

# Scientific Instruments

*S. & M. Tycos*

*Taylor Instrument Companies  
Rochester, N. Y.*



CATALOG PART 2000

(DECEMBER 1926 EDITION)

*Tycos*

**Meteorological and Other  
Scientific Instruments**

**Barometers, Compasses, Rain Gauges, Stormographs,  
Thermographs, Anemometers, etc.**

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*Tycos* Instruments of American Manufacture

(Pages 4 to 33)

S. & M. *Tycos* Instruments of English Manufacture

(Pages 35 to 62)

S. & M. *Tycos* Instruments of English Manufacture  
For Import Orders Only

(Pages 63 to 70)

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All trade marks and trade names registered  
U. S. Patent Office

*Taylor Instrument Companies*

ESTABLISHED 1851

Executive Offices and Factory

Rochester, N. Y., U. S. A.

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Canadian Plant, *Tycos* Building, Toronto, Canada

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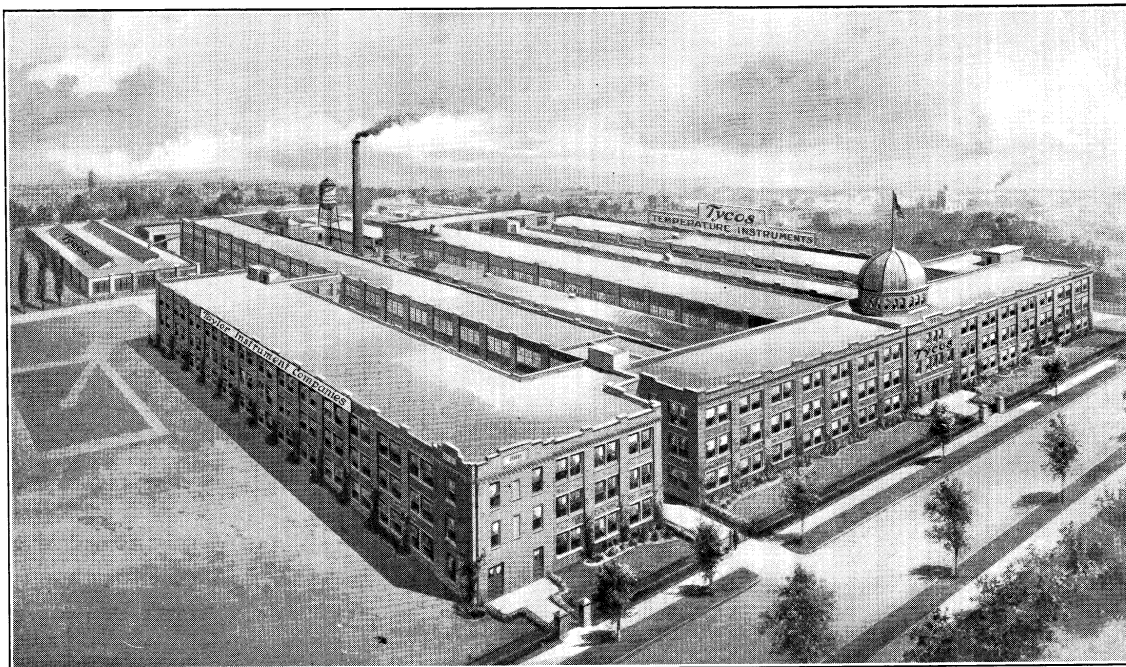
*Branch Offices*

NEW YORK	CHICAGO	BOSTON	PHILADELPHIA	PITTSBURGH	CLEVELAND
	LOS ANGELES		INDIANAPOLIS		SAN FRANCISCO
ST. LOUIS	CINCINNATI	TULSA	DETROIT	ATLANTA	MINNEAPOLIS

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Manufacturing Distributors in Great Britain,  
Short & Mason Ltd., London





HOME OF *Tycos* PRODUCTS

IN ADDITION TO THE NUMBERS LISTED IN THIS CATALOG WE MANUFACTURE  
A COMPLETE LINE OF INSTRUMENTS FOR INDICATING, RECORDING AND  
CONTROLLING TEMPERATURE AND PRESSURE

**SOME OF THESE ARE**

INDUSTRIAL THERMOMETERS  
CAPILLARY RECORDING THERMOMETERS  
SELF-CONTAINED RECORDING THERMOMETERS  
CAPILLARY INDEX (DIAL) THERMOMETERS  
THERMOELECTRIC PYROMETERS; INDICATING AND RECORDING  
FÉRY RADIATION PYROMETERS  
TEMPERATURE-CONTROLLING DEVICES  
TIME CONTROLS  
CAPILLARY ELECTRIC-CONTACT TEMPERATURE CONTROLS  
LABORATORY ENGRAVED THERMOMETERS  
HYGROMETERS (WET-AND-DRY-BULB) INDICATING AND RECORDING  
OUTDOOR AND HOUSEHOLD THERMOMETERS  
THERMOGRAPHS  
MEDICAL AND GENERAL-USE THERMOMETERS  
COAL-OIL TESTING INSTRUMENTS

**WE ALSO MAKE**

HYDROMETERS, MERCURY-COLUMN VACUUM GAUGES, MERCURIAL  
BAROMETERS  
SPHYGMOMANOMETERS, ETC., ETC.

CATALOGS COVERING ANY OF ABOVE, ON REQUEST

THE IMPORT SECTION OF THIS CATALOG (pages 35 to 70) LISTS INSTRUMENTS IMPORTED FROM SHORT & MASON, LONDON, SUCH AS

SURVEYING BAROMETERS, VERSCHOYLE TRANSITS  
POCKET ALTITUDE BAROMETERS  
RECORDING BAROMETERS (BAROGRAPHS)  
THERMOGRAPHS, HYGROGRAPHS (RECORDING HYGROMETERS), ANEMOMETERS, COMPASSES,  
GAS-PRESSURE GAUGES, GAS-LEAK INDICATORS, ETC.





## Foreword

**T**HIS catalog shows our present line of Aneroid Barometers, Compasses, "Thermographs" and Meteorological Instruments.

The first part of the catalog (*pages 4 to 33*) covers the *Tycos* line made in the Rochester factory. The Short & Mason English-made line will be found in the second and third parts (*pages 35 to 70*). The whole makes a comprehensive line of Meteorological Instruments.

If you are looking for instruments not shown in this catalog, send us particulars, that we may have an opportunity of advising whether we can furnish them.

Although we are carrying a larger stock of the Short & Mason line than ever before, we cannot always ship all items from stock. Will you ask us therefore about delivery, before making definite promise on any of this imported line?

Both the *Tycos* Domestic line and the Short & Mason Imported line are now so well known and in such constant demand that dealers will be well repaid for studying this catalog closely.

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### Terms of Sale and Points to be Observed in Ordering Goods

- 1—Always order by catalog number.
- 2—We employ the most experienced packers and observe every possible precaution in the packing of goods, to avoid damage during transportation. Our prices are all based on "f.o.b. Rochester" terms, and we can assume no responsibility for breakage or other damage after a package leaves our premises and is receipted for in good order by the transportation company.
- 3—Our terms are "net thirty days, f.o.b. Rochester, N. Y., U. S. A." No discount for prepayment.
- 4—*Prices subject to change without notice.*

Cable Address: "*Tycos*-Rochester"

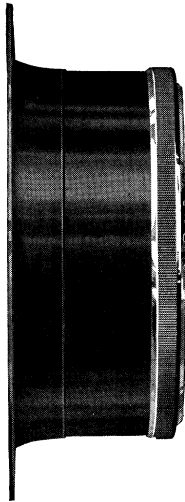
Codes Used: A. B. C. All Editions; Western Union—Universal and 5 Letter;  
Lieber's, Bentley's, Commercial and Private





# Tycos Auto-Altimeters

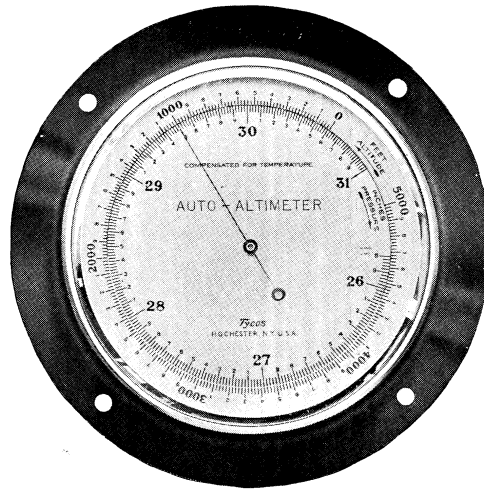
Combined Altitude Indicator and Weather Barometer for Automobiles  
(American Manufacture)



Side View of Nos. 2073C,  
2073D and 2073F

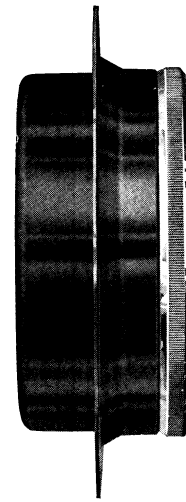
**For Offset Mounting**

1 3/8-inches deep.



No. 2073C

(Illustrations about two-thirds actual size)



Side View of Nos. 2073 1/2 C,  
2073 1/2 D and 2073 1/2 F

**For Inset Mounting**

5/8-inches deep above flange.  
11/16 " " below "

The *Tycos* Auto-Altimeter registers automatically on its dial the altitude of one place above another. Made in three ranges, to measure upwards to 5,000, 10,000 and 16,000 feet, respectively.

The exhilarating effect of a trip is governed by the altitude of the route traversed. A person is not equally comfortable at all altitudes.

Without an altitude barometer you are compelled to consult a table of altitudes if you want to know the elevation of the place you are passing.

There is no secret about the *Tycos* Auto-Altimeter—it is merely an altimeter like those used on aircraft, but specially built for service on an automobile.

Second only to your speedometer in interest. Not affected by the jolting or vibration of the car.

Works as a weather indicator when car is running 'round town.

<b>No. 2073C</b>	<i>Tycos</i> Auto-Altimeter. . . . .	EACH <b>\$ 35.00</b>
	Scaled to 5,000 feet, in 20-foot divisions; flange at back for screwing to cowl. Size 3 inches across front; 4 inches over flange. Each in a cardboard box. Weight about 13 ounces.	
<b>No. 2073 1/2 C</b>	Same as No. 2073C, except flange at front of case, so that body of instrument can be accommodated to hole cut in cowl. . . . .	<b>35.00</b>
<b>No. 2073D</b>	Same as No. 2073C, except reading to 10,000 feet in 50-foot divisions. . . . .	<b>36.50</b>
<b>No. 2073 1/2 D</b>	Same as No. 2073 1/2 C, except reading to 10,000 feet in 50-foot divisions. . . . .	<b>36.50</b>
<b>No. 2073F</b>	Same as No. 2073C, except reading to 16,000 feet in 50-foot divisions. . . . .	<b>39.00</b>
<b>No. 2073 1/2 F</b>	Same as No. 2073 1/2 C, except reading to 16,000 feet in 50-foot divisions. . . . .	<b>39.00</b>

Complete instructions for use with all of above instruments.





# Tycos Auto-Altimeters

## Directions for Use as an Altitude Indicator

The *Tycos* Auto-Altimeter should be screwed to the cowl, or if installed for the benefit of back-seat passengers, a point above the robe-rail is very convenient. It can if desired be used in conjunction with the speedometer.

The altitude scale is made to revolve by turning with the fingers. It is a very easy matter to "set" the instrument before starting a run.

There are two methods of determining altitudes with the *Tycos* Auto-Altimeter:

(a) If you make a start from Syracuse you can turn the silver-plated ring carrying the altitude scale so that the hand will indicate 398 feet (the height of Syracuse above sea level.) You then drive to Binghamton. Your instrument on arrival there shows 863 feet. This is the height of Binghamton above sea level. Or, by deducting 398 from 863, the resulting 465 feet represents the difference in altitude between Syracuse and Binghamton. The *Tycos* Auto-Altimeter indicates differences of altitude as you drive, information which is always of interest.

(b) Or, in starting from Syracuse you can set the altitude scale so that the hand points to "0." On arrival at Binghamton the *Tycos* Auto-Altimeter will show 465 feet, which is the difference in altitude between Syracuse and Binghamton. To get the height of Binghamton above sea level, you simply add the altitude of your starting place—Syracuse—which is 398 feet.

Instrument reading at Binghamton, N. Y. . . . .	465 feet
Height of starting place above sea level—Syracuse, N. Y. . . . .	<u>398 feet</u>
Height of Binghamton above sea level. . . . .	863 feet

It is necessary to know only the altitude of your **starting place**. Other altitudes are determined by the *Tycos* Auto-Altimeter.

In traversing a route of **increasing** elevation, either of the methods of setting can be adopted.

If the route be of **decreasing** elevation—when you are descending to the lakes or the coast, for example—the former method of setting is essential—that is, the *Tycos* Auto-Altimeter must show the height of your starting place above sea level. The readings will then indicate at all times your actual height above sea level.

## As a Weather Indicator

When the car is put away, if the scale of the altimeter be set at "0", when it is next consulted it will indicate coming weather probabilities, according as the hand is rising or falling.

A "rising barometer" generally means fine weather with cool breezes.

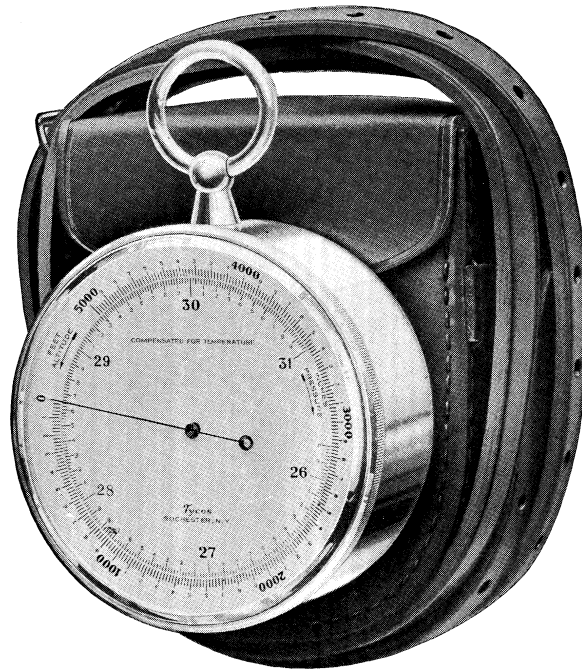
A "falling barometer" indicates wet, windy, or warmer weather.





# Tycos Altitude Barometers

(American Manufacture)



No. 2075CK  
(About two-thirds actual size)

The greatest difficulty met with in the past in the use of altitude barometers has been that their altitude scales were unequally divided, and as a consequence they either had to be used with the zero of the scale at a fixed point and a sum worked out for correct readings, or the scales made to revolve so the zero could be set at 0 feet. If used the latter way the readings were approximate only and the higher the altitude the greater the error.

The *Tycos* Altitude Barometer is "direct-reading". The scales have been redesigned, the altitude scale being made in equal divisions. All chance of error is eliminated.

It is truly an American instrument for America, since the scales are designed from the U. S. Standard Tables and will be found correct at all points.

The movement is compensated carefully to offset the effect of changing temperature, and it is recommended confidently as an ideal altitude barometer for the tourist, surveyor, geologist, engineer and all those to whom information on altitude is of interest and value.

<b>No. 2075CK</b>	<i>Tycos</i> Altitude Barometer.....	EACH <b>\$42.00</b>
	Exclusive design; best-grade movement, compensated for temperature; aluminum case; revolving altitude scale to 5,000 feet in 20-foot divisions; 3 inches in diameter. In velvet-lined leather sling carrying case. Weight 9 ounces.	
<b>No. 2075DK</b>	Same as above, except reading to 10,000 feet in 50-foot divisions.....	<b>43.00</b>
<b>No. 2075FK</b>	Same as above, except reading to 16,000 feet in 50-foot divisions.....	<b>46.00</b>

NOTE—This instrument can be used also as a highly-sensitive weather forecaster. Complete instructions and forecasts accompany each barometer.



# Tycos Aviation Altitude Barometer

(American Manufacture)

As supplied to U. S. Navy, U. S. Signal Corps, Bureau of Aircraft Production, and Leading Aircraft Builders



No. 2082  
(About two-thirds actual size)

A superlatively fine instrument for indicating the altitude of aircraft.

We have no hesitancy in saying that the *Tycos* Altimeter is the most perfectly adjusted and mechanically accurate instrument being offered today for this purpose.

The mechanism is delicately constructed, yet remarkably durable, and each instrument before being finally passed is subjected to a series of tests such as are encountered in actual use. The mechanical compensation for temperature is effective in extremes of heat and cold, insuring as perfect results as are possible.

<b>No. 2082 G</b>	<i>Tycos</i> Altimeter .....	EACH <b>\$80.00</b>
	Reading to 20,000 feet; 4½ inches in diameter; dial set by rack and pinion. Each in a cardboard box. Weight about one pound.	
<b>No. 2082 H</b>	Same as No. 2082G, except reading to 25,000 feet.....	<b>80.00</b>
<b>No. 2082 I</b>	Same as No. 2082G, except reading to 30,000 feet.....	<b>80.00</b>

### Extra for Radium Dials

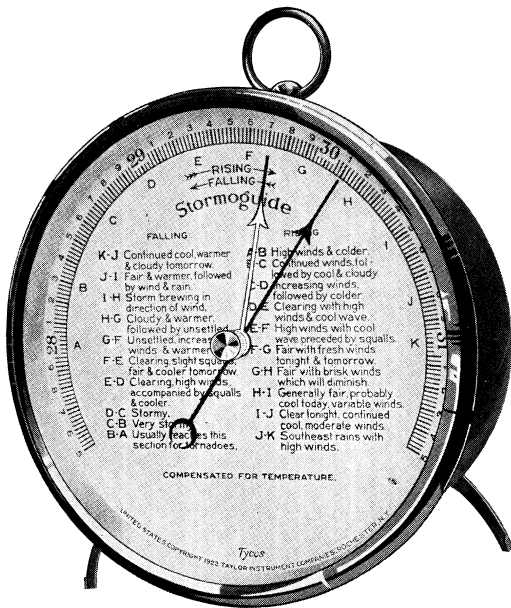
Hand, and figures at every 500 and 1000 foot division, painted with a radium preparation:—

DESCRIPTIVE LETTER		EXTRA
<b>“R”</b>	For 20,000-foot dials .....	<b>\$4.00</b>
	For 25,000-foot dials .....	<b>4.00</b>
	For 30,000-foot dials .....	<b>4.00</b>

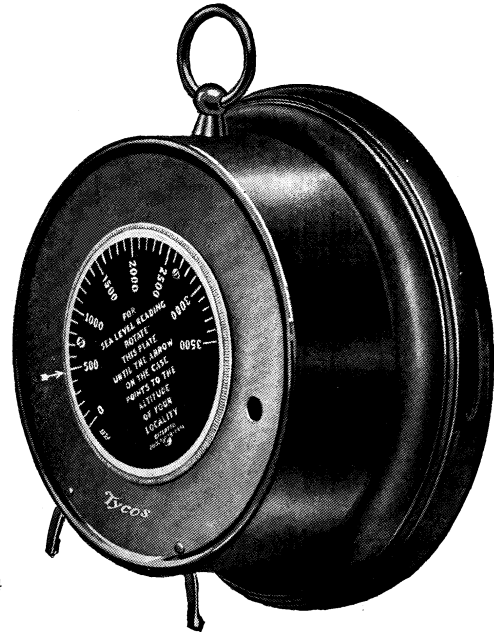


# Tycos and Taylor Brass-Case "Stormoguides"

(The Simplified Barometers)  
(American Manufacture)



No. 2256X. (Front View)



No. 2256X. (Back View)

PATENTED  
AUGUST 18, 1914  
JULY 16, 1918

(Illustrations about one-half actual size)

## The Simplest Form of Barometer to Read

Barometers are instruments essential in weather forecasting. For years they have been made with weather words "Fair," "Change" and "Stormy" at definite positions on the dial, and for years to come many will be made this way. The "Stormoguide" now offered you is much simpler to read, however, since complete forecasts are plainly shown on the dial.

The weather forecasts on the dial of the "Stormoguide" are based on barometer indications at sea level. To furnish correct readings at an altitude above sea level a barometer must be adjusted to allow for the effect of the altitude on the reading of the instrument. The "Stormoguide" provides for this by having an altitude plate fitted in its back. To make the adjustment it is necessary simply to revolve the back plate with the fingers until the arrow engraved in the back of the case points to the proper altitude indications for the location in which the instrument is to be used.

No. 2256X *Tycos* Brass-Case "Stormoguide" . . . . . **EACH \$25.00**

Movement compensated for temperature changes; round antique-finish brass case, with ring at top for hanging, and feet which fold into case when not in use; 5-inch engraved silvered-metal dial; sheet-glass crystal; for altitudes 0 to 3,500 feet. Each in a cardboard box. Weight about 1 3/4 pounds.

No. 2255 *Taylor* Brass-Case "Stormoguide" . . . . . **18.00**

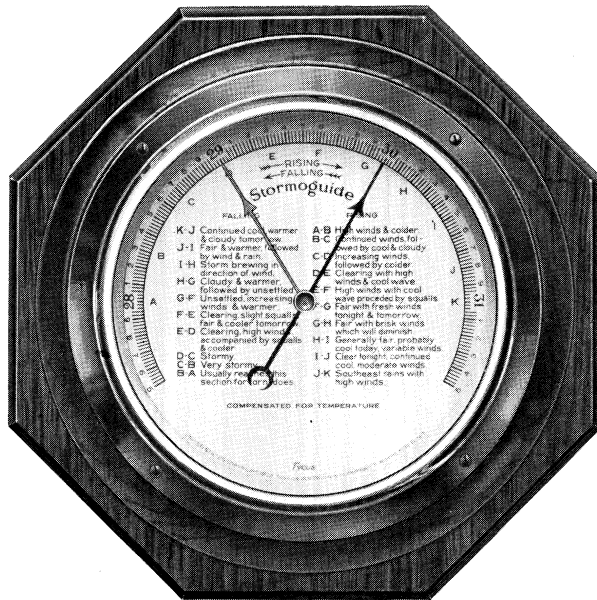
Ordinary-grade movement (not compensated); round blue-bronzed brass case, with ring at top for hanging and with folding feet; sheet-glass crystal; five-inch white-enameled dial; for altitudes 0 to 3500 feet. Each in a cardboard box. Weight about 1 3/4 pounds.

