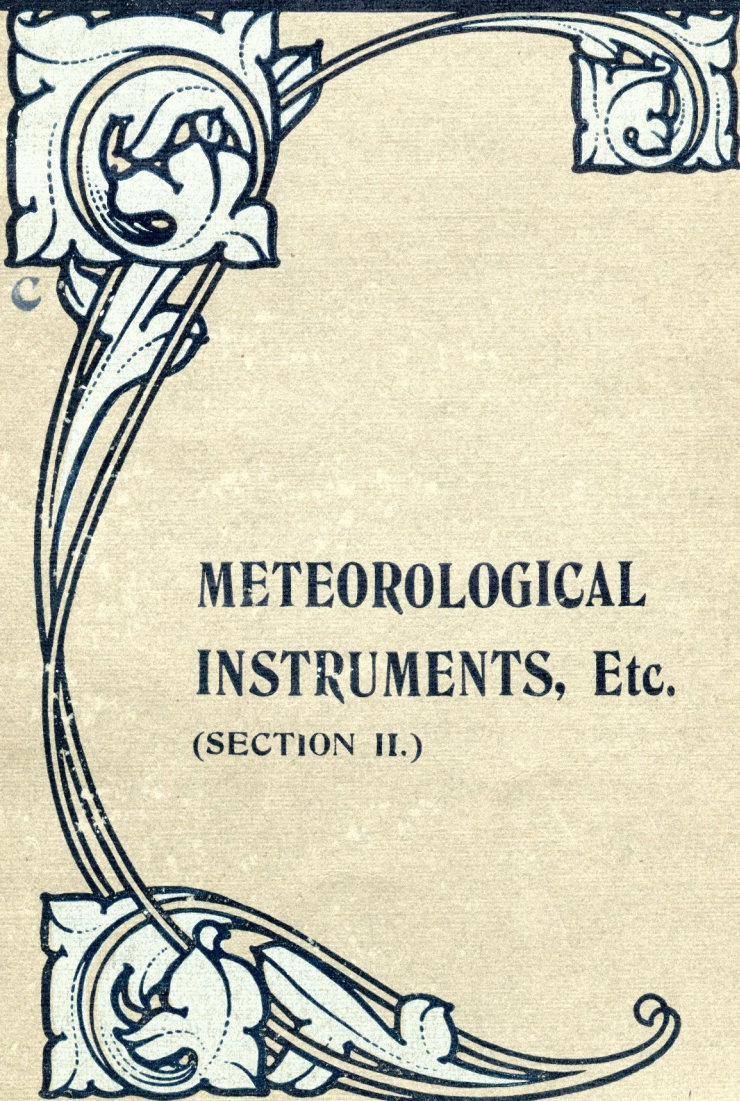


T. COOKE & SONS

LIMITED

LONDON, YORK
& CAPE TOWN

A large, intricate Art Nouveau decorative flourish in black ink. It features a central circular motif with a stylized face or floral design, from which several long, flowing, ribbon-like lines extend downwards and outwards, ending in ornate, scroll-like shapes. The overall style is characteristic of the early 20th-century decorative arts.

METEOROLOGICAL
INSTRUMENTS, Etc.
(SECTION II.)

All Prices in our previous Catalogues are hereby cancelled.

MESSRS.
T. COOKE & SONS
LIMITED

Illustrated Catalogue (Sec. II.)

(FOREIGN EDITION)

- OF -

**Meteorological Instruments,
Etc.**

Separate Catalogues of Astronomical, Surveying, and
Drawing Instruments, Drawing Office Stationery,
Spectacles, Cameras and Photographic Apparatus,
:: may be had on application. ::

Head Office :

3, BROADWAY, WESTMINSTER,
LONDON, S.W.

Telegrams: "Coordinate-Vic., London."
Telephone: Victoria 625.

Factory :

BUCKINGHAM WORKS,
YORK, ENGLAND.

Telegrams: "Coordinate, York."
Telephone: York 310.

Cables: "Coordinate, London, York, or Cape Town."
A.B.C. Code, 5th Edition.

Branch Office:—18, STRAND STREET, CAPE TOWN.

Telephone No. 1391. P.O. Box, 1552. Telegrams: "Coordinate, Cape Town."

AGENCIES:—

Brisbane - -	A. P. Greenfield & Co.	Shanghai - -	Jardine, Matheson & Co.
Calcutta - -	Thacker & Co.	Toronto - -	The Art Metropole, Ltd.
Johannesburg	R. L. Esson & Co., Ltd.	Vancouver - -	The Hughes Owens Co., Ltd.
Montreal - -	The Hughes Owens Co., Ltd.	Wellington - -	The Adams Engineering Co.
Ottawa - -	The Hughes Owens Co., Ltd.	Winnipeg - -	The Hughes Owens Co., Ltd.

PACKING AND CARRIAGE OF ALL GOODS CHARGED EXTRA.

Goods forwarded at Purchaser's Risk.

THE prices quoted in this Catalogue are nett for cash, and are for goods delivered, duty paid, at our Branch Establishment in Cape Town.

Should any article ordered be out of stock, it will be supplied with the least possible delay.

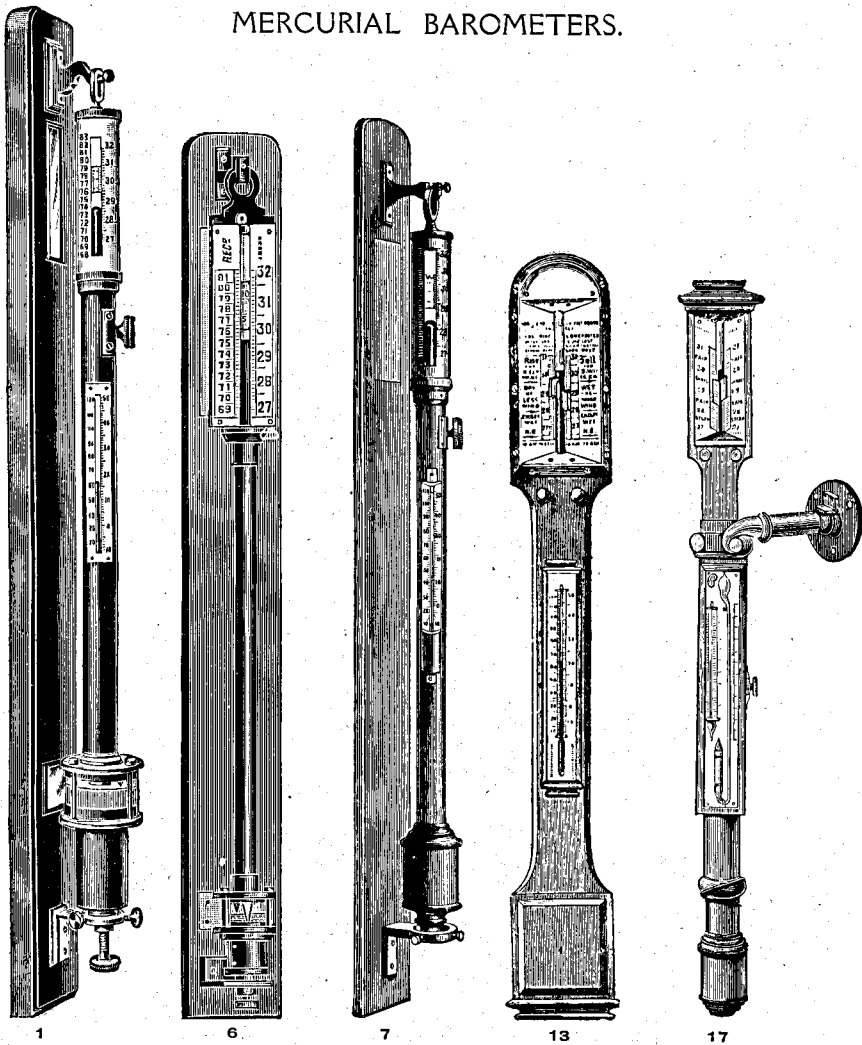
Messrs. Cooke & Sons have had large experience in supplying complete outfits to Engineers, Surveyors, Explorers, Prospectors, Miners, and others, and will be pleased to advise any such as to the choice of the most suitable instruments and apparatus for any special purpose. They can, and do frequently, supply a large variety of other goods in addition to those here catalogued, and will obtain to order anything that may be required on receipt of instructions.

The cost of packing, except in the case of small articles which can be easily sent by post, is not included, but special quotations, including tin-lined cases, if required, and delivery free on rail or on board ship, may be had on application.

The greatest care is taken in the packing of all goods, but Messrs. Cooke & Sons cannot be held responsible for damage done in transit. They suggest that in the event of any goods being received in an unsatisfactory condition, an immediate claim should be made against the Carriers.

Messrs. Cooke & Sons employ at their South African Branch, 18, Strand Street, Cape Town, a staff of workmen specially trained in their Factory at York, England, capable of effecting Repairs and Adjustments to any class of instrument in the shortest possible time.

MERCURIAL BAROMETERS.



1. **STANDARD MERCURIAL BAROMETER** on Fortin's principle; in which the mercury is adjusted at each observation to a fixed ivory point, which is the zero of the scale. Bore 0.5 in. dia. Scale divided on one side to inches and $\frac{1}{32}$ ths, and on the other to c/ms and m/ms, and reading by verniers to $\frac{1}{320}$ th in. and $\frac{1}{320}$ th m/m respectively. Opal glass reflectors, adjusting screws at base; a sensitive thermometer divided on the stem is attached to the tube, and the whole is mounted on a mahogany board £13 10 0

2. **Kew Certificate, extra** 1 0 0

3. **STANDARD MERCURIAL BAROMETER** as above, but of bore 0.3 in. dia. — scaled inches and metric 10 10 0

4. **STANDARD MERCURIAL BAROMETER** as No. 3, but with one scale only, inches or metric, as preferred 10 0 0

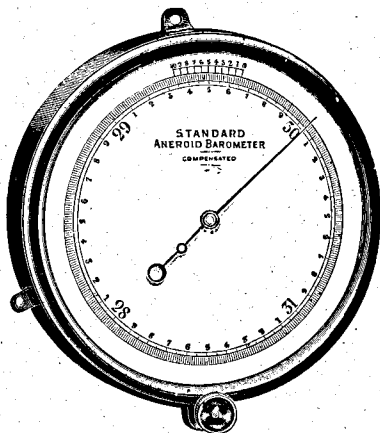
5. **STUDENT'S MERCURIAL BAROMETER** on Fortin's principle, bore 0.25 in. dia. Scaled English and metric and reading by verniers to $\frac{1}{100}$ th in. and $\frac{1}{10}$ th m/m. Mounted on a mahogany board, with thermometer 7 10 0

6. **STUDENT'S MERCURIAL BAROMETER** as above, but of cheaper make and less expensive finish, without thermometer 5 5 0

- 7. STANDARD MERCURIAL BAROMETER**, Kew principle, in which the barometric scale is graduated to compensate for the rise and fall of the mercury in the cistern. Bore 0.5 in. dia. :—scale reading to $\frac{1}{1000}$ th in., a sensitive thermometer divided on the stem is attached to the tube, and the whole is mounted on a mahogany board. Opal glass reflector and adjusting screws at base £11 0 0
- 8. Kew Certificate**, extra 1 5 0
- 9. STANDARD MERCURIAL BAROMETER** as No. 7, but bore 0.3 in. dia. 8 10 0
- 10. STANDARD MERCURIAL BAROMETER**, Kew principle, as used by the Board of Trade, Admiralty, and Meteorological Office, with bronzed-brass tube, contracted to prevent oscillation during sudden changes of pressure, and iron cistern. The scale reads to $\frac{1}{1000}$ th in. Thermometer attached to the tube which is swung in gymbals, with flexible arm for hanging up 7 7 0
- 11. Glass Case for Standard Barometer** 3 10 0
- 12. Ditto**, of ebonised mahogany with plate-glass sides and door, lock and key 6 10 0
- 13. MERCURIAL BAROMETER**, Board of Trade pattern, as used at Coastguard Stations, in round-top solid oak frame, with thermometer 6 0 0
- 14. MERCURIAL BAROMETER**, square top pediment, with opal glass scales, in mahogany or oak frame, with thermometer 5 0 0
- 15. MARINE MERCURIAL BAROMETER**, with single vernier and attached thermometer, in oak frame revolving in centre ring and gymbals 4 15 0
- 16. Ditto**, with double vernier, and ivory scales reading to $\frac{1}{1000}$ th in. ... 5 5 0
- 17. Ditto**, with sympiesometer 6 5 0

For Captain George's portable Mercurial Barometer see Surveying Instrument Catalogue (Section 1).

ANEROID BAROMETERS.

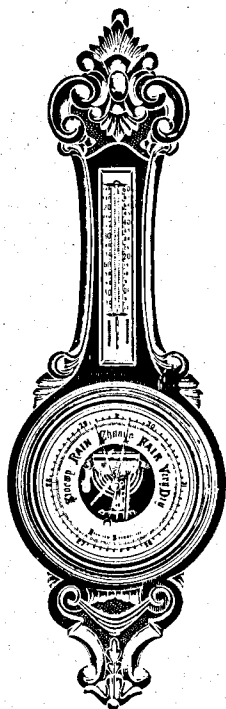


21

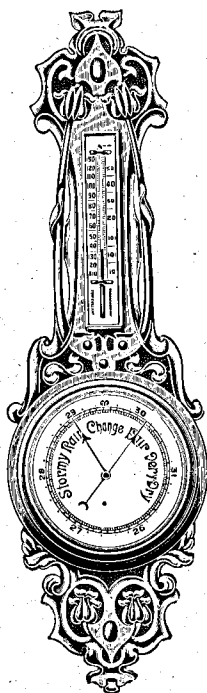
- 21. STANDARD ANEROID BAROMETER**, in heavy bronzed metal case, 8 in. dia., silvered-metal dial, hand engraved, scale range 28 in. to 31 in., or otherwise as desired, reading by a vernier to $\frac{1}{1000}$ th in., compensated for temperature, certificate of comparison throughout the scale with a verified Kew standard accompanies each instrument. The mechanical movement is the most perfect obtainable, and is much more sensitive than a mercurial barometer, showing instantly the most minute variation of the atmospheric pressure £17 10 0

This instrument is especially suitable for the Colonies and abroad owing to the difficulty of safely transporting standard mercurial barometers to out-of-the-way places.

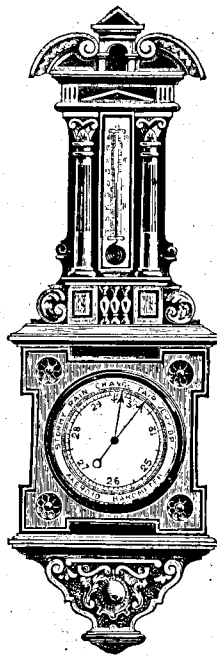
HALL BAROMETERS.



27



29

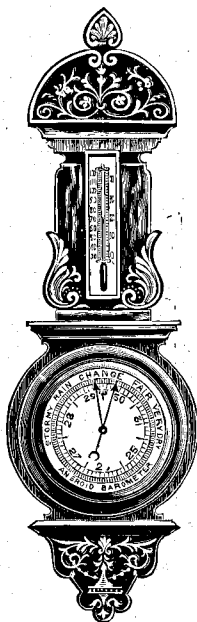


33

PENDANT-FRAME HALL ANEROIDS.

