

NEW YORK
1869



BUFFALO 1901
GOLD MEDAL



CHICAGO
1883

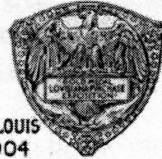


GRAND PRIZE

GOLD MEDAL



ST. LOUIS
1904



CATALOGUE OF

KEUFFEL & ESSER CO.

MANUFACTURERS AND IMPORTERS

DRAWING MATERIALS

SURVEYING INSTRUMENTS

MEASURING TAPES



SAN FRANCISCO
1915



TRADE MARK

NEW YORK H & CO.

127 FULTON ST.

GENERAL OFFICE AND FURNISHERS OF PAINTERS'

BRAND

AND RETAIL

CHICAGO: 516 N. W.

ST. LOUIS: 30 N. W.

SAN FRANCISCO: 30 N. W.

MONTREAL: 5 Nos. R. U.



PORTLAND
1905



PHILADELPHIA
1876



36 EDITION

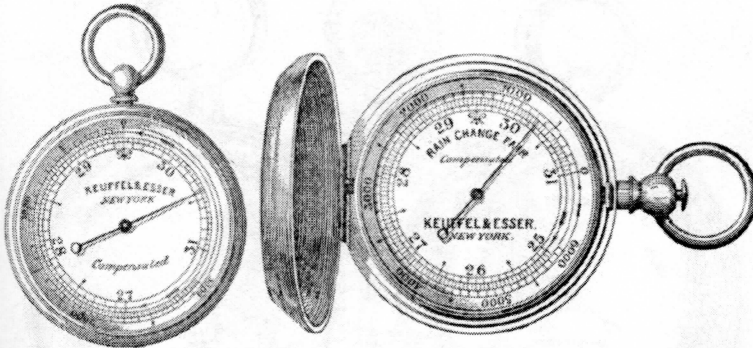


CHICAGO
1893



ANEROID BAROMETERS.

FOR MEASURING ALTITUDE AND ATMOSPHERIC PRESSURE.



No. 5855.

5871.

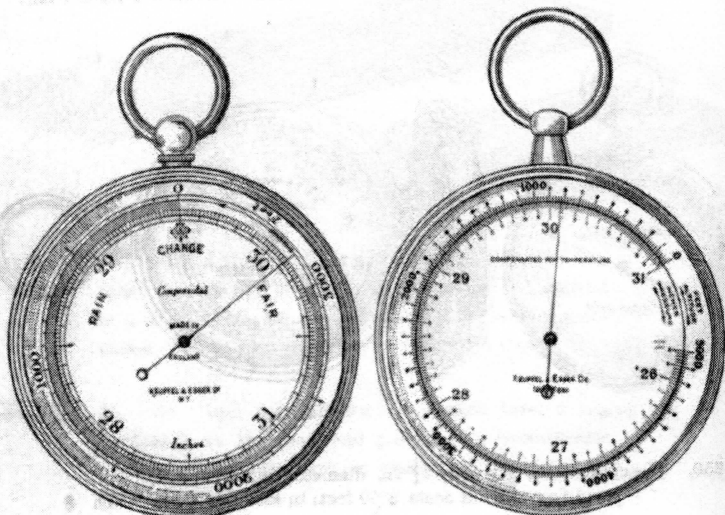
- 5850. Watch pattern, gilt case $1\frac{3}{4}$ in. diameter, silvered dial, revolving altitude scale 8000 feet; in morocco Case, each \$
- 5855. Watch pattern, gilt case $1\frac{3}{4}$ in. diameter, silvered dial, revolving altitude scale 3000 feet, compensated for temperature; in morocco Case "
- 5856. Like No. 5855, but altitude scale 6000 feet "
- 5857. " " 5855, " " " 12000 " "
- 5858. " " 5855, " " " 18000 " "
- 5870. Watch pattern, nickel hunting case 2 in. diameter, silvered dial, revolving altitude scale 3000 feet, compensated for temperature "
- 5871. Like No. 5870, but altitude scale 6000 feet "
- 5872. " " 5870, " " " 12000 " "
- 5873. " " 5870, " " " 18000 " "

PLAIN DIRECTIONS FOR MEASURING HEIGHTS FURNISHED WITH EACH INSTRUMENT.



ANEROID BAROMETERS.