# Tycos Bracket "Stormoguides"

(The Simplified Barometers)

(American Manufacture)

PATENTED AUGUST 18, 1924; JULY 16, 1918



No. 2553

(About two-fifths actual size)

The octagonal frame combined with "Stormoguide" service appeals to the artistic sense, as well as to the appreciation of utility. An ornament to any home or office.

The forecasts on the dial are based on barometer indications at sea-level. To furnish correct readings at any altitude above sea-level a barometer must be adjusted to allow for the effect of the altitude on the mechanism of the instrument. The Tycos "Stormoguide" provides for this by having an altitude plate fitted in its back. To make the adjustment, it is necessary simply to revolve this back plate with the fingers until the arrow engraved on the back of the case points to the proper altitude for the location in which the instrument is to be used.

No. 2553 Tycos Bracket "Stormoguide" ..... **EACH \$35.00**

Hand-rubbed satin-finished mahogany, 7 $\frac{3}{4}$ " diameter; antique-finished bezel to match the wood frame; movement compensated for temperature changes; engraved 5" silvered-metal dial; sheet-glass crystal; for altitudes 0 to 3,500 feet. Each in a cardboard box. Weight about 3 pounds 5 ounces.



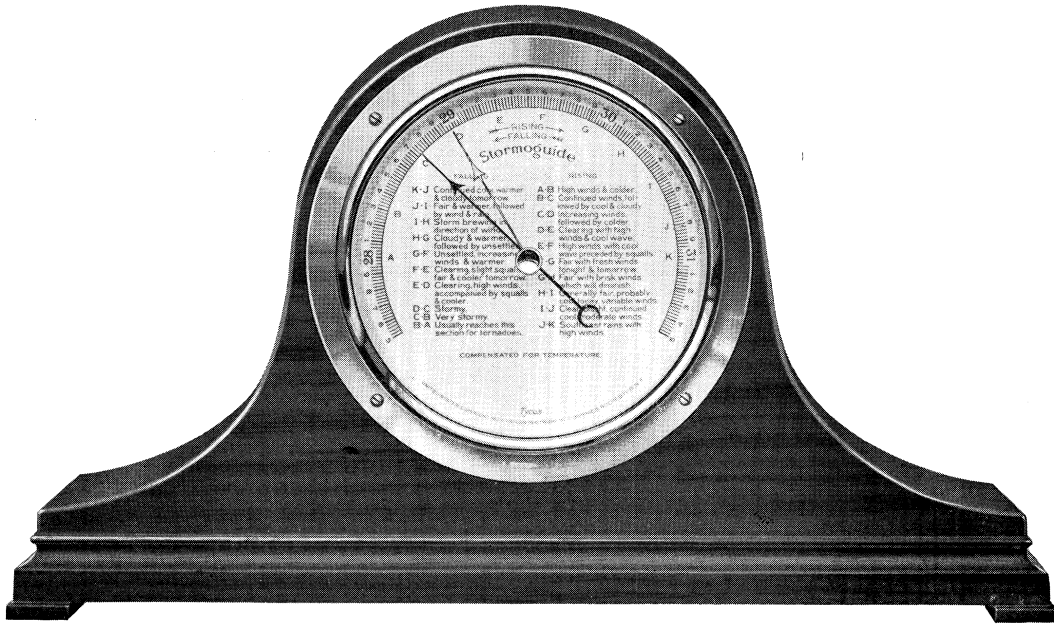


# Tycos Stand "Stormoguides"

(The Simplified Barometers)

(American Manufacture)

PATENTED AUGUST 18, 1914; JULY 16, 1918



No. 2554

(About three-eighths actual size)

In its general appearance the satin-finished mahogany stand 17 $\frac{5}{8}$  inches wide by 8 inches high by 3 $\frac{3}{4}$  inches deep resembles a mantel clock. It is an ornament to any club, hotel, bank or home.

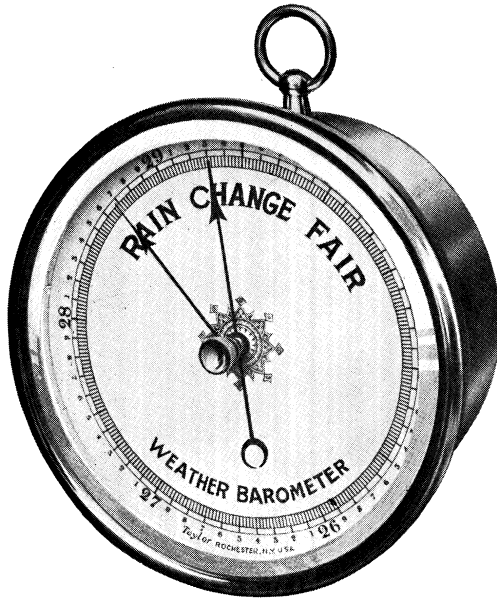
The Tycos "Stormoguide" has the usual figured scale of all aneroid barometers, showing at all times the scientific, or air-pressure, readings. In addition, sections of the dial inside this pressure scale are indicated by letters referring to the weather forecasts on the dial. The Tycos "Stormoguide" is "set" the same as any barometer; viz., by moving the brass index hand, by means of the gilt knob on the glass, so that it is directly over the black indicating hand. Later, when taking a reading, it is necessary to observe if the black hand is "falling" (moving counter-clockwise), or "rising" (moving clockwise). The brass hand moves only when the gilt knob on the glass is turned. Having determined whether the black hand is "rising" or "falling," notice the lettered section in which it is located and refer to the table of weather forecasts on the dial.

These forecasts on the dial are based on barometer indications at sea-level. To furnish correct readings at any altitude above sea-level a barometer must be adjusted to allow for the effect of the altitude on the mechanism of the instrument. The Tycos "Stormoguide" provides for this by having an altitude plate fitted in its back. To make the adjustment it is necessary simply to revolve this back plate with the fingers until the arrow engraved on the back of the case points to the proper altitude indication for the location in which the instrument is to be used.

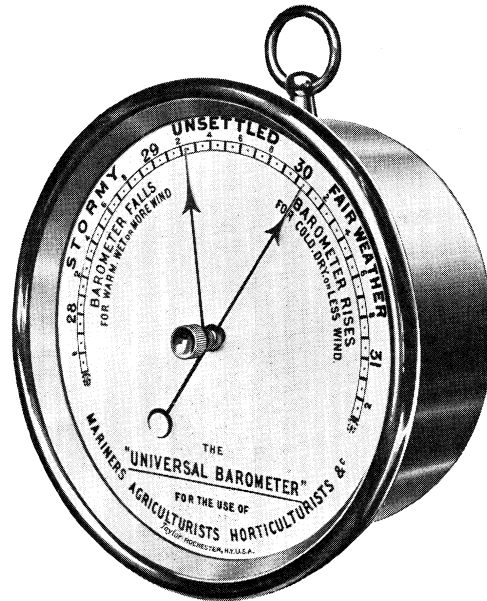
**No. 2554** Tycos Stand "Stormoguide" ..... **EACH \$50.00**  
 Movement compensated for temperature changes; engraved 5-inch silvered metal dial; sheet-glass crystal; for altitudes 0 to 3,500 feet. Weight about 4 pounds 10 ounces.

## Taylor Brass-Case Aneroid Barometers

(American Manufacture)



No. 2200



No. 2224

(Illustrations about one-half actual size)

No. 2200 Taylor Brass-Case Aneroid Barometer . . . . . <sup>EACH</sup> \$12.00

Lacquered-brass case, 5-inches in diameter; sheet-glass crystal; good-grade movement; closed, moisture-proof, untarnishable enameled dial. Each in a cardboard box. Weight 22 ounces.

No. 2202 Same as No. 2200, except better-grade movement finished in brass lacquer, and with open-center enameled metal dial . . . . . 13.50

NOTE—Either of above will be supplied if specified, at no extra charge, with dials engraved with metric scale in addition to the inch scale, and without weather words, or with metric scale only and in addition the weather words in Spanish.

## Taylor "Universal"-Pattern Aneroid Barometers

These barometers have been designed and constructed to combine strength, attractiveness and efficiency, at a price within the reach of everyone. The weather readings on the dial are understandable even to the amateur, and the "Universal" is especially popular with agriculturalists, mariners and fishermen. They are thoroughly sound, reliable instruments, at an attractive price.

No. 2224 Taylor "Universal" Aneroid Barometer . . . . . <sup>EACH</sup> \$15.00

Lacquered-brass case 5 inches in diameter; closed enameled dial, unaffected by dampness; good-grade movement; sheet-glass crystal. Each in a cardboard box. Weight 22 ounces.

NOTE—It is not necessary to expose barometers out of doors to get the best results. They should be kept in the house and in a place where the temperature remains fairly uniform.

(Page 15 for "Tycos Patented Folding Feet.")

(Page 15 for Barometer Instruction Chart and Weather Record.)

(Page 33 for booklet "Practical Hints for the Amateur Weather Forecaster.")





# Tycos Special Brass-Case Aneroid Barometers

Compensated for Temperature

(American Manufacture)

As Supplied to U. S. Navy, U. S. Weather Bureau, U. S. Bureau of Plant Industry, etc.



No. 2250  
(About one-half actual size)

To be absolutely accurate a barometer must of necessity be compensated for temperature. Some years ago we developed the No. 2250 type of aneroid barometer, and it has been supplied since to the U. S. Navy and the U. S. Weather Bureau, besides many scientific and educational institutions throughout the country.

As at present constructed the movement is practically non-corrosive, steel parts having been replaced, where practicable, with either nickel-silver or phosphor-bronze.

**No. 2250-5" Tycos Special Brass-Case Aneroid Barometer . . . . . \$20.00**

Lacquered-brass case, 5 inches in diameter; sheet-glass crystal; open-center silvered-metal dial, divided with great accuracy. The movement is extra-grade, compensated for temperature changes, thus insuring at all times accurate readings of barometric pressure. Each in a cardboard box. Weight 24 ounces.

NOTE—No. 2250 in the 5-inch size only will be supplied if so specified, at no extra charge, with dial engraved in the metric scale and with weather words in Spanish, or with metric scale in addition to the inch scale and without weather words.

**No. 2250-6" Same as above, except 6-inches in diameter. . . . . 25.00**

**No. 2250T-5" Tycos Special Brass-Case Aneroid Barometer with Curved Thermometer . . . . . 21.50**

Same as No. 2250-5", except that the lower part of the barometer scale is omitted and a curved thermometer is mounted on the dial, with both Centigrade and Fahrenheit temperature scale.

(Page 15 for "Tycos Patented Folding Feet.")



# Tycos and Taylor Special Brass-Case Aneroid Barometers

Arranged for High Altitudes

(American Manufacture)



No. 2250<sup>23</sup>/<sub>29</sub>

(About one-half actual size)

The Aneroid Barometers listed on pages 11 and 12 are suitable for use at or near sea level.

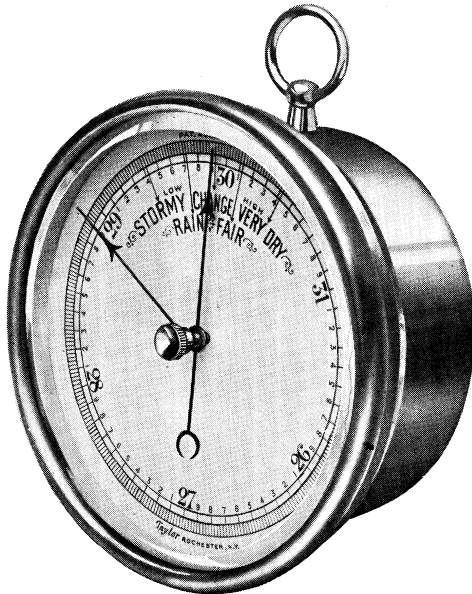
The following instruments should be ordered for altitudes from 2,000 to 10,600 feet. They have no weather words.

	EACH
No. 2250 <sup>23</sup> / <sub>29</sub> Tycos Special Brass-Case Aneroid Barometer.....	\$25.00
Lacquered-brass case, 5 inches in diameter; sheet-glass crystal; first-quality compensated movement; finely-divided-and-figured open-center silvered-metal dial. Good for use at altitudes from 2,000 to 7,100 feet. Each in a cardboard box. Weight 24 ounces.	
No. 2250 <sup>20</sup> / <sub>26</sub> Same as 2250 <sup>23</sup> / <sub>29</sub> , except for use at altitudes from 4,800 feet to 10,600 feet....	25.00
NOTE—Nos. 2250 <sup>23</sup> / <sub>29</sub> and 2250 <sup>20</sup> / <sub>26</sub> are of special design, being first-grade throughout and compensated for changes of temperature.	
No. 2202 <sup>23</sup> / <sub>29</sub> Taylor Special Brass-Case Aneroid Barometer.....	18.00
Lacquered-brass case, 5 inches in diameter; sheet-glass crystal; open-center enameled-metal dial; good-grade movement finished in brass lacquer. Is good for use between 2,000 and 7,100 feet. Each in a cardboard box. Weight 24 ounces.	
No. 2202 <sup>21</sup> / <sub>27</sub> Same as No. 2202 <sup>23</sup> / <sub>29</sub> , except good for use between 3,600 feet and 9,500 feet....	18.00
NOTE—Movements of the Nos. 2202 <sup>23</sup> / <sub>29</sub> and 2202 <sup>21</sup> / <sub>27</sub> are of good quality, and except for their special construction for high altitude are identical with No. 2202, (page 11).	

(Page 15 for "Tycos Patented Folding Feet".)

# Taylor Brass-Case Aneroid Barometers With Revolving Back

Adjustable for any Altitude up to and Including 7,000 Feet  
(American Manufacture)



(Front View)

PATENTED  
AUGUST 18, 1914  
JULY 16, 1918



(Back View)

No. 2252

(Illustrations about one-half actual size)

An adjustment is made whereby the barometer hand points directly to the approximate weather mark and the weather is foretold at a glance.

It is necessary to arrange all "weather words" on aneroid barometers in relation to the barometric pressure scale at sea level, in order to fix a standard level for observation.

Since barometric readings are affected by altitude, and it obviously is impossible because of the enormous variety involved to make special instruments for various altitudes from sea level upwards, the desirable barometer is one provided with a means of adjustment, whereby the observer may at any desired location take observations agreeing with sea-level readings.

The instruments are so arranged as to be suitable for use in any location from sea level to 7,000 feet elevation. The adjustment is very simple and no derangement of the working parts is necessary. Once adjusted by the observer for a given location, no further adjustment is required until the barometer is taken to another location.

Turn the black plate set in the back of the case (this is easily done with the fingers) until the number corresponding with the elevation of the city or town is opposite the arrow on the case. The hand will then point to the proper weather mark and the reading will be the same as that of the U. S. Weather Bureau, which is sea-level reading.

**No. 2252 Taylor Brass-Case Aneroid Barometer . . . . . EACH \$15.00**

Lacquered-brass case, 5 inches in diameter; sheet-glass crystal; closed enameled-metal dial; good-grade movement; for use at altitudes from 0 to 3,500 feet. Each in a cardboard box. Weight 24 ounces.

**No. 2252<sup>1</sup>/<sub>2</sub> Same as No. 2252, except for use at altitudes from 3,500 to 7,000 feet . . . . 18.00**

NOTE—No. 2252 can be furnished with dials figured with metric scale in addition to the inch scale, without weather words, and words on the back adjusting plate in Spanish.

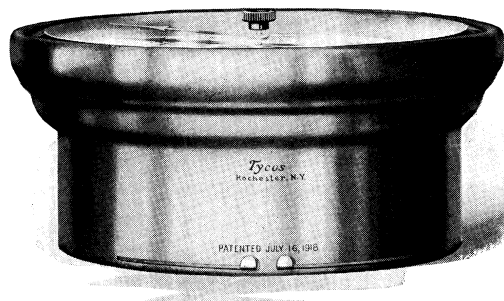
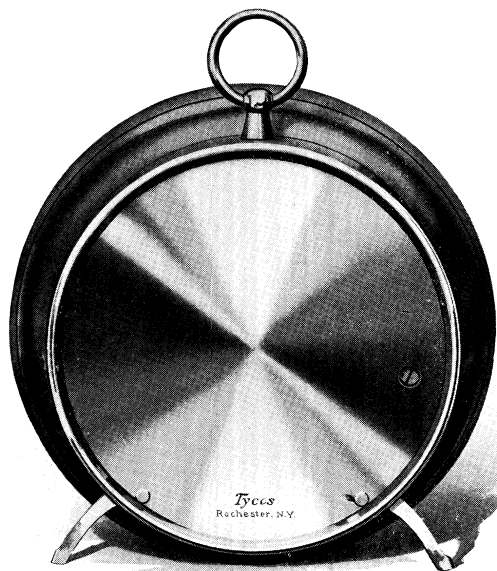
(Page 15 for "Tyco's Patented Folding Feet.")





# Feet for *Tycos* and *Taylor* Brass-Case Aneroid Barometers

Procurable on American-Made Barometers only



(Illustrations about one-half actual size)

There have been many requests for the addition of "feet" to our weather barometers, so the instruments will stand on a table, bureau or mantel.

On account of the admitted ugliness of feet formerly fitted to barometers, we have designed and patented a type which can be folded back into the case when not in use.

It is obvious that these legs are a decided improvement over those which permanently protrude from the case, and when they are not in use the instrument has a pleasing, symmetrical appearance when hung on the wall.

If ordinary care is exercised, delicately polished surfaces will not be scratched by the feet.

DESCRIPTIVE LETTER "X"	Tycos Patented Folding Feet . . . . .	EXTRA PER SET \$1.00
------------------------------	---------------------------------------	----------------------------

As an extra for any barometer in the 5-inch size, listed on pages 11 to 14.

## *Tycos* Aneroid-Barometer Instruction Chart and *Tycos* Meteorological Register

The words "rain," "fair," "changeable," "stormy," etc., on the dial of an aneroid barometer are apt to be misleading without a nearer knowledge of the comparative relations between the indications of the barometer and thermometer, the direction of the wind, etc. This information is given in a semi-automatic manner by the use of the *Tycos* Chart, simplified sufficiently for the average layman to master readily.

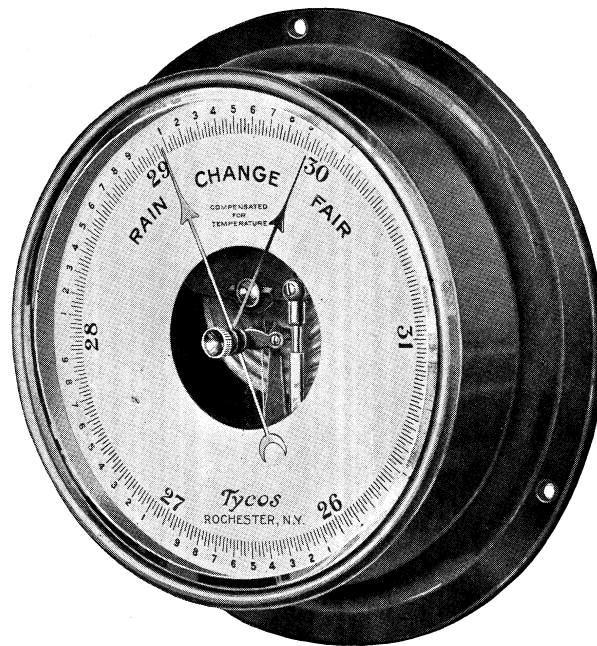
No. 4051	<i>Tycos</i> Instruction Chart . . . . . For Aneroid Barometers. Size 5½ inches by 5½ inches.	EACH \$ .75
No. 4052	<i>Tycos</i> Meteorological Register Pad . . . . . For keeping record for one year of barometer; thermometer; humidity; rainfall, and wind direction. Complete, with pencil. Size 9 inches by 5½ inches.	1.00

(Page 33 for Booklets on Weather.)

# Tycos and Taylor Yacht or Engine-Room Barometers

(American Manufacture)

Pattern Adopted by U. S. Shipping Board



No. 2230APL

(About one-half actual size)

The ideal barometer for almost any purpose where weather readings are of consequence. Simpler to use than the mercurial barometer, for no corrections are necessary. The movement is compensated for temperature, specially adjusted and rated, and is of the same grade as those supplied to the U. S. Navy and the U. S. Weather Bureau.

The flanged case gives the instrument a finished appearance and is drilled for easy fitting to a wall, cabin or instrument board.

No. 2230APL-5" *Tycos* Yacht, or Engine-Room, Barometer..... <sup>EACH</sup> \$27.00

Lacquered heavy spun-brass case, 5 inches in diameter,  $2\frac{3}{8}$  inches deep; drilled back-flange is  $5\frac{3}{4}$  inches in diameter; sheet-glass crystal. Open-center silvered-metal dial, divided to 0.02 of an inch, ranged 25 inches to 31 inches. Movement is compensated for temperature. Weight 34 ounces.

