolite		3	0	0
2F (f) LEVELS WITH SIGHTS.					
New	Hand Level		1	5	0
	Larger Type		1	15	0
1/92	Baker Telescopic Abney Level, with metal sliding leg tripod.....		4	15	0
6/92	5in. Abney Level by Steward		1	7	6
7/92	5in., with compass, in case		2	5	0
954-7/93	Watts Shafting Level, in case		1	10	0

DUMPY LEVELS

WE ARE ALWAYS PREPARED TO PURCHASE FOR CASH AND ALLOW GOOD PRICES FOR DUMPY LEVELS AND OTHER SURVEYING APPARATUS OF MODERN DESIGN AND BY WELL-KNOWN MAKERS WHY NOT CHANGE YOUR PRESENT INSTRUMENT FOR ONE OF THE LATEST PATTERN? A GENEROUS ALLOWANCE WILL BE MADE

WRITE TO-DAY
AND ASK FOR A QUOTATION

Apparatus Purchased for Cash

G. DRAWING INSTRUMENTS.

(a) Sets in Cases below £5. (b) Sets in Cases above £5. (c) Single Drawing Instruments. (d) Enlarging and Reducing Apparatus. (e) Perspective Apparatus.

2G (a) SETS BELOW £5. All needle pointed.		£	s.	d.
SS	12in. Electrum Half-set of Drawing Instruments	1	15	0
NS	Pocket Case of Drawing Instruments, school set, 4in. plain point, half-set of compasses, ink and pencil point, spring bow pen, 5in. ruling pen, leads.....	0	5	6
NS	Pocket Case of Drawing Instruments, 5in. half-set of compasses, ink and pencil point lengthening bar, 5in. divider, spring bow divider, rotating compass pen and pencil point, 5in. ruling pen, leads	1	1	0
NS	Pocket Case, containing best quality tubular electrum drawing instruments, needle point, 6in. half-set of compasses, lengthening bar, ink and pencil points, 6in. hair divider, 3 spring bows, centre wheel, 6in. ruling pen, 4½in. ruling pen, spare handle, screwdriver, leads, spare set of screws and bolts.....	2	15	0
231/S	Electrum Beam Compass in mahogany case, with 6in. needle-pointed half-set.....	3	0	0
16/94/S	6in. Half Set	1	1	0
19/94/S	Pocket Case, containing 6in. half set, 5in. hair divider, 3 spring bows, 1 pen.....	0	15	0
20/94/S	Riefleer Pocket Case, containing 6in. half-set, 5in. divider, 4in. compass, 3 spring bows and 3 pens	1	10	0
2G (b) SETS ABOVE £5. All needle pointed.				
835-5/75	Presentation Set of Instruments, in electrum-bound case, 6in. half set of compasses, double-jointed plain points, set of 3 spring bows, pen and pencil bow double-jointed needle points, map measurer, index pen, dotting pen, road pen, parallel rule, divided ivory edge, ivory scales, curves and set square	10	0	0
866-17/75	13in. Oak Case of Electrum Instruments, by Stanley, containing 6in. half-set, 5in. and 4in. hair dividers, set of 3 spring bows, bow pen and pencil compasses, 4 drawing pens, protractor, etc.	5	15	0

We hold complete stocks for Drawing Office equipment at strictly Competitive Prices.

**NEW CATALOGUE OF SURVEYING
AND DRAWING INSTRUMENTS.**

If you have not received a copy, write for one to-day. Many New
and interesting Models are Listed and Prices are Reduced.

Drawing Pen Sets—Delivery 5 hours

G. DRAWING INSTRUMENTS.—Continued.

£ s. d.

DRAWING BOARDS AND TEE SQUARES.

BEST PINE BOARDS, Ebony Edge, Battened and Slotted—

Imperial Size, 3lin. × 23in.	1	7	6
Double Elephant, 42in. × 29in.	2	2	0

TEE SQUARES. Best Mahogany, Ebony Edge—

Imperial Size, 32in.	0	13	9
Double Elephant, 42in.	0	17	0

BLACK AND WHITE, BLUE, AND TRUE TO SCALE PRINTS.

We can give you a very quick service at exceptionally low prices, and the quality of the work is beyond question.

Prints supplied in two or three hours.

2G (c) SINGLE DRAWING INSTRUMENTS.

£ s. d.

Spring Bows	New	Set of 3, in case, with needle points	1	0	0
	New	Pen, needle-pointed	0	5	0
	New	Pencil, needle-pointed	0	5	0
	New	Divider	0	5	0
Proportional Compass	W	Baker, 9in., adjustable points, in case	1	10	0
	14/96/S	6in. Harling Proportional Compass, in case	1	5	0
Planimeter	270/S	Reiss, in case, nearly new	3	10	0
	272/S	Reiss, in case nearly new	5	10	0
	275/S	Reiss, in case, as new	4	10	0
	954-6/S	Keuffel & Esser, in case	1	15	0
Beam	213/75	Beam Compass, 15in. bar, all brass, in case	0	15	0
	887-26/159	5ft. Troughton & Simms, Ebony, inlaid brass, in case	2	10	0
Trammel	New	Combination Pillar Compass	3	10	0
Ruling Pens	New	Hinged pattern	0	6	6
	New	Plain Nib	0	4	6

2G (d) ENLARGING AND REDUCING APPARATUS.

All of which are packed in mahogany cases, unless otherwise stated.

Pentograph	New	Wooden Frame, 12in.	0	12	0
	11/97/S	18in. Boxwood Pantograph	1	0	0
Eidograph	765-1/91	30in. Brass Eidograph, by Elliott, with accessories, in mahogany case	15	0	0
	8/97/S	Camera Lucida	1	5	0

2G (e) SLIDE RULES.

2G (e) PERSPECTIVE APPARATUS.

2/75	Set of Metal Marquise Scales, in case	1	0	0
	2in. New Reducing Glass	0	7	6
661-10/75	Lorraine Mirror, 185 m/m × 155 m/m	1	5	0

Drawing Pen Sets—Delivery 5 hours.

H. SCALES, ANGULAR AND LINEAR.

(a) Protractors. (b) Protractors with Vernier. (c) Station Pointers.
(d) Sets of Scales. (e) Scales, Various.

2H (a) PROTRACTORS.**Semi-Circular****2H (b) PROTRACTORS WITH VERNIER.**

All of which are divided on silver and packed in mahogany case, unless otherwise stated.

			£	s.	d.
Circular	49/77	5in. Stanley, 1 arm, reading to 1 minute, in mahogany case	1	5	0
	869-14/77	6in. Stanley Electrum, reading to 30 minutes, in case	1	0	0
	53/77	6in. Elliott Brass Protractor, in case	0	10	6
	1/100/77	6in. Stanley Electrum Goniometer Protractor, in case	1	10	0

2H (c) STATION POINTER.

887-18/76	6in. Elliott, divided on silver, reading to 1 minute, clamp and tangent, with extension arm, in case	4	0	0
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2H (d) SETS OF SCALES.

All of which are contained in case, unless otherwise stated.

Solid**Boxwood****2H (e) SCALES, VARIOUS.**

98/S	Set of Boxwood Chain Scales and Offsets, in mahogany case	1	0	0
101/75	Set of 6 Boxwood Scales, with Offsets, in mahogany case	1	0	0
102/75	Set of Electrum Marquise Scales, in case.....	0	10	0
866-4/75	Set of Boxwood Scales and Offsets, in case.....	1	0	0
880-8/S	7, 4in. Ivory Surveyors' Scales, in case	0	7	6

Surveyors' 5ft. Folding Rods.

We are pleased to announce that owing to improvements in manufacturing we are able to reduce the price of our Folding Rods.

5ft. Rods	...	...	6/6 each.
5ft. Rods	...	...	12/- per pair.
5ft. Rods, 4-fold	...	...	15/6 each.

Apparatus lotted and sent to Auction.

J. DRAWING BOARDS, T SQUARES, PARALLELS, ETC.

(a) Drawing Boards. (b) T Squares. (c) Straight Edges.
(d) Parallel Rules. (e) Curves.

2J (a).

2J (b) T SQUARES AND SET SQUARES. £ s. d.
2/105/S 60in. Mahogany Tee Square, ebony edge..... 0 12 6

2J (d) PARALLEL RULES.

Bar 48/97 48in. Brass Straight Edge, by **Potter**, in case..... 2 5 0

J (e) CURVES.

Selections sent on approval against remittance to value.

1/107/77 Box containing 90 Cardboard Curves, 1in.—240in. 0 10 0

L. SUNDRY APPARATUS—SECTION II.

	£	s.	d.
247/92 Current Meter, reading yards, furlongs and miles	2	10	0
839-7/93 Walker Cherub Ship Log, with 2 rotators	4	10	0
839-8/93 Walker Harpoon Ship Log, as new	2	10	0
323-3/85 Richards' Patent Steam Engine Indicator.....	6	0	0
34/108 Fowler Calculator	0	15	0
37/108 Holden Calculator	0	15	0
7/98/S 6in. Hemmi Slide Rule.....	0	6	0
9/98/S 14in. Faber Commercial Slide Rule.....	1	7	0

Charges for the Hire of Surveying Instruments.

The following instruments can be hired at the charges stated. Other apparatus by arrangement.

Deposit to value or satisfactory London Trade references. Instruments are at the sole risk of the hirer after leaving our premises.