FOR MEASURING ALTITUDE AND ATMOSPHERIC PRESSURE.



No. 5880.

5880½.

- 5880. Pocket pattern, brass case 2½ in. diameter, silvered dial, revolving altitude scale 3000 feet, compensated for temperature; in morocco Case each \$
- 5881. Like No. 5880, but altitude scale 6000 feet "
- 5882. " " 5880, " " " 12000 " "
- 5883. " " 5880, " " " 18000 " "
- 5880½. Pocket pattern aluminum case 2½ in. diameter, silvered dial, revolving *equidistant* altitude scale 5000 feet, compensated for temperature. In sewed leather sling Case with shoulder straps each \$
- 5881½. Like No. 5880½, but altitude scale 10000 feet "
- 5882½. " " 5880½, " " " 16000 " "

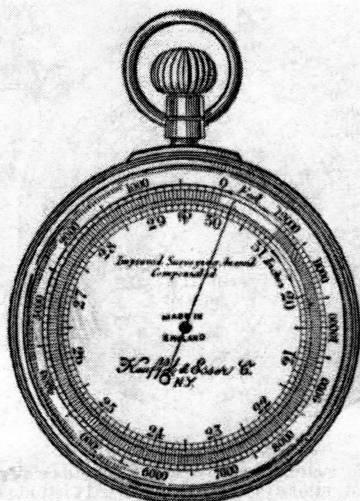
Nos. 5880½-5882½. The advantage of this type barometer lies in its equidistant altitude scale. In the old type instrument the unit of division of the altitude scale decreased commensurately with the increase in altitude; the altitude scale of this new type barometer is graduated uniformly throughout its entire length, thus accuracy is not dependent upon the section of the scale which may be read.

PLAIN DIRECTIONS FOR MEASURING HEIGHTS FURNISHED WITH EACH INSTRUMENT.



ANEROID BAROMETERS.

FOR MEASURING ALTITUDE AND ATMOSPHERIC PRESSURE.



No. 5892.

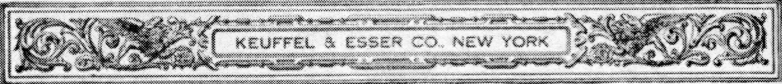
- 5890. Pocket pattern, bronzed case 2½ in. diameter, silvered dial, revolving altitude scale 3000 feet, operated by rack and pinion, revolving pointer (index) operated separately by milled ring, compensated for temperature; in sewed leather Sling Case each \$
- 5891. Like No. 5890, but altitude scale 6000 feet "
- 5892. " " 5890, " " " 12000 " "
- 5893. " " 5890, " " " 18000 " "

As the altitude scale and the pointer of Nos. 5890 to 5893 have separate actions, these instruments can also be used as with fixed altitude scale.

Sewed leather Sling Cases for Barometers Nos. 5890, 5891, 5892 and 5893. each \$

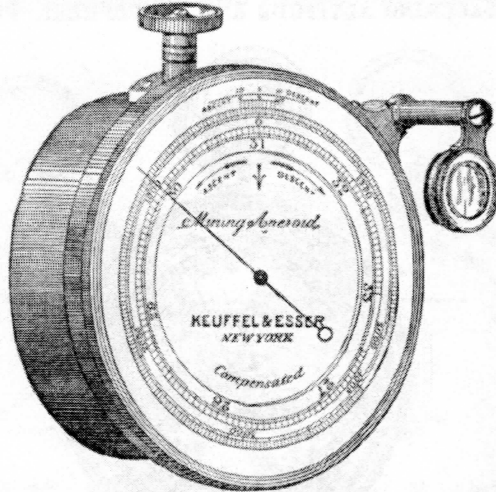
- 5900. English Government pattern, brass case 5 in. diameter, silvered dial, graduations on raised ring, fixed altitude scale 6000 feet, revolving pointer, compensated for temperature, curved thermometer; in morocco Case. each \$
- 5902. Like No. 5900, but altitude scale 12000 feet "
- 5904. " 5900, " " " 18000 " "

PLAIN DIRECTIONS FOR MEASURING HEIGHTS FURNISHED WITH EACH INSTRUMENT.



SURVEYING BAROMETERS.

FOR MEASURING ALTITUDE AND ATMOSPHERIC PRESSURE.



No. 5920.