No. 2230APL-6" Same as No. 2230APL-5", except case 6 inches in diameter,  $2\frac{1}{2}$  inches deep; back-flange is  $6\frac{7}{8}$  inches in diameter. Weight 46 ounces..... 30.00

No. 2230L-5" *Taylor* Yacht or Engine-Room Barometer..... 20.00

Lacquered heavy spun-brass case, 5 inches in diameter,  $2\frac{3}{8}$  inches deep; drilled back-flange is  $5\frac{3}{4}$  inches in diameter; sheet-glass crystal; open-center silvered-metal dial, good-grade movement, not compensated for temperature. Weight 34 ounces.

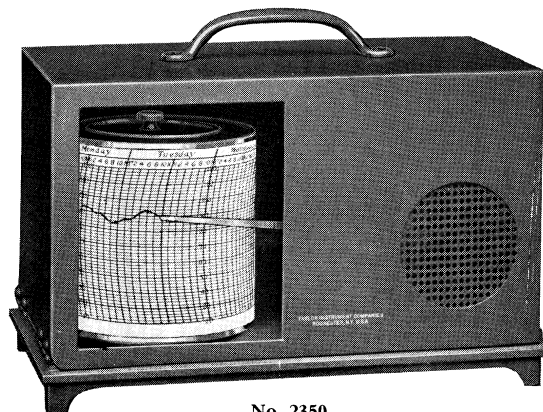




# Tycos "Thermographs" (Recording Thermometers)

(American Manufacture)

In use by U. S. Department of Agriculture, Canadian Government, the Leading Observatories, and Many Educational Institutions



No. 2350  
(About one-fourth actual size)

The Tycos "Thermograph" (Recording Thermometer) is arranged to give on a chart a continuous 7-day ink record of temperature.

This chart is divided into days and two-hour subdivisions of each day. Horizontally the dividing lines are in degrees of temperature.

An arm carrying the recording pen is connected directly to a bi-metallic coil, which changes as the temperature rises or falls. This causes the arm, with the recording pen attached, to move vertically over the chart, leaving its record.

**No. 2350** Tycos "Thermograph" (Recording Thermometer) . . . . . EA CH \$66.00

Gray-enameled metal case, 10 $\frac{1}{4}$  inches long, 6 $\frac{3}{8}$  inches high, 5 inches deep; complete with year's supply of charts No. 84 (0° to 100° Faht.), Charts No. 84C, (minus 20° to plus 30° Cent.), charts No. 85 (20° to 120° Faht.) or charts No. 86 (minus 10° to plus 90° Faht.), or with charts No. 88 (below), bottle of ink and full instructions. Weight about 7 pounds.

NOTE—When instrument is used outside, it should be protected against the weather by an adequately-ventilated screen.

## Extras for Tycos "Thermographs"

<b>No. 84</b>	Charts ranged from 0 to plus 100° F., one year's supply . . . . .	<b>\$3.50</b>
<b>No. 84C</b>	Charts ranged from minus 20° to plus 30° C., one year's supply . . . . .	<b>3.50</b>
<b>No. 85</b>	Charts ranged from plus 20° to plus 120° F., one year's supply . . . . .	<b>3.50</b>
<b>No. 86</b>	Charts ranged from minus 10° to plus 90° F., one year's supply . . . . .	<b>3.50</b>
<b>No. 88</b>	Charts unfigured, for any range of 100°F. between minus 10° and 200°, one year's supply . . . . .	<b>3.50</b>
	Bottle of Ink (plain bottle) . . . . .	<b>.50</b>
	Pens . . . . .	<b>1.00</b>





## Tycos "Thermographs" (Recording Thermometers)

To insure entire satisfaction, see that the pen is kept free from dust and dirt. It should be washed in alcohol occasionally.

To be sure of a delicate record, adjust the pressure of the pen-arm by means of the thumb-screw provided for this purpose.

If the pen does not mark readily draw a piece of paper carefully through its nibs, to insure a flow of ink. Use only specially-prepared ink;— **this is important.**

Wind the clock each time the chart is changed.

Do not tamper with the thermal-coil, or handle it unnecessarily.

Instrument is portable.

Direct-reading movement is extremely simple, durable and accurate, non-rusting and highly sensitive. Changes of  $\frac{1}{2}^{\circ}\text{F.}$  are easily discernible.

More sensitive than some mercurial thermometers and can be carried about without danger of being disarranged.

Charts showing a variety of ranges can be secured to suit individual requirements. Standard charts are listed on page 17. As three of these charts show ranges of temperature equal to  $100^{\circ}\text{ Fahrenheit}$ , they are interchangeable. If, for instance, an instrument were fitted with chart No. 85, and it was required to obtain a record of temperature lower than  $20^{\circ}\text{ Fahrenheit}$ , which is the minimum range of this chart, it could be accomplished readily by placing chart No. 86 on the recording drum and re-setting the instrument. This latter operation is extremely simple.

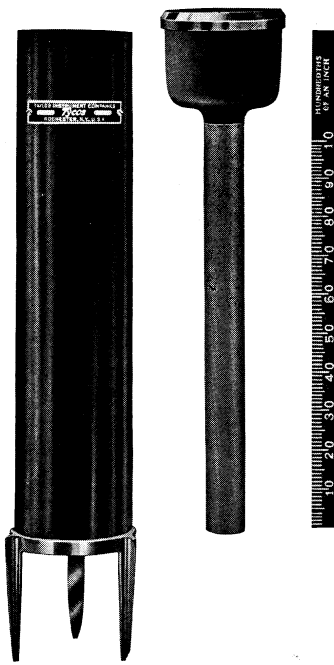
If the pen-arm pointed at say the  $60^{\circ}\text{F.}$  line on the No. 85 chart at the time the change is made it would be necessary only to remove clamp screw holding pen-arm in position on the spindle. The pen-arm then will be quite free and can be re-clamped at the  $60^{\circ}\text{F.}$  line on the No. 86 chart. It will not be possible to set it exactly, but after getting it as near as possible any fine adjustment that is necessary can be made by means of the adjusting screw, which will be seen on the other side of the thermal-coil.

For the purpose of having a universal range of temperature, instrument No. 2350 can be supplied also with No. 88 chart, ruled but unfigured. This chart can be arranged by the user to cover any reasonable range of temperature covering  $100^{\circ}\text{ Fahrenheit}$ . For instance, if used for winter weather purposes, the chart can be figured from minus  $20^{\circ}$  to plus  $80^{\circ}\text{ Fahrenheit}$ , in the spring from plus  $10^{\circ}$  to plus  $110^{\circ}\text{ Fahrenheit}$ , and in the summer from say plus  $40^{\circ}$  to plus  $140^{\circ}\text{ Fahrenheit}$ , or any range of  $100^{\circ}\text{ Fahrenheit}$  desired by the user. When sent this way the instrument is provided with an engraved mercury thermometer for use in setting.



# Tycos Rain Gauges

(American Manufacture)



No. 2705  
(About one-fifth actual size)



No. 2715  
(About one-seventh actual size)

The exposure of a rain gauge is of great importance. A position on a fairly level piece of ground in an open lot, unobstructed by large trees, buildings or fences, is an ideal one. The gauge should be sunk slightly, or supported at the sides by staves, to prevent its being blown over in a high wind. It is essential that when in use the top of the gauge be exactly level.

No. 2705 *Tycos* Rain Gauge..... EACH \$12.00

Blue-bronzed metal cylinder 13½ inches high, with brass rim three inches in diameter inside; three pointed feet three inches long, which when forced into the ground hold the gauge upright. Care in manufacture makes this a most satisfactory instrument. Has two graduated measuring sticks to show from .01 to 1.0 inch of rainfall. Each in a special felt-lined shipping container. Weight about 5 pounds.

No. 2715 *Tycos* Glaisher's Rain Gauge..... 18.00

Originally designed by Mr. James Glaisher, Fellow of the Royal Society.

Japanned-metal receiver with 8-inch-diameter funnel with brass rim, terminating in a curved tube, which, retaining a small portion of water, prevents evaporation. Complete with metal cup and graduated measuring glass showing from .01 to .50 of an inch of rainfall. Weight about 5 pounds.

NOTE—The receiver being sunk into the ground to within eight inches of the top, no evaporation will take place even in the warmest season.

No. 2716 Same as No. 2715, except copper with brass rim..... 26.00

NOTE—Care must be taken after pouring the rain from the gauge to the graduated measure, to hold the measure quite vertical, or an inaccurate reading will result.

NOTE—Such small amounts of water as are deposited in the gauge by dew, hoarfrost and fog should be taken into account also when calculating the total precipitation for a given period.

## Measuring Glasses

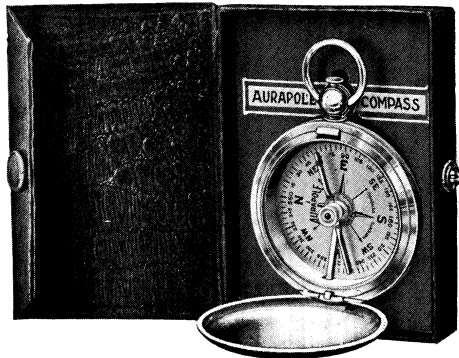
Extra graduated measuring glasses reading from .01 inch to .50 inch of rainfall, for Nos. 2715 and 2716 ..... EACH \$3.00

## Taylor-Quality Compasses

The Nationally-Advertised Line  
(American Manufacture)

Taylor-Quality Compasses are the result of years of study and research in a factory with more than half a century's experience in the manufacture of meteorological instruments, and with every possible device for the improvement of the product.

All "Taylor-Quality" Compasses are so constructed that they can be repaired easily when broken, which is not the case with other makes. There is no loss from damaged stock. They are attractively packed for displaying and dispensing, as illustrated and described below.



Each hunter-case "Taylor-Quality" Compass is packed in a pasteboard container like this  
(About one-half actual size)

All open-face "Taylor-Quality" Compasses are packed in a folding paper container and each dozen in a display carton, similar to the Flodial package illustrated.

The open-face compasses are the "Leedawl," "Telaway," "Magnapole," "Flodial" and "Litenite."



ACTUAL SIZE OF TRAY 8" WIDE BY 7" HIGH

No. 2909 Assortment  
(About one-third actual size)

All hunter-case "Taylor-Quality" Compasses are packed in an attractive box with hinged cover, as illustrated, six in a carton. The hunter-case compasses are the "Gydawl," "Aurapole," "Meradial," "Ceebynite" and "Usanite."



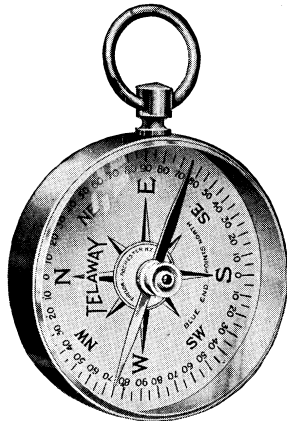
Typical Display Carton in which all Open-face "Taylor-Quality" Compasses are packed  
(About one-half actual size)

No. 2909 Taylor Compass Assortment . . . . . \$23.00

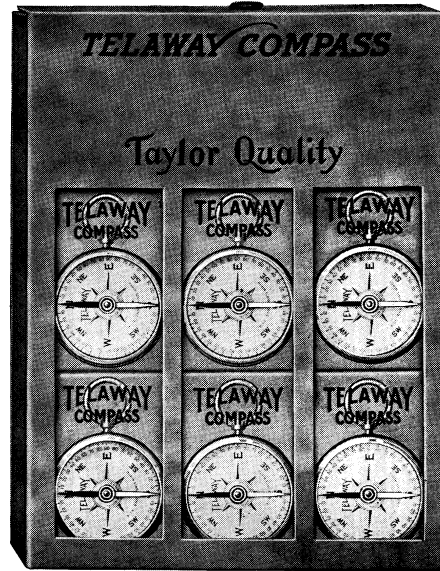
Consists of one each Leedawl, Magnapole, Flodial, Litenite, Gydawl, Aurapole, Meradial and Ceebynite Compass, packed in a velvet-lined easel-back tray of extra quality, lettered in gold. The tray can be used in counter, window or showcase display, offering at sight an exceptionally fine line of compasses, and drawing the attention of the public to a complete line, whereas if the compasses were exposed for sale in the usual haphazard way, they might be passed unnoticed.

# Taylor-Quality Compasses

(American Manufacture)



No. 2905  
(Actual Size)



Display Box Holding One Dozen Telaway Compasses  
(About one-half actual size)

## The "Telaway" Compass

The insistent demand for a good compass at a reasonable price prompted us to put the "Telaway" on the market.

We feel that it is exceptional value, and has many features not to be found in many compasses costing twice as much.

The case is of black-bronzed brass and is fitted with a ring at the top, for fastening to a chain or guard.

The dial is of heavy enameled card, accurately divided, and figured at the principal cardinal points.

Needle is of flat design, the north-pointing end being blued. A jeweled center insures perfect accuracy of movement.

The beveled crystal glass fits into the case in the same way as the crystal of a watch. This means that should the glass break, or the needle need repairing, or anything whatever go wrong with the "Telaway," it can be repaired readily. Of all cheap compasses the "Telaway" has this feature exclusively.

No. 2905 Taylor "Telaway" Compass . . . . . **\$9.00** PER DOZ.

Black-bronzed brass case fitted with ring for attaching chain; heavy enameled-card dial accurately divided; flat needle; jeweled center; beveled-glass crystal. Weight  $\frac{3}{4}$  of an ounce.

Packed each in a folding box; 12 in attractive counter display package (illustrated above).

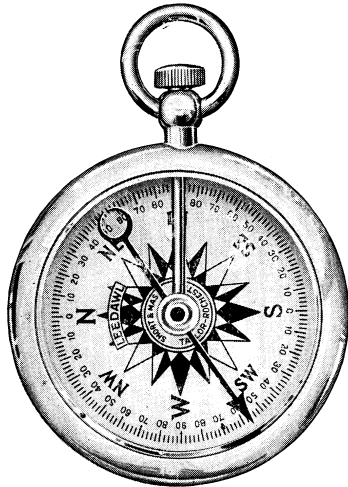
(Page 33 for booklet, "The Compass, the Signpost of the World.")



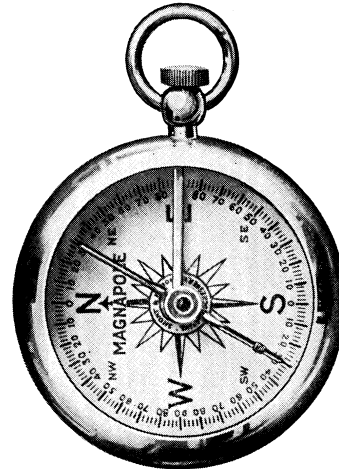


## Taylor-Quality Compasses

(American Manufacture)



No. 2910



No. 2911

PATENTED  
APRIL 20, 1915  
JANUARY 8, 1918

(Illustrations actual size)

### The "Leedawl" Compass

The "Leedawl" Compass has been put on the market to meet the ever-growing demand for a good, reliable, properly manufactured, attractive, accurate and sensitive pocket compass, at a reasonable price.

The "Leedawl" is mounted in an untarnishable white-metal case (not plated) has an untarnishable silvered-metal dial, hardened and tempered steel point and cupped jewel bearing. The stop for lifting the needle off its center when compass is not in use, is made to prevent dust getting inside the instrument, besides making it practically water-tight.

The beveled glass crystal is made to snap in, a most desirable feature, since it can be removed easily when the working parts need to be repaired or cleaned.

<b>No. 2910</b>	Taylor "Leedawl" Compass . . . . .	<b>PER DOZ. \$ 15.00</b>
	White-metal case; beveled-glass crystal; jeweled needle with stop; untarnishable silvered-metal dial; cupped jewel bearing. Packed each in a neat box, 12 in an attractive counter display package, (similar to Flodial display package, page 21).	

### The "Magnapole" Compass

The case design and the stop mechanism for raising the needle off the point when not in use are essentially the same as in the "Leedawl" Compass, but the dial is of aluminum, much whiter and more easily read than most other types. As aluminum is impervious to moisture and will not discolor, the life of the "Magnapole" dial is practically unlimited.

"Magnapole" needles are of the bar type and have perfectly jeweled centers. This insures a high degree of sensitiveness and consequent accuracy.

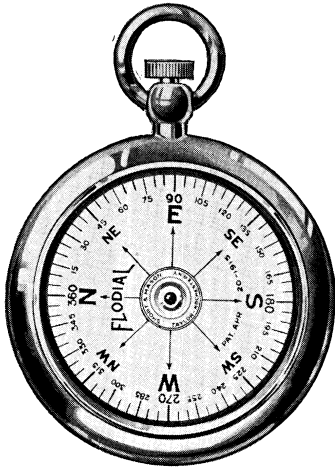
<b>No. 2911</b>	Taylor "Magnapole" Compass . . . . .	<b>PER DOZ. \$ 21.00</b>
	White-metal case; beveled-glass crystal; aluminum dial; jeweled-center bar needle with stop. Packed each in a neat box, 12 in an attractive counter display package, (similar to Flodial display package, page 21).	

(Page 33 for booklet, "The Compass, the Signpost of the World".)

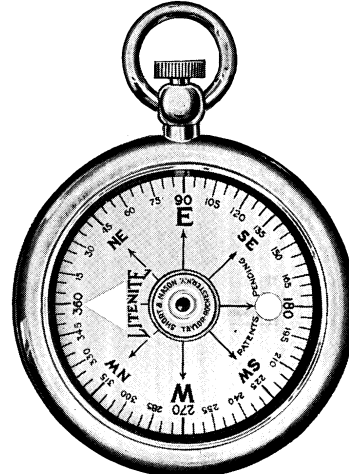


## Taylor-Quality Compasses

(American Manufacture)



No. 2912  
PATENTED APRIL 20, 1915



No. 2913  
PATENT PENDING

(Illustrations actual size)

### The "Flodial" Compass

Mounted in case of same pattern and grade as the "Leedawl" (*page 23*.) Flat magnetic needle attached to under side of aluminum dial, which floats instead of being fixed, making it possible to note all magnetic bearings at once. Center is jeweled and stop is provided, to lock the dial when not in use.

No. 2912 *Taylor* Flodial Compass..... PER DOZ. **\$21.00**

White-metal case with stop; beveled-glass crystal; untarnishable floating aluminum dial; cupped jewel center. Packed each in a neat box, 12 in an attractive counter display package, (*illustrated page 21*).

### The "Litenite" Compass

Same pattern in every respect as the "Flodial", except that the "N" and "S" points of the dial are treated with a luminous compound, so that direction can be seen at night.

No. 2913 *Taylor* "Litenite" Compass..... PER DOZ. **\$24.00**

Same as No. 2912, except that the "N" and "S" points are luminous.

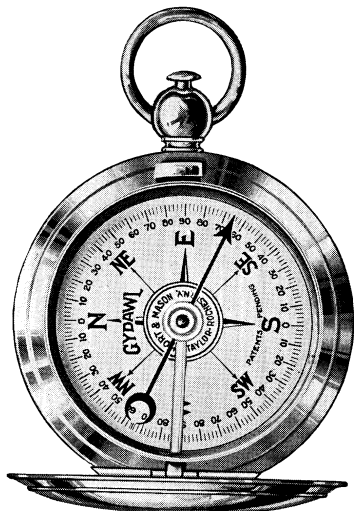
Packed each in a neat box; 12 in an attractive counter display package, (*similar to Flodial display package, page 21*).

NOTE—Do not "test" the "Litenite" for its luminous power in the daytime. A person's eyes take up light and it requires from 15 to 20 minutes in a dark room to bring them in the day to the condition they are in at night. If you wait this length of time in a dark room, the luminous points will appear quite bright and will increase in luminosity the longer you stay.

(*Page 33 for booklet, "The Compass, the Signpost of the World."*)

## Taylor-Quality Compasses

(American Manufacture)



No. 2914

PATENTS PENDING



No. 2915

(Illustrations actual size)

### The "Gydawl" Compass

For a low-priced compass in a hunter-style case the "Gydawl" cannot be beaten. The needle is of the flat, half-blued steel type—the same as in the "Leedawl" (*page 23*)—has a jeweled center and a stop which automatically, directly the lid is closed, lifts the needle off the special steel point on which it operates. This means practically everlasting life to the compass, for it always will remain delicate and sensitive as long as the needle is lifted off the center when not in use.

No. 2914 Taylor "Gydawl" Compass . . . . . PER DOZ. \$42.00

Thin model, white-metal hunter case, strongly hinged; beveled-glass crystal; flat half-blued steel needle with jeweled center; automatic stop lift; untarnishable silvered-metal dial. Packed each in an attractive box (*similar to Aurapole, page 21*), six in a carton.

### The "Aurapole" Compass

In the selection of a compass many people prefer styles having needles of "bar" pattern to those of flat design, as used in the "Gydawl" (*above*) and "Leedawl" (*page 23*). Bar needles are to be preferred: first, on account of their extreme sensitiveness; secondly, because they can be magnetized much more strongly, and thirdly because they retain their magnetism indefinitely.

The needle of the "Aurapole" is heavily magnetized, delicately balanced, and extremely sensitive. Center is jeweled and a stop lifts the needle off center point when lid of case is closed. Dial is of aluminum.

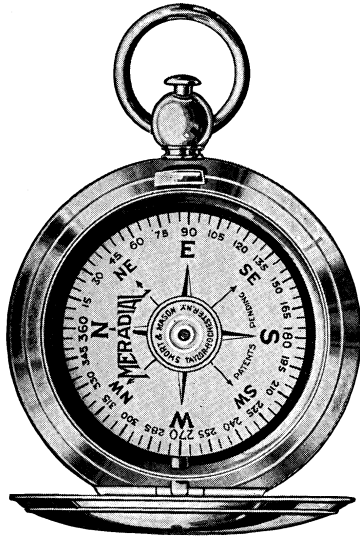
No. 2915 Taylor "Aurapole" Compass . . . . . PER DOZ. \$48.00

Thin-model, white-metal hunter case, strongly hinged; beveled-glass crystal; bar needle with jeweled center; automatic stop lift; untarnishable aluminum dial. Packed each in an attractive box (*as illustrated, page 21*), six in a carton.