The day period includes collection from these premises the evening before day of using and delivery here the morning of the day after use.

	Per Day.			Per Week.			Per Month.		
	£	s.	d.	£	s.	d.	£	s.	d.
Dumpy Level, with Stand and Staff.....	0	15	0	1	5	0	2	10	0
Transit Theodolite	1	0	0	2	10	0	4	0	0
Set 6 Poles.....	0	2	6	0	6	6	0	15	0

Any expenses of packing and carriage are charged extra at cost.

Hire of other Instruments by Arrangement.

Apparatus lotted and sent to Auction.

SUNDRY APPARATUS.—Continued.		£	s.	d.
623-7/81	Gravity Levelling Instrument	0	10	0
109/S	Perambulator Attachment, for recording distance travelled, in case.....	1	5	0
658-10/77	Collimator Telescope, with iron base, and adjusting screws.....	2	10	0
160/74	Thomson Pattern Azimuth Instrument, in mahogany case.....	2	0	0
215/92	Richards' Patent Steam Engine Indicator, by Elliott, with 6 springs, 15 to 148 lbs. pressure, in case	3	0	0
216/92	Crosby Steam Engine Indicator, nickel finish, with 4 springs, 20 to 120 lbs. pressure, in case	5	10	0
220/80	Current Meter, by Casella, reading metres, kilometres and hectometres, in case, new condition.....	5	0	0
232	Current Meter	2	10	0
266/74	Volta Azimuth Reflector Mirror, in case.....	1	10	0
267/96	Amsler Electric Current Meter, complete in case (new price, £40)	10	0	0
880-14/S	4in. Dip Needle by Browning, on 5in. metal base	2	10	0
880-18/S	2 Metre bone multi-folding rule, in centimetres and millimetres throughout both sides.....	0	7	6
880-16/S	12in. Brown gradient level, in case	0	12	6
891-13/92	Darke's High-speed Steam Engine Indicator, complete in case	3	0	0
879-18/S	K. & E. Thatcher Calculating Machine, in case.....	12	10	0
888-17/93	Short & Mason Water Pressure Gauge, in case.....	1	0	0
289/S	Sliding Leg Metal Tripod, in leather case	0	15	0
908-16/92	Elliott Steam Engine Indicator, in case.....	4	10	0
16/108/92	Crosby Steam Engine Indicator, complete in case.....	3	0	0
18/108/92	Crosby Reducing Wheel, in case.....	1	10	0
27/108/S	20in. Stanley Slide Rule, in case	1	17	6
954-8/92	Diesel Oil Engine Indicator, complete in case.....	3	10	0

This List, owing to the nature of the stock it represents must necessarily never fully cover the whole of our stock, as goods are being sold and replaced daily. When this list is published in April and October it is actually then correct.

WE STRONGLY URGE our customers to write giving full particulars of their requirements if they do not see it listed, as we are adding to stock daily.

Apparatus Valued.

SECTION III. TELESCOPES ON STANDS AND ACCESSORIES.

A. ASTRONOMICAL TELESCOPES.

(a) Refractors, Equatorial Mount. (b) Refractors, Altazimuth Mount.

3A (a) REFRACTORS. Equatorial Mount.		£	s.	d.
542/158	4in. Browning , on equatorial mount (no circles), slow motions by Hooke's joint, finder telescope, 2 astro and terrestrial eyepieces, on mahogany tripod, case for telescope.....	35	0	0
538/158	6in. on well-built equatorial, with geared circum-polar adjustment, finder, clamp and slow motion to declination, 4 Astro eyepieces, on square iron column	75	0	0
933/2	5½in. Object Glass by Cooke , on equatorial mount, with divided circles, slow motions, finder telescope, 5 astro eyepieces, on iron column, also mahogany tripod with altazimuth mount ...	45	0	0
1/109/S	3½in. Astro Telescope on skeleton equatorial mount, with slow motion, on garden tripod ...	17	10	0
539/S	5in. Cooke , with achromatic objective focus, 60in., equatorial mount, adjustable for latitude, 6in. declination circle, and 5in. hour circle, divided on silver, large driving quadrant clock, weight driven, finder telescope, dew cap, 3 astro eyepieces, on heavy mahogany garden tripod, with levelling feet, reconditioned as new.....	120	0	0
3/109	4in. Browning , 60in. focus, with rack eye end, no stand	20	0	0
961-1/158	3½in. Astro Telescope, with equatorial mount, finder, 2 eyepieces, on garden tripod.....	25	0	0
877-7/158	4in. Cooke , equatorial mount, with declination and hour circles divided on silver, slow motion by Hooke's joint, with battery of 6 eyepieces, solar diagonal, on mahogany tripod and case.....	70	0	0

ALUMINIUM REFLECTING FILMS ON ASTRONOMICAL MIRRORS

WE ARE PLEASED TO ANNOUNCE THAT WE CAN
ACCEPT ORDERS FOR ALUMINISING THE SURFACES OF
MIRRORS UP TO 20in. DIAMETER. THE PERMANENCY
AND REFLECTING EFFICIENCY OF THIS FILM MUST
BE OF SPECIAL INTEREST TO OUR CUSTOMERS.

PRICES:

3in. ...	£1 7 6	9in. ...	£3 6 6
4in. ...	1 10 6	10in. ...	3 17 0
5in. ...	1 16 0	11in. ...	4 8 6
6in. ...	2 2 6	12in. ...	5 1 6
7in. ...	2 9 6	13in. ...	5 15 0
8in. ...	2 17 0	14in. ...	6 10 0

ORDERS EXECUTED PROMPTLY.

Apparatus Valued.

TELESCOPES ON STANDS AND ACCESSORIES.—Continued. £ s. d.

3A (b) REFRACTORS. Altazimuth Mount.

608/S	5in. Astro Telescope, 84in. with finder, 3 astro and 1 terrestrial eyepieces, on heavy sliding leg mahogany tripod	55	0	0
599/158	2in. Cutts, on table stand, with 1 Astro eyepiece and 1 terrestrial eyepiece, in case.....	5	10	0
939-13/158	4½in. Astro Telescope with finder, slow motion, 6 astro eyepieces, star diagonal, on heavy mahogany garden tripod, case for telescope.....	25	0	0
9/110/S	3in. Dolland, with leather covered body, terrestrial eyepiece, on garden tripod, as new	12	0	0
953-7/158	3in. Watson, equatorial mount by Newton, with declination and hour circles divided on brass, finder, slow motion by Hooke's joint, 2 Astro and 1 terrestrial eyepieces, sun diagonal, on garden tripod, case for telescope	20	0	0
955-4/158	2½in. Astro Telescope, with steady rod, 1 Astro eyepiece, 1 terrestrial eyepiece, on table stand, case	12	10	0
11/110/158	2½in. Astro Telescope, with 1 terrestrial eyepiece, 1 Astro eyepiece, on table stand, in case.....	10	10	0
12/110/158	2½in. Astro Telescope, with finder, terrestrial eyepiece, on table stand, case.....	9	10	0
13/110/158	3in. Astro Telescope, with tapered body, finder, 1 Astro and 1 terrestrial eyepiece, on garden tripod, case for telescope	10	10	0
14/110/158	3in. Dixey, with 1 terrestrial and 1 Astro eyepiece, on table stand, in case.....	10	0	0

OUR PHOTOGRAPHIC DEPARTMENT

is exceptionally well equipped, and is staffed by men with good technical experience, well able to advise on the selection of apparatus required for special purposes, or any difficulties you may encounter with your own photographic apparatus.

In addition to all the different types of New Cameras, we hold a very comprehensive stock of Second-hand Cameras and Lenses, by leading manufacturers. Every item is fully guaranteed, both optically and mechanically.

We accept, and allow good prices for, Cameras and Scientific Apparatus, in part exchange for articles from our Photographic Department.

Photographic Apparatus is purchased for cash or sold on commission.

Wherever you are, let us have your enquiries. Our Mail Order Department guarantees you prompt delivery, and full satisfaction.

Apparatus Purchased for Cash.

B. REFLECTING TELESCOPES.

(a) Equatorial Mount. (b) Altazimuth Mount.

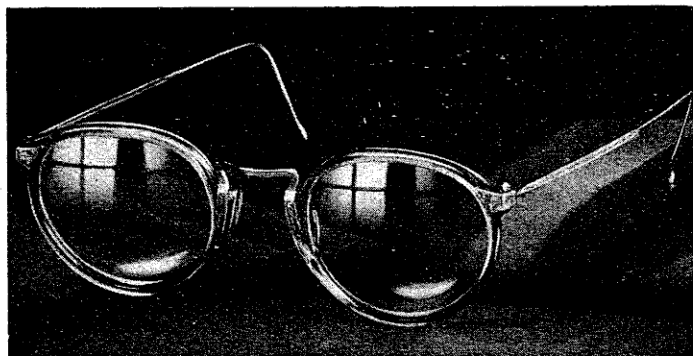
3B (a) EQUATORIAL MOUNT.

£ s. d.

927-1/158	10in. Telescope Tube with mirror and flat by Irving , 2in. finder, 24in FL., battery of 5 eyepieces, 95 to 715, rack eye end, no stand	35	0	0
1/111/S	12in. With-Browning , 6ft., 7in. focus, mirror refigured by Calver , equatorial mount, clock driven, 2in. finder, revolving tube, 16in. circles divided on silver, to 5 seconds, complete with battery of 10 achromatic eyepieces, in case.....	150	0	0

3B (b) ALTAZIMUTH.