Made in a great variety of patterns; new designs are being constantly added:—

- | | | |
|---|--|---------|
| 26. CARVED OAK PENDANT-FRAME HALL ANEROID, with closed porcelain dial and thermometer:— | 5 in. dia., 30/-; 6 in. dia., 35/-; | |
| 8 in. dia. ... .. | ... .. | £2 2 0 |
| 27. Ditto, with open face, showing works:— | 5 in. dia., 33/-; 6 in. dia., 38/-; | |
| 8 in. dia. ... .. | ... .. | 2 5 0 |
| 28. Ditto, of more elaborate design, with either closed or open porcelain dial and thermometer:— | 5 in. dia., 40/-; 6 in. dia., 45/-; 8 in. dia. ... | 2 12 0 |
| 29. Ditto, "Tulip" pattern, with either closed or open porcelain dial, 8 in. dia., and thermometer | ... .. | 3 15 0 |
| 30. Ditto, "Empress" pattern, with closed or open porcelain dial and thermometer:— | 5 in. dia., 60/-; 6 in. dia., 82/-; 8 in. dia. ... | 5 12 0 |
| 31. Ditto, "Side Column" pattern, with either closed or open porcelain dial, 8 in. dia., and thermometer | ... .. | 6 15 0 |
| 32. Ditto, "Cornucopia" pattern, with first quality movement, best ornamental engraved silvered-metal dial, 8 in. dia., and thermometer | ... .. | 9 16 0 |
| 33. Ditto, "Carlton" pattern, as No. 32 | ... .. | 10 12 0 |



- 34. INLAID SOLID MAHOGANY PENDANT FRAME HALL ANEROID, "St. Martin" pattern, with either closed or open porcelain dial, and thermometer:—5 in. dia., 60/-; 8 in. dia. £4 10 0**

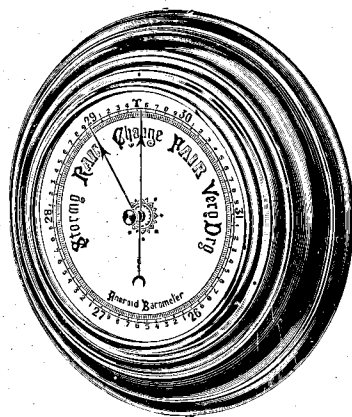
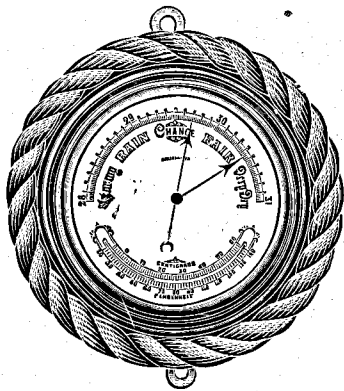
EXTRAS TO PENDANT-FRAME ANEROIDS:—

- 35. First quality movement £0 6 6**
36. Compensation for temperature (to first quality only) 0 5 0
37. Open dial (visible works) 0 3 0
38. Silvered metal dial and thermometer scale, in lieu of porcelain:—5 in., 8/-; 6 in., 13/-; 8 in. 0 17 0
39. Ditto, best engraved with ornamental centre:—5 in., 15/-; 6 in., 21/-; 8 in. 1 8 0

ROUND-FRAME HALL ANEROIDS.

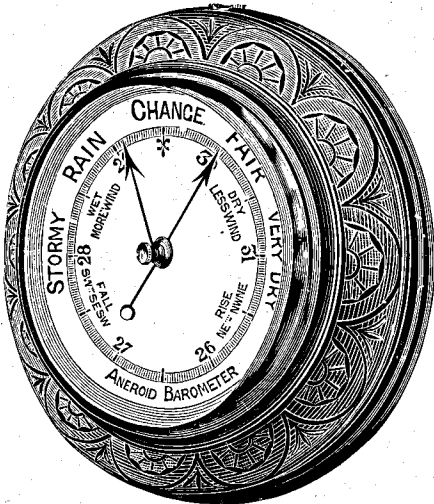
Made in a great variety of patterns; new designs are being constantly added:—

- 44. CARVED OAK ROUND-FRAME HALL ANEROID, "Cable" pattern, with closed porcelain dial:—5 in. dia., 18/-; 6 in. dia., 22/-; 8 in. dia. £1 8 0**
45. Ditto, of better make:—5 in. dia., 24/-; 6 in. dia., 29/-; 8 in. dia. 1 17 0
46. Ditto, of best finish, with first quality movement, silvered-metal dial, and thermometer:—5 in. dia., 40/-; 6 in. dia., 50/-; 8 in. dia. 3 3 0

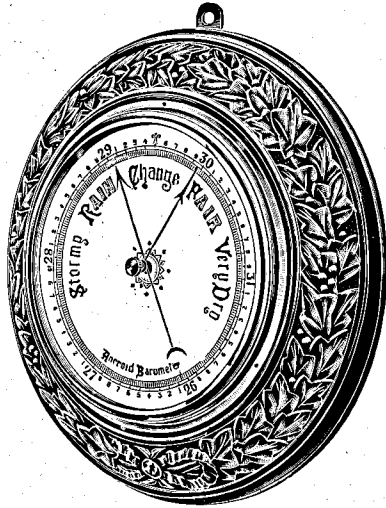


- 47. MOULDED OAK ROUND-FRAME HALL ANEROID, with closed porcelain dial:—5 in. dia., 19/-; 6 in. dia., 23/-; 8 in. dia. £1 9 0**
48. CARVED OAK ROUND-FRAME HALL ANEROID, "Star" pattern, with closed porcelain dial:—5 in. dia., 19/-; 6 in. dia., 23/-; 8 in. dia. 1 9 0
49. Ditto, "Half-circle" pattern with porcelain dial:—5 in. dia., 23/-; 6 in. dia., 29/-; 8 in. dia. 1 16 0

LONDON, YORK & CAPE TOWN

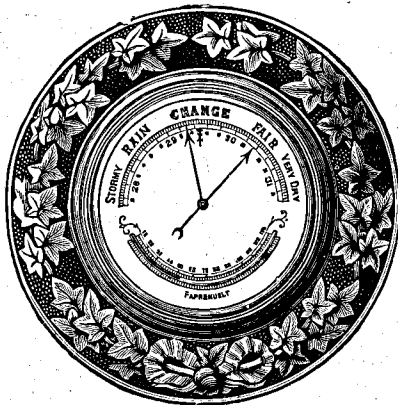


50



52

- | | |
|---|--------|
| 50. CARVED OAK ROUND-FRAME ANEROID, "Greek edge" pattern, with porcelain dial, 5 in. dia., 26/-; 6 in. dia., 32/-; 8 in. dia. ... | £2 0 0 |
| 51. Ditto, "Laurel and Berry" pattern, with porcelain dial, 5 in. dia., 33/-; 6 in. dia., 40/-; 8 in. dia. | 2 10 0 |
| 52. Ditto, "Oak Leaf and Acorn" pattern, with porcelain dial, 5 in. dia., 38/-; 6 in. dia., 45/-; 8 in. dia. | 2 16 0 |



53

- | | |
|--|---------|
| 53. CARVED OAK ROUND-FRAME ANEROID, "Ivy" pattern, of best finish, first quality movement compensated for temperature, silvered-metal dial best engraved, and thermometer:—5 in. dia., 75/-; 6 in. dia., 80/-; 8 in. dia. | £4 10 0 |
| 57. BRACKET FRAME HALL ANEROID, "Queen Anne" pattern, with porcelain dial, 5 in. dia., 75/-; 6 in. dia. | 4 4 0 |
| 58. STAND FRAME HALL OR CHIMNEY-PIECE ANEROID, "Drum-head" pattern, with porcelain dial, 5 in. dia. | 1 9 0 |
| 59. Ditto, "Italian" pattern, with thermometer, 5 in. porcelain dial ... | 2 7 0 |



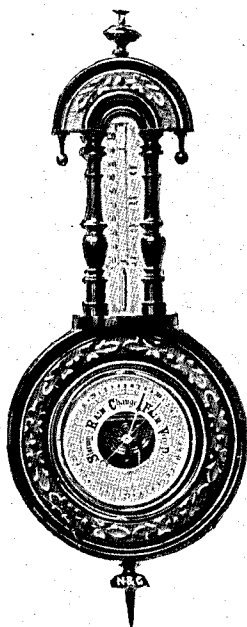
60

60. **STAND FRAME HALL OR CHIMNEY-PIECE ANEROID**, "Arch top" pattern, 5 in. porcelain dial (no thermometer) £2 15 0

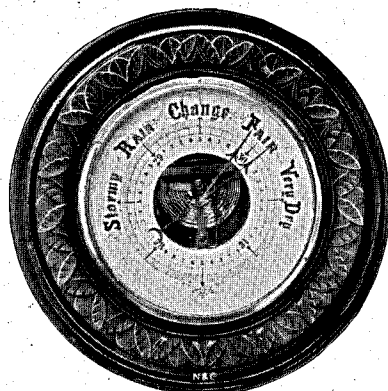
EXTRAS TO ROUND-FRAME, BRACKET, AND STAND-FRAME ANEROIDS:—

- | | | |
|---|--------|--------|
| 63. First quality movement | ... .. | £0 6 6 |
| 64. Compensation for Temperature (to first quality only) | ... .. | 0 5 0 |
| 65. Open Dial (visible works) | ... .. | 0 3 0 |
| 66. Curved Thermometer | ... .. | 0 3 0 |
| 67. Silvered-Metal Dial, 5 in., 6/6; 6 in., 11/-; 8 in. .... | ... .. | 0 14 0 |
| 68. Ditto, best engraved, with ornamental centre, 5 in., 14/-; 6 in., 19/-; 8 in. | ... .. | 1 5 0 |

HALL BAROMETERS OF CHEAPER MAKE.



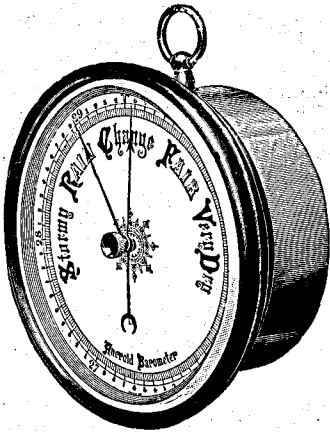
71



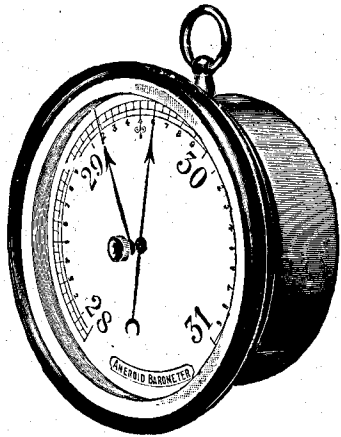
72

71. **PENDANT FRAME HALL ANEROID** of cheaper make, brown or black wood, carved and polished, open enamel dial, with opal scale thermometer, in several patterns, 3¾ in., 21/-; 4½ in. £1 8 0
72. **ROUND FRAME HALL ANEROID** as above, with open enamel dial, in several patterns, 3¾ in., 13/-; 5 in. 1 2 0

BRASS CASE ANEROIDS.

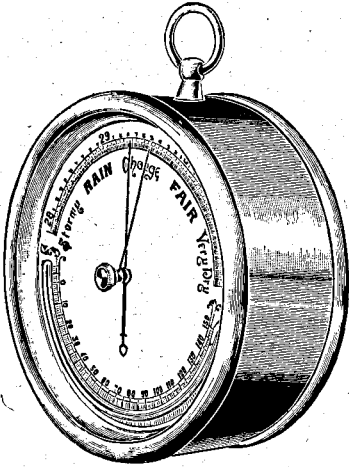


73

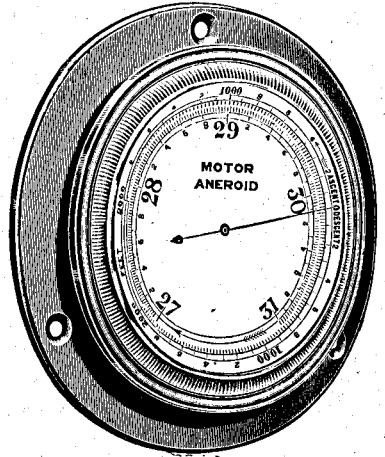


82

73. BRASS CASE ANEROID, with closed porcelain dial, 5 in.,	20/- ; 6 in.	£1 8 0
74. Ditto, with open porcelain or closed silvered-metal dial, 5 in.,	28/- ; 6 in.	1 17 0
75. Ditto, with open silvered-metal dial, 5 in.,	33/- ; 6 in.	2 3 0
EXTRAS.		
76. First quality movement	... ..	0 6 6
77. Compensation for temperature (to first quality only)	... ..	0 5 0
78. Extended scale to 22 in., and weather words arranged for an altitude of 6,400 feet:—		
To 5 in. Aneroid with open or closed porcelain dial	... ..	0 5 0
To 6 in. ditto	... ..	0 7 0
To 5 in. Aneroid with open or closed silvered-metal dial	... ..	0 9 0
To 6 in. ditto	... ..	0 12 0
79. Additional Hand fitted to any Aneroid intended for use at a high altitude, to show the corresponding pressure at sea level	... ..	0 5 0
80. Curved Thermometer	... ..	0 3 0
81. Best Morocco case, to 5 in. Aneroid, 5/6 ; to 6 in. Aneroid	... ..	0 7 6
82. BRASS CASE ANEROID, graduated from 28 in. to 31 in. only, giving an open scale on which very small movements are easily perceptible. Good quality movement, enamel dial, figures and graduations very distinct (no weather words), in case, 5 in.,	28/- ; 6 in.	1 17 0
83. Ditto, of better quality, with movement compensated for temperature, and open silvered-metal dial, 5 in.,	42/- ; 6 in.	2 14 0



85

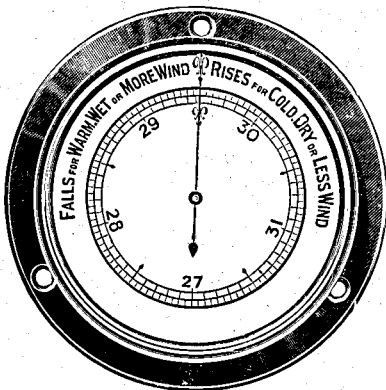


91

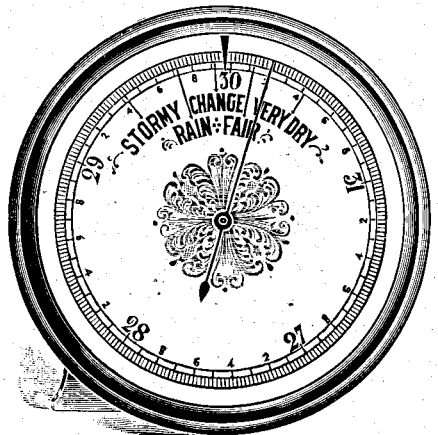
- | | |
|--|---------|
| 84. BRASS CASE ANEROID, cylindrical, 5 in. dia., with first quality movement, compensated, and hand-engraved silvered-metal dial, in snap morocco case | £2 12 0 |
| 85. Ditto, with curved thermometer | 2 18 0 |
| 86. "UNIVERSAL" ANEROID for Agriculturists and others, with 5 in. porcelain dial and reliable movement, in brass case | 1 0 0 |
| 87. "LIFE-BUOY" ANEROID, similar to the above, but intended for marine use | 1 0 0 |

TRAVELLING ANEROIDS, ETC.

- | | |
|--|--------|
| 91. MOTOR ANEROID, with revolving altitude scale, showing 2,000 ft. ascent in black, and 2,000 ft. descent in red. The movement is strong and of good quality; the dial of silvered-metal, and the case of polished brass with flange for screwing in position | £2 2 0 |
| EXTRA. Special brass case, raising the dial at an angle, to facilitate reading | 0 7 0 |

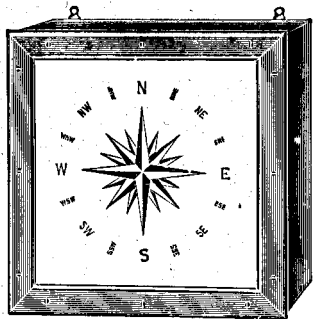


92

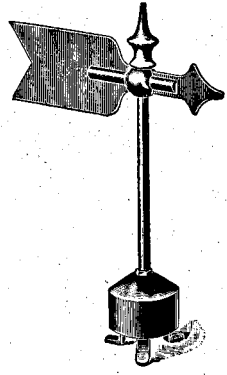


94

- | | |
|--|--------|
| 92. YACHT ANEROID, with 2½ in. engraved metal dial and weather words. The marking index is attached to a milled ring and is easily and quickly set. Dia. of flange, 3¼ in. | £2 2 0 |
|--|--------|



131

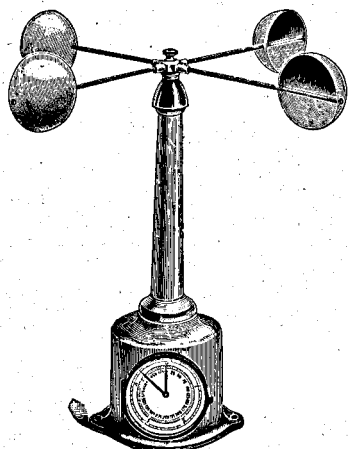


131

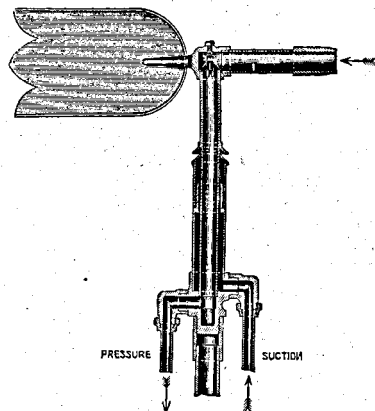
131. WIND DIRECTION INDICATOR, suitable for clubs, hotels, etc. The set consists of a Vane, an Indicator, and a Contact Push. The vane is mounted on the roof or other exposed position; it should be "earthed" by a $\frac{1}{8}$ in. galvanised iron wire as a protection from lightning. The indicator is fitted on the wall of the room or entrance hall, and the push is placed under the indicator and connected therewith. Upon pressing the button the indicator immediately shows from which direction the wind is blowing. Vane, indicator complete with lamps, and contact push, per set (fixing extra) £9 10 0

134. WIND DIRECTION RECORDER, actuated by a vane 4 ft. 6 in. long, carried upon ball bearings. The chart drum is 5 in. dia., 4 $\frac{1}{4}$ in. high, and makes one revolution per 24 hours. The apparatus consists of a vane, 20 ft. of $\frac{1}{2}$ in. dia. steel tube spindle, recorder, pen, bottle of ink, and 400 charts. The instrument has a close-fitting mahogany cover with glass front 25 0 0

135. WIND DIRECTION RECORDER, as above, combined with pressure tube recorder No. 147, by which means there is obtained on the same chart and at the same hours a complete record of both direction and intensity 50 0 0



138



Head of Dine's Anemometer.