(*Page 33 for booklet, "The Compass, the Signpost of the World."*)

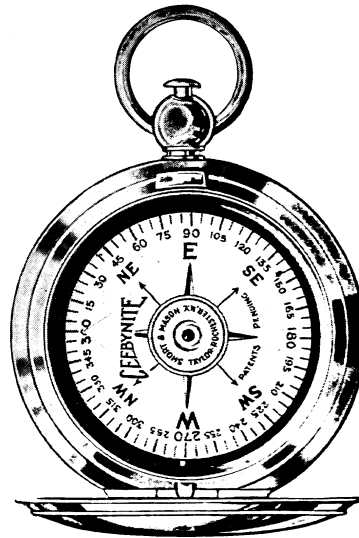
## Taylor-Quality Compasses

(American Manufacture)



No. 2916

PATENTS PENDING



No. 2917

(Illustrations actual size)

### The "Meradial" Compass

Floating-dial compasses are very popular with hunters and those who spend a good deal of time in the woods. Technically speaking they are the most satisfactory of all compasses, as the dials are fitted to the needles and float with them.

Their advantage over "needle" compasses is obvious. When the dial comes to rest it gives all magnetic directions accurately.

Centers are jeweled and when case is closed the dial is lifted off the center point.

No. 2916 Taylor "Meradial" Compass . . . . . PER DOZ. \$48.00

Thin-model, white-metal hunter case, strongly hinged; beveled-glass crystal; floating aluminum dial; cupped-jewel center; automatic stop lift. Packed each in an attractive box (similar to *Aurapole*, page 21), six in a carton.

### The "Ceebynite" Compass

Supplied to Canadian and U. S. Armies

The North and South points of the floating dial of the "Ceebynite" Compass are treated with a radio-active luminous compound which enables them to be seen at night. The action of this material is such that it does not have to be exposed to sunlight during the day to make it phosphorescent at night, as is the case with other compounds.

In all other respects the same as the "Meradial."

No. 2917 Taylor "Ceebynite" Compass . . . . . PER DOZ. \$54.00

Thin-model, white-metal hunter case, strongly hinged; beveled-glass crystal; floating aluminum dial with luminous points; cupped-jewel center; automatic stop lift. Packed each in an attractive box (similar to *Aurapole*, page 21), six in a carton.

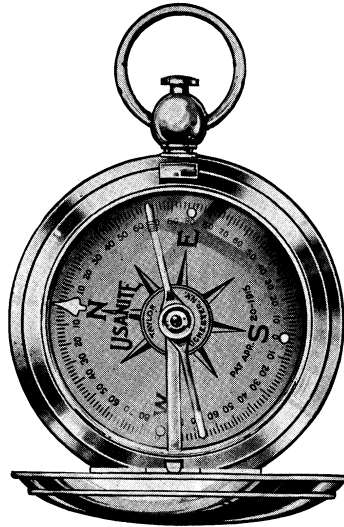
NOTE—Do not "test" the "Ceebynite" for its luminous power in the daytime. A person's eyes take up light and it requires from 15 to 20 minutes in a dark room to bring them in the day to the condition they are in at night. If you wait this length of time in a dark room, the luminous points will appear quite bright and will increase in luminosity the longer you stay.

(Page 33 for booklet, "The Compass, the Signpost of the World.")



# Taylor-Quality Compasses

(American Manufacture)



No. 2918  
(Actual size)

## The "Usanite" Compass

As supplied to the U. S. Army

PATENTED APRIL 20, 1915

The "Usanite" was designed for people who prefer needle-style compasses to those with floating dials.

The north-pointing end of the needle is covered almost completely with radium material, while a smaller portion is applied to the south-pointing end.

The cardinal points (N., E., S. and W.) of the compass dial are similarly prepared, the N. point being distinguished by an arrow head, the other points being represented by dots.

No. 2918 *Taylor* "Usanite" Compass . . . . . **PER DOZ. \$48.00**

Thin-model, white-metal hunter case, strongly hinged; beveled-glass crystal; automatic stop lift; silvered-metal dial; jeweled-center bar needle with luminous points. Packed each in an attractive box (similar to *Aurapole*, page 21), six in a carton.

NOTE—Do not "test" the "Usanite" for its luminous power in the daytime. A person's eyes take up light and it requires from 15 to 20 minutes in a dark room to bring them in the day to the condition they are in at night. If you wait this length of time in a dark room, the luminous points will appear quite bright and will increase in luminosity the longer you stay.

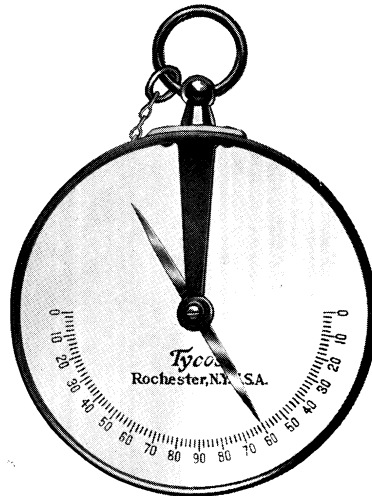
(Page 33 for booklet, "The Compass, the Signpost of the World.")





# Tycos Dipping Needle

(American Manufacture)



No. 2975

(About one-half actual size)

The *Tycos* Dipping Needle has been developed for use in locating accurately and quickly iron box covers and pipe lines (water, gas, etc.) which are buried out of sight. Water-works and gas-works employees find these instruments of great value, and use them daily. They should be a part of every outfit.

The point at which the needle assumes the greatest angle of declination from the horizontal will indicate closely the location of the box or pipe-line.

As a Dipping Needle, or Miner's Compass, this instrument is a guide in the discovery and location of magnetic iron ore. When used for this purpose the observer should take into consideration the local magnetic dip, as well as the general geological formation. This will aid him in telling the approximate depth and mass of the iron ore being traced.

**THE DIPPING NEEDLE WILL NOT INDICATE THE PRESENCE OF NON-MAGNETIC METALS.**

No. 2975 *Tycos* Dipping Needle ..... EACH \$12.00

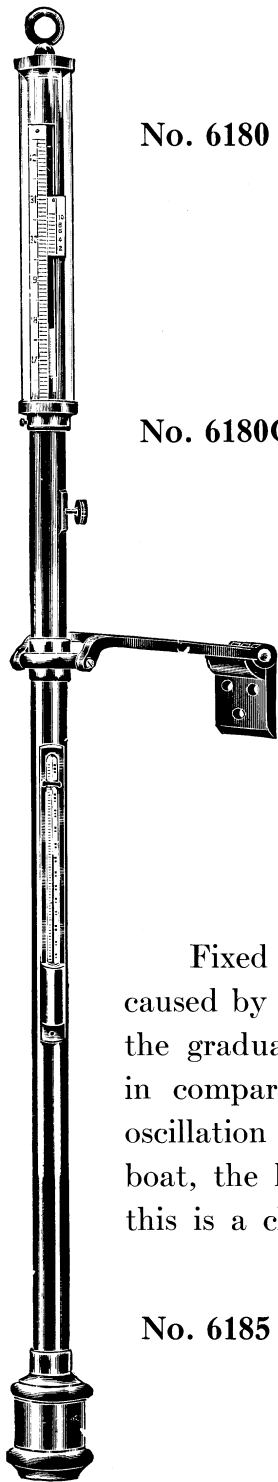
Strong, dull-black metal case with "pull-off" cover; accurately-divided white-metal dial with black figures; magnetic needle poised in jeweled bearings, with stop to prevent needle from swinging when not in use, eliminates breakage. In cloth bag. Weight about 9-ounces.



# Mercurial Barometers

## Observatory Type

(American Manufacture)



No. 6185  
About one-fifth actual size

No. 6180 *Tycos* Observatory-Type Mercurial Barometer . . . . . PRICE ON APPLICATION

Over-all length 39 inches; scale range 26 to 31 inches; inch-and-metric scale with double vernier reading to  $\frac{1}{1000}$  of an inch and  $\frac{1}{10}$  mm; glass cover protects the scale; improved design of cistern makes it impossible for air to get into the tube in transit; black-oxidized brass stem; silvered scales with black-filled figures and graduations. Weight about  $9\frac{3}{4}$  pounds.

No. 6180G *Tycos* Observatory-Type Mercurial Barometer . . . . . PRICE ON APPLICATION

Same as No. 6180, except mounted on mahogany-finished panel (as illustrated). Size of panel 4 inches by 44 inches.

### Extras

“A”—Range for Altitudes up to 5,000 feet . . . . . PRICE ON APPLICATION

“B”—Range for Altitudes up to 5,000 feet . . . . . PRICE ON APPLICATION

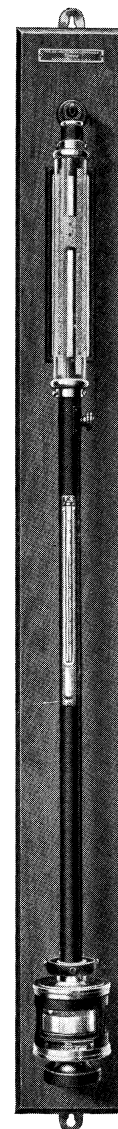
“G” Mahogany-Finished Panel only, for No. 6180 Mercurial Barometer . . . . . PRICE ON APPLICATION

## Marine Type

Fixed cistern without zero adjustment. The deviation caused by a rising or falling column is compensated for in the graduation of the scale. Each instrument is pointed in comparison with a standard barometer. To prevent oscillation of the mercury column from the motion of the boat, the lower end of the tube is contracted, and below this is a chamber to prevent small particles of air rising.

No. 6185 *Tycos* Marine Barometer (best grade) . . . . . PRICE ON APPLICATION

Inch scale, 26 inches to 31 inches,  $\frac{1}{10}$ -inch divisions, vernier reading to  $\frac{1}{100}$ -inch;  $\frac{1}{4}$ -inch-bore barometer tube; black-oxidized-finish brass stem; nickel-silver-scale and vernier, with black-filled figures; Fahrenheit scale engraved thermometer mounted on stem; gimballed arm for attaching; length over-all 38 inches. Each in a carrying box. Weight about 10 pounds.



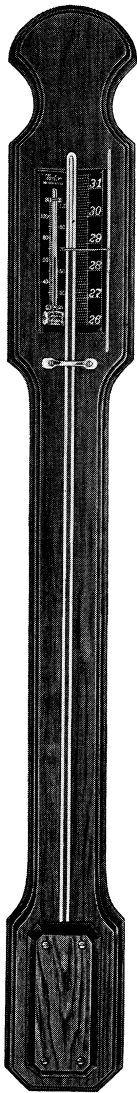
No. 6180-G  
(About one-seventh actual size)



# Mercurial Barometers For Schools and Colleges

(American Manufacture)

No. 6190 *Taylor* Improved Barometer for Schools and Colleges  
(medium grade) . . . . . PRICE ON APPLICATION



For use in altitudes from sea level to 3,000 feet; double scale: (inch scale, 25 inches to 32 inches,  $\frac{1}{10}$ -inch divisions, vernier reading to  $\frac{1}{100}$ -inch; metric scale, 64 cm. to 81 cm.,  $\frac{1}{10}$  cm. divisions, vernier reading to  $\frac{1}{10}$  mm);  $\frac{1}{8}$ -inch-bore barometer tube; black-oxidized-finish scale and vernier, with white-filled figures; sliding scale to allow for changing level of mercury in the cistern; screw attachment for blocking the mercury; mounted on oak board with F. and C. Scale Thermometer; length over-all, 39 inches. Each in a box. Weight about  $2\frac{3}{4}$  pounds.

Extra Tube for No. 6190, filled with mercury, *with* screw stopper . . . . . PRICE ON APPLICATION

Extra Tube for No. 6190, filled with mercury, *without* screw stopper . . . . . PRICE ON APPLICATION

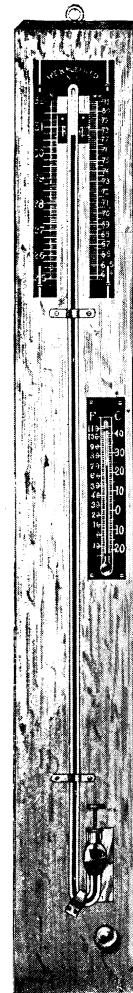
## Library Barometer

No. 6196 Library Barometer (*ordinary grade*). PRICE ON APPLICATION

Inch scale, 26 inches to 31 inches,  $\frac{1}{10}$ -inch divisions; sliding metal pointer;  $\frac{1}{8}$ -inch-bore barometer tube; black-oxidized-finish scale with white-filled figures; mounted on oak board with thermometer; approximate temperature range 10° to 120° F.; length over-all 42 inches. Each in a box. Weight about  $2\frac{3}{4}$  pounds.

No. 6196  
(About one-eighth actual size)

No. 6196A Extra Tubes for No. 6196, filled with mercury . . . . . PRICE ON APPLICATION



No. 6196  
(About one-eighth actual size)



## Weather Series for the Amateur

By P. R. Jameson, F. R. Met. Soc., F. R. G. S.

- |                  |   |                                    |
|------------------|---|------------------------------------|
| <b>Booklet A</b> | <b>"Practical Hints for Amateur Weather Forecasters"</b> . . . . .  | <b>NET<br/>PER 100<br/>\$10.00</b> |
|                  | Twenty-four pages, illustrated, of information on the care and exposure of barometers, how to set for sea level, effect of temperature on the weather, etc. Scale of winds, general indications and approximate forecasts for the barometer scale, for either rising or falling indications.  |                                    |
| <b>Booklet B</b> | <b>"Humidity, Its Effect on Our Health and Comfort"</b> . . . . .   | <b>10.00</b>                       |
|                  | Twenty-four pages, illustrated, on matters concerning the necessity of correcting present-day inside moisture conditions, which are dangerous to health and deprive us of ordinary comfort. Hygrometer and dew-point tables included in this book.  |                                    |
| <b>Booklet C</b> | <b>"The Mountains of Cloudland and Rainfall"</b> . . . . .  | <b>10.00</b>                       |
|                  | Twenty-four pages, illustrated with different types of clouds and ancient and modern rain gauges. Rainfall is dealt with in a very concise manner. Information given on the variety and speed of clouds, with their elevation. Different kinds of clouds are described, so that it is an easy matter for any observer to recognize them quickly.  |                                    |
| <b>Booklet D</b> | <b>"The Thermometer and Its Family Tree"</b> . . . . .  | <b>10.00</b>                       |
|                  | Twenty-four pages, illustrated with thermometers from the time of their invention to the present day. The history of the birth and development of this instrument is popularly dealt with and the different scales in use on all types are clearly described. The manufacture of thermometers is described in plain language, including the manufacture of the glass from which they are made.  |                                    |
| <b>Booklet E</b> | <b>"The Barometer as the Foot-Rule of the Air"</b> . . . . .  | <b>10.00</b>                       |
|                  | Twenty-four pages, illustrated. An elementary booklet describing the invention of the barometer and the processes it has gone through to bring it to its present status. The air, its density and weight, are simply described, also information as to the correct method of using barometers to measure heights, corrections necessary for absolute readings, and the use of the vernier.  |                                    |
| <b>Booklet F</b> | <b>"The Compass, the Signpost of the World"</b> . . . . .   | <b>10.00</b>                       |
|                  | Twenty-four pages, illustrated. History of the compass, its invention and use, clearly given. A map giving declination of the compass for all parts of the United States is also included.  |                                    |
| <b>Book G</b>    | <b>"Weather and Weather Instruments"</b> . . . . .  | <b>EACH<br/>\$ .65</b>             |
|                  | Most books on this subject are either so scientific that they are "beyond" the ordinary layman, or so superficial as to be practically useless. "Weather" is a summary of the information contained in the six books described above. It covers the subject of weather in sufficient detail for the layman, deals with the construction and proper use of instruments used in observing the weather, and gives the history of the development of many of them. Has 140 pages handsomely and durably bound in imitation leather, lettered in gold. Retailers readily at \$1.00 each. |                                    |





**Short & Mason *Tycos*  
Meteorological and Other  
Scientific Instruments**

Manufactured by  
**Short & Mason, Ltd.**  
London, England



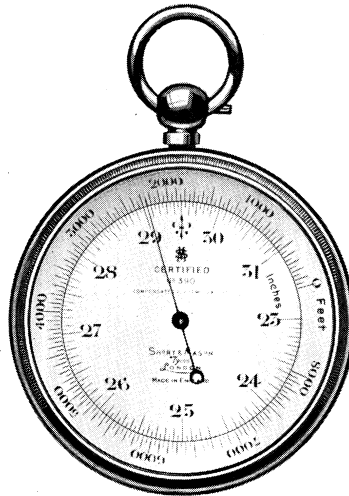
# Short & Mason *Tycos* Super-Grade Certified Watch-Size Aneroid Barometers

(English Manufacture)

Carefully-selected movement.

Compensated for temperature.

Certificate supplied with every instrument.



No. 2000  
(Actual size)

Superior-quality soft-leather case.

Equally-divided altitude scale.

A pocket altitude barometer of character.

This super-grade instrument is made possible by a complete manufacturing equipment, an experience of over 75 years in the manufacture of meteorological instruments, and a force of skilled workmen trained from father to son, through several generations.

No better pocket aneroid barometer is obtainable from any source, at any price. Specially recommended for tourists, engineers and prospectors.

**No. 2000** S. & M. *Tycos* Super-Grade Watch-Size Aneroid Barometer. . . . . **\$45.00**

EACH  
Gold-plated case, 1 $\frac{3}{4}$ " in diameter; silvered-metal dial; altitude scale to 8,000 feet in 50-foot divisions; compensated for temperature; certified. In soft suede case with correction certificate in pocket in case. Weight about 6 ounces.

**No. 2000B** Same as No. 2000, except reading to 3,000 feet in 10-foot divisions. . . . . **48.00**

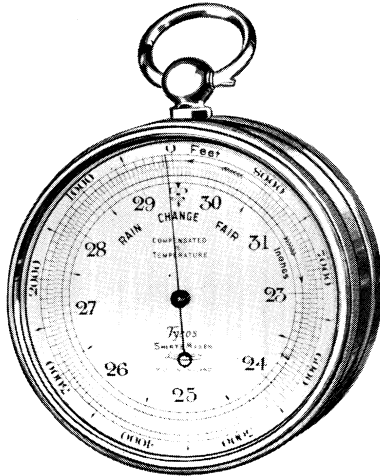
**No. 2000E** Same as No. 2000, except reading to 12,000 feet in 50-foot divisions . . . . . **48.00**

**No. 2000F** Same as No. 2000, except reading to 16,000 feet in 100-foot divisions . . . . . **51.00**



# Short & Mason *Tycos* Watch-Size Aneroid Barometers

(English Manufacture)



Barometer Side



(Compass and Thermometer Side)

No. 2007K

(Illustrations Actual Size)

Best-quality combination barometer, thermometer and compass. Combines in one compact case three indispensable instruments for the traveler, tourist, geologist or engineer.

No. 2007K S. & M. *Tycos* Watch-Size Aneroid Barometer . . . . . **\$67.50** EACH

Aluminum case  $1\frac{3}{4}$  inches in diameter; silvered-metal dial; revolving altitude scale to 8,000 feet divided to 50 feet; compensated for temperature; small compass and thermometer on reverse side. In morocco case. Weight about 6 ounces.

No. 2007KE Same as 2007K, except reading to 12,000 feet in 100 feet divisions . . . . . **70.00**

No. 2007KF Same as 2007K, except reading to 16,000 feet in 100-foot divisions . . . . . **73.00**

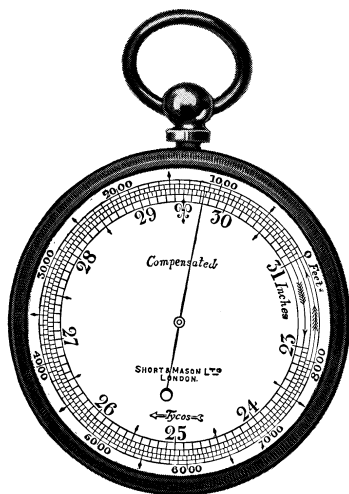


# Short & Mason *Tycos* Watch-Size Aneroid Barometers

(English Manufacture)

This line of Short & Mason *Tycos* Watch-Size Aneroid Barometers is popular with tourists, engineers and prospectors, for use both as "hill measurers" and weather indicators. They are coming to be looked upon by tourists as being as essential as a camera to an all-round satisfactory trip.

### (Best Quality)



No. 2003  
(Actual size)

No. 2003      S. & M. *Tycos* Aneroid Barometer . . . \$36.00

EACH

Gold-plated case, 1¾ inches in diameter; silvered-metal dial; altitude scale to 8,000 feet in 50-foot divisions; compensated for temperature. In soft leather case. Weight about 5 ounces.

No. 2003E      Same as No. 2003, except reading to 12,000 feet in 50-foot divisions. . . . . 39.00

No. 2003F      Same as No. 2003, except reading to 16,000 feet in 100-foot divisions. . . . . 42.00

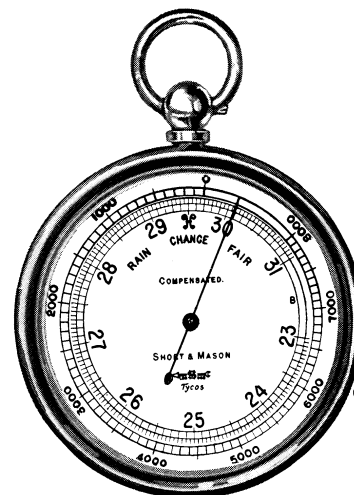
### (Second Quality)

No. 2021      S. & M. *Tycos* Aneroid Barometer . . . \$25.00

EACH

Gold-plated case, 1¾ inches in diameter; silvered-metal dial; altitude scale to 8,000 feet in 100-foot divisions; compensated for temperature. In soft leather case. Weight about 5 ounces.