920-8/158	4in. Gregorian with finder, 2 speculums, variable powers, 2 eyepieces, table stand, in case.....	10	0	0
3/112/158	6in. Newtonian Tube, with mirror, 36in. focus and flat, no stand (mirror by Irving).....	9	0	0

OPHTHALMIC DEPARTMENT

QUALIFIED REFRACTIONIST
ALWAYS IN ATTENDANCE

QUICK REPAIRS AND
REPLACEMENTS

PRESCRIPTIONS DISPENSED

Hours 9 a.m.—5-30 p.m. Sat. 9 a.m.—12-30 p.m.

Apparatus Sold on Commission.

C. TRANSIT AND MERIDIAN INSTRUMENTS.

(a) Transit Instruments. (b) Dipleidoscopes.

3C (a) TRANSIT INSTRUMENTS.

£ s. d.

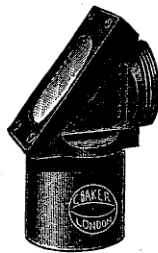
3C (b) DIPLEIDOSCOPE.

Dent Dipleidoscope..... 1 0 0

D. OBJECT GLASSES, EYEPIECES, ETC.**3D (a) OBJECT GLASSES.**

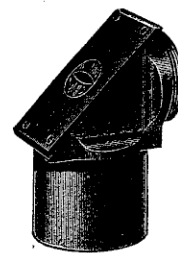
£ s. d.

573/123	2½in. Object Glass, 8½in. focus, in cell.....	1	0	0
505/156	2½in. Troughton, mounted in wooden tube with brass fittings	4	0	0
553/123	2½in. Unmounted Object Glass, 10½in. focus.....	2	0	0
514	2½in. Object Glass, in cell, clear aperture.....	4	0	0
561	2in. Object Glass, 12in. focus, unmounted	0	15	0
582/123	24 m/m Object Glass, by Hilger, 4in. focus, in cell.....	0	7	6
891-16/124	1½in. Object Glass, in cell, 20in. focus.....	1	0	0
8/115/S	5in. Broadhurst-Clarkson, 75in. focus, in cell.....	25	0	0
9/115/123	3½in. Parks Objective Glass, 50in. cell.....	2	10	0
10/115/123	2½in. Object Glass, 40in. focus, in cell	1	15	0
564	Wray 6in. Object Glass, 108in. focus, in cell	45	0	0
565	4in. Watson Object Glass, 60in. focus, in cell.....	15	0	0

Two New Models of Sun and Star Diagonals.

We have designed and manufactured these two new diagonals so that we can offer either a sun or star diagonal fitted with the highest quality optical equipment at strictly competitive prices. The star diagonal has a 1in. clear aperture prism. Both models are finished black enamel and have standard threads.

Star Diagonal	...	£2 10 0
Sun Diagonal	...	£2 10 0



Whatever your requirements for astronomical purposes, please let us have your enquiries, it is more than probable we can meet your wants as our stock is unique and telescopes of apertures varying from 2in. to 12in. are always available, each instrument being fully guaranteed optically and mechanically.

Our catalogue of second-hand scientific instruments includes over 3,000 items.

Levels and Staves Repaired.

D. OBJECT GLASSES, EYEPIECES, ETC.—Continued.

3D (b) EYEPIECES.

		£	s.	d.
726/87	Ross, Position Micrometer, with 2 spare eyepieces, in case	20	0	0
727/87	Browning Solar Prism Eyepieces, in case	3	15	0
722/87	Transit Eyepiece	0	15	0
	Improved Pattern Star Diagonal, standard thread	2	10	0
	Improved Pattern Sun Diagonal, standard thread	2	10	0
	Ocular Zollner Star Spectroscope	2	10	0
	Astro Eyepieces, various power, Huyghenian pattern, from	0	10	0
589/87	Prismatic Solar Eyepiece.....	8	10	0
590/87	Troughton Prismatic Eyepiece	6	10	0
531/87	Erecting Eyepiece	1	5	0
547/87	Solar Prism Eyepiece	3	5	0
639/87	Focussing Comet Eyepiece.....	1	15	0
662/87	Transit Eyepiece.....	2	0	0
663/87	Comet Eyepiece	1	5	0
	New Zollner Star Spectroscope, in case.....	2	10	0
707/87	2½ in. Comet Eyepiece.....	1	10	0
710/87	54 m/m Steinheil Eyepiece.....	2	0	0
734/87	Solar Diagonal Eyepiece	1	10	0
761/87	Browning Erecting Prism Box, with standard R.A.S. thread	3	0	0
770/87	Browning Centring Eyepiece.....	1	1	0
787/87	Battery of high-power Eyepieces on revolving nosepiece	4	10	0
785/87	4 m/m Gifford Eyepiece, sliding fitting.....	1	15	0
788/87	Zeiss Double Revolver, to take standard Eyepiece and Comet Eyepiece	5	15	0
875-7/87	Sun Diagonal	1	10	0
4/116	Browning Star Diagonal, in case.....	1	10	0
10/116	Browning No. 2 R.A.S. thread.....	0	15	0
2/116/87	½ in. Astro Eyepiece.....	0	15	0
800/87	Watson Comet Eyepiece.....	1	5	0
327-8/159	Battery of Grubb Astro Eyepieces, in cabinet.....	8	10	0
758/87	9 m/m Steinheil Achromatic, with sliding fitting.....	1	1	0
939-15	Cooke Transit Eyepiece, with spider web cross lines, in case	1	5	0
20/116/87	Hilgar Position Micrometer Eyepiece.....	10	0	0
23/116/87	Cooke Comet Eyepiece	2	10	0
24/116/87	Zeiss 20 m/m Kellner Eyepiece	2	10	0
25/116/87	Zeiss Monocentric 12.5 m/m Eyepiece	3	15	0
28/116/87	Zeiss 5 m/m Orthoscopic Eyepiece	4	7	6
22/116/87	Zeiss 5 m/m Orthoscopic Eyepiece	4	7	6
39/116	Barlow Lens in mount, to take standard eyepiece	1	0	0
36/116	¾ in. Astro Eyepiece	0	17	6
40/116	¾ in. Astro Eyepiece.....	0	15	0
41/116	¾ in. Astro Eyepiece.....	0	15	0
43/116	¾ in. Astro Eyepiece.....	0	15	0
44/116	¾ in. Astro Eyepiece.....	0	15	0
47/116	¾ in. Astro Eyepiece.....	0	17	6
49/116	¾ in. Astro Eyepiece.....	0	17	6
51/116	Sun Diagonal	1	10	0
931-14/87	Cooke Large Position Micrometer, suitable for double star work.....	45	0	0

Apparatus lotted and sent to Auction.

SECOND-HAND DEPARTMENT.

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3D (b)	EYEPIECES.—Continued.	£ s. d.
552/88	Browning Double Image Reflecting Micrometer, with 3 eyepieces, in case.....	5 10 0
3D (d)	TRANSIT PARTS.	
357-8/135	Transit Eyepiece	2 10 0
7/158	Striding Bubble, 24in., with scale, in case.....	6 0 0

F. STANDS, MOUNTINGS, ETC.

3F (a)	EQUATORIAL.	
N.S./B.	Baker, 3in. Student's Equatorial, divided circles, on iron pyramid stand	18 10 0
35/S	Ottway Equatorial Mount, suitable for 3in. or 3½in. telescope, circles divided on brass, 1 slow motion by Hooke's joint, adjustment for latitudes.....	35 0 0

BAKER'S

“BRITISH” EPIDIASCOPE

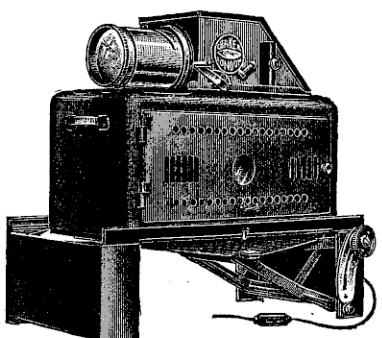
So efficient is our cooling system that Plasticine models may be left in the Epidiascope for long periods without fear of damage.

Brilliant pictures, with strong stereoscopic relief if required.

Projection objective 16in., focus F/3.5, giving excellent definition and flat field.

EFFICIENT,
SIMPLE TO USE, AND
SILENT TWIN COOLING
FANS.

Descriptive pamphlet on application.



Contractors to H.M. Government.

C. BAKER ^(Estab. 1765), 244, High Holborn, LONDON.

Apparatus let out on Hire, see page 36.

STANDS, MOUNTINGS, Etc.—Continued.

3F (b) ALTAZIMUTH.

3F (c) TRIPODS.

		£	s.	d.
8/158	Extra heavy mahogany Sliding Leg Tripod, with altazimuth head, suitable for 5in. or 6in. telescope	10	0	0
875-5/158	2ft. Walnut Tripod	0	5	0
1/121/S	Metal Telescopic Tripod with slow motion to the horizontal movement	1	10	0

3F (d) CLIPS.

SS	Pair 2½in. Clips	1	0	0
8/S	Table Stand, to take 1½in. telescope	0	15	6
9/158	Brass Table Stand, suitable for 2in. telescope	1	5	0
1/122/	Brass Table Stand to take 1½in. telescope, in case	1	0	0
2/122/	Brass Table Stand to take 2in. telescope, in case	1	0	0

3E. SPECULUM FLATS AND MIRRORS.