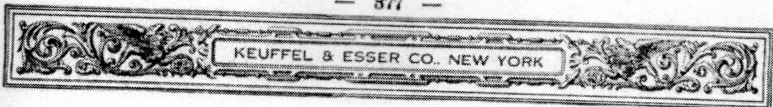
- 5910. Surveying Barometer, bronzed case 3 in. diameter, silvered dial, graduations on raised ring, fixed altitude scale 14800 feet, vernier scale operated by rack and pinion, reading to 5 feet, compensated for temperature, adjustable reading lens; in leather Sling Case . . . each \$
- 5915. Surveying Barometer, bronzed case 5 in. diameter, silvered dial, graduations on raised ring, fixed altitude scale 5000 feet, vernier scale operated by rack and pinion, reading to 1 foot, compensated for temperature, adjustable reading lens; in leather Sling Case . . . “
- 5916. Like No. 5915, but altitude scale 14000 feet, reading to 2 feet, “
- 5920. Mining Barometer, bronzed case 5 in. diameter, silvered dial, graduations on raised ring, fixed altitude scale 2000 feet below and 4000 feet above sea level, vernier scale operated by rack and pinion, reading to 1 foot, compensated for temperature, adjustable reading lens; in leather Sling Case “

Sewed leather Sling Cases for Nos. 5910, 5915, 5916 and 5920 “

The instruments Nos. 5910 to 5920 are constructed especially for ascertaining slight variations in gradients, levels, etc. Their extreme sensitiveness is of great value in mining and surveying work generally. A valuable improvement in these instruments is an arrangement of the scale of altitude permitting the reading by vernier, formerly impracticable owing to the usual altitude scale being a gradually diminishing one to which a vernier could not be applied. In the above instruments the action has been adjusted to give accurate readings upon a uniform scale of altitudes, the barometrical scale of inches having been made progressive so as to afford the correct relative readings with the scale of altitudes.

These instruments are also constructed for measuring greater altitudes, i. e., up to 20,000 feet, but with these higher scales the measurements cannot be made quite so minute as with the more open scales.

PLAIN DIRECTIONS FOR MEASURING HEIGHTS FURNISHED WITH EACH INSTRUMENT.



ANEROID BAROMETERS.



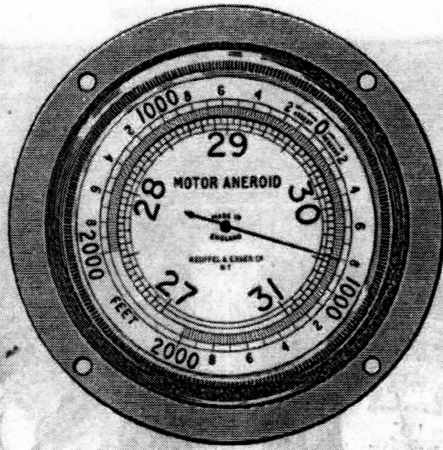
No. 5922.

- 5922.** Aneroid-Magnetic Compass set, consisting of:-
 a highest grade aneroid barometer, silvered dial, 1 3/4 in. diameter, revolving altitude scale 10,000 feet; a liquid magnetic compass, floating dial 1 3/4 in. diameter with radium luminous marks on the North point of the dial, on the fixed arrow on the glass cover, and on the zero point of the revolving azimuth scale; a small thermometer. Set packed in fine morocco case with folding stand each \$

This is a fine set for travelers, automobilists, aviators, etc.



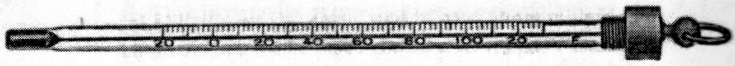
AUTOMOBILE ANEROID.



No. 5924.

5924. Automobile aneroid, dial 2½ in. diameter, heavily nickel-plated, revolving altitude scale, graduated to 2,000 feet, numbered every 200 feet, and reading 2,000 feet ascent and 2,000 feet descent. each \$

POCKET THERMOMETERS.



No. N 5930.