No. 2021E      Same as No. 2021, except reading to 12,000 feet in 100-foot divisions. . . . . 27.00

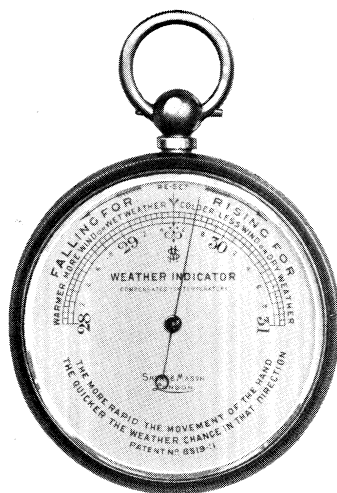


No. 2021  
(Actual size)



# Short & Mason *Tycos* Watch-Size Weather Indicator

(English Manufacture)



No. 2025

(Actual size)

The ideal Pocket Barometer for Hunters, Fishermen and Campers.

No. 2025 S. & M. *Tycos* Pocket Weather Indicator..... **EACH \$30.00**

Gold-plated case, 1¼ inches in diameter; silvered-metal dial; movement compensated for temperature in soft suede carrying case. Weight about 5 ounces.



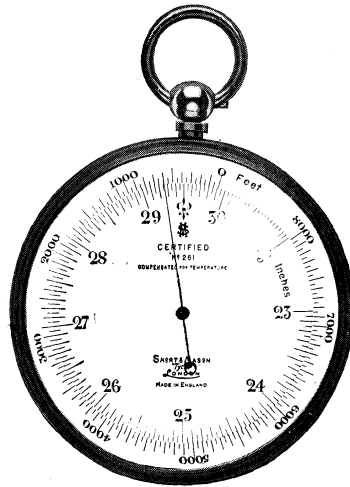


# S. & M. Tycos Super-Grade Certified Pocket-Size Aneroid Barometers

(English Manufacture)

Highest-quality compensated movement, carefully selected.

Equally-divided altitude scale.



No. 2040

(About two-thirds actual size)

Certificate and fine-quality soft-leather case supplied with each instrument.

This super-grade pocket barometer is made by workmen who have spent a lifetime in the making of instruments of highest accuracy. Years of experience has made it possible to turn out an aneroid of unquestionable quality.

Prospectors, engineers and tourists will find these barometers well adapted to their use. Much more open readings can be obtained from an aneroid of this size than from a watch-size aneroid.

**No. 2040** S. & M. Tycos Super-Grade Pocket-Size Aneroid Barometer... **\$50.00** EACH  
Gold-plated case, 2¾ inches in diameter; silvered-metal dial; altitude scale to 8,000 feet in 50-foot divisions; compensated for temperature; certified. In soft leather case, with certificate in pocket of case. Weight about 7 ounces.

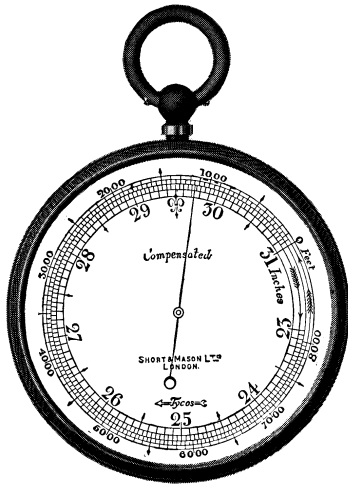
**No. 2040B** Same as No. 2040, except reading to 3,000 feet in 10-foot divisions . . . . . **53.00**

**No. 2040E** Same as No. 2040, except reading to 12,000 feet in 50-foot divisions. . . . . **53.00**



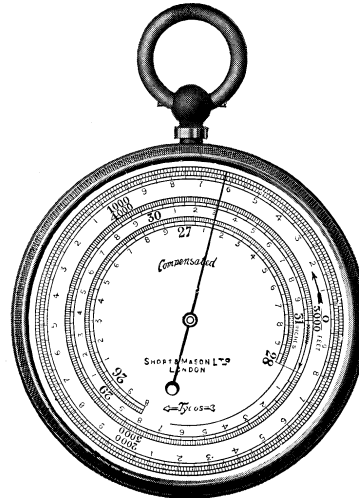
# Short & Mason *Tycos* Pocket-Size Aneroid Barometers

(English Manufacture)



No. 2042

(Illustrations about two-thirds actual size)



No. 2047½

These barometers are the size commonly carried by engineers, being larger and easier to read than the "watch size" (pages 36 to 39) which are designed especially for travelers and tourists. These pocket-size aneroids are popular also with both amateur and professional meteorologists, as they can use them on their desks for forecasting the weather.

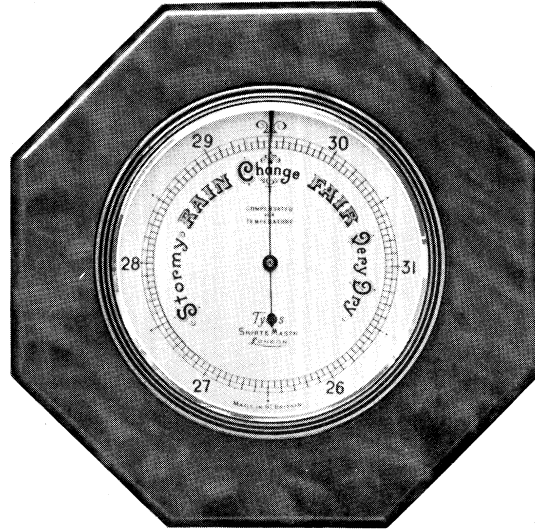
We make for geologists a larger and finer barometer with vernier, about which we will gladly furnish information on request.

(Best Quality)

<b>No. 2042</b>	S. & M. <i>Tycos</i> Pocket-Size Aneroid barometer. . . . .	EACH <b>\$ 45.00</b>
	Gold-plated case, 2¾ inches in diameter; silvered-metal dial; altitude scale reading to 8,000 feet in 50-foot divisions; compensated for temperature. In soft leather case. Weight about 8 ounces.	
<b>No. 2042B</b>	Same as No. 2042, except reading to 3,000 feet in 10-foot divisions. . . . .	<b>48.00</b>
<b>No. 2042E</b>	Same as No. 2042, except reading to 12,000 feet in 50-foot divisions. . . . .	<b>48.00</b>
<b>No. 2047½</b>	Same as No. 2042, except reading to 5,000 feet in double circle of divisions sub-divided to five feet; soft leather case; with S. & M. certificate. . . . .	<b>70.00</b>



## Short & Mason *Tycos* Desk Barometers (English Manufacture)



No. 2054

(About two-thirds actual size)

This S. & M. *Tycos* Desk Barometer is popular with the executive, permitting him to forecast the weather from his desk. The beauty of design makes it eminently suitable also for the home.

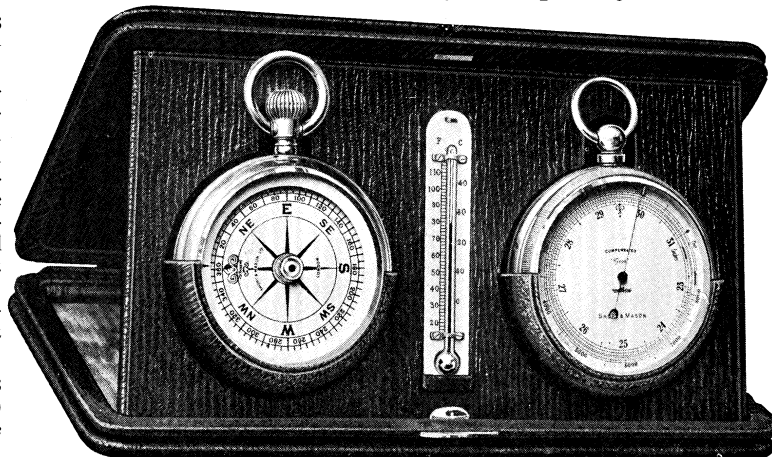
- |           |   |                        |
|-----------|---|------------------------|
| No. 2054B | S. & M. <i>Tycos</i> Desk Barometer .....   | EACH<br><b>\$30.00</b> |
|           | Best-quality movement compensated for temperature; engraved silvered-metal dial; in peacock-blue frame; gilt strut on back to support instrument upright on desk or table. Each in a cardboard box. |                        |
| No. 2054M | Same as No. 2054B, except in mottled-granite-brown frame .....  | <b>30.00</b>           |
| No. 2054S | Same as above, except in imitation-tortoise-shell frame .....   | <b>30.00</b>           |

## Short & Mason *Tycos* Traveling Sets (English Manufacture)

These sets include three instruments indispensable to the traveler, the tourist, the hunter; in fact to all who spend any time in the great out-of-doors.

- |           |  |                        |
|-----------|--|------------------------|
| No. 2049S | S. & M. <i>Tycos</i> "Livingstone" Traveling Set ( <i>finest quality</i> ) . . . | EACH<br><b>\$60.00</b> |
|-----------|--|------------------------|

Comprises a No. 2003 (*page 38*) 1 $\frac{3}{4}$ -inch best-quality watch-size aneroid barometer, compensated for temperature and dial graduated to 8,000 feet altitude in 50-foot divisions; a full-size pocket magnetic compass and an ivory-scale thermometer. All in best-quality blue soft skiver carrying case, with easel back, as illustrated. Weight about 11 ounces.



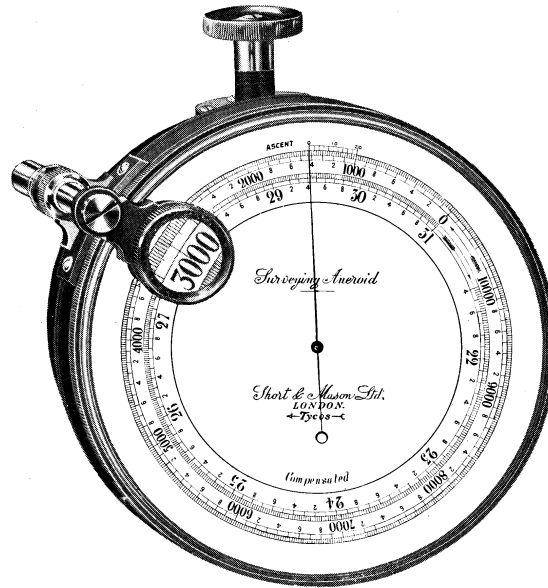
No. 2049

(About two-thirds actual size)

NOTE—Can be supplied with No. 2003 aneroid barometer reading to 12,000 or 16,000 feet as an extra (*see page 38*).

# Short & Mason *Tycos* Special Surveying Aneroid Barometers

(English Manufacture)



No. 2121D  
(About one-half actual size)

New features have been added to this exceptional instrument, making it the ideal surveying barometer. These features are the revolving altitude scale and the device for locking the scale. Special with S. & M. *Tycos* Surveying Barometer only.

These instruments are designed especially for readily ascertaining slight variations of gradients, levels, etc. For approximate surveys and levelings for roads, railways, canals, water courses and mines they are invaluable, as their readings are taken so easily and rapidly. They are in great demand by geologists in the oil regions for checking up slight differences in elevation.

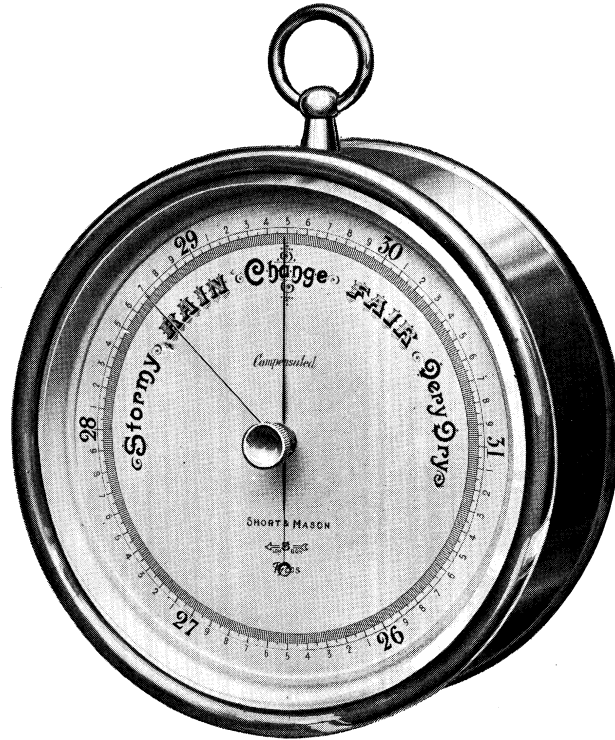
The action has been arranged to give accurate readings on a regular scale of altitudes. The barometer scale of inches has been made progressive, to afford the correct relative readings with the scale of altitudes, but this arrangement in no way interferes with their use as ordinary barometers.

	EACH
<b>No. 2120</b> S. & M. <i>Tycos</i> Surveying Aneroid Barometer.....	<b>\$102.00</b>
Aluminum case three inches in diameter; silvered-metal dial with vernier, altitude scale moved by rackwork motion; locking device for locking altitude scale; reading lens arranged to traverse the entire circle; movement compensated for temperature; altitude scale 6,000 feet, reading by vernier to two feet of elevation. In solid-leather sling carrying case. Weight about 38 ounces.	
<b>No. 2120B</b> Same as No. 2120, except for readings to 3,000 feet only and reading by vernier to single feet of elevation.....	<b>107.50</b>
<b>No. 2121</b> Same as No. 2120, except 5 inches in diameter and reading by vernier to single feet of elevation; weight 49½ ounces.....	<b>117.00</b>
<b>No. 2121B</b> Same as No. 2121, except for readings to 3,000 feet only reading by vernier to single feet of elevation.....	<b>122.50</b>
<b>No. 2121D</b> Same as No. 2121, except for readings to 10,000 feet; vernier reading to two feet of elevation.....	<b>122.00</b>
<b>No. 2121F</b> Same as No. 2121, except for readings to 16,000 feet; vernier reading to two feet of elevation.....	<b>128.00</b>



# Short & Mason *Tycos* Cylindrical-Brass-Case Weather Barometers

(English Manufacture)



No. 2218

(About three-fifths actual size)

A high-grade aneroid barometer for the professional man, ship's officer, meteorologist, or engineer. The vacuum chambers being  $2\frac{3}{4}$  inches in diameter, these instruments are specially recommended for accurate and important meteorological work.

No. 2218 S. & M. *Tycos* Cylindrical-Brass-Case Weather Barometer . . . . . <sup>EACH</sup> \$40.00

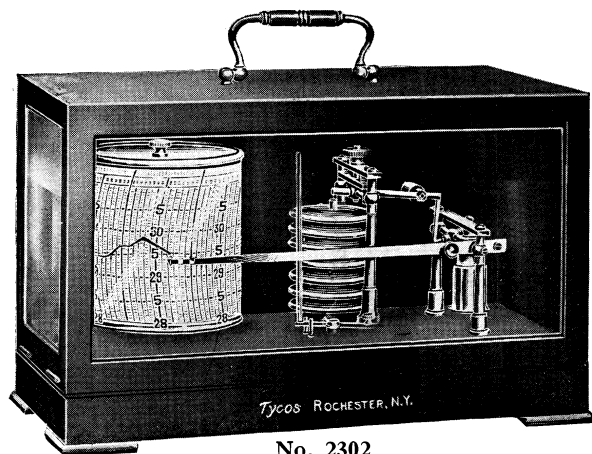
Dial reads to 0.01 of an inch and the hand is extra fine; first-quality movement compensated for temperature;  $4\frac{3}{4}$  inches in diameter,  $2\frac{1}{8}$  inches deep with straight sides; bevel-glass crystal; hand-engraved metal dial; polished and lacquered brass case. In morocco snap carrying case. Weight about 28 ounces.



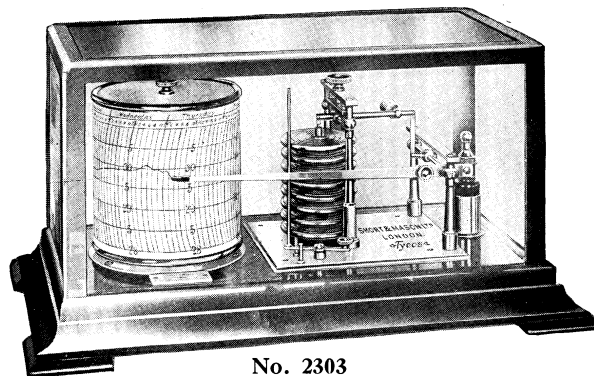
# Short & Mason *Tycos* "Stormographs" (Recording Barometers)

(English Manufacture)

As Supplied to U. S. Weather Bureau, U. S. Navy Yard, Coast and Geodetic Survey, Bureau of Plant Industry, etc.



No. 2302



No. 2303

(Illustrations about one-fifth actual size)

In weather prognostication a single observation of the barometer is of little or no value, and while frequent readings will if recorded convey the desired information, provided changes in atmospheric pressure are gradual, yet when sudden changes occur between observations such records will be missing and probably will lead to a misinterpretation of "weather signs".

The "Stormograph" is a most reliable form of barometer for indicating the present-time atmospheric pressure, but its special value lies in the continuous hourly record of every fluctuation in pressure which it creates on a seven-day chart, showing not only the extent of the various changes, but also the time of their occurrence.

		EACH
No. 2302	S. & M. <i>Tycos</i> "Stormograph" .....	\$105.00
Mahogany case 12 inches long, 7 inches high, 6 inches deep; cover hinged at end; glass in front and one end; with handle. Weight $6\frac{3}{4}$ pounds. With year's supply of charts and bottle of ink.		
No. 2303	S. & M. <i>Tycos</i> "Stormograph" .....	105.00
Mahogany frame, 14 inches long, 7 inches high, 8 inches deep; plain glass cover. Weight $7\frac{1}{2}$ pounds. With year's supply of charts and bottle of ink.		
No. 2305	S. & M. <i>Tycos</i> "Stormograph" .....	125.00
Mahogany case, $14\frac{1}{2}$ inches long, 8 inches high, $8\frac{3}{4}$ inches deep; beveled-plate glass; with front-opening drawer, which has two divisions, for holding used and unused charts. Weight, 11 pounds. With year's supply of charts and bottle of ink.		

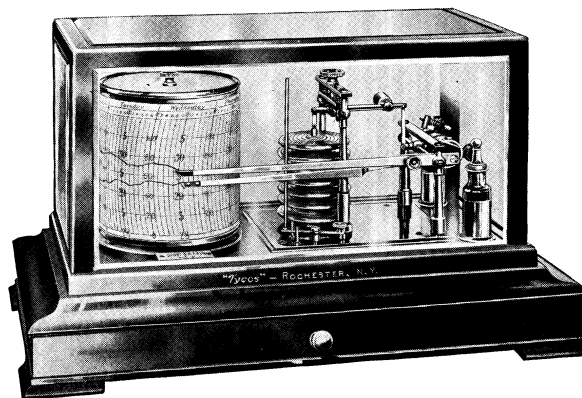
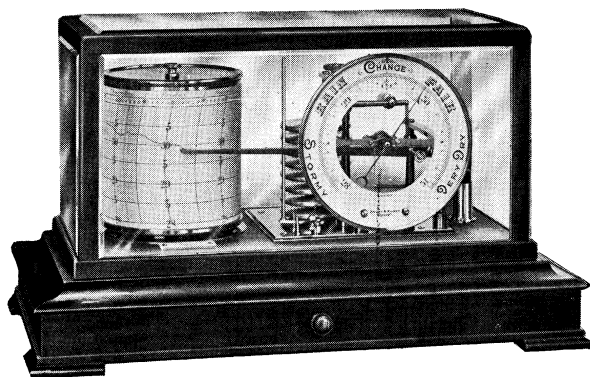
### Extras for "Stormographs"

Set (year's supply) of No. 2 perforated charts.....	\$3.00
Ink, plain bottle.....	.50
Ink, stoppered bottle.....	1.00
V-Shape Pens.....	1.00



# Short & Mason *Tycos* "Stormographs"

(English Manufacture)



Fitted to Stormograph No. 2305

Illustrating NN Attachment  
(British Registered No. 428,606. Design Copyrighted.)

Illustrating PP Attachment  
(British Design Registered No. 476,369. Chart Copyrighted)

(Illustrations about one-fifth actual size)

The S. & M. "NN" attachment illustrated above on a No. 2305 S. & M. *Tycos* "Stormograph" can be fitted to any of the "Stormographs" listed (*page 45*). It combines with the record of the "Stormograph" chart the dial readings of an ordinary aneroid barometer. Being actuated by the same movement and adjusted to complete agreement, the pen on the chart and the hand on the dial invariably will give the same indications.

The advantage of this combined "Stormograph" and Aneroid Barometer to the lay user is obvious; the present-time barometer readings are more readily determined by the dial, while the chart records the hourly variation in pressure, as indicated on the dial. Instead of complicating the "Stormograph" it really simplifies it, and adds a most interesting feature. The dial readings are engraved on silvered metal and it is attached as in above illustration.

DESCRIPTIVE  
LETTER

"NN" S. & M. *Tycos* Auxiliary Dial for "Stormographs" . . . . . EACH \$20.00

Can be attached to any "Stormograph" listed (*page 45*).

The S. & M. "PP" Thermograph attachment illustrated above on a No. 2305 S. & M. *Tycos* "Stormograph" can be fitted to any of the "Stormographs" listed (*page 45*), furnishing barometer and thermometer readings on the same chart. The range of the barometer is from 28 to 31 inches, while the thermometer shows a range of 0° to 120°F. in 2° lines. Two colors of ink are used (blue for the barometer record and green for the thermometer record) avoiding any possible confusion of records.