507/89	Silvered Mirror, 8½in., 12ft. focus	8	10	0
587-2/120	4½in. Speculum, 7ft. 3½in. focal length	2	0	0
15/98	10½in. Mirror, with flat, 2in. × 1½in.	15	0	0
515/120	6½in. Speculum, 72in. focus	3	10	0
528/88	3½in. Glass Mirror, by With, 32in. focus	3	0	0
531/88	4½in. With, Glass Mirror, 51in. focus	6	0	0
532/88	2in. Oval Flat, 1½ minor axis	1	10	0
537/88	6in. Slade Glass Mirror, 54in. focus and flat, unmounted	5	0	0
541/88	Silvered Optical Flat, 2½in. × 1½in.	1	0	0
543/88	Silvered Optical Flat, 2⅝in. × 1½in.	0	17	6
546/88	6in. Irving Glass Mirror, 74½in. focus and flat	5	0	0
547/88	Stainless Steel Optical Flat, 1½in. × 1½in.	2	10	0
2/123/88	6½in. Glass Mirror, 51in. focus by Slade, and flat	5	10	0
3/123/88	7in. Oliver Glass Mirror, 60in. focus	4	10	0
4/123/88	7in. Oliver Glass Mirror, 72in. focus	4	10	0
5/123/88	7in. Zeiss Optical Flat, with chipped edge	5	0	0
6/123/158	15in. Linscott Glass Mirror, 93in. focus	20	0	0

RE-SILVERING.

RE-SILVERING FLATS AND MIRRORS.

We have pleasure in announcing that we are now in a position to re-silver mirrors and flats by a new process which gives an exceptionally fine, brilliant surface of the highest quality, at the following competitive prices.

Prices include silvering flat.

4in. to 6in. inclusive	£1	10	0
Above 6in. to 8in. „	1	15	0
„ 8in. to 10in. „	2	0	0
„ 10in. to 12in. „	2	10	0

IF YOU ARE INTERESTED IN ANY OF THE LARGER TELESCOPES PLEASE WRITE US FOR FULL PARTICULARS. YOU WILL REALISE THAT SPACE DOES NOT PERMIT US TO PRINT DETAILED DESCRIPTIONS IN THIS LIST.

Apparatus Valued.

G. SUNDRY APPARATUS—SECTION III.

		£	s.	d.
656/121	1½in. Finder Telescope, suitable for 6in. or 8in. telescope	4	0	0
665/87	Photometer Wedge, to screw over eyepiece	1	0	0
504/87	4½in. Zinc Object Glass Cap, with set of stops.....	1	10	0
646/121	Finder Telescope	1	10	0
675/102	Horne & Thornthwaite Star Finder, with graduated circle, clamp and slow motion screw, levelling screws, in case	5	10	0
676/121	1½in. Finder Telescope, suitable for 6in. or 8in. telescope	2	0	0
866-32/121	5in. Circle divided on silver to 30 minutes reading by 2 Verniers to 30 seconds, clamp arm and screw adjustment	2	10	0
611/121	Hooke's Joint Handle, solid mahogany.....	0	10	6
	See Section 4A (d) for Astro-Spectroscopes.			
642/130	Dynamometer, by Dolland, in case.....	1	10	0
664-24/S	Electric Clock, astronomical model, by L. Leroy & Co., Paris, with central second hand, metre pendulum compensated, mounted on marble slab, in fine mahogany case and glazed door, with synchronising contact to the second.....	35	0	0
632/121	Table Stand, suitable for 2in. telescope	0	10	0
752-21/78	Helio-stat, by Baker	7	10	0
640/94	Circular Glass Parallel Plate, 7½in. diameter	4	10	0
649/87	Photometer Wedge, to screw over eyepiece.....	1	0	0
924-16/121	Table stand, suitable for 2in. telescope.....	0	10	0
2/124/121	Astro Camera, fitted with 20in. Aldis F/5.6 lens, in focussing flange and 2 slides	20	0	0
3/124/123	Astro Camera, fitted with Ross 29in. Aero lens F/6.3 and 2 slides	30	0	0
4/124/121	Astro Camera, fitted with Ross F/4 wide angle Xpress lens, 10in. focus, with iris diaphragm, angle 80°, with focussing flange, 2 slides, new condition.....	30	0	0

"YOUR EYEWEAR."**ARE YOU AWARE?**

THAT WE CAN IN THE MAJORITY OF CASES CARRY OUT REPAIRS OR FIT NEW LENSES, AND RETURN TO YOU THE SAME EVENING PROVIDED THE FRAMES ARE RECEIVED FIRST POST IN THE MORNING.

ON REQUEST A POSTAL BOX ALREADY ADDRESSED WILL BE SENT FREE.

THIS CAN BE KEPT READY FOR AN EMERGENCY. JUST PLACE THE GLASSES WITH A NOTE IN THE BOX, TIE SECURELY WITH STRING, AND DROP IN A PILLAR BOX.

OUR MAIL ORDER DEPARTMENT

WILL GIVE YOU SATISFACTION WHEREVER YOU RESIDE.

Apparatus Purchased for Cash.

SECTION IV.
SPECTROSCOPIC APPARATUS.
A. SPECTROSCOPES.

4A (a) TABLE INSTRUMENTS.		£	s.	d.
519/92	Spectrometer for 2 prisms, no tube or collimator, in case	2	5	0
516/113	Self-Recording Spectrometer, screw micrometer, eyepiece	27	10	0
526/99	Uviol Glass Spectrograph.....	12	0	0
3/125/89	Townsen & Mercer, single prism, with adjustable slit, in case	3	10	0
4A (b) DIRECT VISION.		£	s.	d.
New	Baker, with adjustable slit and comparison prism.....	3	15	0
926-6/89	Browning, extra large, with spare eyepiece, adjustable slit, in case.....	5	0	0
926-7/89	Browning, 5-prism, with hinged telescope, extra eyepiece, micrometer slit, on stand, in case.....	8	10	0
926-20/89	Browning, 5-prism, with hinged telescope, adjustable slit, in case	5	15	0
7/126/88	Schmidt and Haensch, with adjustable and fixed slits, 4 test tube holders, mirror, complete in case.....	4	4	0
11/126/88	Browning 5-prism, with hinged telescope, adjustable slit and scale, in case.....	5	15	0
12/126/88	Hilger, with adjustable slit	4	10	0
4A (c) MICRO-SPECTROSCOPES.		£	s.	d.
517/143	Hartridge Reversing Micro Spectrometer, by Bellingham & Stanley	15	10	0
507/139	Hilger, with comparison prism, no case.....	9	0	0
509/99	Hilger Adjustable Slit and Comparison and Triple Prism Slit, no case.....	11	10	0
851-14/130	Zeiss Abbé, in mahogany case.....	7	10	0
821-14/130	Zeiss Abbé, in mahogany case	10	0	0
941-13/143	Browning, complete in case.....	4	0	0
4A (d) ASTRO-SPECTROSCOPES.		£	s.	d.
834-9/88	McClean's Star Spectroscope, in case	2	0	0
518/88	Star Spectroscope, with adjustable slit, standard screw fitting	3	0	0

Apparatus lotted and sent to Auction.

A. SPECTROSCOPES—Continued.

£ s. d.

4A (d) ASTRO-SPECTROSCOPES.—Continued.

508/89	Browning , in case.....	8	10	0
926-9/88	Browning, McClean Star Spectroscope.....	3	0	0
491-6/157	Astronomical Spectroscope, 2½in. object glass, prism, slit adjustment, telescope with rack and pinion motion tube, with direct vision prisms, in case.....	20	0	0
509/89	Browning Large Astro Spectroscope, with adjustable slit and centring attachment, in case.....	10	10	0
	New Zöllner Star Spectroscope, in case.....	2	10	0
519/88	Browning 2-Prism, micrometer reading, with accessories, in case	8	10	0
521/95	Large Grubb , single prism, Astro Spectroscope, with collimator telescope, fitted with micrometer and graduated on silver, standard Grubb fitting suitable for 6in. or 8in. telescope, in case.....	10	0	0
525/88	Browning-McClean Star Spectroscope	3	0	0
2/128	Browning 2-prism, with adjustable slit, in case	4	15	0
939-14/88	Browning , with adjustable slit, in case	3	10	0
3/128/88	McClean Sun and Star Spectroscope, with adjustable slit	3	10	0

B. SUNDRY APPARATUS—SECTION IV.**4B (a) PRISMS.** (See also under Section VIII. C.).

£ s. d.