138. ROBINSON'S ANEMOMETER, with 3 in. cups, reading to 500 miles, zero setting £7 5 0

139. ROBINSON'S RECORDING ANEMOMETER, in japanned metal case, range of chart 25 miles, recording 8 days, enamelled dial registering 500 miles, outer circle divided to 5 miles and sub-divided to $\frac{1}{10}$ ths, zero setting 26 10 0

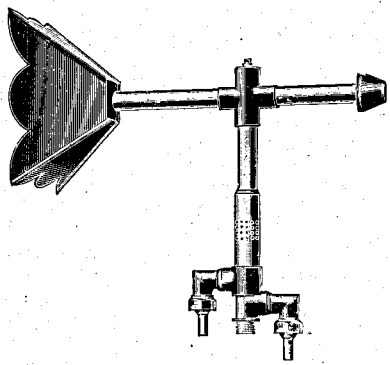
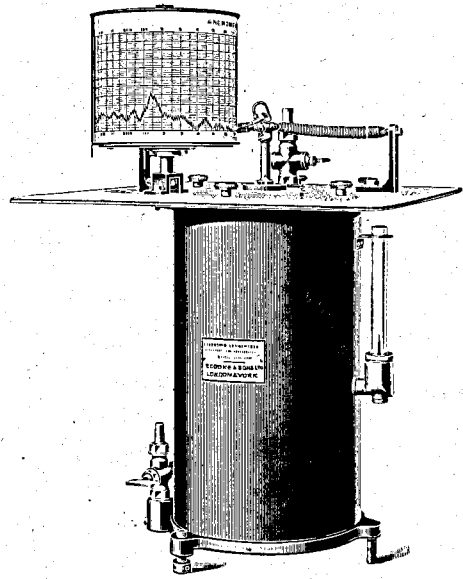
New Pattern Recording Anemometers of large size to order.

140. BECKLEY'S IMPROVED ANEMOMETER. This is a simple form of Robinson's Anemometer; the index portion consists of two graduated circles divided into $\frac{1}{10}$ ths and $\frac{1}{100}$ ths. A fixed index at the top marks miles and $\frac{1}{10}$ ths on the inner dial, and a moveable index indicates every 5 miles on the outer dial **£5 15 0**

143. DINE'S PRESSURE-TUBE RECORDING ANEMOMETER has been adopted by the Meteorological Office as their standard instrument. It consists of two parts, the head, which is exposed to the wind, and the recording apparatus, which is set up at any convenient place, not necessarily near to the head. The two parts are connected by two flexible metal tubes, $\frac{1}{2}$ in. internal dia., two 50-ft. lengths of which are included in the price **50 0 0**

144. Charts can be supplied printed either English or metric, at per 400, sufficient for one year **2 10 0**

An illustrated description of the above instrument will be supplied free on request.



147

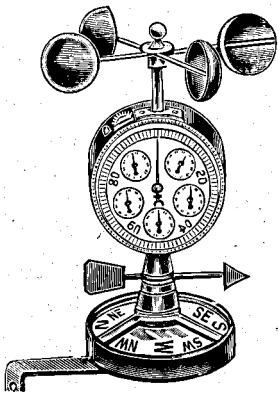
147

147. RECORDING PRESSURE TUBE ANEMOMETER of simpler and cheaper form than No. 143. The principle is the same as the Dine's Instrument, in which the pressure and suction effects of the wind acting upon a float give a true record of its action. The two tubes are necessary to eliminate casual alterations of pressure in the room where the recorder is placed. The drum is 5 in. dia., $4\frac{1}{2}$ in. high, and makes one revolution in 24 hours. The clock requires winding only once per week. The apparatus consists of a head and vane, recorder with glass cover, bottle of liquid (for float chamber), pen, bottle of recording ink, and 400 charts **£28 0 0**

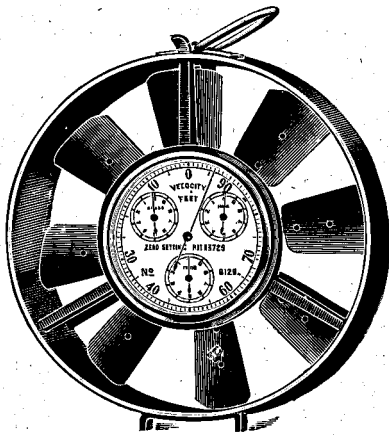
EXTRAS. Composition tubing $\frac{1}{8}$ in. bore, per ft. \ **0 0 4**
 Additional charts, per 100 **0 12 6**

150. PRESTEL'S ANEMOMETER is a simple apparatus for quickly ascertaining the direction and approximate pressure of the wind. It consists of a vane to which is attached a swinging plate. In calm weather this plate hangs vertically, at zero, and as the pressure increases it is raised through various degrees of elevation from 1 to 10. The vane is perforated with holes to mark the different stages, and enable the angle to which the plate is raised to be easily noted **6 5 0**

151. LIND'S ANEMOMETER, shows the force of the wind by the height to which it raises water in one arm of a U-shaped tube, alongside which a scale is fixed. A vane keeps the open end of the tube facing the proper direction **2 12 0**



152

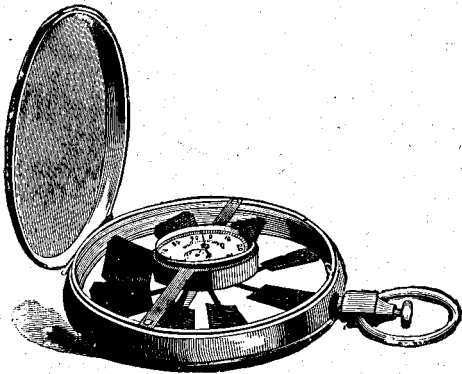


155

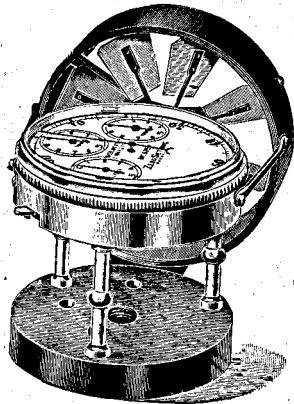
152. PORTABLE ANEMOMETER, with wind vane and luminous compass for the use of airmen and others. Can be easily fixed in any position and gives the direction and force of the wind. Packed in a mahogany box, 7 in. X 5 in. X 5 in. ... **£7 0 0**

BIRAM'S ANEMOMETER, for registering the velocity of air-currents in mines, sewers, furnaces, etc., with disconnector and zero setting attachment; packed in a square leather case:—

155.	6 in. dia.,	reading to 100,000 ft.,	4 dials	...	...	...	...	£4 5 0
156.	4 in. "	" "	100,000 " 4 "	...	...	...	...	4 0 0
157.	3 in. "	" "	1,000 " 2 "	...	...	...	...	3 15 0



159



166

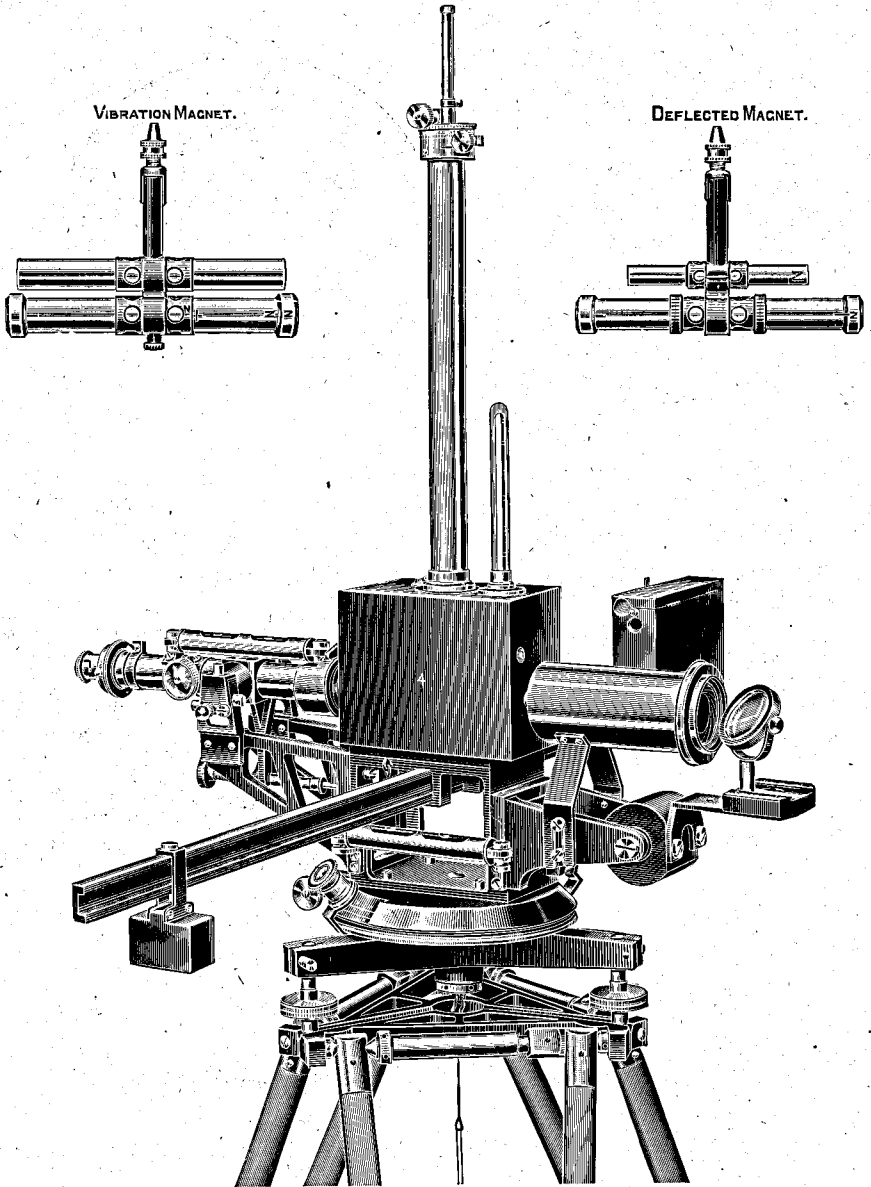
159. BIRAM'S ANEMOMETER, 2 in. dia., reading to 1,000 ft., two dials, special watch form, with disconnector **£5 10 0**

161. HIGH SPEED ANEMOMETER, for ascertaining the velocity of very strong currents and capable of registering up to 10,000 ft. per minute; 4½ in. dia., reading to 200,000 ft., with disconnector and zero setting attachment. Complete in case **6 10 0**

165. PORTABLE AIR METER, with 6 dials, reading to 10,000,000 ft., with disconnector and zero setting attachment **4 0 0**

166. Ditto, with 4 dials, reading to 100,000 ft. **4 0 0**

All Anemometers are carefully tested at the time of manufacture in air-currents of known velocity, and a chart of corrections is supplied with each. Dials can be graduated in metres, in lieu of feet, without extra charge.



THE UNIFILAR MAGNETOMETER, which has been adopted by the India Office as the Standard, is based on the Kew pattern instrument, but modified and improved in several important details.

The instrument generally consists of a graduated horizontal circle supported on three levelling foot-screws. Fixed to the cover of the circle is a light metal box carrying on one end the Y brackets of the telescope, and on the other a counterpoise to which is fixed a removable bracket carrying an adjustable mirror for illuminating the scales in the telescope and

LONDON, YORK & CAPE TOWN

magnet, the mirror being also interchangeable with a lamp. The magnet box and torsion tube are fixed centrally above the instrument. The deflection bar is made channel-section of extremely hard metal, thus being light and stiff.

The telescope is of 8 in. focal length, fitted with high and low power eye-pieces, striding level, and a longitudinal level on the top; a glass diaphragm is placed in the focus of the telescope, which, instead of having the usual cross webs, has two scales engraved on it, one a long horizontal scale of 100 divisions, and the other a short vertical scale of 40.

Two magnets are supplied, viz., the long or vibration magnet, and the short or deflected magnet. In the illustration the vibration magnet is shown with the inertia bar in its sheath. The N. end contains the collimator lens, whilst the S. end carries a piece of optical glass with a horizontal and vertical line engraved on it.

The deflected magnet which takes the place of the reflector magnet in the Kew instrument is fixed parallel to the collimator tube which carries a similar lens and engraved piece of glass as the vibration magnet.

The magnets are suspended by means of a thin ribbon of phosphor-bronze instead of the ordinary silk fibre, the ribbon being held both at the torsion tube head and magnet by improved clip chucks. With this suspension the torsion is constant. Thermometers are fitted to both magnet boxes, and two spare reels of ribbon are supplied.

A finely divided plummet is provided, which is read by a collimating lens in front of the telescope object glass.

The tripod is rigid, closing up into small space, and together with the deflection bar is carried in a canvas and leather-bound case.

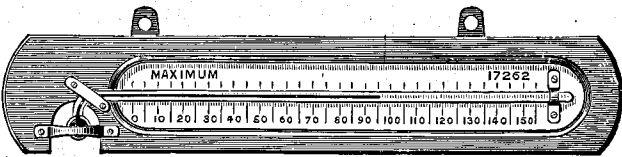
The instrument is packed complete in a mahogany case with shoulder strap.

- 171. **MAGNETOMETER**, as above (Captain Fraser's pattern), fitted with vertical circle for taking azimuths, as made for the Indian, United States, and Canadian Governments £112 10 0
- 172. **Ditto**, Kew pattern 100 0 0
If without vertical circle a reduction of £6 will be made.
- 173. **Kew Certificate** to either pattern, extra 8 0 0

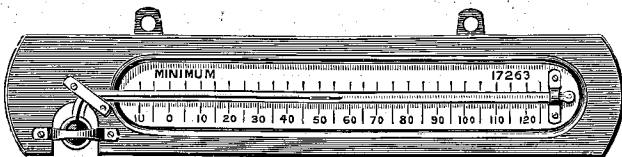


181

- 181. **COMPARATIVE STANDARD THERMOMETER**, 15 in. long, with engine-divided stem and raised metal scale, graduated 0° to 212° F. or -20° to 100° C.; fitted in a morocco case, with Kew certificate £2 15 0



182



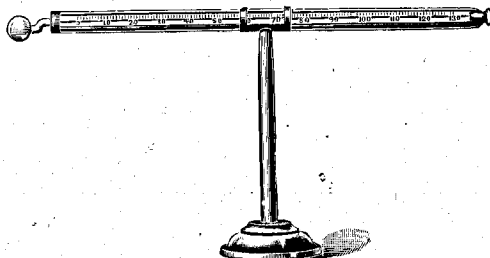
183

- | | | |
|---|--------|--------|
| 182. STANDARD SELF-REGISTERING THERMOMETER, maximum, with opal glass scale, and engine-divided tube, superior quality, in oak frame | 10 in. | 12 in. |
| | £1 3 0 | £1 8 0 |
| 183. Ditto, minimum | 1 3 0 | 1 8 0 |
| 184. Kew Certificate to either pattern, extra | | 0 5 0 |



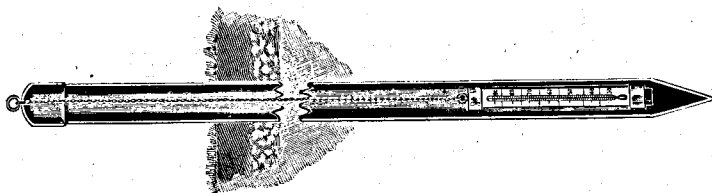
187

- | | | |
|---|--|---------|
| 187. STANDARD SOLAR RADIATION MAXIMUM THERMOMETER, divided and figured on the stem, with black bulb in vacuo, and glass shield to protect the graduations and figures | | £1 15 0 |
| 188. Kew Certificate, extra | | 0 10 0 |
| 189. STANDARD SOLAR RADIATION MAXIMUM THERMOMETER, divided and figured on the stem, with black bulb and glass shield, for registering the temperature of the Solar rays in the open air | | 1 7 0 |
| 190. Kew Certificate, extra | | 0 10 0 |
| 191. Stand, 4 ft. high. with fastenings for one insulated thermometer | | 0 10 6 |
| 192. Ditto, for two thermometers | | 0 14 0 |