N 5930. Pocket Thermometers, mercurial, 5 in., Fahrenheit, opal glass scale reading to 2 degrees; in nickelplated brass Case each \$

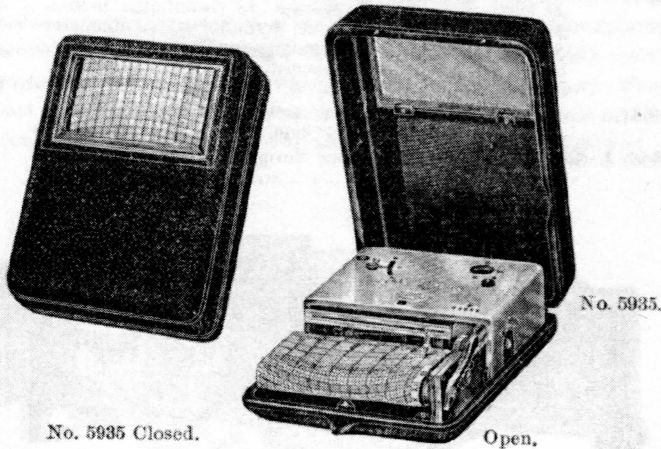


BAROGRAPHS, THERMOGRAPHS, HYGROGRAPHS.

These Self-recording instruments are for many purposes preferable to reading instruments. They have been perfected, so that they are now reliable and correct.

The sensitive member of these instruments expands or contracts under varying conditions of pressure, temperature, or humidity of the atmosphere and imparts its motion to a multiplying lever. A pen automatically records on a graduated chart which is operated by clockwork.

POCKET BAROGRAPHS.



- 5935 Pocket Barograph, compensated for temperature, reading to 4000 feet; in morocco-covered metal Case. Barograph, with bottle of Ink and 50 graduated Charts; in polished mahogany Box each \$
- 5936. Like No. 5935, but reading to 7800 feet "
- 5937. " " " " " 15000 " "

These self-recording aneroid barometers are of great advantage in many cases where the bulk and weight of the usual barographs forbid their use.

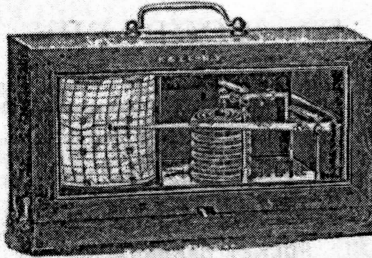
The Pocket Barograph measures $4\frac{3}{4} \times 3\frac{1}{4} \times 1\frac{1}{4}$ in. and weighs about one pound. The metal, morocco covered case has a glass inserted in the cover over the chart, for taking readings without opening the case.

The chart is so ruled that it represents the time by half-hours, for 24 hours, and the pressure in feet of altitude. The pen makes contact every two minutes. The instruments also indicate atmospheric changes, like other aneroids.

Notwithstanding its small size the Pocket Barograph is a relatively reliable instrument.

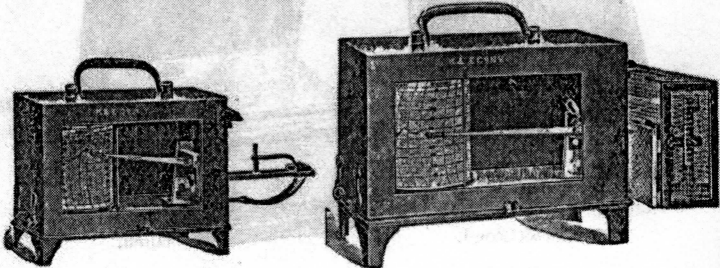


RECORDING INSTRUMENTS.



No. 5941.

- 5940.** Barograph, small size, registering one week; from 28 in. to 31 inch atmospheric pressure, by twentieths inches. Series of 5 vacuum boxes, cylinder $2\frac{1}{2}$ in. diameter $\times 2\frac{1}{2}$ in. high. In polished mahogany Case with handle, hinged cover with glass-paneled front. With Charts for one year and bottle of Ink each \$
- 5941.** do. do. but large size; series of 8 vacuum boxes, cylinder $3\frac{1}{2}$ in. diameter $\times 3\frac{1}{2}$ in. high "
- 5941 H.** Gimbal Hook for suspending Barograph from ceiling on shipboard "



No. 5942.

5943.