519/130	Pentagonal Prism	0	10	6
27/130	Rutherford's Compound Prism.....	1	0	0
520/130	Erecting Prism.....	0	10	6
541/130	Spar Double Image Prism, with plate in mount.....	1	2	6
545/130	Roof Prism, in mount.....	0	7	6
786-12/130	Direct Vision Prism of Glass and Oil of Winter Green...	2	10	0
861-8/146	Equilateral Prism, on universal stand.....	0	15	0
861-16/130	Photometer Prism	1	10	0
861-17/130	Right Angle Prism, 50 m/m faces	2	0	0
870-19/130	Double Image Prism	0	15	0
1/129/130	Pair of Double Image Prisms, in brass mount, 15 m/m aperture	2	0	0
2/129/130	30in. Quartz Prism.....	2	10	0
4/129/130	Comparison Prism	0	7	6
909-29/130	R.A. Prism	0	12	6
580/130	Train of 3 Prisms.....	0	17	6
582/130	Right Angle Prism, 3in. × 1½in. × 1½in. faces.....	0	7	6
821-22/130	Spar Prism, 1½ × 1½in. faces	2	10	0
792-20/142	Zeiss , 60 m/m, R.A. Prism, in mount	5	0	0
6/129/	Pair of 30° Spar Prisms, 1½in. faces, by Hilger , in metal mounts	8	0	0
7/129/	Pair of 30° Quartz Prisms, 1½in. faces by Hilger , in metal mounts	8	0	0
870-28/130	Set of 4 Flint Prisms, various angles, 45 m/m.....	2	0	0

Apparatus Purchased for Cash.

SUNDRY APPARATUS—Continued.		£	s.	d.
4 B (a) PRISMS. —Continued.				
589/130	Hilger Double Image Prism, 20 m/m aperture.....	2	0	0
590/130	Train of 3 Prisms.....	1	5	0
856-12/130	2 Spar Prisms, 25 m/m × 30 m/m, 60 m/m long and 15 m/m × 20 m/m, 20 m/m long.....	4	10	0
4B (b) LENSES.				
SS Large selection of Achromatic Lenses, particulars on request.				
4B (c) VARIOUS.				
22/130	Optical True Plane, 3in. diameter.....	4	10	0
584-11/130	Quartz Plano Test Plate.....	10	0	0
870-18/93	Stereoscopic Spectrum Viewer.....	2	10	0
1/131/130	Diffraction Ruling, on glass, 3in. × 3in.....	0	10	0
2/131/130	Spectroscope Eyepiece.....	1	0	0
3/131/130	Zeiss Wedge Trough for Spectroscopic use.....	2	0	0
6/131/130	Original Grating, on metal, ruled on Rowland's Engine ...	10	0	0
9/131/130	2in. × 1½in. Thorp's Transparent Replica of Rowland's Metal Diffraction Grating, 14495 lines to the inch.....	1	5	0
956-12/130	6 Quartz Plates, 2in. square, approx. parallel .....each	0	10	0
961-7/89	Spectroscopic Camera, grating type, with wave length scale, adjustable slit, 5 exposures on one ¼-plate	7	10	0

SECTION V.

PROJECTION AND OPTICAL BENCH APPARATUS. CINEMATOGRAPH APPARATUS.

A. LANTERNS.

5A (a) ARC, and GAS FILLED LAMP TYPES.		£	s.	d.
M/	Baker "C.B." Lantern, built on optical bench, complete with 8in. objective condensers and slide carrier	11	12	0
5A (b) OTHER THAN OXY-HYDROGEN.				

PROJECTION LANTERNS, ETC.

669/14/SR	Optical Bench, consisting of prism bar, 4 saddle pieces, lantern slide attachment, revolving table for micros- cope, automatic arc lamp with 2 tubular resistances, spare platform on saddle piece, all on wooden table...	20	0	0
646/9	Projection Microscope, with coarse and fine adjustments, cooling trough, condensing lens, Cooke Series III., 1.25in. projection objective, in case.....	7	15	0
867-28/146	Projection Lens with erecting prism, on stand.....	2	0	0
513/144	Baker School Micro Projector, on stand	5	10	0
518/141	Baker School Projector, complete with lamphouse, microscope and stand.....	5	10	0
931-12/147	Pointolite Outfit, for lantern, with resistance 100-240.....	2	10	0
1/132/28	Cooling Trough for running water.....	0	15	0

Apparatus Purchased for Cash.

LANTERNS, Etc.—Continued.		£	s.	d.
514/143	Baker Substage Micro Projection and Drawing Apparatus	4	10	0
507/159	Zeiss 30-Amp. Clockwork-feed Arc Lamp, with 125 volt resistance, table top with optical bench, and dark curtains	10	0	0
503/143	Leitz School Projector, for micro projection only, with 210 v. resistance	5	5	0
511/27	Large Diaphragm Lens Holder	1	10	0
1/133/28	5 Optical Bench fittings, consisting of cylindrical lens, $4\frac{1}{2}$ in. condenser, bi-prism, adjustable split lens	2	10	0
8/53/MR	30-Amp. Prism Arc Lamp, with full mechanical adjustments, mounted on pin tray	2	10	0
1/75/MR	Lantern, with 8 in. lens fitted for electricity, in carrying case	4	0	0
33/52/147	Lantern Micro Projection Attachment, with rack and pinion adjustment, mechanical stage, lin. objective, detachable cooling trough, in mahogany case	5	0	0
3/133/28	Cooling Trough, on stand	1	0	0
965-8/28	Zeiss $1\frac{1}{4}$ in. lens, on stem, 14 c.m. focus, with iris diaphragm	0	17	6
960-1/S	10×15 c.m. Zeiss Ica Aero Camera, detachable focal plane shutter, 4 changing boxes, case, new condition	20	0	0

OBJECTIVES AND LENSES.

SECTION VI.

TOURIST, LOOK-OUT NAVAL AND
MILITARY TELESCOPES, FIELD AND
OPERA GLASSES.

6A. TELESCOPES.

		£	s.	d.
822-2/S	Zeiss $\times 10$ Prism Periscope, in leather case and sliding leg tripod	7	0	0
11/138/S	$1\frac{1}{4}$ in. Officer of the Watch , single-draw, leather covered	2	10	0
22/138/S	$1\frac{1}{4}$ in. Steward (Lord Bury), 3-draw, leather covered	3	0	0
23/138/S	1 in. Negretti & Zambra Spotter Telescope	1	15	0
24/138/S	2 in. Dolland Signalling Telescope, 3-draw leather-covered	2	5	0
965-1/S	$1\frac{3}{8}$ in. 3-draw Telescope	1	0	0
965-2/S	Single-draw Telescope	0	10	0

Apparatus let out on Hire, see page 36.

6B. FIELD GLASSES.

		£	s.	d.
847/S	7×25 Society Parisienne, eyepiece focussing, in case.....	3	5	0
7/139/S	Ross Stereo, ×10, eyepiece focussing, in case.....	6	15	0
10/139/S	Zeiss, 6×24, eyepiece focussing, in case	7	15	0
109/139	Zeiss, 6×30, Silvarmar, eyepiece focussing, in case.....	9	10	0
110/139	Zeiss, 8×24, Delturis, eyepiece focussing, in case.....	9	0	0
117/139	Bausch & Lomb, 6×30, eyepiece focussing, in case.....	3	15	0
120/139	Zeiss, ×8 Monocular.....	3	15	0
144/139/S	Ross, 9×30, Stepruva, centre wheel focussing, in case...	12	0	0
147/139	Zeiss, 8×24, Turita, centre wheel focussing, in case.....	14	10	0
148/139	Moeller, ×6, Tourixam, centre wheel focussing, in case	9	10	0
149/139	Moeller, ×6, Tourix, eyepiece focussing, in case.....	8	10	0
151/139	Zeiss, 8×30 (Deltrintem), centre wheel focussing, in case	11	15	0
142/139	Watson, 6×24, eyepiece focussing, in case	4	5	0
128/139	Beck, ×5, Galilean, in case	2	10	0
129/139	Zeiss, 8×40, Delactis, eyepiece focussing, in case	15	0	0
131/139	Hensoldt, 6×35, centre wheel focussing, in case	9	9	0
137/139	Zeiss, 8×40, Delactis, eyepiece focussing, in case.....	15	10	0
941-16	Moeller, ×3½ Theatis, in case	7	10	0
154/139	Ivory Opera Glass	1	5	0
158/139	8×30 Kershaw W.A., eyepiece focussing, in case	9	15	0
159/139	6×30 Zeiss (Marineglas), eyepiece focussing, in case.....	9	10	0
955-6/S	Ross, 6×30, Stepnac, eyepiece focussing, in case.....	10	10	0
161/139	Leitz, 8×30 (Binuxit), centre wheel focussing, in case...	15	0	0
162/139	Ross, ×7, Stepnada, centre wheel focussing, in case.....	12	15	0
163/139	8×25, Bausch & Lomb, centre wheel focussing, in case	5	10	0
164/139	8×30, Busch, centre wheel focussing, in case	9	15	0
166/139	6×24, Kershaw, eyepiece focussing, in case.....	3	15	0

SECTION VII.

**APPARATUS FOR THE DETERMINATION OF TIME, VELOCITY,
HEAT, PRESSURE, WEIGHT, SPECIFIC GRAVITY, SIZE, QUANTITY,
DISTANCE, ETC.**

7A. TIME.

7A (a) SUN DIALS, &c.	£	s.	d.
New 8in. Brass, plainly divided for latitude of London or a 30-mile radius	2	12	6
507/89 Universal Portable Sundial, 5in. hour circle, 2 levels, 3 adjusting screws, engraved for N. and S. latitudes, with compass	4	10	0
508/S Portable Sun Dial, by Casella, in case.....	3	0	0
821-2/91 Spencer Celiostat, on board, with levelling screws	7	10	0
883-22/75 6in. Universal sun dial, in case.....	3	0	0
7A (b) CHRONOMETERS, &c.			
3/142/95 Dent, 8-day Chronometer, in case	22	10	0

7B. VELOCITY.