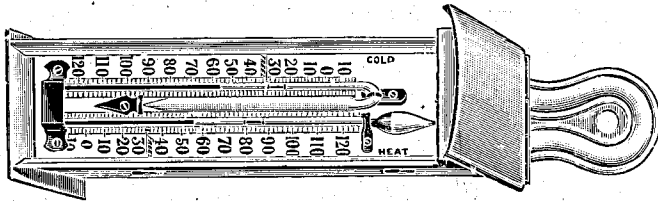
193

- | | | |
|--|--|---------|
| 193. STANDARD TERRESTRIAL RADIATION MINIMUM THERMOMETER, divided and figured on the stem with glass shield, on brass stand | | £1 10 0 |
| 194. Kew Certificate, extra | | 0 5 0 |



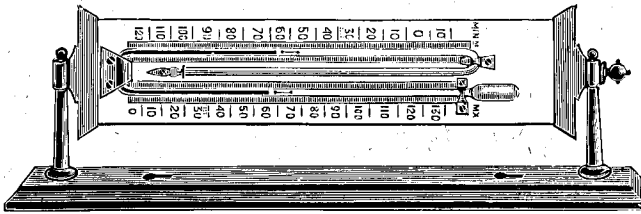
195

- | | | |
|--|--|---------|
| 195. EARTH TEMPERATURE THERMOMETER, Symon's pattern, with engine-divided tube and boxwood scale; it is attached by a chain to a copper cap which fits the top of a pointed pipe, driven into the ground. For indicating temperatures at various depths below the surface, viz: 1 ft. | | £1 10 0 |
| 196. Ditto, 2 ft. | | 1 14 0 |
| 197. Ditto, 4 ft. | | 2 0 0 |



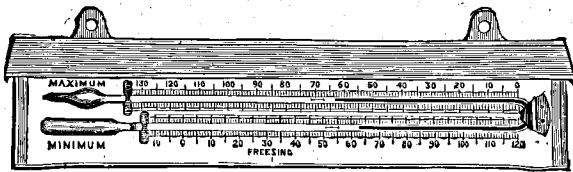
201

- | | | | | |
|--|-------|--------|--------|--------|
| 201. SIX'S SELF-REGISTERING MAXIMUM AND MINIMUM THERMOMETER , with opal glass scale, enamelled tube, in open-back white-japanned tin case, best make, with magnet | 8 in. | 10 in. | 12 in. | 14 in. |
| ... | 15/- | 18/6 | 22/- | 26/- |
| 203. Ditto , zinc scale, in white-japanned tin case, with magnet | 10/- | 13/- | 16/- | 20/- |
| 204. Spare Magnets , grooved, for Six's thermometer | ... | ... | each | 1/- |



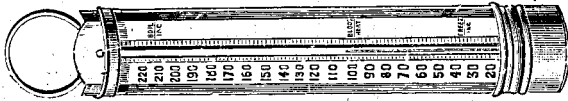
206

- | | | | | |
|--|-------|--------|--------|--------|
| 206. SIX'S SELF-REGISTERING MAXIMUM AND MINIMUM THERMOMETER , with opal glass scale, mounted on oak back with revolving bronzed brackets for window | 8 in. | 10 in. | 12 in. | 14 in. |
| ... | 28/- | 33/- | 38/- | 44/- |



209

- | | | | |
|---|-------|--------|--------|
| 209. DIMENUON SELF-REGISTERING MAXIMUM AND MINIMUM THERMOMETER , with opal glass scale in white-japanned tin case, best make | 8 in. | 10 in. | 12 in. |
| ... | 17/- | 21/- | 25/- |
| 210. Ditto , zinc scale in white-japanned tin case | 10/- | 14/- | 18/- |

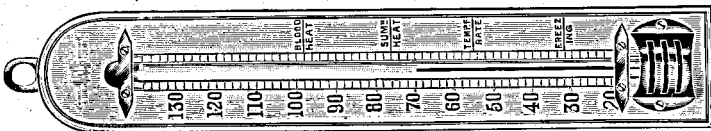


213

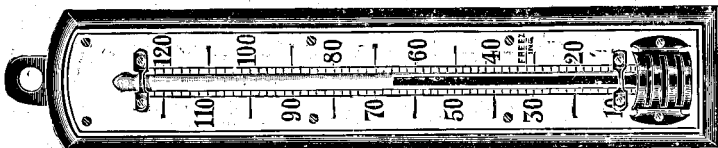


215

- | | |
|--|--------|
| 212. BREWER'S THERMOMETER , with silvered metal scale graduated to boiling point, in black japanned tin case, 8 in., 2/6; 10 in., 4/-; 12 in., 5/6; 14 in. | £0 7 0 |
| 213. Ditto, in copper case, 8 in., 3/6; 10 in., 5/-; 12 in., 6/6; 14 in. ... | 0 8 6 |
| 214. Ditto, in stout copper scooped case, 10 in., 9/-; 12 in., 12/-; 14 in. ... | 0 15 0 |
| 215. SUGAR BOILER'S THERMOMETER , with scale graduated to 400°, in brass case with sides turned up, 10 in., 7/6; 12 in., 10/-; 14 in. | 0 12 6 |
| 216. MINIMUM THERMOMETER , self-registering, with zinc scale, engine-divided, on boxwood back, 8 in., 4/-; 10 in. | 0 5 6 |
| 217. Ditto, with solid zinc scale, non-rusting, raised figures and divisions, in metal frame, 12 in. | 0 2 6 |
| 218. Ditto, filled red spirit on boxwood back, 8 in., 1/9 to 3/6; 10 in., 2/6 to | 0 5 0 |
| 219. WINDOW THERMOMETER , with porcelain scale, tube filled with black or red spirit, revolving in metal frame, with slotted holes for fixing | 0 7 6 |



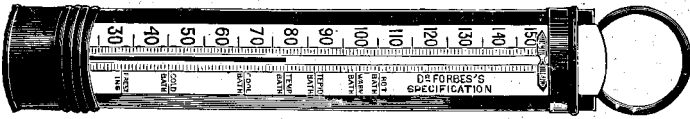
222



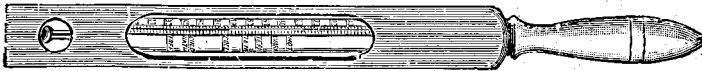
223

- | | |
|--|-----------------|
| 222. HOUSEHOLD THERMOMETER , with boxwood scale, tube filled mercury or spirit, 8 in. | 1/6 and upwards |
| 223. Ditto, with celluloid scale on oak or boxwood back, 8 in. ... | 3/6 ,, ,, |
| 224. Ditto, with porcelain scale, graduated both F & C, 8 in., 4/-; 10 in. ... | £0 5 0 |
| 225. Ditto, with porcelain scale, magnifying tube, best make and finish, 8 in., 9/-; 10 in., 12/-; 12 in., 15/-; 14 in. | 0 18 0 |

226. **HOUSEHOLD THERMOMETER**, with porcelain scale, graduations and figures very distinct, suitable for Public Buildings, etc., from ... £0 10 0
227. Ditto, with metal scale, on oak back, 8 in., 4/-; 10 in. ... 0 5 0
228. Ditto, with metal scale, on boxwood or ebonised back, 8 in. ... 0 5 0
233. **IVORY TUSK THERMOMETER** ... 21/- and upwards to 2 10 0
234. **SILVER-MOUNTED THERMOMETER**, to hang or stand 12/6 and upwards to 1 15 0
235. **ALARM THERMOMETER**, that may be set for any temperature, either high or low, which if attained, causes an electric bell to ring continuously until stopped. Particularly recommended for ship's holds, cold storage, hot-houses, etc. In three patterns: maximum, 30/-; minimum, 30/-; combined maximum and minimum ... 2 0 0
236. Ditto, with bell, battery, 100 feet of wire, and indicating board with 4 discs, registering both heat and cold ... 4 15 0



238



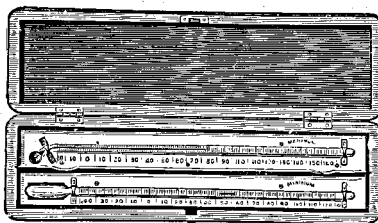
238

238. **BATH THERMOMETER**, all porcelain, 5/-; japanned tin case, with silvered-metal scale, 2/6 to 4/6; japanned tin case, with porcelain scale, 5/- and 6/-; whitewood ... £0 1 6



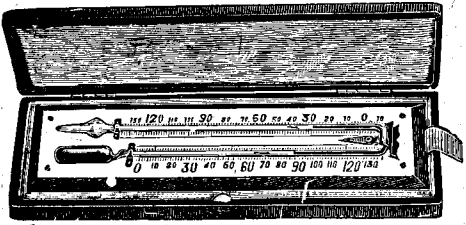
2:9/240

239. **POCKET THERMOMETER**, with boxwood frame of oval section, in morocco case, 4 in., 9/6; 5 in. ... 0 10 6
240. Ditto, with ivory frame, 3 in., 15/-; 4 in., 18/-; 5 in. ... 1 1 0



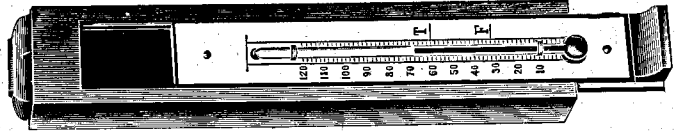
241

241. **TRAVELLING SET**, comprising a pair of maximum and minimum self-registering thermometers, divided on the stem, with German silver scales, in morocco case, 6 in., 30/-; 8 in. ... £1 15 0



242

- 242. **POCKET DIMENSION SELF-REGISTERING THERMOMETER**, with ivory scale in morocco case, 5 in., 22/-; 6 in., 25/-; 7 in. £1 10 0
- 244. **POCKET THERMOMETER**, with ivory scale and German silver mounts in snap morocco case, 4 in., 9/-; 5 in., 11/6; 6 in. 0 14 0



245

- 245. **POCKET THERMOMETER**, with silvered-metal scale, in polished mahogany case with slide lid, 4 in., 3/-; 5 in., 4/-; 6 in. £0 5 0
- 246. **REFRIGERATING THERMOMETER**, 12 in., in turned box-wood stick, filled red spirit 0 3 6
- 247. *Ditto*, 8 in., in brass pipe, with silvered metal scale for brine tanks 0 17 0
- 251. **DAIRY THERMOMETER**, with insulated paper scale, in card case, 8 in. 0 6 6
- 252. *Ditto*, all porcelain, 12 in. 0 5 0
- 253. *Ditto*, in square wood frame, with handle, 10 in. 0 7 6
- 254. **INCUBATOR THERMOMETER**, with metal scale, flanged edges, 4 in. 0 2 6
- 255. *Ditto*, all glass, engraved tube, for drawer, 8 in. 0 3 6
- 258. **HOT-BED THERMOMETER**, 12 in., in turned oak case with brass point 0 5 0
- 259. **RAIL TEMPERATURE THERMOMETER**, 5 in., in heavy copper case, graduated either F or C, and fitted in wood box. Indispensable to plate-layers for accurately fixing the width of the gap when laying long rails 0 7 6

CHEMICAL THERMOMETERS, with engine-divided tubes, engraved stems, best quality, filled mercury or spirit, in turned mahogany boxes:—

- 263. 8 in., from 120° to 220° F. or corresponding C. £0 7 0
 - 264. 10 in., from 120° to 220° F. 0 8 3
 - 265. 12 in., from 120° to 300° F. 0 9 6
 - 266. 12 in., from 120° to 400° F. 0 11 0
 - 267. 14 in., from 120° to 500° F. 0 12 6
 - 268. 14 in., from 120° to 600° F. 0 14 0
 - 269. 16 in., from 120° to 700° F. 0 16 0
- Ditto* of cheaper quality:—
- 271. 12 in., from 120° to 220° F. or corresponding C. 0 5 6
 - 272. 12 in., from 120° to 300° F. 0 6 6
 - 273. 14 in., from 120° to 400° F. 0 7 6
 - 274. 16 in., from 120° to 700° F. 0 8 6

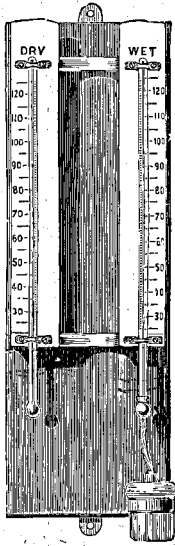
276. **Armoured Cases** for chemical thermometers, any length each 0 12 0

278

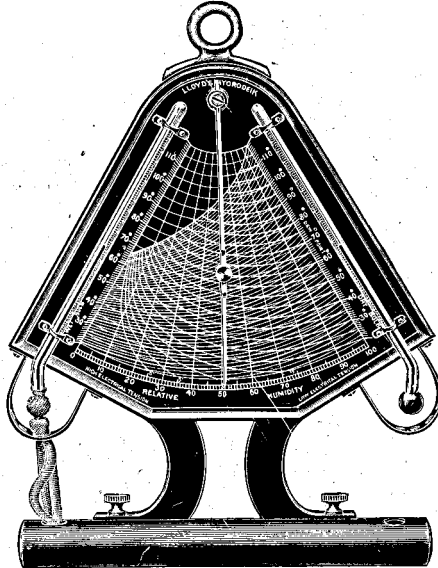
LONDON, YORK & CAPE TOWN



- | | 282 | 2 min. | 1 min. | ½ min. |
|---|-----|--------|--------|--------|
| 281. CLINICAL THERMOMETER , with plain tube, in nickel case | | 3/6 | 4/- | 4/6 |
| 282. Ditto , with lens front | | 4/- | 5/- | 6/- |
| <i>The above are provided with our own certificates, which we guarantee are within one-tenth degree of a corresponding certificate issued by Kew Observatory.</i> | | | | |
| 283. Hicks' Patent Lens Front , with his own certificate ... | | 6/- | 8/- | 8/- |
| 284. Hicks' "Facilis," easy to shake down, with lens front ... | | 6/- | 6/- | 6/- |
| 286. Veterinary Thermometer , with normal temperature for various animals marked on stem, 4 in., 4/-; 5 in. | | | | £0 5 6 |
| <i>A few clinicals of different patterns, with Kew certificates, are kept in stock.</i> | | | | |

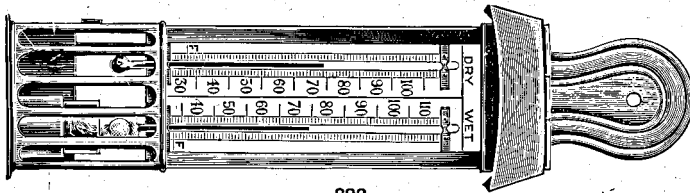


291



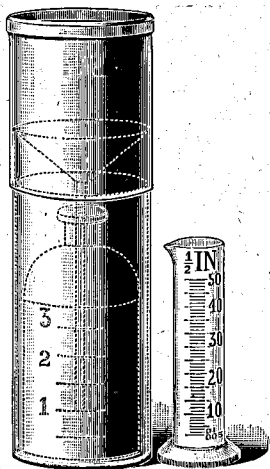
298

291. **MASON'S WET & DRY BULB HYGROMETER**, with opal scales and engine-divided tubes, on oak board, small, 35/-; medium, 45/-; large £2 15 0

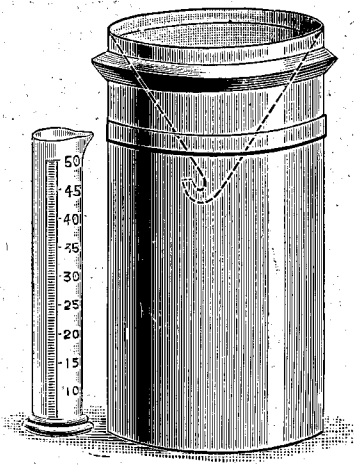


292

292. **ADMIRALTY PATTERN HYGROMETER**, zinc, well protected £1 1 0
293. **Kew Certificates (2)**, for Hygrometer, extra 0 8 0
297. **THE HYGRODEIK** is a condensed graphic presentation of all the facts given in the hygrometer tables. The lines on the chart show at a glance the relative humidity, dew-point, absolute amount of water present and weight of water in each cubic foot of air. Made in two ranges: 20° to 120° F., and 80° to 180° F., and mounted in japanned iron frame with base to stand 2 2 0
298. **Ditto**, mounted on polished brass frame, in two patterns, to stand or hang 3 0 0