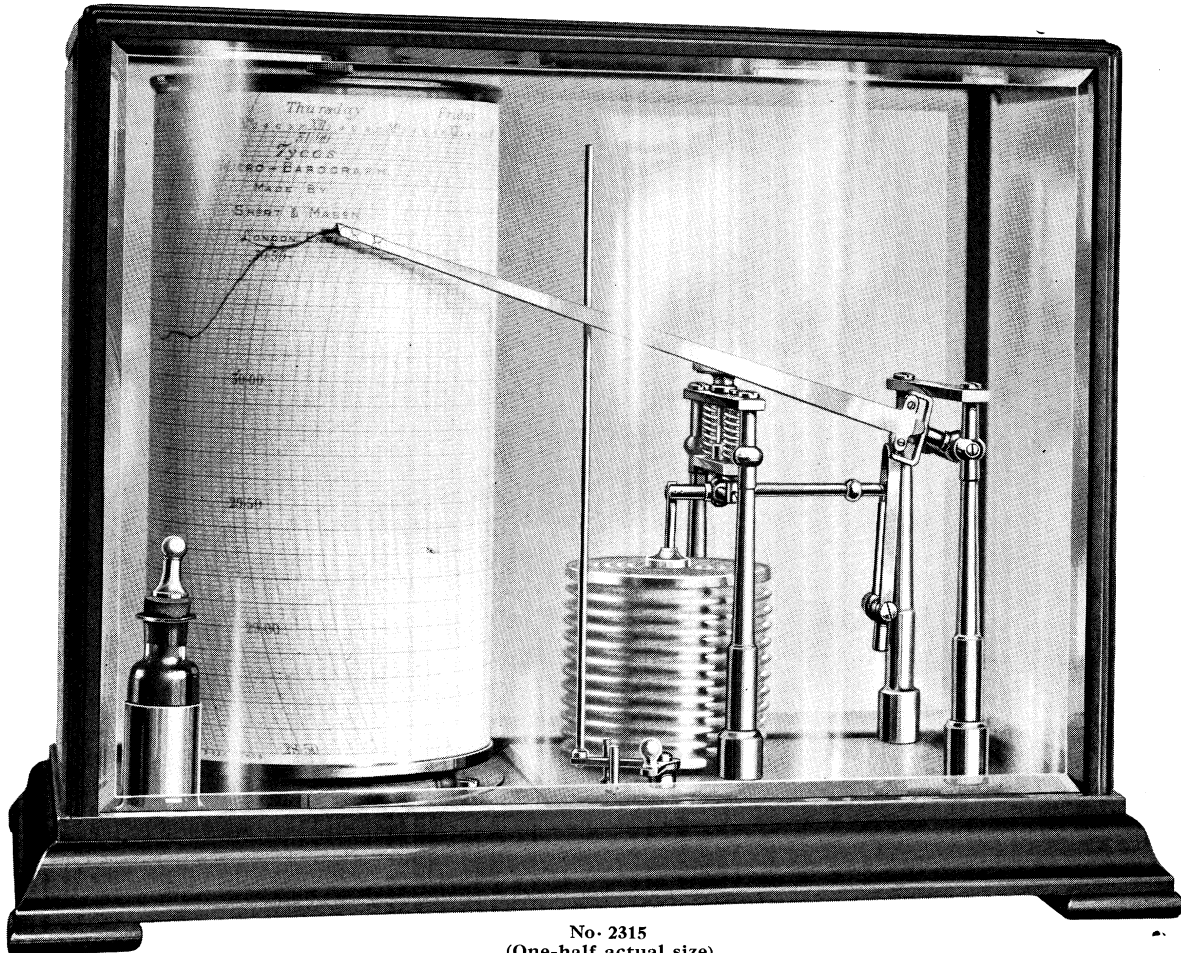
DESCRIPTION  
LETTER

"PP" S. & M. *Tycos* "Thermograph" Attachment for "Stormographs" \$30.00

Can be attached to any "Stormograph" listed (*page 45*).

No. 20 Perforated Charts for "Stormo-Thermographs", year's supply \$ 3.50

## Short & Mason *Tycos* "Micro-Barographs" (English Manufacture)



No. 2315  
(One-half actual size)

The "Micro-Barograph" has a remarkably sensitive movement and an unusually high chart, furnishing a record of even the smallest changes in atmospheric pressure. Slight variations, hardly visible on an ordinary barograph chart, are read easily from the chart of a "Micro-Barograph."

**Public-Service Corporations** find the "Micro-Barograph" of immeasurable value in guarding their equipment against storm periods, enabling them to have emergency equipment and workmen available with the least possible delay.

**Laboratories**, where the determination of atmospheric pressure has a decided bearing on the results of certain investigations and experiments, find the "Micro-Barograph" a valuable addition to their equipment.

**Universities, Technical Schools and High Schools** can use the "Micro-Barograph" to great advantage in connection with lectures, in the study of atmospheric pressure and its effect upon other natural phenomena, because of its sensitiveness and its records of slight variations.

**Surveyors and Engineers** find the "Micro-Barograph" an ideal instrument for use at the station (starting point) when checking up differences of elevation by means of an altitude barometer, or surveying aneroid, showing as it does very minute variations of atmospheric pressure, which would affect the readings of the altitude barometer.

**No. 2315** Short & Mason *Tycos* "Micro-Barograph" . . . . . EACH \$250.00

Metal frame 12 inches long by 9 inches high by 6½ inches deep; beveled plate-glass sides and top; chart is 10¾ inches long by 6½ inches high. Weight 14 pounds and 2 ounces. Complete with year's supply of charts and bottle of ink.

**No. 130** Extra Charts for "Micro-Barograph" (year's supply) . . . . . 4.50

(Extra for pens and ink same as on page 45)

Page 47

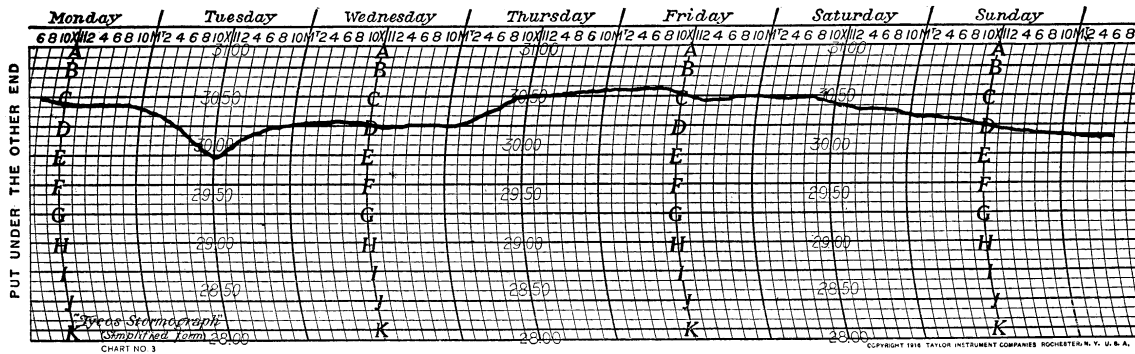


# Short & Mason Tycos "Micro-Barographs"

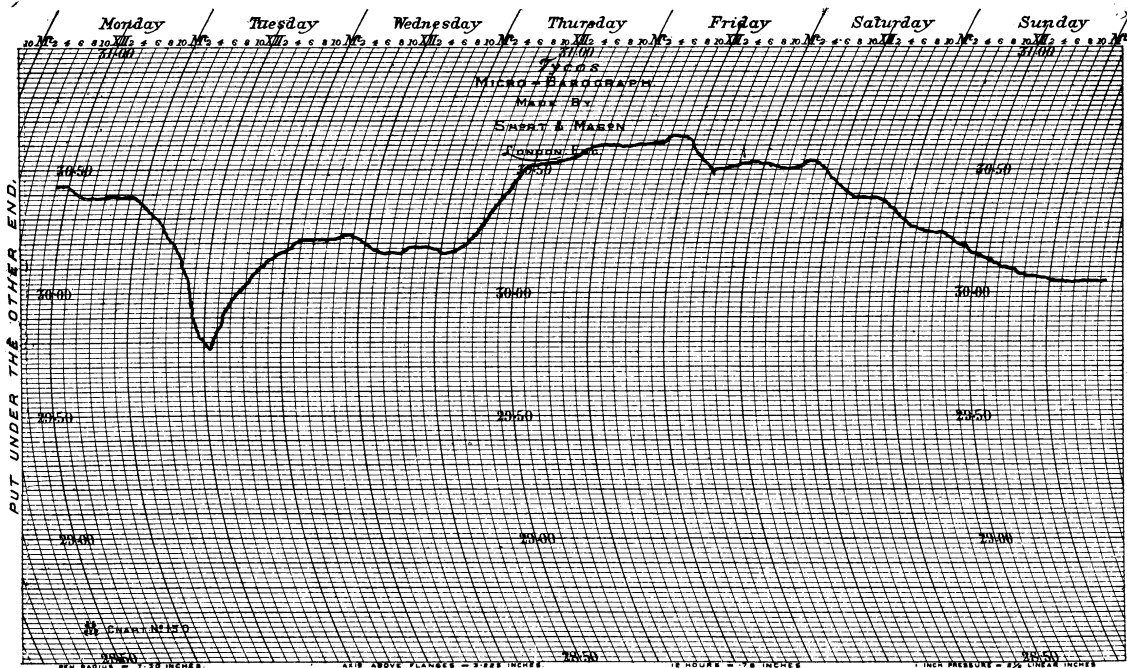
The half-size illustrations (*below*) of a chart and record from an ordinary barograph and a "Micro-Barograph" record covering the same period of time, visualize the great advantage of the "Micro-Barograph" when close readings are important.

Whereas it is possible with the regular type of barograph to read only to .10 (one-tenth) of an inch of pressure, the charts used on the "Micro-Barograph" are divided to .02 (two hundredths) of an inch of pressure and these small divisions can be subdivided by the eye to .01 (one hundredth) of an inch.

As shown by the illustrations (*below*) an inch of pressure covers a space on the "Micro-Barograph" chart of approximately 2½ times that on an ordinary chart, making it possible to read slight variations which hardly would be visible on an ordinary chart.



Record made by a regular-size Barograph during the week ending Nov. 4th, 1923  
(One-half actual size)



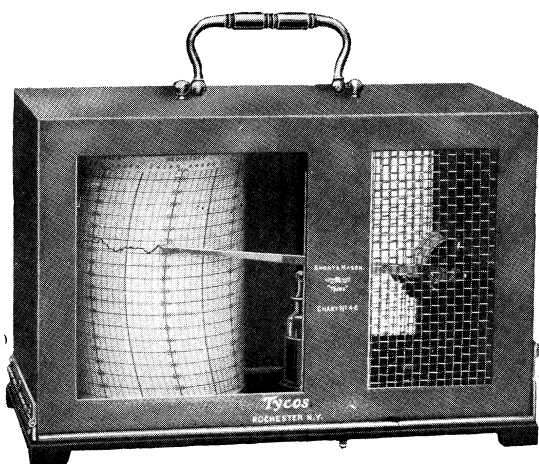
Record made by a "Micro-Barograph" during the same period ending Nov. 4th, 1923.  
(One-half actual size)



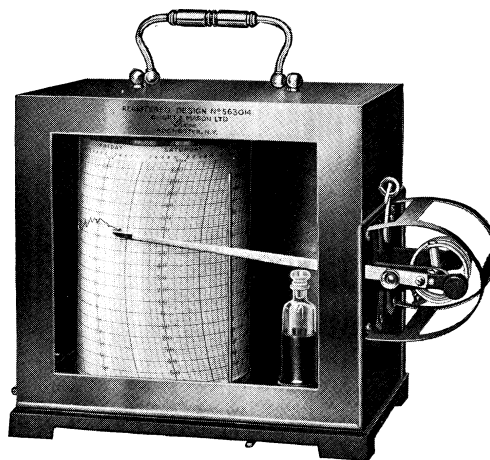
# Short & Mason *Tycos* "Thermographs" (Recording Thermometers)

(English Manufacture)

As supplied to U. S. Weather Bureau, Bureau of Plant Industry, U. S. Navy Yard, Bureau of Engraving and Printing, Dept. of Botanical Research. Official Pattern British Meteorological Service, British Air Ministry, etc.



No. 2353 1/2



No. 2360

(Illustrations about one-fifth actual size)

The bi-metallic coils used in these instruments have been proven to be more satisfactory than the old-style liquid thermostats. The new "gate" arm reduces friction between pen point and chart and there are no levers to cause "lag" or "creep" errors.

Instrument No. 2360 can be arranged to show temperatures covering any 75°F., 150°F. or 300° F. range, and charts are sent ruled only, so they can be figured at the will of the user. An engraved-stem mercurial thermometer accompanies each No. 2360, to assist the user in the adjustment of his instrument.

If an instrument with a range of 150° F. is to be used, the first thing necessary is to figure the chart in the manner desired. As an instance, suppose it was arranged with the 50° at the bottom of the chart and 200° at the top, covering 150° F. from lowest to highest point. The chart should then be placed around the clock drum, the setting thermometer placed in proximity to the coil and the reading taken. Imagine it reading 65° F. At the end of the pen arm will be found a nickel-plated screw securing it to the bar running at right angles through the spiral thermometric coil. When this is loosened the arm is free for adjustment. Place the pen arm on the 65° F. mark on chart (agreeing with the mercurial thermometer), and tighten screw again, thus securing it to the horizontal bar. Small final adjustments can be made by the long screw at the back of the coil, with the fingers or an ordinary screw-driver.

EACH

**No. 2353 1/2 S. & M. *Tycos* High-Drum-Clock Thermograph . . . . . \$105.00**

This instrument has oxidized-copper hinged case 14 inches long by 6 7/8 inches high by 5 1/8 inches deep, with iron base; is supplied with seven-day clock, bottle of ink and a year's supply of No. 46 Charts (range minus 62°F. to 126°F.); has recording lamina inside. Weight about seven pounds.

**No. 2360 S. & M. *Tycos* Thermograph "M.O." Pattern . . . . . 105.00**

As used by the English Meteorological Office. Has exposed lamina, which insures perfect circulation of air. A sensitive, durable, portable recording thermometer. Hinged copper lid; cast-metal base; is 7 inches long by 6 7/8 inches high by 5 1/8 inches deep; supplied with 7-day clock and 6-inch setting thermometer, for purposes of comparison. Complete with bottle of ink and a year's supply of No. 54 unfigured charts for any 75° range, or No. 46 Charts (range minus 62°F. to plus 126°F.). Weight about 7 1/2 pounds.

NOTE—No. 2353 1/2 and 2360 can be supplied without extra charge, if so specified on order, to show any range covering 75°F., 150°F. or 300°F., the charts being ruled but not figured, so that the user can fill them in to suit his requirements. In specifying chart wanted, use "A" for 75° range, "B" for 150° range and "C" for 300° range.

### Extras for S. & M. *Tycos* Thermograph

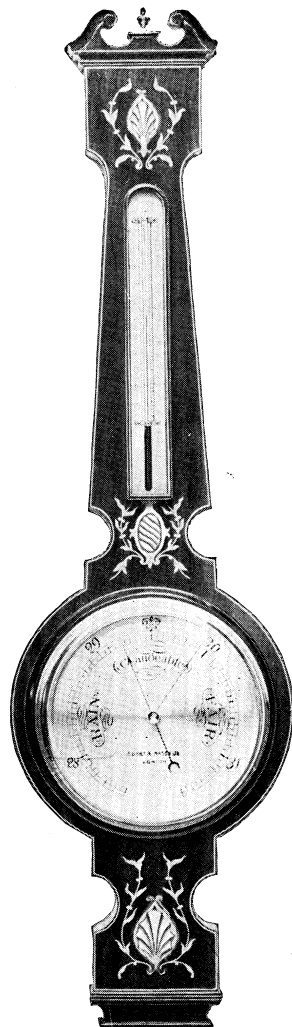
Charts No. 46 (years supply) . . . . .	\$3.50	Ink, Plain bottle . . . . .	\$ .50
" " 54 " " unfigured . . . . .	3.50	Pens . . . . .	1.00



# Short & Mason *Tycos* Pendant Barometers

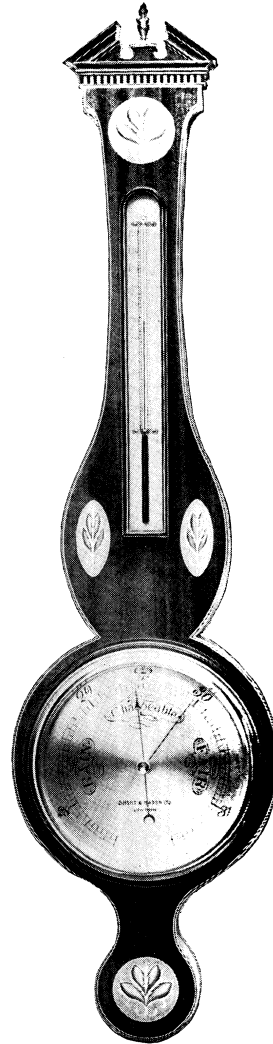
## "Sheraton" (Old English) Designs

(English Manufacture)



No. 2470

(Design Registered in Great Britain)



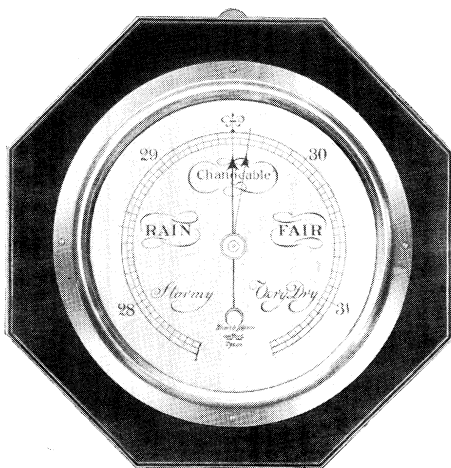
No. 2471

- |                    |  |                |
|--------------------|--|----------------|
|                    |  | EACH           |
| <b>No. 2470-8"</b> | <b>S. &amp; M. <i>Tycos</i> Pendant Aneroid Barometer</b> . . . . .  | <b>\$70.00</b> |
|                    | Inlaid solid mahogany, old-pattern wheel aneroid barometer (39 inches by 11 inches), pediment top; antique silvered-metal 8-inch dial; red-spirit-filled thermometer; first-quality compensated movement. Weight about 7¼ pounds.  |                |
| <b>No. 2470-5"</b> | Same as No. 2470-8", except 5-inch dial (27 inches by 7 inches) . . . . .  | <b>53.00</b>   |
|                    | Weight about 3¾ pounds.  |                |
| <b>No. 2471-8"</b> | <b>S. &amp; M. <i>Tycos</i> Pendant Aneroid Barometer</b> . . . . .  | <b>70.00</b>   |
|                    | Inlaid solid mahogany, old-pattern wheel aneroid barometer (39 inches by 10½ inches), pediment top; antique silvered-metal 8-inch dial; red-spirit-filled thermometer; first-quality compensated movement. Weight about 7½ pounds. |                |
| <b>No. 2471-5"</b> | Same as No. 2471-8", except 5-inch dial (27 inches by 7 inches) . . . . .  | <b>53.00</b>   |
|                    | Weight about 3½ pounds.  |                |
|                    | NOTE—Above barometers furnished with revolving altitude adjustment for setting to sea-level  | EXTRA          |
|                    | reading up to 3,500 feet. . . . .  | <b>\$5.00</b>  |



# Short & Mason *Tycos* Octagonal-Frame Aneroid Barometers

(English Manufacture)



No. 2555½

(About one-fourth actual size)

No. 2555½ S. & M. *Tycos* Inlaid Solid-Mahogany Octagonal  
Aneroid Barometer . . . . . **EACH \$30.00**

One of the choicest designs we have ever offered. The metal dial is gilt-finished, to match the bezel; dial 6 inches in diameter; case 9 inches in diameter. Movement not compensated. Each in a cardboard box. Weight about 3½ pounds.

No. 2555½A Same as No. 2555½, except with best-quality compensated movement . . . **32.00**

NOTE—Above barometers furnished with altitude adjustment up to 3,500 feet . . . . . **EXTRA \$5.00**



# Short & Mason *Tycos* Indoor Thermometers

(English Manufacture)

Something decidedly recherche in cabinet (wood back) thermometers. Decorative black lettering and figuring in the Daniel Quaire style, on brass scale. Genuinely antique in its appearance. A companion-piece to the octagonal barometer described above.

No. 3710 S. & M. *Tycos* Indoor Thermometer . . . . . **EACH \$5.00**

No. 3710  
(About one-fourth actual size)

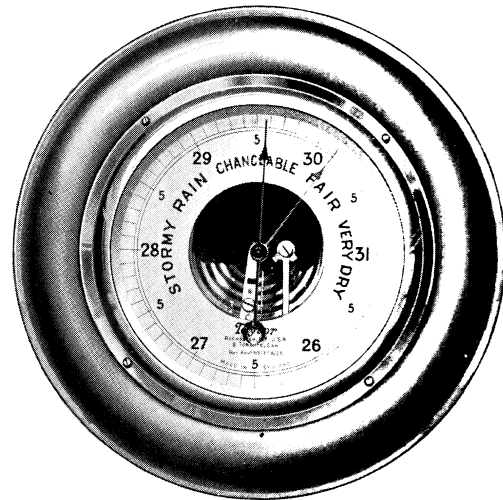
Mahogany 8-inch back; indoor temperature range approximately 10° to 120° F.; plain tube filled with red spirit; gold-plated fittings; black figures and letters on brass scale. Each in a cardboard box. Weight about 7 ounces.

# Taylor Round Wood-Frame and Metal Frame Aneroid Barometers

(English Manufacture)



No. 2502



No. 2505

(Illustrations about one-third actual size)

The constant demand for a barometer at a conservative price has brought about the development of the *Taylor* Wood-Frame and *Taylor* Metal-Frame Aneroid Barometers listed below. At these prices the dealer can carry a good stock with a small investment.