7B (a).			
525/99 Lown's 5-dial Air Meter, reading to 100,000 ft., in case...	4	15	0
5/143/99 5½in., with 5 dials, reading to 10 million feet, in case.....	3	0	0
7B (b) VARIOUS.			

Apparatus Sold on Commission.

7C. HEAT.**7C (c) TRADE THERMOMETERS.**

		£	s.	d.
	Confectioner's Thermometer.....	0	8	6
567/158	Dial Thermometer, 7ft. stem, reading to 350° centigrade	1	10	0
569/158	Dial Thermometer, 2ft. stem, reading to 350° fahrenheit	1	1	0
572/158	Dial Thermometer, 3ft. stem, reading to 500° centigrade	1	15	0
880-15/S	Pair of Maximum and Minimum Thermometers, Centigrade and Fahrenheit, ivory scales, in case.....	1	10	0
910-20/124	Dial Thermometer, with 6½in. stem, reading to 200° fahrenheit.....	1	0	0

c (d) ALL-GLASS THERMOMETERS DIVIDED ON STEM.

448-1/24	Insulated Chemical Thermometer.....	0	6	6
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7C (e) THERMOMETERS.—Various.

835-2/124	Negretti & Zambra Standard Maximum Thermometer	1	0	0
835-3/124	Negretti & Zambra Standard Minimum Thermometer	1	0	0
574/96	Dewar & Fleming Standard Platinum Thermometer...	5	0	0
575/91	Pair of Hicks' 24in. Glass Thermometers, 0·57 centi- grade, in case	0	10	0
523/122	T. & S. Thermometer, on metal base, reading from 170° to 250°	0	12	6
902/3/S	12in. Sugden's Thermometer, with magnifying lens front, reading 30°—120° F.....	0	17	6
902-4/S	24in. Sugden's Thermometer, with magnifying lens front, 20°—120° F.	2	0	0
862-22/124	Negretti & Zambra Maximum Thermometer.....	1	0	0
862-23/124	Pastorelli & Rapkin Minimum Thermometer.....	1	0	0
543/121	10in. Maximum and Minimum on silvered metal scale, with water tank, in case.....	2	0	0
711-16/124	Baker Maximum and Minimum Thermometer, in case	1	5	0
711-15/124	Deep Sea Thermometer.....	1	0	0
576/S	Lambrecht's Polymeter, with Thermometer.....	0	15	0
906-30/124	Pair of Maximum and Minimum Thermometers, in case	1	4	0
906-31/124	14in. Standard Thermometer, on silver metal scale, 30°—230°, cent. and fahr., in case.....	1	0	0
910-29/124	Low Reading Thermometer × 20 to 150°C.....	0	12	6
1/147/124	12in. Maximum and Minimum Rototherm Thermometer, 0-120	2	10	0

7D. PRESSURE.**7D (a) STANDARD MERCURIAL BAROMETERS.**

908-1/S	Richard Frères Vacuum Recording Pressure Gauge, with clock, in case	5	0	0
1/148/99	Davis, U. Pressure Gauge, in case.....	0	10	0

We can also offer a good selection of Incubator, Chemical and Minimum Thermometers at reduced prices.

Apparatus lotted and sent to Auction.

7D (b) MERCURIAL BAROMETERS—PEDIMENT, WHEEL PATTERN, &c.

		£	s.	d.
46/S	8in. Inlaid Polished Mahogany Mercurial Dial Barometer, with thermometer, by Alietti	4	10	0
47/S	Polished Carved Oak Pediment Barometer, with large column double vernier and thermometer.....	7	10	0
50/S	8in. Satin Barometer, wheel pattern, with thermometer...	4	4	0
53/157	Capt. George's Surveying Mercurial Barometer, with spare tube and round mahogany tripod, in mahogany case	10	0	0
55/S	10in. Mahogany Mercurial Barometer, with level and mirror, by C. Fenn	5	15	0
938-10/S	8in. wheel, Mercurial Barometer, mahogany shell pattern	4	10	0
958-8/S	8in. Inlaid Walnut Wall Barometer.....	3	0	0

7D (c) ANEROID BAROMETERS—PEDESTAL, PENDANT AND RECORDING.

323-1	Hicks' Patent Mercurial Barometer, mounted on pedestal base.....	5	5	0
884-24/S	8-Day Barograph, in glazed brass case	4	10	0
902-16/S	Richards Micro Barograph, with dial in m/m and inches, in glazed oak case.....	15	0	0
37/S	Mercurial Barometer, by Dellatori , in good condition	5	15	0
42/S	10in. Mercurial Barometer, in oak frame, by Fastorelli & Rapkin , with thermometer	4	10	0
522/S	10in. Pendant Aneroid, carved oak frame, best quality compensated movement, silvered metal dial, with thermometer	4	15	0
13/150/76	Hair Hygograph, with 24-hour clock, in white japanned metal case	5	5	0
948-3/S	Short & Mason 8-day Barograph, in oak glazed case...	7	0	0
951-6/S	Holosteric Barometer, in leather case	2	0	0

7D (d) ANEROID BAROMETERS—TRAVELLING AND SURVEYING.

520/124	5in. (nickel case) Compensated Metric Scale, with thermometer and leather case.....	3	0	0
491-2/124	Surveying Aneroid, graded in metres up to 5,000 metres	2	0	0
537/S	4½in. Compensated Aneroid, by T. Cooke , altitude scale to 8,000ft., in leather case.....	3	15	0
511/124	Watkin Mountain Aneroid, by Hicks , compensated, metric scale.....	4	0	0
514/124	Watkin Compensated Aneroid, by Saunders , altitude scale to 5,000ft.....	4	0	0
886-10/S	Combined Watch form Aneroid and Compass, in case.....	2	10	0
934-6/S	3in. Troughton & Simms , Altitude Scale to 12,000 feet, compensated, in leather case.....	3	10	0
5/151	2½in. Pocket, nickel case, compensated altitude scale to 4,000 feet, in case.....	2	15	0
7/151/S	4½in. Stanley Surveying Aneroid, compensated, altitude scale to 4,000 feet, in case	4	10	0
573/S	4in. Adie Surveying Aneroid, compensated, altitude scale to 5,000 feet, in sling case.....	3	10	0
602/S	4½in. Baker Surveying Aneroid, with rack rotation reader to vernier, compensating, altitude scale to 5,000 ft.....	5	0	0
10/151/S	3in. Watts Compensating Aneroid, with altitude scale to 5,000ft., in case	3	10	0

7D (e) BOILING POINT APPARATUS.

Apparatus lotted and sent to Auction.

7E. WEIGHT.**E7 (a) BALANCES AND MACHINES.**

		£	s.	d.
887-24/	Avery Automatic Counter Scales, indicating up to 11 lbs. by $\frac{1}{4}$ lb.	2	10	0
889-4/95	Salter's Cycle Balance, to weigh up to 40 lbs. by $\frac{1}{4}$ lb.	0	10	0
764/S	Cary Balloon Balance, Gendle pattern, complete	3	0	0
763/S	Cary Balloon Balance, Gendle pattern, complete	2	5	0
883-12/SR	Avery Personal Weighing Machine, platform type with height measurer, weighing to 24 stone.....	9	10	0
883-13/SR	Avery Personal Weighing Machine, platform type, weighing to 150 Kilog or 330 approx. English lbs.....	6	10	0
883-14/SR	Avery Weighing Machine, platform type to weigh up to 3 cwt.....	8	15	0
10/153/S	Analytical Balance, Short Beam, graduated 100 divisions, to read 0.1 m/g with 5 m/g rider, in glazed mahogany case.....	10	0	0
22/153	Ainsworth Assay Balance, with agate knife edges rider slide, in mahogany glazed case.....	7	10	0
22/153	Bullion Balance, with 9in. triangle beam to carry 2lb. turn to 2 grains, steel knife edges, chromium plated, in mahogany glazed case, as new.....	8	10	0
23/153	Chemical Balance, with divided beam, sensitive to 0.2 m/m, in glazed case	6	10	0
15/153	Oertling Analytical, with 12in. beam, single rider slide, to carry 100 grammes, sensitive to 0.2 m/g.....	4	0	0
18/153	Bunge S.B. Analytical, to carry 200 grammes, sensitive to .1 m/g	12	10	0
26/153	Becker Analytical Balance, short beam, turn to .1 m/g, to carry 200 grammes	8	10	0
955-1/S	Sartorius Analytical Balance, to carry 200 grammes, turn to .1 m/g, in glazed mahogany case.....	12	12	0
30/153/SR	Chemical Balance, with 12in. beam, pans swung on platinum, in glazed case.....	1	10	0

7E (b) WEIGHTS.

564/95	Set of Weights, 1 kilogramme to 1 milligramme and riders	3	0	0
883-15/	Set of Avery Brass Bell Weights, 28 lb. to $\frac{1}{8}$ dr., complete in oak case.....	4	0	0
883-16/	Set of Oertling Weights, 7 lbs. to $\frac{1}{8}$ dr., in mahogany case	4	0	0
27/154/95	Set of Oertling Weights, 1,000 grains to fractions.....	0	15	0
28/154/95	Set of Weights, 100 grammes to fractions.....	1	1	0
29/154/95	Set of Weights, 50 grammes to fractions.....	0	18	6

7E (c) SPECIFIC GRAVITY.