302



303

300. SYMON'S RAIN GAUGE (British Association pattern), with funnel 5 in. dia. and graduated glass measure

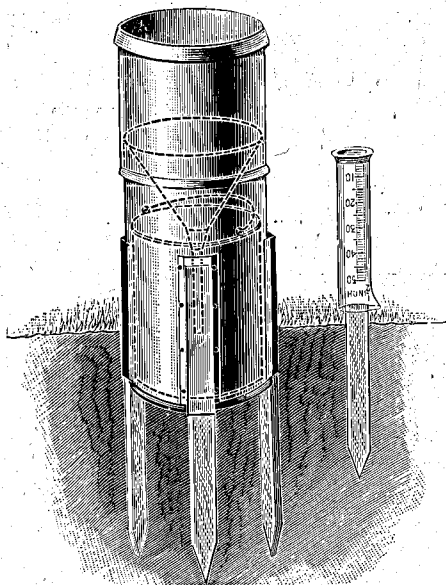
301. METEOROLOGICAL OFFICE RAIN GAUGE, with high rim, 8 in. dia., graduated white glass bottle and Camden jar

302. Ditto, 5 in. dia.

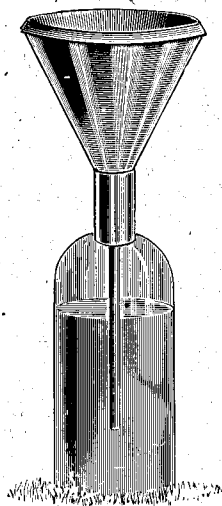
303. GLAISHER'S RAIN GAUGE, consisting of a metal case with funnel, 8 in. dia., metal receiver, and graduated glass measure

304. Ditto, in galvanized iron, or zinc, with brass rim 33/-

Copper with brass rim	£1 5 0	Japanned tin with brass rim	£0 15 0
	2 15 0		—
	1 12 0		—
	2 0 0		1 7 0



306



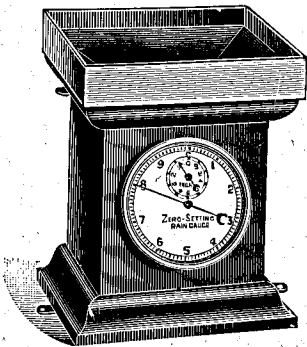
307

306. SNOWDON RAIN GAUGE, copper case with high brass rim and stakes for holding in position, 5 in. funnel, metal receiver, and glass measure

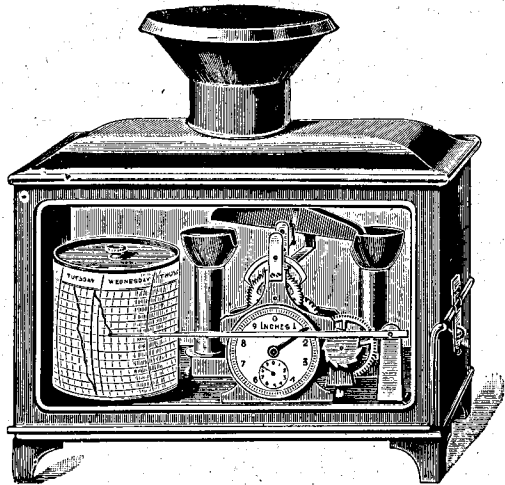
307. Ditto, in galvanized iron, with brass rim

£2 0 0
1 12 0

- | | | | | |
|---|-----------------------|---------|-----------------------------|---------|
| 308. HOWARD'S RAIN GAUGE, consisting of a metal funnel, 5 in. dia., with straight tube, flint glass bottle and graduated glass measure | Copper with brass rim | £0 16 0 | Japanned tin with brass rim | £0 12 0 |
| 309. HOWARD'S PEDESTAL RAIN GAUGE, with graduated tube at the side, showing the amount of rainfall without using a measure; receiving surface, 12 in. dia. ... | 4 8 0 | | 3 0 0 | |
| 310. GLAISHER'S TROPICAL RAIN GAUGE, having extra large container fitted with tap, and graduated measure ... | 4 10 0 | | — | |
| 311. BRADFORD RAIN GAUGE, holding about 27 in. of rainfall, for use in very rainy localities, or in situations which can only be visited occasionally, 5 in. dia., with graduated dipping rod, and large glass measure to hold 1½ in. of fall ... | 3 15 0 | | — | |
| 312. Measuring Glass for rain gauge, 5 in., 2/6; 8 in. | | | 0 4 0 | |
| 313. Ditto, "Camden" pattern, ... 5 in., 3/6; 8 in. | | | 0 5 0 | |
| 314. Kew Certificate to any ordinary rain gauge, 5/-; to any measuring glass, 4/- | | | | |

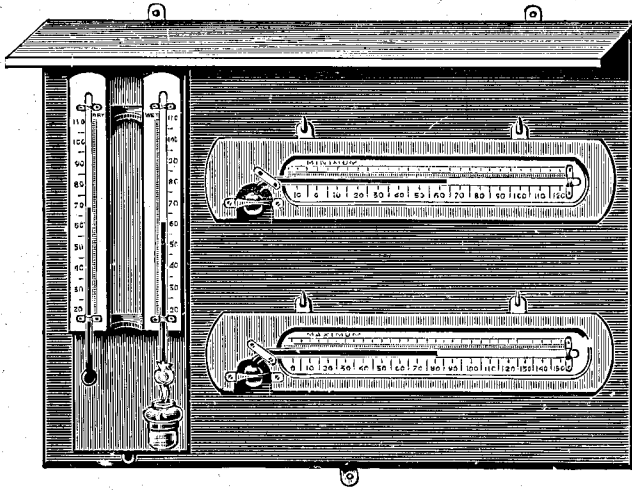


316



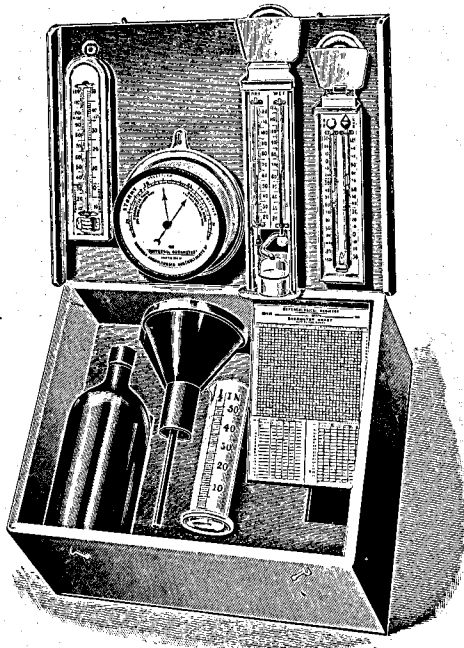
327

- | | |
|--|---------|
| 316. REGISTERING RAIN GAUGE, zero setting, showing amount of rainfall, from 1/100th in. to 12 in., on a dial, in square japanned metal case, size 10 in. x 8 in. ... | £4 10 0 |
| 317. Ditto, in copper case, same size | 5 10 0 |
| 320. RECORDING RAIN GAUGE of new type, in which the pen is actuated by a float, and the height of the chart represents 1/2 in. of rainfall. When this amount has been registered the pen automatically falls to the bottom of the chart and then commences to rise again. The clock makes a complete revolution in 24 hours, but requires winding only once a week. It is desirable, but not imperative, to fix a new chart daily. Two-years'-supply of charts is included with each instrument | £9 10 0 |
| 321. Extra Charts, per 100 | 0 10 6 |
| 327. RECORDING RAIN GAUGE, runs for a week, showing rainfall in inches and 1/100ths at the exact time at which it occurred. With 8 in. funnel, and including charts for one year | 14 10 0 |
| 328. Kew Certificate, extra | 1 10 0 |
| 329. Extra Charts, per year's supply | 0 8 0 |
| 330. RAINFALL CHARTS, per dozen | 0 6 0 |
| 332. METEOROLOGICAL SET, consisting of maximum and minimum thermometers and Mason's hygrometer, all divided on the stems and fitted with porcelain scales. Wood screen, with adjustable front to hold above instruments when hung upon a wall or post. Also a Symon's 5 in. copper rain gauge with graduated glass measure, a pad of charts for noting observations and a book "Hints to Meteorological observers" | £7 5 0 |
| 333. Kew Certificates (4) to thermometers and hygrometer only, extra | 0 18 0 |



334

- 334. METEOROLOGICAL SET, consisting of standard maximum and minimum thermometers and hygrometer, mounted on oak board ... £6 0 0
- 335. Kew Certificates (4), extra 0 18 0
- 336. METEOROLOGICAL SET, as No. 334, but smaller 5 0 0

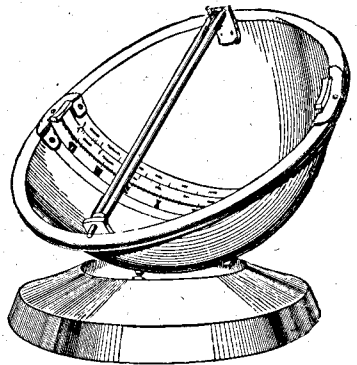


337

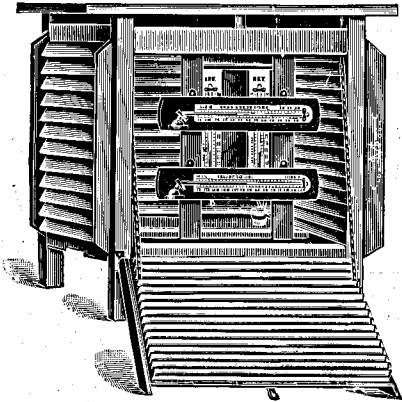
337. METEOROLOGICAL SET, consisting of 5 in. aneroid barometer, Mason's hygrometer, Six's thermometer, 8 in. boxwood thermometer, 5 in. japanned Howard's rain gauge with glass measure, and record calendar for 12 months. Packed in a stained deal case £3 0 0

338. Meteorological Pad, with charts sufficient for one year 0 1 3

339. 12 Large Meteorological Charts, in case ... 0 3 0



365



341



351

- | | |
|--|---------|
| 341. STEPHENSON'S METEOROLOGICAL SCREEN, double louvered and painted white, with padlock, complete with hand-painted opal scale maximum and minimum thermometers, and Mason's hygrometer | £8 15 0 |
| 342. SCREEN, as above, without instruments | 4 0 0 |
| 351. SUNSHINE RECORDER, Campbell-Stokes pattern, universal type, with adjustment for any latitude | 16 0 0 |
| 352. Ditto, but without adjustment, for use at any fixed latitude | 12 0 0 |
| 353. Cards for above, printed with hour scale; a year's supply consisting of 150 short, curved, for winter; 150 long, curved, for summer; 100 straight for equinoxes | 2 5 0 |
| 354. Glass Gauge, etched with hour lines and sub-divisions; facilitates totalling the record | 0 15 0 |
| SUNSHINE RECORDER, Jordan pattern, of simple construction, adjustable for any latitude, registers the actinic effect of the Sun's rays upon a sensitised chart:— | |
| 355. Twin Cylinder Type, records upon separate morning and afternoon charts | 6 10 0 |
| 356. Charts for do., ready sensitised, 100 days' supply | 0 15 0 |
| 357. Single Cylinder Type, records upon one chart only | 3 10 0 |
| 358. Charts for do., ready sensitised, 100 days' supply | 0 7 0 |
| 359. Register Forms, in pads lasting 1 year | 0 2 0 |

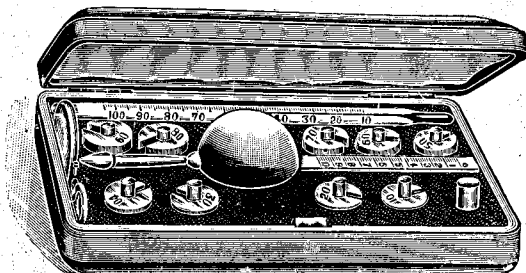
SUN CLOCK AND SOLAR CHRONOMETER.

THE SUN CLOCK shows standard sun time to the minute whenever the sun shines between 6.30 a.m. and 5.30 p.m. It is provided with a table showing how many minutes it is fast or slow compared with standard mean-time (the time that a watch ought to show). It has no movable parts. The **SOLAR CHRONOMETER** shows standard mean time and has a moveable scale.

- | | |
|--|--------|
| 363. SUN CLOCK, with 12 in. bowl in oxidised polished copper, plated engraved scales, heavy plated fittings, latest type of adjuster, complete in every respect, for fixing either to a wall or level surface in any locality | £5 5 0 |
| 364. Ditto, but made to suit one definite locality | 4 0 0 |
| 365. SOLAR CHRONOMETER, of the same size and finish as No. 363 | 5 5 0 |
| 366. Ditto, but made to suit one definite locality | 4 0 0 |
| 367. Plate glass cover (not indispensable) for either of the above | 0 18 0 |

METAL HYDROMETERS.

- 371. SIKES' HYDROMETER**, Excise pattern, boxwood proof and mixing rules and ivory-scale thermometer in mahogany case. Book of tables, instructions and trial jar **£3 10 0**



372

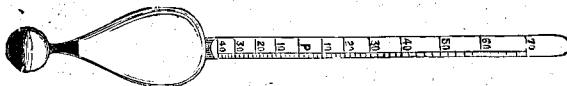
- 372. SIKES' HYDROMETER**, pocket size, with thermometer, weights and magnifier, in morocco case. Miniature book of tables **£3 15 0**
- 373. BEAUME'S HYDROMETER**, gilt metal in tin case, for heavy liquids **1 0 0**
- 374. Ditto**, for light liquids **1 0 0**
- 375. TWADDLE'S HYDROMETER**, gilt metal in tin case, Nos. 1, 2, and 3, each, 22/-; No. 4, 24/-; Nos. 5 and 6 each **1 6 0**
- 376. BARKTROMETER**, gilt metal, in tin case **1 2 0**
- 377. LACTOMETER**, gilt metal, round bulb, flat stem, in tin case **1 2 0**
- 378. BATES' SACCHAROMETER**, with four poise weights and thermometer, in mahogany case **3 15 0**



379

- 379. SALINOMETER**, gilt metal, in tin case **£0 7 6**
- 380. Ditto**, scaled one side in 32nds, and ounces per gallon on the other **0 8 6**
- 381. Salinometer Thermometer** **0 5 0**
- 382. Salinometer Pot**, copper **0 6 6**
- 383. MARINE "LOAD LINE" HYDROMETER**, German silver, in tin case **0 9 6**
- 384. Ditto**, Board of Trade pattern **0 15 0**
- 385. "Load Line" Hydrometer Tables** **0 1 0**

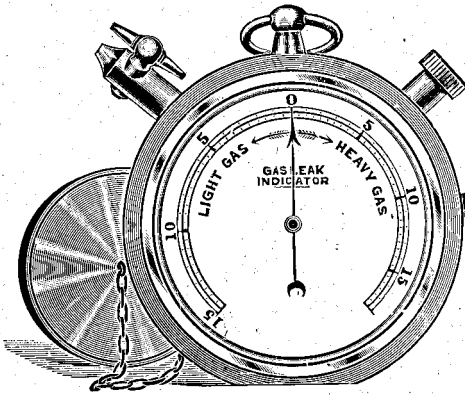
GLASS HYDROMETERS.