- 5942.** Thermograph, registering one week; from 0 to 100 degrees Fahrenheit by 2 degrees; cylinder $2\frac{1}{2}$ in. diameter $\times 2\frac{1}{2}$ in. high. In weatherproof metal case with handle and glass-paneled front. With Charts for one year and bottle of Ink each \$

The curved tube outside of the case contains alcohol and is hermetically sealed. The alcohol expands and contracts under changes of temperature, thereby changing the curve of the tube and thus imparting motion to the recording lever.

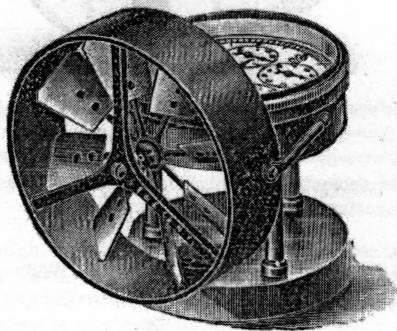
- 5943.** Hygrometer, registering one week; from 0 to 100 per cent. of moisture by single per cent. Cylinder $3\frac{1}{2}$ in. diameter $\times 3\frac{1}{2}$ in. high. The sensitive hairs are protected by a wire cage. Instrument in weatherproof metal case with glass-paneled front and handle. With Charts for one year and bottle of Ink each \$

The sensitive member of this instrument consists of a bundle of fine hair, which expands and contracts under variations of humidity, and imparts the resultant motion to the recording mechanism.

Extra charts for period of one year for Nos. 5935, 5936, 5937, per set \$
do. do. do. for Nos. 5940, 5941, 5942, 5943 " "

ANEMOMETERS.

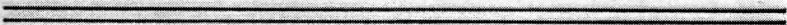
Anemometers are used for the measurement of the velocity of air currents in mines, tunnels, sewers, public buildings, hospitals, etc. As now constructed by us, these instruments embody a number of important mechanical improvements, among which may be mentioned the zero setting arrangement. Setting the instrument to zero before each reading does away with the necessity of taking a previous reading into consideration and lessens the liability of error. Each instrument is carefully calibrated and provided with a calibration curve. Our instruments have jewel bearings and are constructed to measure air velocities from 200 to 2000 feet per minute (except No. 5966Z, which measures to 6000 feet and No. 5967, which measures from 75 to 400 feet). They should not be used in temperatures exceeding 300° F. As a rule, our anemometers (except No. 5966Z, and No. 5967) are calibrated from 200 to 1000 feet.



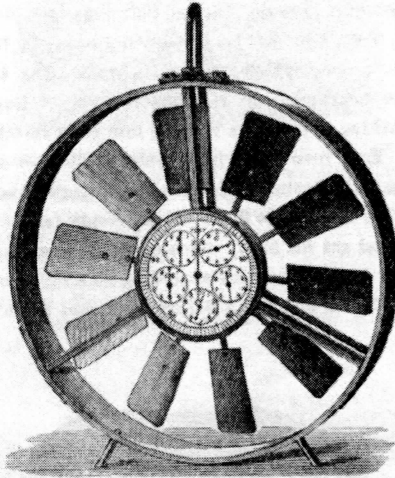
No. 5952.

5950. Improved Portable Anemometer with disconnecter, vane $2\frac{1}{2}$ in. diam., registering to 1000 feet; in polished mahogany Case each \$

5952Z. Improved Portable Anemometer like No. 5950, but registering to 10,000,000 feet and with Zero Setting arrangement "

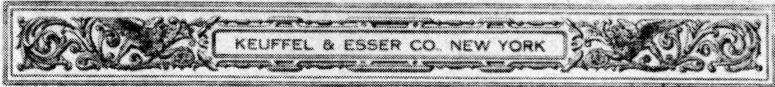


ANEMOMETERS.

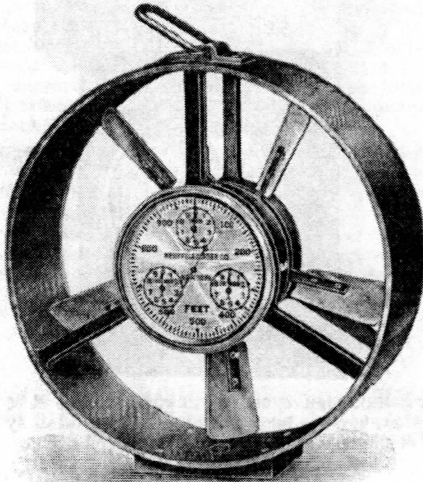


No. 5965 Z.