835-4/124	Hydrometer, with wet and dry bulb, centigrade scale	1	1	0
561-3/124	Sikes' Hydrometer, with glass vessel, in mahogany case	0	18	0
504/99	Sikes' Hydrometer, with tables.....	1	15	0
852-6/99	Sikes' Hydrometer, with tables	1	15	0
841-22/S	Specific Gravity Balance, Westphil	1	10	0

7F. DISTANCE.

822-2/S	Zeiss x 10 Prism Periscope, on stand	7	0	0
22/121	Zeiss Periscope	2	10	0
889-24/158	Zeiss Prismatic Binocular Periscope, x 10 and 18x magnification, complete in case, with sliding leg tripod	7	10	0
924-13/121	Steward Range Finder, in case.....	1	0	0
1/156/81	Stanley Subtense Telemeter, for measuring distances, with socket for tripod, in leather case.....	4	4	0
4/156/82	Telemeter, by Wagner	3	0	0
5/156/82	Stanley Telemeter, complete in case	3	0	0
946-3/S	Steward Telemeter, in case.....	2	0	0
946-4/158	Barr & Stroud , No. 2 Infantry Range-finder.....	7	10	0

Apparatus Purchased for Cash.

7G. CALLIPERS, GAUGES, ETC.

		£	s.	d.
857-4/94	Starrett Inside Micrometer, in case	2	10	0
2/157/93	Cicerimet Self-Calculating Micrometer Gauge, capacity 25 m/m, reading 2 c/m plus .54 decimal fraction of centimetre, in case	4	4	0
10/157/93	Cicerimet Self-Calculating Micrometer, for inside measurements, reading hundredths and thousandths of an inch, in case	3	15	0
12/157/93	Cicerimet Self-Calculating Micrometer, capacity 8 m/m, reading 2 m/m plus .46 decimal fraction of a millimetre, in case	3	5	0
15/157/S	lin. Brown & Sharp Micrometer Gauge, with ratchet, in case	1	10	0

7H. SUNDRY APPARATUS—SECTION VII.

880-22/S	Recording Hygrograph by Bourgeois.....	4	10	0
881-1/159	Mercury Pump, with lin. and millimetre barometric scales	8	0	0

SECTION VIII.**PHYSICAL AND OTHER APPARATUS
SUITABLE FOR DEMONSTRATION.****8A. AIR PUMP APPARATUS.**

AIR PUMPS.		£	s.	d.
563/93	Syringe, for compression.....	0	10	6
861-34/97	Exhausting and Condensing Syringe.....	1	2	6
906-2/159	Large Bell Glass Vacuum Apparatus.....	1	0	0

8B. POLARISING APPARATUS.**8B (a) INSTRUMENTS.**

528/89	Polariscope, in case	1	0	0
595/135	Duboscq Stand Polariscope.....	10	0	0
589-9/96	Wheatstone's Polar Clock, by Darker, with description as read by Professor Wheatstone before the British Association in 1848, in case.....	4	10	0
2/160/86	Newton's Elbow Lantern Polariscope, with nicol 20 m/m × 25 m/m, 50 m/m long, in case.....	10	0	0
881-20/86	Polar Clock, with 4in. semi-circular face, with black glass analyser, all mounted in mahogany.....	2	0	0
907-16/102	Table Polariscope, with 2 special designs, 8in. × 6in. and 6½in. × 4½in.	10	0	0
910-8/100	Polariscope	3	0	0
910-26/91	Polarisation Apparatus, after Mach, with 2 nicol prisms, 1 of which rotates, gap attachment, glass press, and direct vision prism, as new.....	12	12	0
3/160/89	Goertz Hand Saccharometer, with 1 tube 94.7 m/m, as new	6	0	0
6/160/89	Student's Polarimeter, with 1 tube.....	3	0	0
7/160/89	Schmidt & Haensch Saccharometer, reading by Vernier to .1in. on stand	35	0	0
8/160/89	Saccharometer, reading by Vernier to .1°, on stand.....	35	0	0
10/160/86	Newton's Elbow Lantern Polariscope, with large nicol, in case	10	0	0

Apparatus lotted and sent to Auction

POLARISING APPARATUS—Continued.

£ s. d.

8B (b) SPECIMENS.

The following are suitable for Table or Lantern Polariscopes, and are mounted in glass discs of a standard size of 1½ in. diameter :—

807-23/143	Educational Polarized Light Apparatus	1	0	0	*
668-11/123	Various Selenites, in mounts	0	7	6	
668-12/123	Selenite Figure	0	12	6	
668-13/123	Special Selenite	0	10	6	
807-24	4in. Quartz Plate, clear aperture, ½ in. thick.....	7	10	0	
807-28	Bi-Quartz Plate, R. & L., showing artificial spiral.....	2	0	0	
807-29	Concave Quartz Plate, 1½ in. aperture.....	1	10	0	
886-11/S	Tourmaline Tongs	0	17	6	
1/161/123	Bi-Quartz Plate, 12 m/m dia., in mount.....	0	10	0	
2/161/123	Quartz Lens, 1½ in. dia., 40in. focus in cell.....	2	0	0	
3/161/123	85 Very Fine Polariscopes Specimens believed to be part of the late Prof. Sylvanus Thompson collection.....	10	0	0	
4/161/123	Set of 20 Polariscopes Specimens, in case.....	1	10	0	

8C. PRISMS, ETC.

(See also under Section IV.)

45/132	Large Nicol Prism, 30 m/m × 20 m/m × 45 m/m long, chipped	4	10	0	
527/89	Feild's Differential Polariscopes, with large Nicol prism, 35 m/m × 25 m/m condensing lens, rack rotation to selenites, in mahogany case, with stand	20	0	0	
41/132	Large Nicol Prism, 30 m/m × 20 m/m × 35 m/m long ...	12	10	0	
43/132	Large Nicol Prism, 25 m/m × 45 m/m × 65 m/m long ...	20	0	0	
44/132	Large Nicol Prism, 23 m/m × 33 m/m × 49 m/m long ...	12	10	0	
872-14/132	Large Nicol, 25 m/m × 15 m/m × 30 m/m long.....	6	10	0	
926-2/146	Large Nicol, 33 m/m × 25 m/m long, on stand.....	12	10	0	
926-13/132	Nicol Prism, 16 m/m × 55 m/m long.....	3	10	0	
2/162/132	Nicol Prism, 30 m/m × 25 m/m × 55 m/m long.....	12	0	0	

8E. ELECTRICAL APPARATUS.

823-16/99	Linesmen Galvanometer	0	10	0	
825-19/94	Potentiometer, 240 ohms., 0.2 amps. max.	0	18	6	
807-22/100	Western Amp. and Milliampmeter, 0-60-120.....	1	15	0	
526/148	110 volt 1.6 amp. Motor, vertical drive.....	3	3	0	
823-4/94	Resistance Box and Galvanometer	2	10	0	
823-9/94	Nalder Bridge Testing Set	10	0	0	
823-2/93	Unipivot Galvanometer, 30 M.V.	3	0	0	
831-8/101	Resistance Box, total 133,330 ohms., with contact key and galvanometer	8	10	0	
859-19/84	Sir W. Thompson's Quadrant Electrometer.....	10	0	0	
885-2/159	Large Electric Egg	1	15	0	
885-4/94	Electric Pistol	0	5	0	
885-15/97	Henley's Universal Discharger.....	1	0	0	
886-23/159	Amperes' Apparatus for demonstrating action of magnets on current	0	18	6	
905-21/159	Kelvin's High Tension Electrostatic Voltmeter, 1,000—2,000 volts. Cost £35 10s. 0d.....	15	0	0	
905-6/159	Kelvin's Ampere Gauge, 0—140.....	1	10	0	
905-22/100	De La Rives Apparatus.....	0	15	0	
905-28/95	Three Brass Rocking Bars.....	0	7	6	
862-19/83	Battery of 4 Leyden Jars, 2-pint size, in tray.....	1	7	6	
859-34/SR	Self-exciting Influence Machine, 20in. plates	5	0	0	
859-39/S	Electric Cannon	0	18	6	
859-42/75	Electric Egg	1	5	0	
906-1/159	Kelvin's Patent Rheostat.....	3	10	0	
956-11/96	Crompton Reflecting Galvanometer, in case.....	3	0	0	