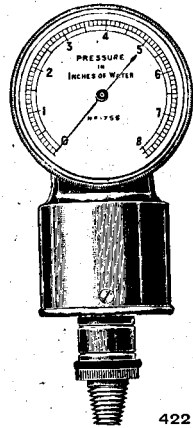
389

- 389. SPIRIT HYDROMETER**, shot poise, paper scale, - 40° to +.70° proof, in case **£0 4 0**
- 390. Ditto**, mercury poise, ivory scale **0 4 6**
- 391. BEAUME'S HYDROMETER**, for liquids heavier than water, range 0/50 **0 4 0**
- 392. Ditto**, for liquids lighter than water, range 10/50 **0 5 0**

394. TWADDLE'S HYDROMETER, shot poise, paper scale, in case, Nos. 1 to 6	...	...	...	...	...	each	£0 3 0
395. Ditto, mercury poise, ivory scale	..	...	...	...	...	..	0 4 0
396. Ditto, set of 6, mercury poise, ivory scale, with thermometer, in mahogany case	...	...	...	...	...	...	1 15 0
397. SACCHAROMETER, range 0/50 lbs., in case	...	...	...	...	...	...	0 4 6
398. Ditto, any ordinary range with 50° in the scale, say 1000/1050	...	...	...	...	...	...	0 8 0
399. SIKES' HYDROMETER, standard quality	...	...	...	...	...	...	0 12 6
400. Ditto, set of 5, 0/100 × 20°, in mahogany case	...	...	...	...	...	...	3 5 0
405. SALINOMETER, shot poise, in case	...	...	...	...	...	...	0 4 0
406. ACCUMULATOR HYDROMETER, shot poise, flat bulb, paper scale, range 1100/1250, in case, 6 in., 4/-; 9 in.	...	...	...	...	...	...	0 5 0
407. PETROL HYDROMETER, in case	..	...	...	...	...	...	0 3 6
408. BRINEOMETER, range 0/100°/c, in case	...	...	...	...	...	...	0 5 0
409. LACTOMETER, mercury poise, ivory scale, with milk scale on one side and Sp. Gr. degrees on the other	...	...	...	...	...	...	0 4 0

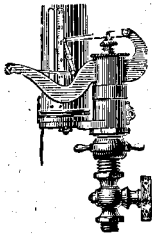


421

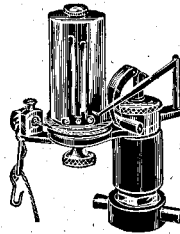


422

421. **GAS LEAK INDICATOR**, a highly sensitive instrument for instantly detecting the presence of gas. The maximum effect is attained within two or three minutes; on opening the valve in pure air, the hand will immediately return to zero £4 15 0
422. **POCKET GAS PRESSURE GAUGE**. This is a reliable instrument. The graduated circle is made to revolve so that any small deviation of the index hand from zero can be easily adjusted. In morocco case 2 12 0



425



426

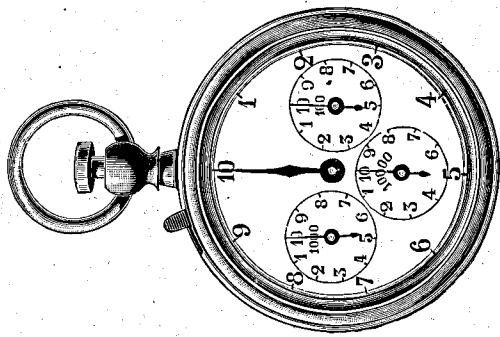
425. **RICHARDS' STEAM INDICATOR**, improved pattern, in teak case with three springs and scales; suitable for speeds up to 150 revolutions per minute £9 0 0
426. **M'INNES' Ditto**, suitable for speeds up to 250 revolutions per min. 9 10 0
427. **Extra spring and scale** for either of above 0 15 0
428. **Drum Spring** 0 2 6

- 431. **SUPERFINE METALLIC PAPER**, size 7½ in. × 3¾ in., for Richards' Indicator; packet of 240 sheets, 4/6; 360 sheets £0 6 0
 - 432. **Ditto**, 6½ in. × 3 in., for M'Innes' Indicator; packet of 240 sheets 0 4 6
 - 433. **Best Italian Hemp Cord**, large hank 0 2 6
 - 434. **Wire Core Cord**, 25 ft. hank 0 3 0
- Also Crosby Indicators for steam, gas, and oil engines; quotations given.*

SPEED INDICATORS.

YOUNG'S SPEED INDICATOR gives at a glance any speed up to 10,000 revolutions per minute. It is made in two ranges:—

- 438. Giving speeds of 100—500 and 400—2,000 revs. per minute £4 8 0
- 439. Giving speeds of 500—2,500 and 2,000—10,000 revs. per minute 6 5 0
- 440. **Leather case** for either of the above 0 6 0
- 441. **REVOLUTION COUNTER**, with three dials, registering rotations in either direction to 10,000, in nickel case with automatic set-back 0 18 0
- 442. **Ditto**, with four dials, registering to 100,000 1 1 0



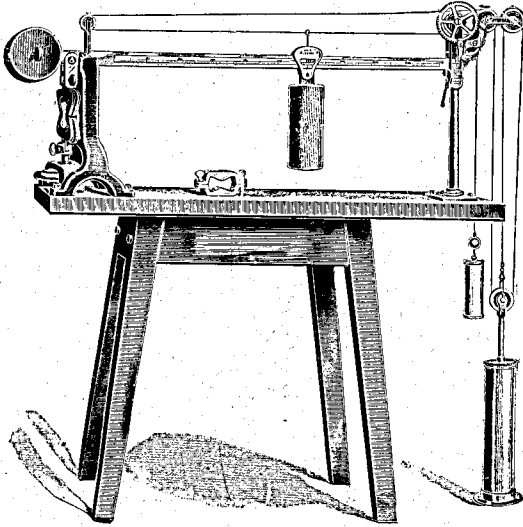
444.

- 443. **POCKET TALLY REGISTER** or Number Counter, with three dials, registering from 1 to 1,000, with automatic set-back £0 18 0
- 444. **Ditto**, with four dials, registering to 10,000 1 1 0
- 445. **THE COWEY SPEED INDICATOR** for motor cycles has been specially designed for use on the road, and can be relied upon as invariably accurate under all conditions. The attached odometer clearly shows the total mileage run up to 10,000 miles, and then automatically sets itself at zero and starts again. Made to register from 5 to 40, or from 10 to 60 miles per hour £5 5 0

THE ELLIOTT SPEEDOMETER for motor cars, is made in several patterns:—

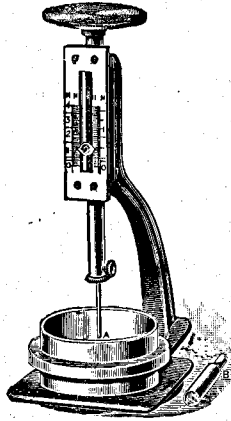
- 449. **SPEED INDICATOR**, calibrated from 5 to 50 miles per hour, with cyclometer reading in miles and 1/10ths to 9,999 miles, finished in brass or nickel, with fittings suitable for friction, live axle or gear drive £9 10 0
- 450. **Ditto**, calibrated from 5 to 40, 5 to 50, or 10 to 60 miles per hour, with cyclometer as above and additional trip hand reading in 1/10ths of a mile to 100 miles 14 10 0
- 451. **STANDARD CYCLOMETER**, reading to 9,999 miles with trip hand reading in 1/10ths of a mile up to 100 miles, and adjustable while travelling. Finished in brass or nickel with fittings for friction, live axle, or gear drive 8 5 0

CEMENT TESTING APPARATUS.



461

461.	CEMENT TESTING MACHINE for 1 in. briquettes, reading from 0 to 1,000 lbs., on ash top, with legs. All the parts are well finished and lacquered, with ball and socket motion clips	... .. £22 17 0
462.	Automatic Regulator , extra	... .. 6 16 0
463.	CEMENT TESTING MACHINE , as above, but of cheaper finish, on ash top, without legs. Very suitable for Builders	... .. 18 15 0
464.	Dr. MICHAELIS'S CEMENT TESTING MACHINE , to 1,000 lbs., with shot run, spring balance, two buckets, etc. The fittings are of polished gun-metal	... .. 23 5 0
465.	Ebonised Table for above	... .. 3 15 0
466.	Frame (only) of glass cover	... .. 2 5 0
467.	STANDARD TESTING SIEVE , 10 in. dia., 20 or 30 mesh, with wood rim, for sand	... .. 0 8 0
469.	Ditto , 7 in. dia., 76 mesh, with wood rim, for cement	... .. 0 8 0
470.	Ditto , ,, 180 ,, ,, ,,	... .. 0 19 0
475.	STANDARD GUN-METAL MOULD for 1 in. briquette, in two parts held together by thumbscrews	... .. 0 19 0
476.	Planished Iron Plate for use with above	... .. 0 1 0
477.	SENSITIVE BALANCE for weighing residues	... .. 2 0 0

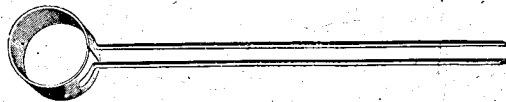


478



480

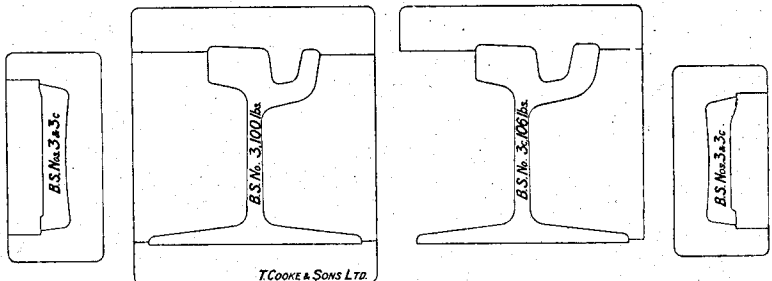
- | | |
|--|---------|
| 478. VICAT NEEDLE APPARATUS for ascertaining the commencement of hardening, time of setting, and correct consistency ... | £2 12 0 |
| 479. Ditto, with dash-pot ... | 3 15 0 |
| 480. B.S. WEIGHTED NEEDLE, for testing setting time ... | 0 19 0 |
| 481. STANGER AND BLOUNT'S SPECIFIC GRAVITY BOTTLE ... | 0 8 0 |



482

- | | |
|---|--------|
| 482. LE CHATELIER EXPANSION GAUGE, with glass plates and weight | £0 3 0 |
| 483. Millimeter Rule, 4 in., steel, for measuring expansion ... | 0 1 6 |
| 484. COPPER TANK for boiling Le Chatelier specimens, complete with thermometer ... | 2 2 0 |
| "British Standard Specification for Portland Cement (including instructions for testing)" ... | 0 6 0 |

STANDARD RAIL AND FISHPLATE TEMPLATES. Messrs. T. COOKE & SONS, Ltd., have been appointed by the Engineering Standards Committee, sole makers of Standard and Commercial Templates of British Standard-Section tramway rails, bull-head and flat-bottom railway rails and fishplates. Messrs. COOKE have supplied to the National Physical Laboratory at Bushey, standard sets of templates, which have a guaranteed accuracy of $\frac{1}{1000}$ th inch, and the N.P.L. is ready to compare commercial sets with these standards at a small charge, and if found accurate to issue a certificate to that effect. The commercial sets are made of nickel, and their accuracy is within $\frac{1}{1000}$ th in.



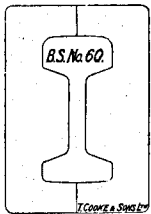
Tramway Rail and Fishplate Templates.

LONDON, YORK & CAPE TOWN

TRAMWAY RAIL AND FISHPLATE TEMPLATES. The set of Templates for each weight of straight and corresponding curved rail and its fishplates (Report No. 2*) comprises fourteen pieces.

	No. of "B.S." Section	Weight of Rail in lbs. per yd.			Price per Set
		Straight	Curved		
491.	1 and 1c.	90	96	...	£13 15 0
492.	2 " 2c.	95	101	...	13 15 0
493.	3 " 3c.	100	106	...	13 15 0
494.	4 " 4c.	105	111	...	13 15 0
495.	5 " 5c.	110	116	...	13 15 0
EXTRAS.	If made in steel	...	...	...	1 5 0
	Packed in a mahogany case	...	...	...	4 8 0
	National Physical Laboratory certificate to any set	...	...	...	0 10 0
** Specifications and Sections of British Standard Tramway Rails and Fishplates "					1 6 0

BULL-HEAD RAILWAY RAIL TEMPLATES. The set of Templates for each weight of rail (Report No. 9†) comprises three pieces.

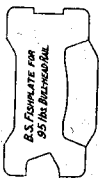


Bull-Head Railway Rail Templates.

	Weight of Rail in lbs. per yd.				Price per Set
498.	100	...	...	...	£6 11 0
499.	95	...	...	...	6 11 0
500.	90	...	...	...	6 11 0
501.	85	...	...	...	6 11 0
502.	80	...	...	...	6 11 0
505.	75	...	...	...	6 5 0
506.	70	...	...	...	6 5 0
507.	65	...	...	...	6 5 0
508.	60	...	...	...	6 5 0
EXTRAS.	If made in steel	...	...	...	0 15 0
	Packed in a mahogany case	...	...	...	1 1 0
	National Physical Laboratory certificate to any set	...	...	...	0 5 0

† " British Standard Specification and Sections of Bull-Head Railway Rails " nett. 1 6 0

FISHPLATE TEMPLATES FOR BULL-HEAD RAILWAY RAILS. The set of Templates of Fishplates for each weight of Rail (Report No. 47 §) comprises two pieces.



Fishplate Template for Bull-Head Railway Rail.

	Weight of Rail in lbs. per yd.	Weight of Fishplates in lbs. per pair		Price per Set
513.	100	...	32½	£5 13 0
514.	95	...	32½	5 13 0
515.	90	...	32½	5 13 0
516.	85	...	32½	5 13 0
517.	80	...	29½	5 13 0
518.	75	...	26½	5 13 0
519.	70	...	26½	5 13 0

Fishplates for 65 lbs. and 60 lbs. per yd. Bull-Head Rails have not been standardized.

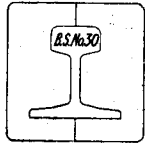
EXTRAS.	If made in steel	...	...	...	0 10 0
	Packed in a mahogany case	...	...	...	0 16 0
	National Physical Laboratory certificate to any set	...	...	...	0 4 6

§ " British Standard Specification and Sections of Steel Fishplates for 'B.S.' Bull-Head and Flat-Bottom Railway Rails " nett. 0 13 0

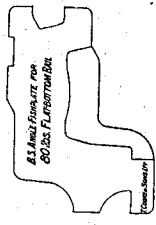
T. COOKE & SONS, LTD

FLAT-BOTTOM RAILWAY RAIL TEMPLATES. The set of Templates for each weight of Rail (Report No. 11†) comprises three pieces.

	Weight of Rail in lbs. per yd.	Price per Set		Weight of Rail in lbs. per yd.	Price per Set
524.	100	£7 10 0	535.	55	£6 18 0
525.	95	7 10 0	536.	50	6 18 0
526.	90	7 10 0	537.	45	6 18 0
527.	85	7 10 0	538.	40	6 18 0
528.	80	7 10 0	539.	35	6 11 0
529.	75	7 4 0	540.	30	6 11 0
530.	70	7 4 0	541.	25	6 11 0
531.	65	7 4 0	542.	20	6 11 0
532.	60	7 4 0			
EXTRAS.	If made in steel, Nos. 524 to 532	...	...	...	0 15 0
	Ditto, Nos. 535 to 542	...	...	...	0 12 6
	Packed in a mahogany case, Nos. 524 to 532	...	...	...	1 1 0
	Ditto, Nos. 535 to 542	...	...	...	0 19 0
	National Physical Laboratory certificate to any set	...	...	...	0 5 0
††	British Standard Specification and Sections of Flat-Bottom Railway Rails	...	...	...	1 6 0



Flat-Bottom Railway Rail Templates.



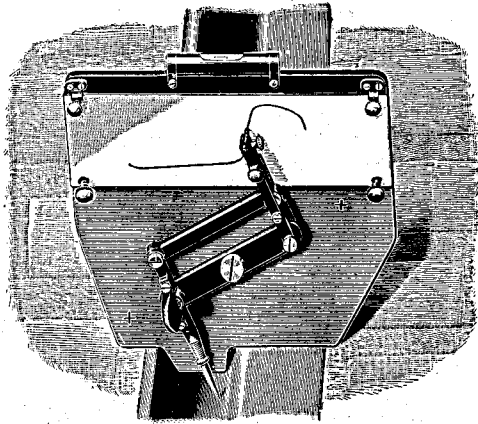
Fishplate Templates for Flat-Bottom Railway Rails.



FISHPLATE TEMPLATES FOR FLAT-BOTTOM RAILWAY RAILS. The set of Templates of Fishplates for each weight of rail (Report No. 47||) comprises two pieces.

	Weight of Rail in lbs. per yd.	Angle Fishplates Weight in lbs. per pair (4-bolt)	Price per Set	Shallow Fishplates Weight in lbs. per pair (4-bolt)	Price per Set
547.	100	57½	£9 8 0	39	£5 12 6
548.	95	53½	9 8 0	36¼	5 12 6
549.	90	49½	9 8 0	33¾	5 12 6
550.	85	45½	9 8 0	31	5 12 6
551.	80	41¾	9 8 0	28¾	5 12 6
552.	75	38¾	9 8 0	26¾	5 12 6
553.	70	35¾	9 8 0	24¾	5 12 6
554.	65	32¾	9 8 0	22¾	5 12 6
555.	60	29¾	9 8 0	20¾	5 12 6
556.	55	26¾	9 8 0	18	5 12 6
557.	50	23¾	9 1 0	16½	5 6 0
558.	45	21	9 1 0	14¾	5 6 0
559.	40	19	9 1 0	13¾	5 6 0
560.	35	17	9 1 0	12¾	5 6 0
561.	30	15	9 1 0	11¾	5 6 0
562.	25	13	9 1 0	10½	5 6 0
563.	20	11	9 1 0	9	5 6 0
EXTRAS.	If made in steel, Angle, 14/-; Shallow	...	...	...	0 10 0
	Packed in a mahogany case, 60 lbs. to 100 lbs., Angle, 22/6;	...	...	...	...
	Shallow	...	...	...	0 16 0
	Packed in a mahogany case, 20 lbs. to 55 lbs., Angle, 19/-;	...	...	...	...
	Shallow	...	...	...	0 14 0
	National Physical Laboratory certificate to any set	...	...	...	0 4 6
||	British Standard Specification and Sections of Steel Fishplates for 'B.S.' Bull-Head and Flat-Bottom Railway Rails	...	...	...	0 13 0

RAIL MEASURING MACHINES.