5953. Biram Anemometer, 3 in. diam., reading to 1000 feet, with disconnector; in leather pouch with belt loop. each \$
5957. Biram Anemometer, like No. 5953, but 4 in. diam., reading to 1000 feet; in leather pouch with belt loop. "
- 5958 Z. Biram Anemometer, like No. 5953, but 4 in. diam., reading to 100,000 feet, with Zero Setting arrangement; in leather pouch with belt loop. "
5963. Biram Anemometer, like No. 5953, but 6 in. diam. reading to 1000 feet; in leather pouch with belt loop. "
- 5965 Z. Biram Anemometer, like No. 5953, but 6 in. diam., reading to 10,000,000 feet, with Zero Setting arrangement; in leather pouch with belt loop. "



HIGH SPEED ANEMOMETER.



No. 5966 Z.

5966Z. High Speed Anemometer, for measuring air velocities up to 6000 feet per minute; 6 in. diameter, registering to 1,000,000 feet by 10 ft. intervals, with disconnecter and zero-setting arrangement; in leather pouch with belt loop. each \$

The K & E High Speed Anemometer is intended for use in measuring the velocities of air blasts or gases moving at high velocities, such as are encountered in blast furnace work or similar operations. The most substantial and durable construction is employed for all parts, insuring reliable results. It may safely be used in temperatures up to 300° F.

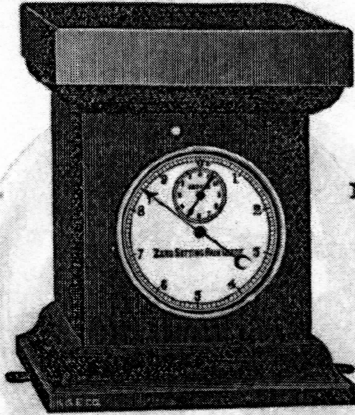
LOW SPEED ANEMOMETER.

We make an instrument similar to No. 5963, but more delicate in construction, for measuring velocities from 75 to 400 feet per minute. This instrument was developed for measuring air currents at the registers of heating and ventilating systems, in schools, public buildings, etc.

5967. Low Speed Anemometer, in leather pouch with belt loop, each \$

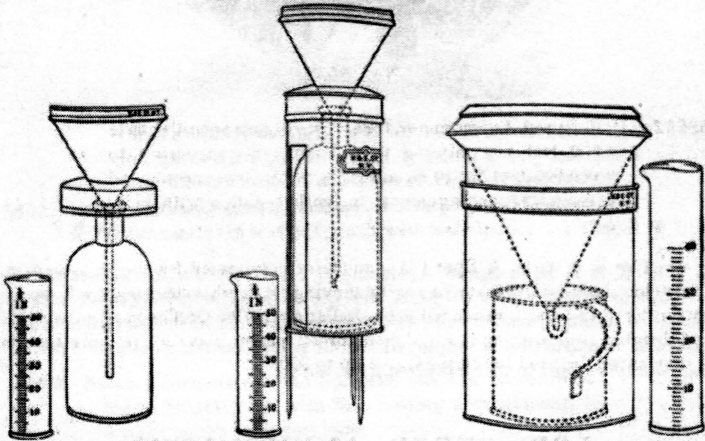


RAIN GAUGES.



No. 5971.

5971. Registering Rain Gauge, zero-setting, metal case $8\frac{1}{2} \times 8\frac{1}{2}$ in. $\times 10\frac{1}{2}$ in. high, records up to 12 inches of rainfall by 100ths inches. The copper receiver is of improved design . . . each \$



- | | | | | | |
|------------|---|------------|---|---------|--|
| No. 5980G. | 5980. | 5982G. | 5982. | 5984. | 5984G. |
| 5980. | Rain Gauge, Howard's model, simple construction, with graduate reading to $\frac{1}{100}$ in. | 5982. | do. Symon's model, with prongs to prevent tipping, with graduate reading to $\frac{1}{100}$ in. | 5984. | do. Glaisber's model, a very reliable instrument, with graduate reading to $\frac{1}{100}$ in. |
| | | | | | each \$ |
| | | | | | " |
| | | | | | " |
| | Extra Graduates | No. 5980G. | 5982 G. | 5984 G. | |
| | each | \$ | | | |