No. 2502 *Taylor* Wood-Frame Aneroid Barometer . . . . . EACH  
\$10.00

Round frame, polished-mahogany finish, 7½" in diameter, with hanger at top; open-center enameled metal dial 4" in diameter; visible works; good-grade movement well finished; polished-brass bezel holding sheet-glass crystal. Each in a cardboard box. Weight about 2 pounds.

No. 2505 *Taylor* Metal-Frame Aneroid Barometer . . . . . 10.00

Round 7½"-diameter molded metal frame; is antique oxidized-silver finish, with bezel and hands to match; open-center enameled-metal dial 4" in diameter; visible works; good-grade movement; sheet-glass crystal. Each in a cardboard box. Weight about 2 pounds.

# Short & Mason *Tycos* Rain Gauges

(English Manufacture)

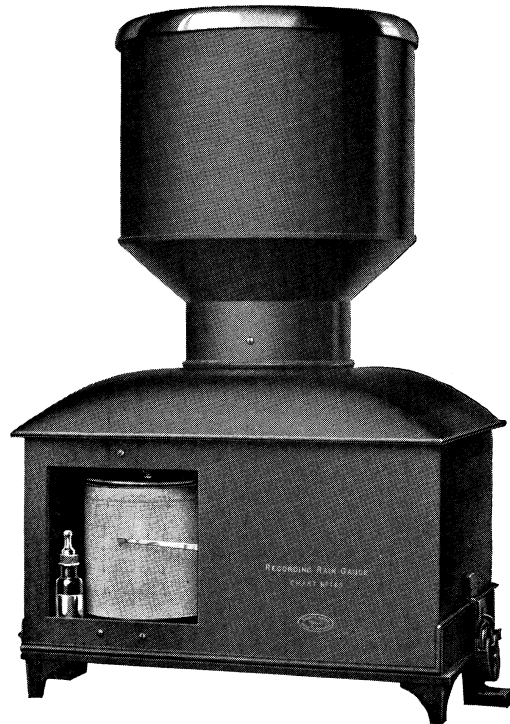


No. 2721  
(About one-fourth actual size)

## Zero-Setting Registering Rain Gauge

No measurement in a graduated glass is necessary. The rain is collected in an 8-inch receiver, passes through a small pipe and drops into one side of a bucket. When 0.01 of an inch of rain has collected, its weight causes the bucket to overbalance and the hand moves mechanically 0.01 of an inch on the dial. The rain, still passing through the receiver, is collected in the opposite bucket, and when that has received the given amount the operation is repeated.

With this gauge it is possible to keep a record of rainfall by the month or week, since with the zero-setting device no calculation is necessary. The dial registers one inch in 1-100th of an inch; the second (smaller) dial reading upwards to 12 inches.



No. 2724 $\frac{1}{2}$ N  
(About one-fifth actual size)

NO.		EACH
2721	S. & M. <i>Tycos</i> Zero-Setting Rain Gauge.....	\$ 60.00
	Japanned metal case, 10 by 8 inches. Weight about 6 pounds.	
2721A	Same as No. 2721, except copper case.....	72.00

## Recording Rain Gauge

This gauge operates with tilting buckets, and also records on a chart the amount of rainfall. When the rainfall during the time covered by the chart reaches the full amount of the chart range the mechanism automatically trips itself and the pen returns to zero and continues its record.

They are furnished (listed below) with 24-hour charts scaled to one-half of an inch divided to .01 of an inch, and also with 7-day charts scaled to one inch of rain divided to .02 of an inch, with mechanism arranged to operate according to the increased range of the chart. Padlock and key are provided, to prevent tampering while rainfall is being recorded.

Insurance companies find this instrument admirably adapted to their requirements, and prefer No. 2724 $\frac{1}{2}$ N, with 24-hour charts.

NO.		EACH
2724 $\frac{1}{2}$ N	S. & M. <i>Tycos</i> Recording Rain Gauge.....	\$160.00
	Japanned metal case; funnel 8 inches in diameter and 6 inches deep; recording on No. 145, 24-hour chart scaled to $\frac{1}{2}$ " , divided to .01 inch. Complete with 100 charts and bottle of ink. Weight about 15 $\frac{1}{2}$ pounds.	
2724 $\frac{1}{2}$	S. & M. <i>Tycos</i> Recording Rain Gauge.....	160.00
	Same as No. 2724 $\frac{1}{2}$ N, except with No. 121, seven-day chart, scaled to 1 inch, divided to .02 inch. Complete with a year's supply of charts and bottle of ink. Weight about 15 $\frac{1}{2}$ pounds.	

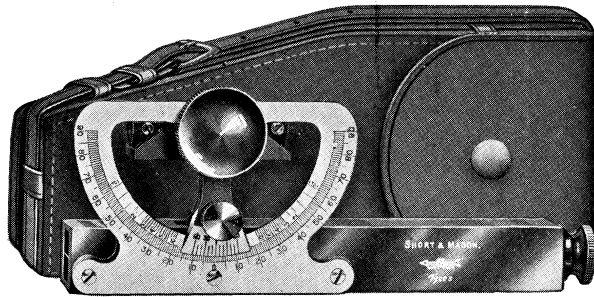
### Extra For Recording Rain Gauges

Set (100 charts) of No. 145 charts.....	\$5.00	Ink, stoppered bottle.....	\$1.00
Set (years supply) of No. 121 charts.....	3.00	V-Shape Pens.....	1.00
Ink, plain bottle.....	.50		



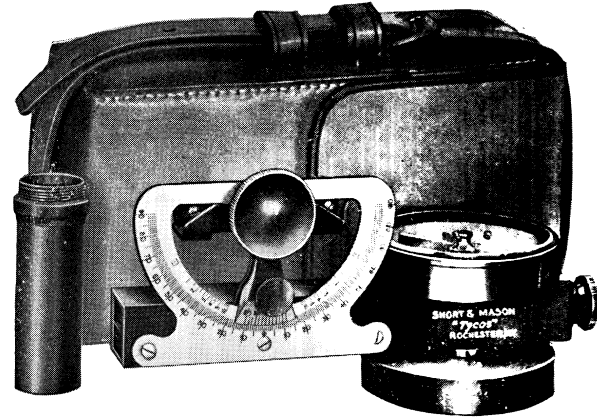
# Short & Mason *Tycos* Abney's Levels

(English Manufacture)



No. 3001

(Illustrations about one-half actual size)



No. 3005

This instrument is used for ascertaining the height of buildings, trees, or other objects also; for setting out gradients for railway, drainage and mining purposes, and any operation where angular distance or inclination of surface is required.

When the height of any object is to be taken, a fairly level piece of ground should be selected and a line of say 100 feet correctly measured from the object. This forms the base line. At the end of this line the observer should stand; then, directing his vision through the tube of the level, he should elevate it at the objective end until the highest point of the object is seen bi-sected by the cross wire of the reflector within the tube. While holding it steadily in this position, the spirit level which is attached to the axis of the arc should be turned upon its center by means of the milled head until the bubble reflected in the mirror is bi-sected by the cross wire of the reflector. The alignment is then complete and the height of the object is obtained by reading off the index of the arc.

The arc has two graduated scales, one reading in degrees 0 to 90 in both directions, and subdivided by vernier on the index to 10 minutes. This will indicate the vertical angle.

The inner set of figures reading 1-1 to 10 is the grade scale. It is read off by the fiducial edge at the side of the index. When read after sighting on a distant object it gives the height of the object in terms of the base line. If therefore the edge coincides with division 4 the length of the vertical line, or the height of the object, is 1 in 4 of the base line. If the base line is 100 feet, the height of the object will be 25 feet above the level of the eye of the observer.

No. 3001½ has the grade scale figured in percentage of the measured base line. Instead of a reading 1 in 4 this instrument would indicate 25% as the length of the line.

<b>No. 3001</b>	<b>S. &amp; M. <i>Tycos</i> Abney's Level</b> . . . . .	<b>EACH \$30.00</b>
	Five inches long; large nickel-silver arc with draw telescope and improved fixing-clamp to vernier. In leather sling carrying case. Weight 6 ounces.	
<b>No. 3001½</b>	Same as No. 3001, except with scale reading in degrees, and grade scale in percentages . . . . .	<b>30.00</b>
<b>No. 3005</b>	<b>S. &amp; M. <i>Tycos</i> Abney Level</b> . . . . .	<b>45.00</b>
	Improved form as above, with compass and circular base on which the whole rotates, by means of which horizontal angles can be measured. In leather sling carrying case. Weight 11 ounces.	

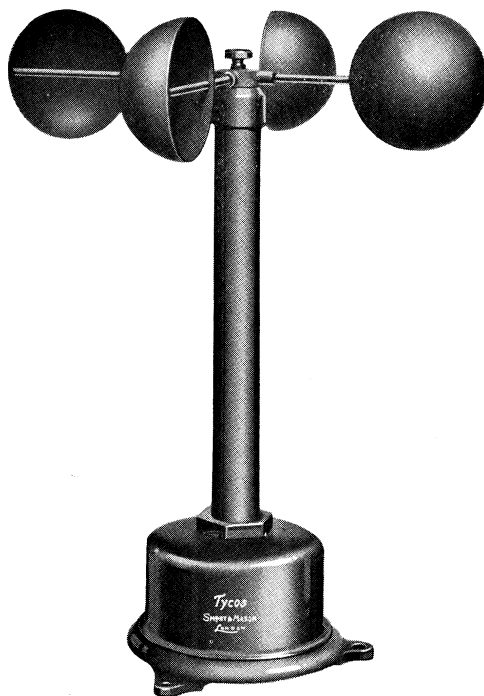
### Special Features on "S. & M." Abney's Levels

- |   |                                       |
|---|---------------------------------------|
| (1) Nickel-silver arc, divided each way to 90°. | (4) A 7-inch level in a 5-inch space. |
| (2) Extra-long draw eyepiece.                   | (5) Positive vernier clamp.           |
| (3) Enlarged arc with vernier to ten minutes.   | (6) Leather sling-case.               |

# Short & Mason *Tycos* Electric Cup Anemometers

## For Meteorological Work

(English Manufacture)



No. 3102

(About one-fifth actual size)

This S. & M. *Tycos* instrument is a modification of the Robinson type of cup anemometer, which has been in use for meteorological work for some years. The essential features of the older instrument are retained, but in place of a counting mechanism the base of the *Tycos* Anemometer contains a contact-making movement.

With the older type it was necessary to take a reading of the dial both before and after the period of observation. This was not always a simple nor a desirable task, especially if the weather were bad.

It is possible to expose the *Tycos* instrument adequately and to take observations at any distance from it. Signals from the instrument can be received in any part of the building on which it is mounted.

This anemometer is strongly constructed, the base and column being made of iron and the cups of copper. It will withstand exposure indefinitely. The diameter of the cups is three inches and the radius of the path traversed by the cups is four inches.

The instrument is connected up with an electric bell, buzzer, or lamp, two or more dry batteries and a switch. The wiring is quite simple—certainly not more difficult than wiring an ordinary electric bell.

When taking a reading, the switch is closed, and the lamp, bell, or buzzer will indicate the completion of the circuit. All you need to know is the time between contacts. Reference can then be made to the table furnished with the instrument, which gives relative values in miles per hour.

PRICE WITHOUT  
ACCESSORIES  
EACH

**No. 3102 S. & M. *Tycos* Electric Cup Anemometer . . . . . \$85.00**

Gray-enamel-finished cast-iron body; 3-inch cups; 4-inch arms; stands 16 inches high; over-all width 11 inches; diameter of base  $5\frac{1}{2}$  inches. Weight about  $7\frac{1}{2}$  pounds.

NOTE—The accessories are quite simple and can be obtained at a local hardware store.



# Short & Mason *Tycos* Airmeters and Anemometers

(English Manufacture)

For registering pressure and velocity of air currents in mines, tunnels, sewers, and the ventilators of public buildings, etc. They are frequently used outside in meteorological work, for determining the true direction of surface winds.

The indications are obtained by means of a delicately-poised fan wheel, the record being commenced by the long hand, which traverses the extreme outer circumference of the main dial and is continued by a series of smaller dials.

Placed in an air passage the instrument registers automatically the rate at which air is traveling through it, and a simple observation will detect any slackening of the current arising from obstruction of the ways, or want of attention at the ventilating surface or fan-wheel.

## High-Speed Anemometers

The introduction of strong blast currents in metal and other manufactures has necessitated an instrument to measure the currents at "high-speed." These now are made to indicate satisfactorily up to 10,000 feet per minute. This calls for an instrument made exceptionally strong, with special movement, which requirements are met by our high-speed anemometer.

## Zero-Setting Adaptation

The most valuable addition to anemometers is that of our special device by which all the indices, or hands, can be set back to the zero, or starting point. By this method, which it will be seen greatly facilitates the observer's work, the sum of the reading for any single observation can be taken instantly, without in any way having to consider a previous test.

Each instrument is supplied with a chart of corrections for different velocities.

Two-dial instruments stand velocities to 1000 feet a minute.

Four-dial and six-dial instruments stand velocities to 3000 feet a minute.

Airmeters and Anemometers cannot be guaranteed correct when used in a temperature of over 300° F.

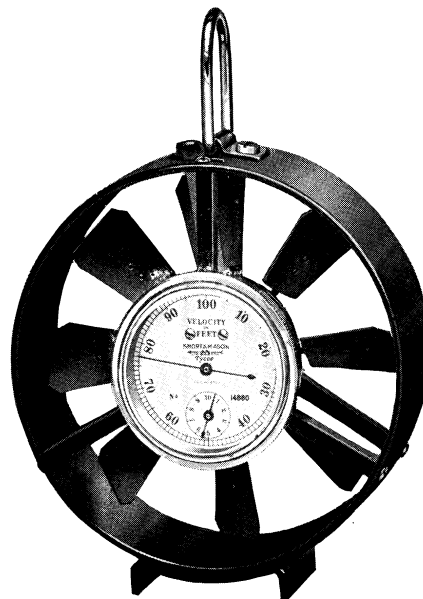


# Short & Mason *Tycos* Jeweled Zero-Setting Airmeters and Anemometers

(English Manufacture)



No. 3121



No. 3130

(Illustrations about one-half actual size)

The *Tycos* Anemometer should be placed in the air channel, all hands having been set at zero. The stop lever can then be moved, and the instrument will start registering. At the end of one or five minutes, or any other period fixed for the test, move the stop lever and note the reading.

The reading will be the number of LINEAR feet of air that have passed the instrument during the period of observation. To obtain the number of CUBIC feet of air that have passed the anemometer, you should multiply the number of linear feet by the area of the channel.

In making tests it is desirable to place the anemometer in several different positions, always with the dial facing in the same direction as the current, i.e. so that the air passes through the instrument from back to front and not from front to back, except Nos. 3112 and 3121 Airmeters, which are placed so that exposed side of fan faces the current. By adding the various readings obtained, and dividing by the number of tests, you get a mean reading.

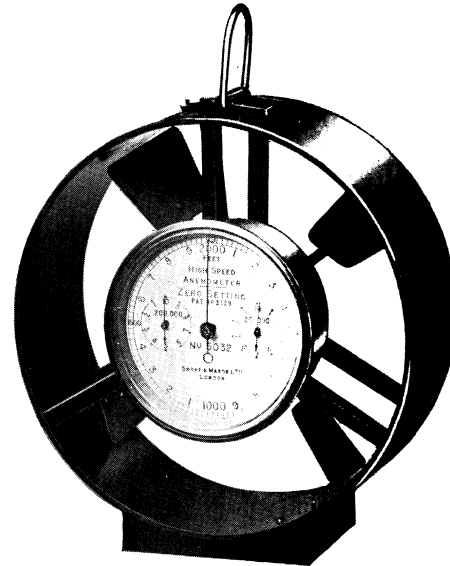
	EACH	
<b>No. 3112</b>	<b>S. &amp; M. <i>Tycos</i> Airmeter.....</b>	<b>\$60.00</b>
	Jeweled movement; zero-setting; four dials reading to 100,000 feet; 2½-inch dial; stands 3 inches high. In sole-leather carrying case. Weight 8½ ounces.	
<b>No. 3121</b>	Same as No. 3112, except with six dials reading to 10,000,000 feet.....	<b>60.00</b>
	NOTE—No. 3112 and 3121 will stand wind velocities up to 3,000 ft. per minute.	
<b>No. 3130</b>	<b>S. &amp; M. <i>Tycos</i> Biram's Anemometer.....</b>	<b>54.00</b>
	Jeweled movement; zero-setting; 3 inches in diameter; two dials reading to 1,000 feet. In sole-leather carrying case. Weight 8 ounces. Will stand wind velocities up to 1,000 ft. per minute.	
	Extra leather carrying cases for No. 3130.....	<b>4.50</b>

# Short & Mason *Tycos* Anemometers

(English Manufacture)



No. 3139  
(About three-fourths actual size)



No. 3150  
(About one-half actual size)

## Pocket-Size Biram's Anemometer

We have recently improved this type of instrument by making it stronger and altering the case. The present type has hinged lids of heavier gauge metal and the dial is absolutely enclosed, insuring perfect safety.

No. 3139 S. & M. *Tycos* Pocket-Size Biram's Anemometer . . . . . **EACH \$80.00**

Pocket size; 2-inch diameter; 3/4-inch thick; 2 dials reading to 1,000 feet; jeweled movement with stop; not zero setting. Weight 5 1/2 ounces.

This instrument will stand wind velocities up to 1,000 feet per minute.

## High-Speed Anemometer

We have given great attention to the production of an anemometer capable of registering very strong blast currents, and can now supply them to register to 10,000 feet per minute.

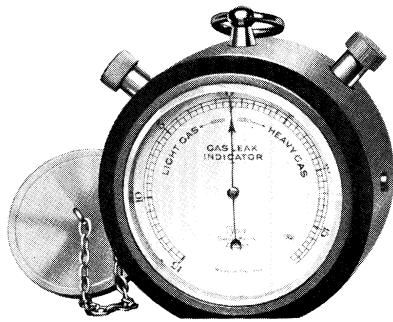
No. 3150 S. & M. *Tycos* High-Speed Anemometer . . . . . **EACH \$80.00**

Registering to 200,000 feet; with disconnecter and zero-setting attachment; 4 1/2" diameter. In leather carrying case. Weight 25 ounces.

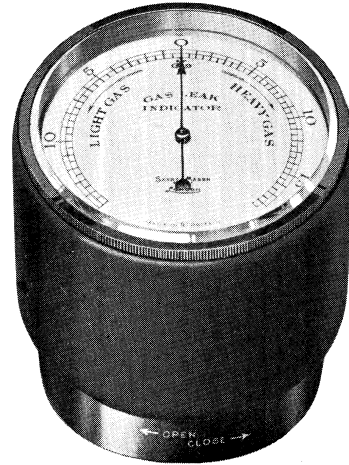
NOTE—Each instrument is tested and a chart of corrections supplied, but cannot be guaranteed correct when used in a temperature of over 200° Fahrenheit.

# Short & Mason *Tycos* Gas-Leak Indicators

(English Manufacture)



No. 3405



No. 3406

(Illustrations about one-third actual size)

These instruments are very sensitive and will detect the presence of gas instantly. Their construction is based on a well-known scientific principle—that of diffusion of gases—and their mechanical application is affected by the employment of an elastic metal chamber, the bottom being made of a porous tile, through which diffusion takes place.

No. 3405 S. & M. *Tycos* Gas-Leak Indicator..... EACH **\$55.00**

In sole-leather carrying case with strap. Weight about  $1\frac{3}{4}$  pounds.

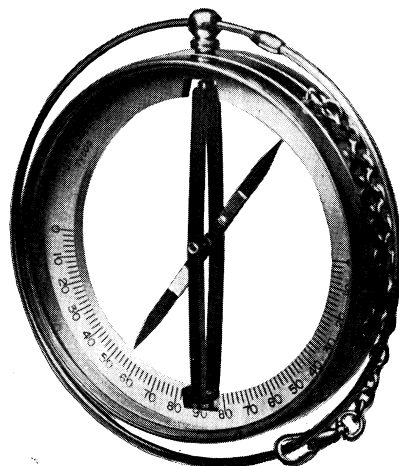
No. 3406 S. & M. *Tycos* Gas-Leak Indicator..... **60.00**

Improved type vertical form. In sole-leather carrying case with strap. Weight about  $1\frac{3}{4}$  pounds.



# Short & Mason *Tycos* Miners' Compass Dipping Needle

(English Manufacture)



No. 2974½

(About two-thirds actual size)

In the hands of the prospector this Miner's Compass, or Dipping Needle, proves a serviceable guide to the discovery and location of magnetic iron ore.

The magnetic needle is carefully balanced in a gimbal frame. It must be held so suspended that the needle is in the plane of the magnetic meridian. The stop being withdrawn the needle will swing freely, turning slightly in its frame to assume the correct magnetic plane. The needle will stop at a point inclined to the horizontal and can then be read. This deviation from the horizontal is called the "inclination," or "magnetic dip," and it varies in different latitudes.

When using this compass the observer must take into consideration the local magnetic dip, as well as the general geological formation. He should be able then to tell the approximate depth and mass of magnetic iron ore that he can trace.

The instrument must always be held in the approximate plane of the magnetic meridian. Immediately it is turned out of this plane the needle touches the glass cover and will not swing. The observer thus is certain always of the magnetic meridian.