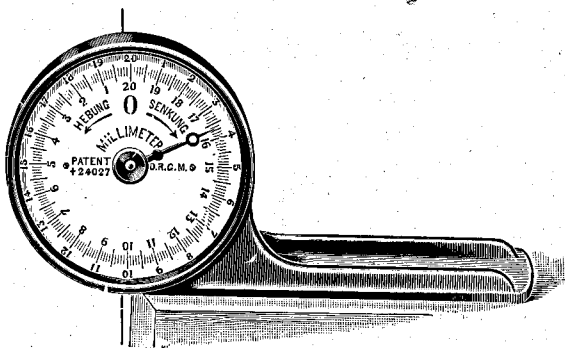
571

571. RAIL MEASURING MACHINE. This apparatus is for obtaining an accurate profile of the head of any tramway rail while in situ, so that the amount of wear which it has sustained can be easily gauged. It works upon the principle of a pantagraph, and the drawing is made upon a strip of paper which is fastened into the machine. The wear is measured by using the bottom of the groove, where no appreciable wear is supposed to take place, as a base. The instrument is of brass, well finished, and is fitted into a mahogany case £5 0 0

572. Ditto, for use with bull-head or flat-bottom rails, with adjustable bubble, in case 10 0 0

573. Ditto, a more exact apparatus consisting of a double pantagraph arrangement with which it is possible to obtain a complete profile of the whole head of the rail, including its undersides where no wear takes place, without reversing the apparatus ... 12 10 0

DEFLECTOMETER.

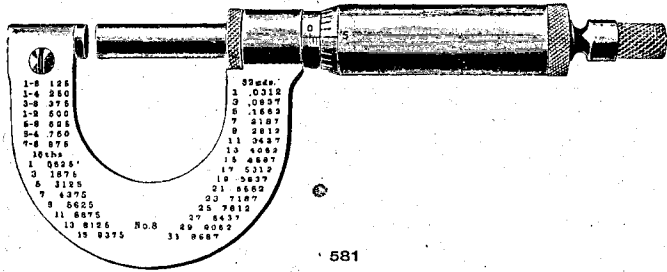


575

575. DEFLECTOMETER, for accurately measuring vertical and horizontal deflections in beams, girders, floors, columns, etc. It is made of metal with enamel dial, 8 c/m. dia., graduated to $\frac{1}{10}$ th m/m., or in inches to $\frac{1}{1000}$ th in. £3 15 0

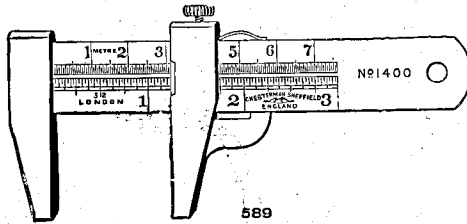
576. Ditto, with maximum hand 4 8 0

MICROMETER CALIPERS.



581. **MICROMETER CALIPER**, capacity 1 in., reading to $\frac{1}{1000}$ in., improved pattern, with friction attachment and clamp, in morocco case ... **£1 18 0**
582. Ditto, reading to $\frac{1}{10000}$ in. **2 2 0**
583. Ditto, capacity 2 in., reading to $\frac{1}{1000}$ in. **2 14 0**
584. Ditto, reading to $\frac{1}{10000}$ in. **2 17 0**

Made in several other sizes and patterns.



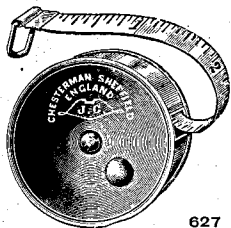
588. **STEEL CALIPER GAUGE**, divided on one side, inches into 32nds and circumference measure into 16ths ... 3 in. 4 in. 6 in.
7/- 7/6 8/6
589. Ditto, inches into 32nds and centimetres into millimetres and halves 7/- 7/6 8/6
590. Ditto, divided on both sides, inches into 32, 48, and 50ths, and centimetres into millimetres and halves 8/- 8/6 9/6

Made in several other patterns and measurements.

591. 1 ft. **FOUR-FOLD POCKET RULE**, $\frac{3}{8}$ in. wide when closed, marked $\frac{1}{16}$ ths and $\frac{1}{32}$ ths, with German silver joints ... Boxwood Ivory
£0 2 6 £0 6 6
592. Ditto, $\frac{3}{8}$ in. wide **0 3 0 0 8 6**
593. 2 ft. **FOUR-FOLD POCKET RULE**, 1 in. wide when closed, marked $\frac{1}{16}$ ths, $\frac{1}{32}$ ths, and $\frac{1}{64}$ ths ins., German silver joints, bevelled edges inside, with 8 scales **0 4 6 1 7 0**
594. Ditto, $1\frac{1}{8}$ in. wide, with 16 scales and protractor joint ... **0 5 6 1 12 6**
595. Ditto, $1\frac{1}{8}$ in. wide, bevelled edges inside and outside, with 8 scales, 4 chain scales, and protractor joint **— 1 15 0**
596. Ditto, $1\frac{1}{8}$ in. wide, as No. 594 **— 1 17 0**
597. Ditto, $1\frac{3}{8}$ in. wide, as No. 595 **0 7 6 —**
598. Ditto, $1\frac{3}{8}$ in. wide, with German silver outside joints, bevelled edges inside, 16 scales and protractor joint ... **0 7 6 —**
599. **FOLDING RULE OR ROD**, boxwood or whitewood, with steel spring joints and German silver-ends; inches both sides, or inches and centimeters:—
- | | | | |
|--------------------|------------|---------------------|--------------|
| 3 ft., 6-fold ... | 2/6 | 1 met., 6-fold ... | 0 2 6 |
| 5 ft., 10-fold ... | 3/6 | 2 met., 10-fold ... | 0 4 0 |
| 6 ft., 12-fold ... | 4/- | | |
600. **FOLDING ROD**, lancewood, large:—
- | | | | |
|-------------------|------------|-------------------|--------------|
| 5 ft., 5-fold ... | 6/- | 6 ft., 6-fold ... | 0 7 6 |
|-------------------|------------|-------------------|--------------|

SPRING MEASURES.

Marked both sides,
Feet and Metres.



In one width
only, $\frac{1}{4}$ in.

627

		3 ft.	6 ft.	9 ft.	12 ft.
626. LINEN TAPE, in brass case, with spring stop	...	2/6	3/3	4/-	5/-
627. Ditto, in German silver case, with spring stop	...	3/3	4/3	5/6	7/-
628. STEEL TAPE, in brass case, with spring stop	...	4/-	5/3	6/9	8/3
629. Ditto, in German silver case, with spring stop	...	4/9	6/3	8/-	10/-

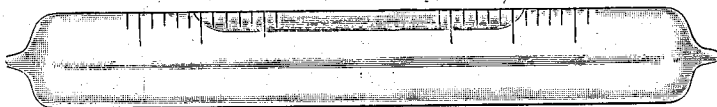
BLOCK LEVELS.



646

643. SPIRIT LEVEL, ebony, with brass top plate and under tips, with sight through, 9 in.	...	...	...	...	£0 4 0
644. Ditto, 12 in.	...	...	...	...	0 6 0
645. Ditto, solid gun metal, with divided bubble, adjustable, fitted into a mahogany case, 9 in.	...	...	...	...	1 10 0
646. Ditto, 12 in.	...	...	...	...	2 0 0
647. Ditto, 18 in.	...	...	...	...	2 10 0
648. SMALL BRASS TUBE LEVEL, in turned boxwood case, 4 in.	...	...	...	...	0 3 0

For Platelayer's Levels see Surveying Instrument Catalogue (Section I.)



BUBBLES, unmounted, machine-ground to a regular curvature, which gives much greater accuracy than hand grinding. In all sizes and degrees of sensitiveness up to $\frac{1}{2}$ sec., per $\frac{1}{10}$ in. of run. A list of standard sizes with prices will be sent on request.

MARINE CLINOMETERS.

651. SHIP'S CLINOMETER, consists of a circular tube containing mercury, with a contraction in the lower part to prevent undue oscillation. The tube is sunk into an oak or mahogany board, and is surrounded by a silvered-metal scale, divided into degrees. There are two indices to show the maximum roll	...	...	...	...	£3 10 0
652. Ditto, as used by the U.S. Navy, with 5 in. dial	...	...	...	...	2 17 0

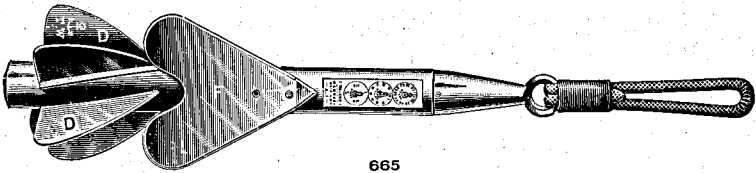
DEEP SEA SOUNDING MACHINES.

THE LUCAS SOUNDING MACHINE is specially constructed for great depths. The wire, as it is paid out, passes over a measuring wheel, and the number of fathoms is shown on a dial. The brake is kept out of action by the strain on the wire, but immediately the sinker touches the bottom it stops the drum.

656. LUCAS SOUNDING MACHINE for depths of 400 fathoms, with handles and spanners	£37 10 0
--	-----	-----	-----	-----	----------

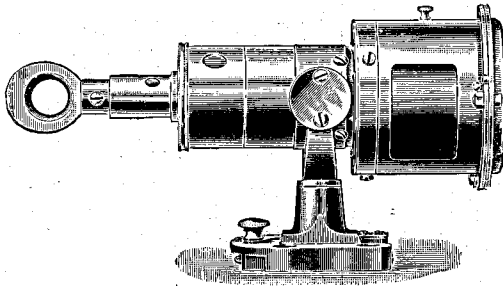
- | | | |
|------|--|---------|
| 657. | LUCAS SOUNDING MACHINE, for 1,000 fathoms | £45 0 0 |
| 658. | Ditto, for 5,000 fathoms, fitted with rope wheel for driving from ship's winch, or electric motor | 78 0 0 |
| 659. | Sinkers, lead with tube at bottom, 20 lbs., 7/-; 30 lbs. | 0 10 0 |
| 660. | Sounding Wire, bright steel, No. 22 gauge, in lengths to suit above machines, per 1,000 fathoms | 1 17 0 |
| 661. | WALKER'S "HARPOON" SOUNDING MACHINE, a thoroughly reliable mechanical sounder; used with the ordinary sounding winch, and wire line | 3 8 0 |
| 662. | SOUNDING LINE, with weight, 25 ft., 10/-; 50 ft., 19/-; 100 ft. | 1 17 0 |

SHIP-LOGS.



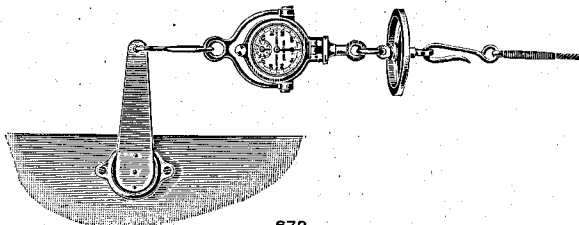
665

- | | | |
|------|---|---------|
| 665. | WALKER'S PATENT A1 "HARPOON" SHIP-LOG; unequalled for accuracy and durability, self-registering as it is drawn through the water | £3 16 0 |
|------|---|---------|



666

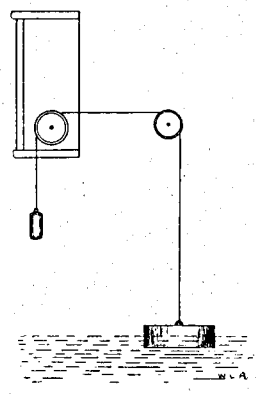
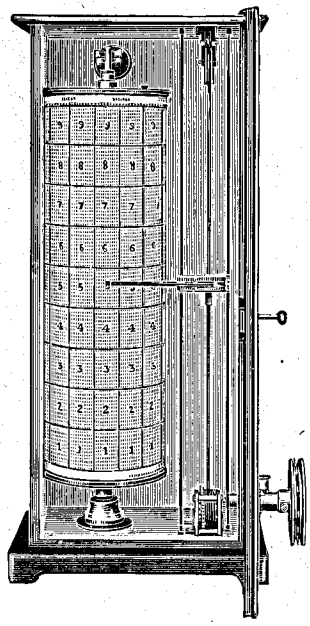
- | | | |
|------|--|---------|
| 666. | WALKER'S PATENT "CHERUB" SHIP-LOG, with registering apparatus for fixing to the taffrail, two rotators, two shoes, one hook and three glasses | £6 10 0 |
| 667. | Extra rotators for ditto | 1 0 0 |
| 668. | Brass Fly-wheel Governor, for use with ship-log | 0 15 0 |
| 669. | Best Quality Log Line, 40 fathoms, No. 8, 16/-; No. 10 | 1 0 0 |
| 670. | Ditto, 50 fathoms, No. 8, 20/-; No. 10 | 1 5 0 |



672

- | | | |
|------|--|--------|
| 672. | WALKER'S PATENT "EXCELSIOR" YACHT-LOG, complete with register, rotator, one hook, one shoe, 100 feet of line, and sinker, packed in a box | £4 8 0 |
| 673. | Extra rotators for ditto | 0 13 0 |

TIDE GAUGES.



681

681

681. WATER LEVEL RECORDER OR TIDE GAUGE, for use in harbours, rivers, reservoirs, tanks, etc. This is a mechanical Recorder; the drum is driven by a reliable clock, which can be made to rotate daily or weekly, to order, and the position of the pen depends upon the movements of a float, to which it is connected. The charts are 14 in. high by 19 in. wide; the instrument can be made to draw a diagram to any particular scale. The gear is of gun-metal, machine cut. The pen is carried on an accurate slide; it is always in sight and forms an efficient indicator. The chain is of phosphor bronze, 20 ft. long. The float is of strong tinned copper, 19 in. dia., with brass swivel. The counterweight is of cast iron, 11 lbs. in weight; a strong grooved brass counter-pulley is provided. The case is of cast iron, and the mechanism is robust; there are no delicate parts to adjust **£40 0 0**

682. Charts; ordinary quality, 100 for **35/-**; 500 for **3 10 0**

683. Ditto, accurately lithographed on heavy non-absorbent paper with shaded night portions, to suit special requirements, 100 for **120/-**; 500 for **11 5 0**

687. BALDWIN LATHAM'S RECORDING TIDE GAUGE, consisting of a vertical cylinder, 5½ in. dia. × 10½ in. high, which is rotated once in 7 days by a spring lever clock of best make. The maximum rise and fall of tide is reduced by suitable gearing to about 9 in. on the chart. The measuring wheel is 2 ft. in circumference, and is sufficiently wide to be used for a maximum rise of tide of 40 ft. The float is of copper, 8½ in. dia. The instrument can be geared suitable for any scale from ¼th to ⅝th. It is enclosed in an ebonized case with glass doors and glass sides. With each instrument is supplied a spare beak pen, a supply of ink, 2 boxes of leads, a small sharpening file, and 50 ft. of spare flexible copper cord **£85 0 0**

A descriptive pamphlet will be supplied free on request.

The cost of packing the above in a zinc-lined case, and delivering F.O.B. London, is £4 nett.

688. Charts. The cost of lithographing any special chart on stone is **£4 0 0**

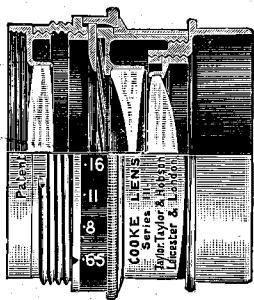
689. Printing in red on stout paper, 100 for **40/-**; 500 for **7 5 0**

Also Water Level Recorders and Alarms for reservoirs, tanks, etc. Quotations upon request.

COOKE LENSES

It is now fully recognised that it is impossible to produce one lens that will meet all the varied requirements of modern photography. For instance, portraiture requires a lens possessing great speed combined with good definition over a limited area, whereas for wide-angle work the primary essential is extreme covering power.

To assist purchasers in selecting the most suitable lens for their purpose we give a short explanation of the capabilities of each series.



Series II a., F/3.5. Extremely rapid with brilliant definition over large plates; not suitable for very wide angle work, nor must great depth of focus at full aperture be expected.