Apparatus Valued

8E. ELECTRICAL APPARATUS—Continued.		£	s.	d.
958-3/159	Electric Furnace, double tube, 1½in. × 12in., 200 v., max. amp. 8·3	5	0	0
9/163/159	3in. Spark Coil	5	0	0
938-9/S	Electric Timing Fork, 250V.D.....	5	0	0
1/163/159	Redwood No. 1 Viscometer, with 2 thermometers 130°—250° F.	7	10	0
2/163/159	Pensky Martin Flash point Apparatus, 200 volts, with thermometer 250° F.	6	18	6
3/163/159	Electric Egg	0	7	6
5/163/100	Medical Magneto	1	5	0
860-38/95	Pith Figure Plates	0	7	6
860-40/99	Volt and Amps Meter	0	12	6
862-15/92	Ritchie's Electric Motor	1	5	0
802-17/S	Electrical Cannon.....	0	15	0
802-18/S	Lightning House	0	7	6
802-19/S	Morse Key and Sounder.....	0	10	3
805-3/100	10,630 ohms Resistance Box and Galvanometer, in case	7	0	0
867-12/159	Wheatstone Bridge, with jockey, standard pattern.....	2	10	0
862-18/91	Ampere Apparatus, with accessories.....	2	10	0
882-11/159	Milliampmeter, 100-500, on 3ft. glass rod and stand.....	2	10	0
862-26/93	Ampmeter, 0—70	0	7	6
862-27/93	Voltmeter, 0—100	0	7	6
867-6/79	Four Large Leyden Jars, 4-pint size, in wood tray.....	2	0	0
883-23/	Mercury Vapour Lamp, water-cooled, on marble slab for clamping to wall, with Westinghouse rectifier, switch board, resistance, and meters in separate mahogany glazed case.....	25	0	0
887-3/159	De La Rive's Apparatus for showing rotation of electric luminous flux about electro magnet	2	0	0
887-4/92	Discharging Tongs	0	10	6
887-10/90	Unit Jar (Harris), on stand	0	15	0
888-25/94	Warralt Ammeter, 0—4.....	0	10	0
888-29/95	Ammeter, 60—0—60	0	5	0
888-30/95	Ammeter, 25—0—25	0	5	0
889-1/93	Ammeter, 0—50	0	10	0
889-2/93	Ammeter, 0—5	0	10	0
889-3/93	Ammeter, 5—0—5	0	10	0
889-5/94	Ampmeter, 0—20 volt meter, 0—300, in mahogany case	2	0	0
889-21/94	Power switch.....	0	5	0
907-9/98	Galvanometer Lamp, with scale.....	1	10	0
910-1/159	Large Leyden Jar	0	10	0
910-3/159	Large Leyden Jar	0	7	0
910-11/96	Crompton 1-ohm Standard, 0—10	1	10	0
910-9/100	Hibbert's 1-volt Standard, 1—11	1	0	0
910-12/159	Three Brass Insulated Stands	0	5	0
910-27/S	Radium Clock, with 2 m/g of radium.....	10	0	6
867-13/159	Wheatstone Bridge, for Foster's method, 1 metre.....	1	15	0
7/163/S	Whimshurst Machine, 14in. plates	5	10	0
8F. SUNDRY APPARATUS—SECTION VIII.				
44/123	Pair Miller's Discs, in Blondlot N Rays, in mahogany case	0	5	0
454-24/139	Beck Radium Applicator, equal to 1 milligramme of pure radium bromide	12	10	0
536-10/139	Oil Blow Pipe Lamp, on stand.....	0	7	6
14/164/S	Gyroscope	2	0	0
15/164/S	Wheatstone's Compound Gyroscope, in case.....	2	10	0
16/164/95	Kaleidoscope.....	1	0	0
18/164/S	Kaleidoscope.....	0	15	0

Apparatus Valued.

8F. SUNDRY APPARATUS—SECTION VIII.—Continued.		£	s.	d.
19/164/S	Large Kaleidoscope, on table stand.....	1	5	0
20/164/159	Large Case of Geological Specimens.....	2	0	0
21/164/94	Case containing 90 various Geological Specimens.....	2	10	0
23/164/94	Case containing 50 Geological Specimens.....	1	0	0
577-7/102	Ash Travelling Dental Drill, with extra drills.....	10	0	0
546/95	Viscometer, for honey and sugar.....	5	0	0
7/164/101	Water Level Apparatus	0	7	6
41-5/71	Draughtboard and Men, in black and white glass.....	1	0	0
905-24/93	Aneroid, scaled for air pump	1	0	0
554/147	Tube of Radium	6	0	0
512-15/84	" Soloid " Water Analysis Case.....	3	3	0
885-16/97	Fire Syringe	0	10	0
886-13/93	Injection Syringe, with 3 Canulae	1	0	0
886-15/93	Siren, with indicator giving number of revs.....	2	0	0
889-6/93	Pair of Bar Magnets, 30 c/m \times 1 c/m, in case	0	10	0
889-7/94	Large compound Horse Shoe Magnet.....	1	0	0
889-9/159	Bramah Hydraulic Press	5	0	0
557/144	Windmill	0	15	0
559/149	Air Fountain.....	1	0	0
562/77	Incline Plane	0	8	6
563/93	Syringe for compression	0	10	6
566/84	" Soloid " Water Analysis Case.....	1	10	0
	Birch Recording Drum	4	10	0
597-140	Traube's Stalagmometer, in case	0	7	6
602/100	Galvanometer Scale.....	1	0	0
870-25/159	Apparatus for revolving 3 large vacuum tubes (no tubes)	1	1	0
862-30/94	Set of 3 Discs, flat and curved surfaces for Spherometer tests	1	10	0
862-29/94	Set of 6 Typical Lenses (1 broken), in case.....	0	17	6
862-31/93	Wheatstone Photometer	2	0	0
862-35/146	3½in. Condensing Lens, on stand.....	1	0	0
859-3/96	Harvey & Peak Double Siren.....	8	10	0
859-9/74	7 Tuning Forks, mounted on sounding boxes	5	0	0
859-10/159	Analysis of Sound Apparatus, with 8 Helmholtz resonators	10	0	0
859-18/159	Geryk Double Cylinder Air Pump, cylinders 5in. and 2in.	12	10	0
859-33/94	Model of Lift Pump	0	18	6
859-44/158	Cathetometer, 6ft., divided rod every 10 c/m, supplementary tube, divided in m/m, with vernier.....	12	0	0
860-2/92	Fluorescent Screen, 12in. \times 9in.....	3	0	0
861-35/76	Air Pump Plate, on stand, 12in. diameter.....	2	0	0
862-6/93	Pair of Long Pattern Triple Pulleys.....	0	7	6
862-7/140	Reflection and Refraction Apparatus.....	5	0	0
862-20/76	Bell, in vacuo	0	17	6
867-9/S	Arzberger Filter Pump.....	0	12	6
867-11/94	Fire Syringe	0	10	0
867-30/95	Berkefeld Portable Filter, in case.....	0	10	6
867-32/159	Whirling Table	2	0	0
905-27/S	Singing Bird, operated by sound vibrations from a distance	5	5	0
910-7/101	Telescope Kaleidoscope.....	2	0	0
907-10/98	Sovart's Toothed Wheels, on stand, with hand-driving gear	3	10	0
906-25/159	Elliott Flash Point Apparatus.....	2	15	0
10/164/94	Steward Refractometer.....	3	3	0
11/164/84	Zeiss Pulfrich Crystal Refractometer, with 3 objectives, D.V. spectroscopic attachment, 8 specimen prisms, 3 testing specimens, quartz, topaz, Iceland spar and fluids, complete in case.....	125	0	0

All Classes of Apparatus Repaired.

8F. SUNDRY APPARATUS—SECTION VIII.—Continued.

		£	s.	d.
886-20/100	Condensing and Exhausting Syringe	0	10	0
12/164/94	Baird & Tatlock Spherometer, in case.....	1	0	0
5/164	Gyroscope Top.....	1	0	0
938-2/101	Metronome	0	7	6
938-12/93	Tuning Fork.....	0	10	6
938-13/93	Tuning Fork.....	0	7	6
1/163/159	Redwood No. 1 Viscometer, with 2 thermometers 130°—250° F.	7	10	0
2/163/159	Pensky Martin Flash point Apparatus, 200 volts, with thermometer 250° F.	6	18	6
907-14/98	Oscillating Prism, complete with whirling table.....	2	10	0
1/164/S	Steiner Portable Model Viscometer, for rapid estimation of viscosity of oil, accuracy $\pm \frac{1}{2}$ per cent. New price, £12	6	10	0
870-6/159	Mahogany Photometer Bench, 60in. scale, with gas jet, candle holder and sliding fitting	1	0	0
859-17/94	Salter's Dynamometer, 10 cwt. by 7 lbs.	1	0	0
881-9/S	Fressel's Compound Gyroscope.....	4	4	0
886-27/141	Neutral Glass Wedge, 6 $\frac{1}{2}$ in. \times $\frac{3}{4}$ in.	0	7	6
887-1/94	Wheatstone Photometer	1	10	0
888-1/124	23 Circular 2in. Filters, mounted in mahogany frames ...	1	0	0
881-22/159	Wheatstone Wave Apparatus, with set of slides for demonstrating various phases of undulations, inter- ference, etc.	5	0	0
882-10/159	Elliott Glass Mirror, 24in. \times 4in., in brass frame, on upright sliding tube with rack adjustment, on levelling base	1	10	0

9A (a) OPHTHALMOLOGICAL TRIAL CASES

1/165/158	Roll top sight testing cabinet, in oak, containing 140 spherical, 80 cylindrical lenses, 16 prisms, in metal frames	12	10	0
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9B (a) OPTICAL MACHINERY.**9 AB SUNDRY APPARATUS, SECTION IX.**

564/93	Rotary Prism, prism value 0-30D, in good condition.....	0	17	6
	Quantity of Spherical and Cylindrical Lenses suitable for experimental and optical bench use.....per doz.	0	5	0

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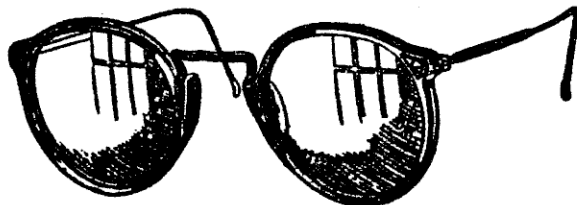
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