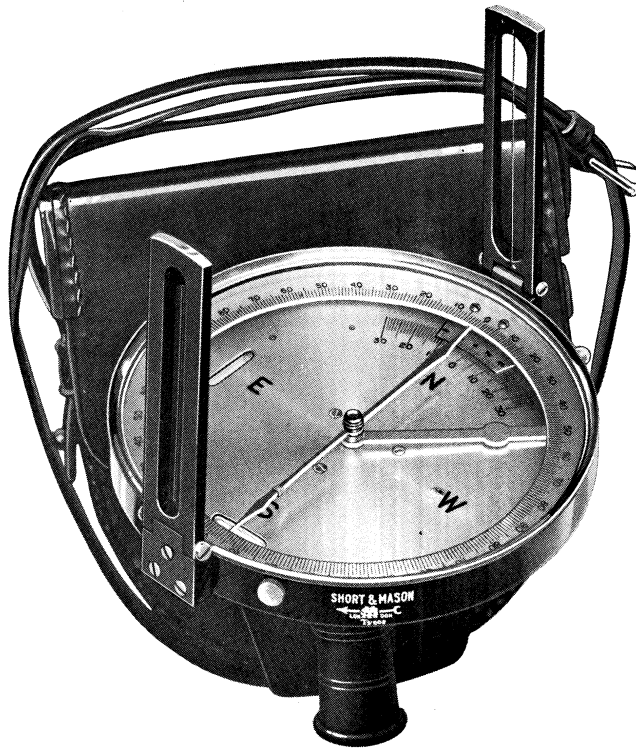
The instrument can be used also for locating pipe lines and iron inspection covers which may be covered out of sight. It **WILL NOT INDICATE THE PRESENCE OF GOLD OR SILVER.**

No. 2974	S. & M. <i>Tycos</i> Miner's Compass.....	EACH <b>\$30.00</b>
	Fixed-meridian type; three inches in diameter. In velvet-lined morocco carrying case. Weight 9 ounces.	

No. 2974½	S. & M. <i>Tycos</i> Miners' Compass.....	<b>40.00</b>
	Norwegian gimballed cradle type; jeweled bearings. Weight 8 ounces. Will always point to the magnetic North, irrespective of position of case. A very sensitive and efficient instrument.	

# Short & Mason *Tycos* Surveying Compasses

(English Manufacture)



No. 2952



No. 2971B

(Illustrations about two-thirds actual size)

Excellent instruments for approximate work; reconnaissance and preliminary surveying. Strong enough to withstand the rough usage incidental to this use.

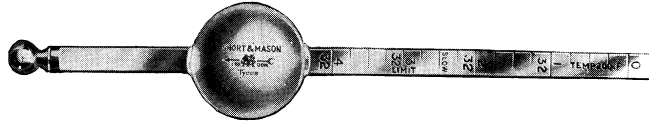
The adjustment for the local magnetic variation is made by loosening the clamp screw shown near the folding sight, and revolving the divided circle by means of its milled edge. The vernier gives readings to five minutes.

- |                  |   |                                       |
|------------------|---|---------------------------------------|
| <b>No. 2952</b>  | <b>S. &amp; M. <i>Tycos</i> Surveying and Sight Compass</b> . . . . .   | <small>EACH</small><br><b>\$54.00</b> |
|                  | Diameter $3\frac{1}{2}$ inches; ball-and-socket Jacob Staff fitting. Special leather case braced with aluminum fittings. Weight $21\frac{1}{2}$ ounces.   |                                       |
| <b>No. 2953</b>  | <b>S. &amp; M. <i>Tycos</i> Surveying and Sight Compass</b> . . . . .   | <b>72.00</b>                          |
|                  | Same as No. 2952, except five inches in diameter and with $4\frac{1}{2}$ -inch needle. Weight 36 ounces.  |                                       |
| <b>No. 2971B</b> | <b>S. &amp; M. <i>Tycos</i> Clinometer Compass</b> . . . . .  | <b>30.00</b>                          |
|                  | Three-inch bronzed-metal case; silvered-metal dial; jeweled centre; bar needle. In leather carrying-pouch. Weight $7\frac{1}{2}$ ounces. Is so constructed that it can be used either as a clinometer or as a sight compass, the sights being made in the form of a bridge and to turn on their pivots at right angles. |                                       |



# Short & Mason *Tycos* Improved Patent Marine Salinometers

(English Manufacture)



No. 3301  
(About one-third actual size)

The advantages of the S. & M. *Tycos* Patent Marine Salinometer over other types result from its construction, whereby the strength and rigidity of the instrument are greatly increased. The liability of leakage is prevented by doing away with the old system of screwed joints, which is made possible by providing the flotation bulb with a neck or collar at top and bottom, formed of the solid metal of the bulb. The flat tubular stem passes through this collar, fitting tightly, and is also soldered in the proper position. Because of the width of the flat stem, extending from the top down to the poise weight, these salinometers offer more resistance to the fluid, rotation is greatly minimized, and a steady poise is maintained.

The salinometer is used by marine engineers for ascertaining the saline density of the water used for the boilers. The stem is graduated from 0 in fresh water, as follows;  $\frac{1}{32}$  denotes that in every 32 pounds of water there is 1 pound of salt held in solution,  $\frac{2}{32}$  will be 2 pounds of salt in 32 pounds of water and so on to  $\frac{3}{32}$  and  $\frac{4}{32}$ . The sub-divisions are quarter pounds. At  $\frac{2}{32}$ , that is, midway between  $\frac{1}{32}$  and  $\frac{3}{32}$ , the word "BLOW" is engraved. When the instrument floats at that mark, the temperature being 200 degrees Fahrenheit, it is necessary to blow off and admit fresh water into the boilers. At  $\frac{3}{32}$ , the word "LIMIT" is engraved, as it is dangerous to carry on when salinity of water exceeds this point.

### Blowing-off Points

TEMPERATURE OF WATER	
200 degrees Fahrenheit . . . . .	$\frac{2}{32}$
180 degrees Fahrenheit . . . . .	$\frac{2}{32}$
160 degrees Fahrenheit . . . . .	$\frac{3}{32}$

No. 3301 S. & M. *Tycos* Patent Salinometer. . . . . **EACH \$4.50**

Made of nickel-silver or gilt; ten inches long; in tin case; scaled in  $\frac{1}{32}$ nds for temperature of 200° Fahrenheit. Weight about 6 ounces.

No. 3301B S. & M. *Tycos* Patent Salinometer. . . . . **6.50**

Same as No. 3301, except square stem scaled on three sides for temperatures of 190°, 200° and 210° F. in  $\frac{1}{32}$ nds. Weight about 6 ounces.

Short & Mason *Tycos*  
Meteorological and Other  
Scientific Instruments

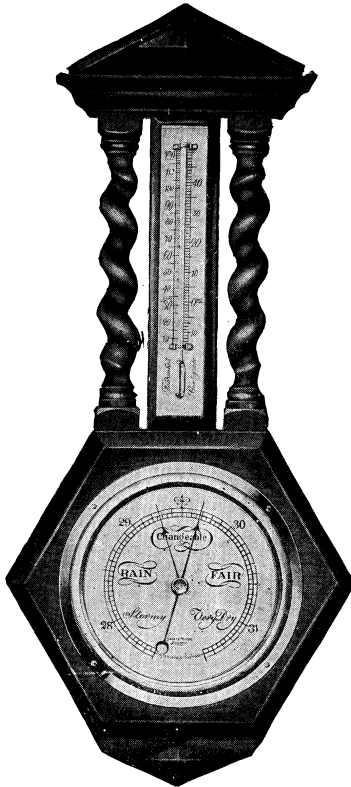
*Furnished on Import Order*  
————— *only* —————

Manufactured by  
**Short & Mason, Ltd.**  
London, England

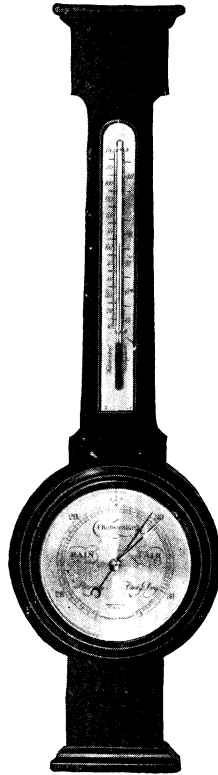


# Short & Mason *Tycos* Period-Design Barometers

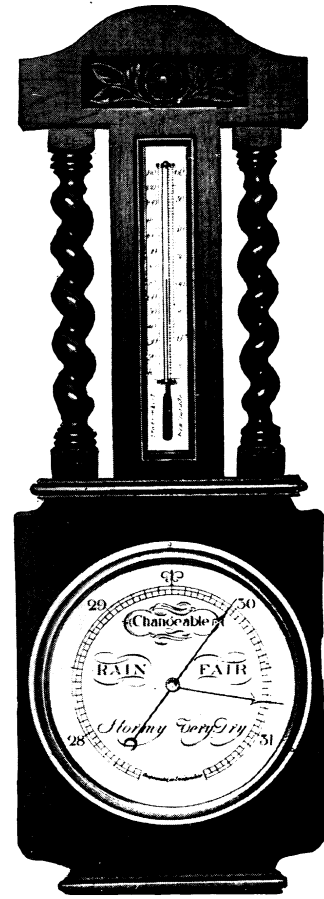
(English Manufacture; Supplied on Import Order Only)



No. 2409  
(Reg. Design 708362)



No. 2410  
(Reg. Design 695787)



No. 2411  
(Reg. Design 695785)

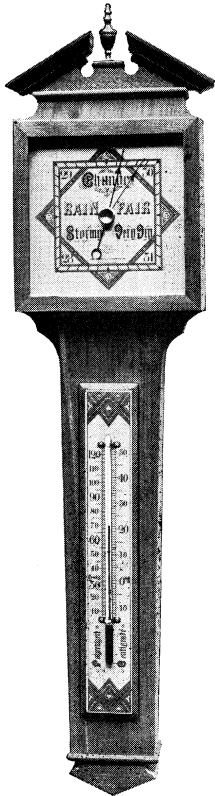
These barometers are in handsome frames, original in conception, and all have best-quality compensated movements.

- |              |  | EACH    |
|--------------|--|---------|
| No. 2409-5"  | S. & M. <i>Tycos</i> "Stuart" Pendant Aneroid Barometer . . . . .  | \$35.00 |
|              | Oak frame, dark age-rubbed effect; antique style lacquered dial 5 inches in diameter; thermometer scale to match, with red-fluid-filled tube; size over-all 19" x 9".  |         |
| No. 2410-5"  | S. & M. <i>Tycos</i> "Puritan" Pendant Aneroid Barometer . . . . .   | 35.00   |
|              | Oak frame, dark-age-rubbed effect; antique style lacquered dial 5 inches in diameter; thermometer scale to match; with red-fluid-filled tube; size over-all 26" x 7½". |         |
| No. 2410M"   | Same as No. 2410-5" except mahogany frame and silvered dial and thermometer scale. . . . .   | 38.00   |
| No. 2410-6"  | Same as No. 2410-5", except with 6-inch dial. Size over-all 31" x 9" . . . .   | 40.00   |
| No. 2410M-6" | Same as No. 2410-6", except mahogany frame and silvered dial and thermometer scale. . . . .  | 43.00   |
| No. 2411-8"  | S. & M. <i>Tycos</i> "Jacobean" Pendant Aneroid Barometer . . . . .  | 55.00   |
|              | Oak frame, dark age-rubbed effect; antique style lacquered dial 8 inches in diameter; thermometer scale to match, with red-fluid-filled tube. Size over-all 27" x 9½". |         |

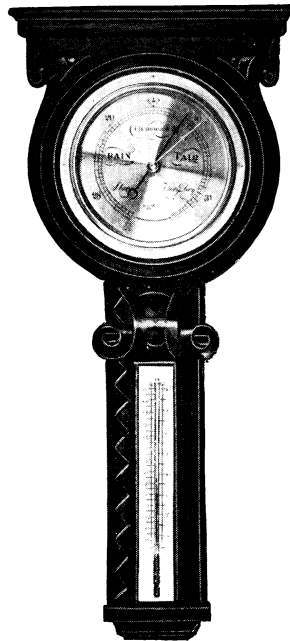
NOTE—Above Barometers furnished with revolving altitude adjustment, for setting EXTRA to sea-level reading up to 3500 feet. . . . . \$5.00

# Short & Mason *Tycos* Period-Design Barometers

(English Manufacture; Supplied on Import Order Only)



No. 2400  
(Reg. Design 71494½)



No. 2415  
(Reg. Design 695788)



No. 2559  
(Reg. Design 708361/713826)

		EACH
No. 2400-5"	S. & M. <i>Tycos</i> "St. James" Pendant Barometer . . . . .	\$45.00
<p>Dark dull-finished mahogany frame; brass-ornament pediment top; unique square dial (registered design) silvered; panel thermometer to match barometer dial; best-quality compensated movement; size over-all 22½" x 6½".</p>		
No. 2415-6"	S. & M. <i>Tycos</i> "Tudor" Pendant Barometer . . . . .	48.00
<p>Dark age-rubbed oak frame; antique-style lacquered brass dial 6 inches in diameter; thermometer scale to match barometer dial, with red-fluid-filled tube; size over-all 26" x 11½".</p>		
No. 2559-8"	S. & M. <i>Tycos</i> "Epping" Bracket Barometer . . . . .	30.00
<p>Dark age-rubbed oak; unique square dial 8 inches in diameter finished antique brass; size over-all 11" x 12".</p>		
No. 2559M-8"	Same as No. 2559, except mahogany frame and silvered dial . . . . .	35.00
No. 2559½-8"	Same as No. 2559, except frame reversed, to stand . . . . .	30.00
No. 2559½M-8"	Same as No. 2559½, except mahogany frame and silvered dial . . . . .	35.00

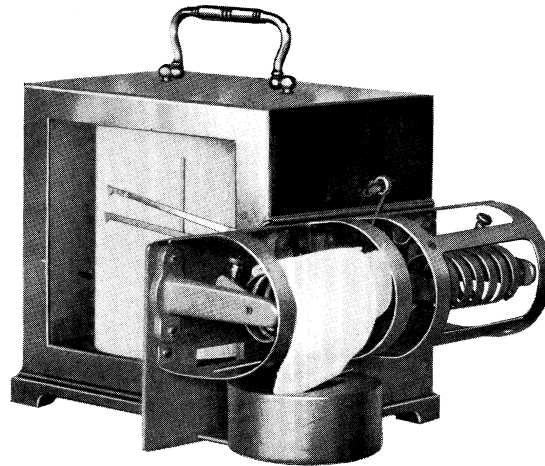
NOTE—Above barometers furnished with revolving altitude adjustment for setting to sea-level reading up to 3,500 feet. . . . . **EXTRA 5.00**



# Short & Mason *Tyccos* Hygrographs

(Recording Wet-and-Dry-Bulb Thermometer)

(English Manufacture; Furnished on Import Order Only)



No. 2361

(About one-fourth actual size)

		EACH
<b>No. 2361</b>	<b>S. &amp; M. <i>Tyccos</i> Hygrograph "M.O." Pattern.....</b>	<b>\$145.00</b>

This Wet-and-Dry-Bulb Recording Thermometer is used and recommended by the English Meteorological Office. It is similar to No. 2360, (page 49) but has two exposed laminas, one covered with silk wicking and leading to the water reservoir, each lamina actuating its own pen and recording respectively the "wet bulb" and "dry bulb" temperature.

# Short & Mason *Tycos* Day-and-Night Compasses

(English Manufacture; Furnished on Import Order Only)



No. 2947



No. 2950

(Illustrations about two-thirds actual size)

No. 2947 S. & M. *Tycos* Improved "Magnapole" Compass . . . . . <sup>EACH</sup> \$24.00

Has luminous vane on glass cover; mounted in rotating bezel; has side and check stop action; radio-active permanent luminous dial and protractor; in sole-leather belt case. Each in a box. Weight about 7 ounces. It can be set for any required bearing at night. When set for the local magnetic variation, all readings can be made with reference to the "true north." Is so designed that it is impossible to make an error through miscalculation of the "true north" bearings with reference to the "magnetic" bearing.

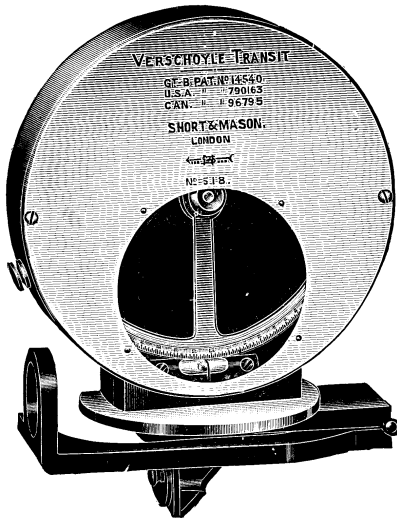
No. 2950 S. & M. *Tycos* Combination Sight and Pocket Compass . . . . . 24.00

Floating aluminum dial reading to 360°, sub-divided in 2° luminous points; bronzed case; in sole-leather belt case, with instructions for use. Each in a box. Weight about 7 ounces. Is designed for engineers, prospectors, explorers, hunters and woodsmen. Is an excellent instrument for determining direction in a trackless region. The sighting features allow the user to fix his line of advance quickly and accurately. The luminous parts make it possible to use the compass for finding direction at night.



# Short & Mason *Tycos* Verschoyle Patent Pocket Transit

(English Manufacture; Supplied on Import Order Only)



No. 3013

This instrument combines the useful features of Abney level, prismatic compass, and clinometer. Designed by a mining engineer of practical experience in the use and possible application of the various forms of instruments intended for preliminary survey.

The distinguishing feature of the instrument is that, owing to its novel construction, only one observation is necessary to obtain both the magnetic bearing and the vertical angle of any distant point. It is also specially adapted for use in difficult positions, such as are always liable to occur in filling in the rougher details in a mining survey. For rapid topographical work and working in constrained positions, the fact that half the labor is saved should be of interest to those who have to use this class of instrument. Another important point is that its efficiency is not determined by the length of the diameter of the compass, as is the case with the ordinary prismatic compass. With even a small instrument the same length of sight is obtained as would be obtained with a 6 or 7-inch prismatic compass.

Weight of instrument .....	9	ozs.
Length .....	4 $\frac{1}{2}$	in.
Width .....	3 $\frac{3}{8}$	in.
Depth .....	11/13	in.
Length of sight arm when opened .....	5 $\frac{1}{2}$	in.
Length of needle .....	2 $\frac{3}{4}$	in.

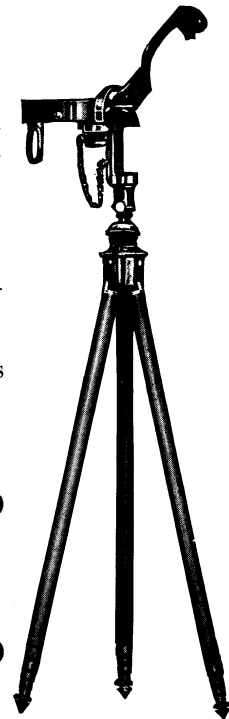
As a thoroughly serviceable instrument it is worthy of special notice.

It is not a complicated delicate instrument, liable to derangement or deterioration.

There are no reflectors or mirrors used other than the prism, which is protected and securely fastened.

**No. 3013** S. & M. *Tycos* Verschoyle Transit for hand use, EACH  
in leather sling case..... **\$75.00**  
Weight, 9 $\frac{1}{2}$  ounces.

**No. 3014** Same as No. 3013, except with angle piece, collapsible  
metal tripod with ball and socket fitting, and sole-leather  
carrying case for tripod..... **100.00**  
Weight, 2 $\frac{1}{4}$  lbs.

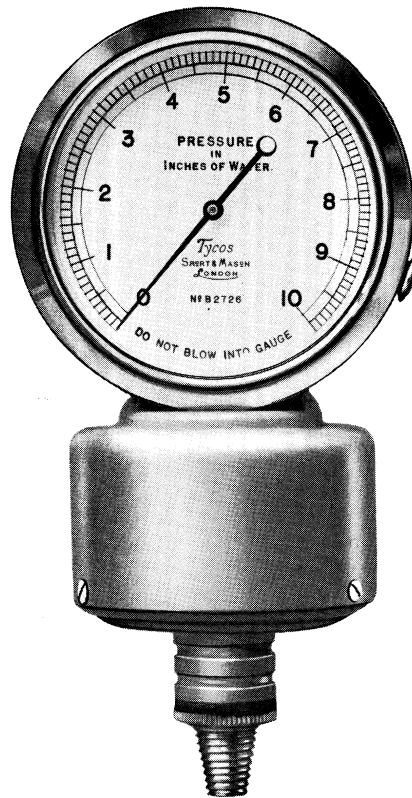


No. 3014



# Short & Mason *Tycos* Portable Gas-Pressure Gauges

(English Manufacture; Furnished on Import Order Only)



No. 3410  
(Actual size)

A reliable instrument, eliminating the inconveniences of liquid gauges. The graduated circle of divisions, showing the equivalent pressure in inches of water, is made to revolve by moving the projecting stud at the side of the instrument case. In this manner any slight deviation of the index hand from 0 may be adjusted easily. The instrument is then ready for use.

The gauge should be used in an upright position and attached to the supply pipe, under test, by the tapered screw socket supplied with it.

No. 3410 S. & M. *Tycos* Portable Gas-Pressure Gauge..... EACH \$32.00

Graduated 0 to 10-inch or 0 to 25-inch water pressure. In morocco carrying case. Weight about 11 ounces.



# Short & Mason *Tycos* Improved Campbell-Stokes Sunshine Recorder

(English Manufacture; Furnished on Import Order Only)



No. 3500

(About one-third actual size)

For latitudes between 40° and 70°. No meteorological equipment is complete without a Sunshine Recorder.

**No. 3500** S. & M. *Tycos* Improved Campbell-Stokes Sunshine Recorder . . . **\$280.00** EACH

Complete with sphere. Official pattern. Each in a box. Weight about 21 pounds.

**No. 3501** Charts for No. 3500, (150 Summer Solstice; 150 Winter Solstice; 100 Equinoctial) . . . . . **40.00**



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