Series II., F/4.5. The above remarks also apply in a great measure to this series, except that they are a little less rapid. Specially useful to press workers.

Series IV., F/5.6. These are well adapted for instantaneous work with between-lens shutters, and for colour photography.

Series III., F/6.5. These may be considered universal lenses, suitable for general work such as landscapes, street scenes, etc. They may be used as wide-angle lenses when slightly stopped down.

Series III a., F/6.5. Specially intended for Kodaks and other compact hand cameras. They are particularly suited for between-lens shutters.

Series V., F/8. Very suitable for commercial photography, giving keen definition at every point of the plate at full aperture.

Cooke Portrait Lenses. Specially designed for high-class studio work.

Cooke Primoplane Lenses. These are particularly adapted for wide angle work.

Cooke Extension Lenses. These are used to lengthen the focus of any normal Cooke Lens, and are very useful in landscape work.

Full price list and descriptive booklet of Cooke Lenses free on request.

**SCIENTIFIC AND TECHNICAL BOOKS ON
METEOROLOGY, ETC.**

	s. d.
Aneroid Barometer : How to use it	E. Whympier 3 0
Applied Mechanics	D. A. Low 9 6
Applied Methods of Scientific Management	F. A. Parkhurst 10 6
Astronomy, Handbook of	D. Lardner and E. Dunkin 12 0
Astronomy, The Visible Universe	J. E. Gore 20 0
Astronomical Glossary, An	J. E. Gore 3 0
Atlas of Meteorology (1899)	Bartholomew 65 0
Atmosphere : Its Characteristics and Dynamics	F. J. B. Cordeiro 13 0
Bridges, Oblique, Practical and Theoretical	G. W. and J. H. W. Buck 15 0
British Rainfall (published annually)	H. R. Mill 12 6
British Rainfall (published annually)	S. G. Symon 6 0
Building Construction, Practical	J. P. Allen 9 6
Calculations in Hydraulic Engineering :—	
Part I., Fluid pressure and the calculation of its effects	T. Claxton Fidler 8 0
Part II., Calculations in Hydro-kinetics	T. Claxton Fidler 9 6
Calculator, Number, Weight, and Fractional	Wm. Chadwick 22 6
Calculator, Weight	H. Harban 30 0
Catalogue of the Library of the Royal Meteorological Society ... ..	... .. 12 6
Cements, Mortars, and Concretes : Their Physical Properties	M. S. Falk 13 0
Cement in Sea-water	A. Poulsen 3 9
Cement Users and Buyers' Guide	" Calcare " 2 0
Charts of the Atmosphere for Aeronauts	A. L. Roitch and A. H. Palmer 10 6
Civil Engineering, as applied in Construction	L. F. Vernon Harcourt & H. Fidler 20 0
Civil Engineering Practice, A Manual of, for the use of Municipal and County Engineers	Noel Taylor 31 0
Climate considered specially in Relation to Man, (1908)	R. de C. Ward 7 6
Climatological Atlas of India (1906)	Sir John Eliot 45 0
Cloudland, A Study on the Structure and Character of Clouds (1894)	Rev. W. C. Ley 9 6
Cloud Studies (1905)	A. W. Clayden 15 0
Concrete Construction, Methods and Cost	H. P. Gillette 26 0
Concrete Inspection	C. S. Hill 5 6
Concrete and Reinforced Concrete	H. A. Reid 26 0
Concrete Bridges and Culverts	H. G. Tyrell 15 6
Concrete : Its Nature and Uses	G. L. Sutcliffe 11 0
Daily Weather Reports of the Meteorological Office (published quarterly) per qr.	6 0
Dock Engineering, The Principles and Practice of	Brysson Cunningham 37 6
Earth's Atmosphere, The	T. L. Phipson 3 0
Earthquakes	C. E. Dutton 7 6
Earthquakes and other Earth Movements	J. Milne 6 0
Elementary Theory of the Tides	T. K. Abbott 2 6
Elementary Meteorology (1894)	W. M. Davis 12 6
Engineering Construction in Steel and Timber	W. H. Warren 22 6
Engineering Standards Committee's Publications (list sent on request) ... ..	... ..
Engineer's Pocket Book of Reinforced Concrete	E. Lee Heidenreich 15 6
Experimental Science	G. M. Hopkins 26 0
Facts, Figures and Formulæ for Irrigation Engineers (1911)	R. B. Buckley 15 6
Force of the Wind	H. Chatley 4 0
Gauges at a Glance	Thomas Taylor 6 0
Gyroscope, The	V. E. Johnson 2 0
Handbook of Climatology (1903)	J. Hann, translated by R. de C. Ward 16 0
Handbuch der Klimatologie (1908-11)	J. Hann —
Harbour Engineering, The Principles and Practice of	Brysson Cunningham 20 0
Hints to Meteorological Observers	Wm. Marriott 2 0
Hydraulic Cement : Its Properties, Testing and Use	F. P. Spalding 10 6
Hydraulic Power and Hydraulic Machinery	Henry Robinson 31 0
Hydraulic Tables and Diagrams for Practical Engineers	Capt. A. ff. Garrett, R.E. 19 0
Hydraulics, in two volumes :—	
Part I., Hydraulic Machinery	S. Dunkerley 13 0
Part II., The Resistance and Propulsion of Ships	S. Dunkerley 13 0

T. COOKE & SONS, LTD

	s.	d.
Hydrology, Manual of	13	0
Hygrometer Tables	3	0
Hydrometer Tables	4	6
Hydrostatics and Pneumatics, Problems and Answers with Worked Solutions		
Sir P. Magnus	5	0
Ice Making Machines	2	6
M. Ledoux and J. E. Denton		
International Meteorological Tables (1890)	35	0
International Cloud Atlas (1896)	20	0
International Catalogue of Scientific Literature, Meteorology (published annually)	19	0
Irrigation of Mesopotamia (2 volumes)	25	0
Sir Wm. Willcocks ... the two		
Journal of the Scottish Meteorological Society (published annually)	16	0
Latitude and Longitude: How to find them	2	6
W. J. Millar		
Law, Handbook for Engineers and Solicitors engaged in promoting Private Acts of Parliament	30	0
L. L. Macassey		
Lehrbueh der Meteorologie (1906)	30	0
J. Hann		
Light: An introduction to the Science of Optics	2	0
Lightning Conductors, Modern	8	0
K. Hedges		
Manual of Marine Meteorology (1900)	4	6
W. Allingham		
Manual of Meteorology for Officers of the Merchant Navy	9	6
W. Allingham		
Marine Engineering Rules and Tables	10	6
A. E. Seaton and H. M. Rounthwaite		
Marine Engineering: A Manual of Marine Machinery	26	0
A. E. Seaton		
Materials of Construction: A Treatise on the strength of Engineering Materials		
J. B. Johnson	31	0
Measurement Conversions, English and French, Tables & Diagrams	9	6
R. H. Smith		
Measurement of High Temperatures	21	0
G. K. Burgess and H. Le Chatalier		
Mechanical Engineers' Pocket Book. Tables, Formulae, Rules, and Data		
D. K. Clark and H. P. Powles	7	6
Mechanical Engineering Terms, Dictionary of	9	6
J. G. Horner		
Mechanics applied to Engineering	11	6
J. Goodman		
Meteorological Record: Monthly Results of Observations (quarterly)		
Royal Meteorological Society per. qr.	2	0
Meteorology, Practical and Applied (1910)	13	0
Sir J. W. Moore		
Meteorology, Descriptive (1910)	16	0
Willis L. Moore		
Meteorology, Elementary (1893)	6	0
R. H. Scott		
Meteorology, Modern (1893)	4	6
F. Waldo		
Meteorology: The Elements of Weather and Climate (1893)	3	0
H. N. Dickson		
Metrology, Modern: A Manual of Metrical Units and Systems	16	0
L. D. A. Jackson		
Metric Tables, A Series of	13	0
C. H. Dowling		
Microscope, Construction and Management of	22	6
H. Van Heurck and W. E. Baxter		
Microscope, Half-hours with	1	3
Lankester		
Minerals and Mining, Metalliferous	16	0
D. C. & E. H. Davies		
Motor Vehicles for Business Purposes	11	0
A. J. Wallis-Taylor		
Observers' Handbook (published annually)	4	0
Meteorological Office		
Official Year-book of the Scientific and Learned Societies (annually)	9	6
On the Adjustment and Testing of Telescopic Objectives	6	0
T. Cooke & Sons		
Optical Instruments, Telescopes, Microscopes, and Apparatus for reproducing Maps and Plans	2	0
J. F. Heather		
Optical Tables and Data, for the use of Opticians	7	6
S. P. Thompson		
Optics, Handbook of	6	0
D. Lardner and T. O. Harding		
Optics, System of Applied	37	6
H. D. Taylor		
Petroleum, A Treatise on, in two volumes	56	0
Sir Boverton Redwood the two		
Physics, Experimental and Theoretical	15	6
R. H. Jude		
Pocket Altitude Tables	3	0
S. G. Symons		
Pocket Register for Original Meteorological Observations		
Royal Meteorological Society	2	0
Popular Treatise on the Winds	20	0
W. Ferrel		
Portland Cement, The Modern Manufacture of	16	0
P. C. H. West		
Portland Cement: Its Manufacture, Testing, and Use	20	0
D. B. Butler		
Portland Cement, Specification for	6	0
Engineering Standards Committee		
Practical Cement Testing	15	6
W. Purves Taylor		
Practical Exercises in Elementary Meteorology (1899)	6	6
R. de. C. Ward		
Practical Manual of Tides and Waves	9	6
W. H. Wheeler		

	s.	d.
Principles and Practice of Harbour Construction	W. Shield	19 0
Pumping Machinery, The Principles and Construction of	Henry Davey	26 0
Quarterly Journal of the Royal Meteorological Society ... ..	...	6 0
Receipts, Formulæ and Processes: Scientific, Chemical & Technical	G. D. Hiscox	16 0
Refrigeration and Ice-making Machinery	W. H. Wakeman	2 0
Reinforced Concrete: A Manual of Practice	E. McCullough	8 0
Reinforced Concrete Design Simplified: Diagrams, Tables and Data	J. C. Gammon	13 0
Sanitary Engineering with respect to Water Supply and Sewage Disposal		
	L. F. Vernon Harcourt	17 6
Screw-cutting, Calculation of Change Wheels for	D. de Vries	4 0
Siesmology	J. Milne	6 0
Smithsonian Meteorological Tables (1907) ... ..	...	...
Specifications in detail	F. W. Macey	26 0
Steam Engine Indicator, Richards, A Treatise on	C. T. Porter	11 0
Strains: Handy book for the calculation of, in Girders and similar Structures		
	Wm. Humber	9 6
Surface Air Currents, Life History of (1906)	W. N. Shaw & R. G. K. Lempfert	9 6
System of Applied Optics	H. D. Taylor	37 6
Testing of Materials of Construction	W. C. Unwin	22 6
The Sea Coast: Destruction, Littoral Drift, Protection	W. H. Wheeler	13 0
Theory and Design of Reinforced Concrete Arches	Arvid Reuterdaahl	10 6
Theory and Design of Structures: A Test Book for the use of Engineers and Draftsmen	E. S. Andrew	11 0
Tidal Rivers, their Hydraulics, Improvement, and Navigation	W. H. Wheeler	9 6
Tramways: Their Construction and Working	D. K. Clark	35 0
Traverse Tables for use in Mine Surveying	Wm. Lintern	4 0
Weather: A popular exposition of the nature of Weather Changes from day to day (1887)	Hon. R. Abercromby	6 0
Weather Influences (1904)	E. G. Dexter	10 6
Weather Lore: A collection of Proverbs, Sayings and Rules about the Weather (1898)	R. Inwards	9 6
Weather: Some Facts about (1909)	W. Marriott	0 9
Weather Warnings for Watchers ... ..	...	1 3
Weekly Weather Reports of the Meteorological Office	annual subscription	37 6
Well-boring for Water, Brine and Oil	C. Isler	13 0
Wireless Telegraphy	Gustave Eichhorn	10 6
Wire Gauge, The English	T. Hughes	3 0

INDEX

Accumulator Hydrometer	97	Incubator Thermometers	90
Admiralty-pattern Hygrometers	91	Indicators, Steam	97
Air Pumps	78	Indicators, Speed	98
Airmeter	83	Indicator Papers	98
Alarm Thermometer	89	Jointed Pocket Rules... ..	104
Anemometers	83	Lactometers	96, 97
Aneroids	70	Le Chatelier Expansion Gauge	100
Barographs	78	Lenses, Cooke, Photographic	108
Barometers	69	Levels, Spirit	105
Bath Thermometer	89	Life-buoy Aneroid	76
Beaume's Hydrometer	96	Lind's Anemometer	82
Beckley's Anemometer	82	Livingstone Sets	89
Biram's Anemometers	83	Livingstone Thermometers	89
Block Levels	105	Lucas Sounding Machines	105
Books, Technical	109	Magnetic Compasses	78
Brass-case Aneroids	75	Magnetometers	84
Brewer's Thermometers	88	Magnets	87
Brineometers	97	Marine Barometers	70
Bubbles, Spirit	105	Marine Clinometers	105
Caliper Gauges	104	Mason's Hygrometers	91
Carved-oak Barometers	72	Maximum Thermometers	85
Cement-testing Apparatus	99	McInnes Steam Indicator	97
Charts	93	Measuring Glasses	93
Cherub Ship-log	106	Measures, Spring	105
Chemical Thermometers	90	Mercurial Barometers	69
Clinical Thermometers	91	Meteorological Pads	94
Compass, Liquid	78	Meteorological Sets	93
Cooke Lenses	108	Meteorological Instruments	93
Crosby Steam Indicators	98	Micrometer Calipers	104
Cyclometers	98	Minimum Thermometers	88
Dairy Thermometers	90	Motor Aneroid	70
Deflectometer	103	Pediment Barometers	70
Desk Aneroid	77	Pendant Aneroids	71
Dimenunon Thermometer	87	Petrol Hydrometer	97
Dines' Anemometer	82	Photographic Lenses	108
Earth-temperature Thermometer	86	Pocket Compass	78
Fishplate Templates	101	Pocket Tally Register	98
Fortin's Barometers	69	Portable Airmeters	83
Folding Rules	104	Portable Anemometer	83
Folding Rods	104	Pocket Rules	104
Gas leak Indicators	97	Pocket Thermometers	90
Gas-pressure Gauge	97	Pressure Gauge, Gas	97
Gauges, Rain	92	Prestel's Anemometer	82
Gauges, Tide	107	Rail Temperature Thermometer	90
Glaisher's Rain Gauges	92	Rail Templates	100
Hall Barometers	71	Rail Measuring Machine	103
Harpoon Ship-log	106	Rain Gauges	92
High-speed Anemometer	83	Rainfall Charts	93
Household Thermometers	88	Refrigerator Thermometer	90
Howard's Rain Gauge	93	Registering Rain Gauges	93
Hot-bed Thermometer	90	Recording Anemometer	82
Hydrodeik	91	Recording Barometers	78
Hydrometers	96	Recording Rain Gauges	93
Hygrometers	91	Recording Thermometer	80
		Recording Tide Gauge	107
		Revolution Counter	98
		Richard's Steam Indicators	97
		Robinson's Anemometer	81
		Round-frame Aneroids	72

INDEX (continued)

Salinometers	96, 97	Sun Clock	95
Ship's Clinometers	103	Symon's Rain Gauge... ..	92
Ship-logs	106	Technical Books	109
Sikes' Hydrometer	96	Templates, Rail	100
Silver-mounted Thermometers	89	Templates, Fishplate	101
Six's Thermometers	87	Terrestrial Thermometer	86
Snowdon Rain Gauge	92	Thermographs... ..	80
Speed Indicators	98	Thermometers... ..	85
Spirit Hydrometer	96	Tide Gauges	107
Spring Measures	105	Travelling Aneroids	77
Solar Chronometer	95	Travelling Sets	77
Solar Thermometer	86	Travelling Thermometers	89
Sounding Machines	105	Twaddle's Hydrometer	96
Spirit Levels	105	Two-foot Rules	104
Standard Aneroid	70	Unifilar Magnetometer	84
Standard Barometers... ..	69, 70	Universal Aneroid	76
Standard Thermometers	85	Vicat Needle	100
Standard Rail Templates	100	Water-level Recorders	107
Standard Fishplate Templates	101	Wind-direction Indicator	81
Standard Sieves	99	Wind-direction Recorder	81
Stevenson's Screen	95	Window Thermometer	88
Steel Tape Measures	105	Yacht Aneroid	76
Steam Indicators	97	Yacht Log	106
Students' Barometer	69	Young's Speed Indicator	98
Sugar-boiling Thermometer	88		
Sunshine Recorders	95		

