

NEW YORK
1869



BUFFALO 1901
GOLD MEDAL
PAN-AMERICAN EXPOSITION

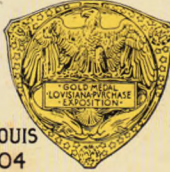


CHICAGO
1883



GRAND PRIZE

GOLD MEDAL



ST. LOUIS
1904



CATALOGUE OF

KEUFFEL & ESSER CO.

MANUFACTURERS AND IMPORTERS

DRAWING MATERIALS

SURVEYING INSTRUMENTS

MEASURING TAPES



NEW YORK

127 FULTON ST.

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PHILADELPHIA
1876



CHICAGO
1893



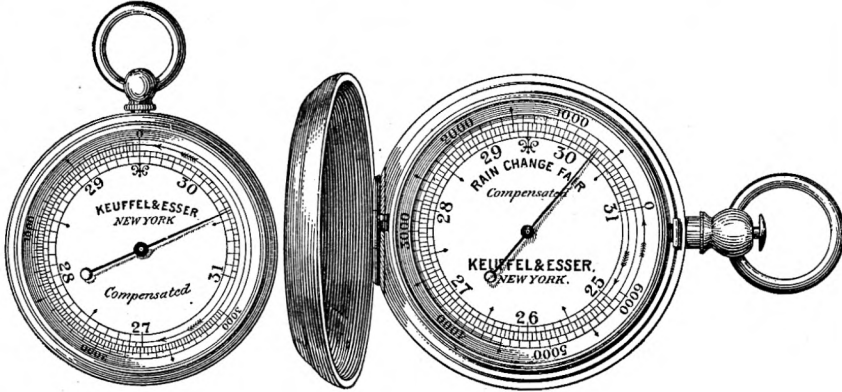
35. EDITION

KEUFFEL & ESSER CO. NEW YORK.

ANEROID BAROMETERS

FOR MEASURING ALTITUDE AND ATMOSPHERIC PRESSURE.

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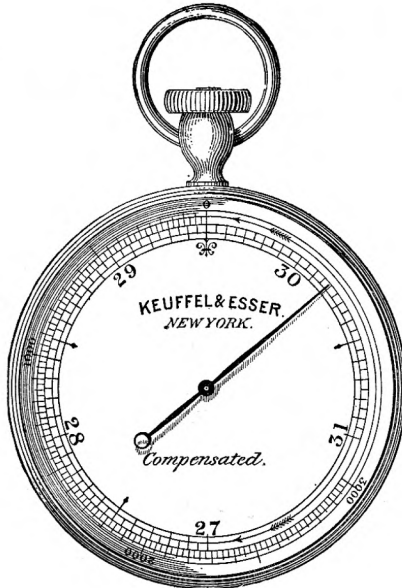
No. 5855.

5871.

- 5850. Watch pattern, gilt case $1\frac{3}{4}$ in. diameter, silvered dial, revolving altitude scale 8000 feet, in morocco Case, each \$ 13 50
- 5855. Watch pattern, gilt case $1\frac{3}{4}$ in. diameter, silvered dial, revolving scale 3000 feet, compensated for temperature, in morocco Case " 19 75
- 5856. Like No. 5855, but altitude scale 6000 feet " 19 00
- 5857. " " 5855, " " " 12000 " " 19 75
- 5858. " " 5855, " " " 18000 " " 21 00
- 5860. Pocket pattern, gilt case $1\frac{3}{4}$ in. diameter, silvered dial, revolving altitude scale 8000 feet, compensated for temperature, detachable bar-needle compass on reverse side, in morocco Case " 29 00
- 5861. Like No. 5860, but altitude scale 18000 feet " 31 00
- 5870. Watch pattern, nickel hunting case 2 in. diameter, silvered dial, revolving altitude scale 3000 feet, compensated for temperature " 22 50
- 5871. Like No. 5870, but altitude scale 6000 feet " 21 75
- 5872. " " 5870, " " " 12000 " " 22 50
- 5873. " " 5870, " " " 18000 " " 23 75

PLAIN DIRECTIONS FOR MEASURING HEIGHTS FURNISHED WITH EACH INSTRUMENT.

KEUFFEL & ESSER CO. NEW YORK.



No. 5890

- 5880. Pocket pattern, brass case $2\frac{3}{4}$ in. diameter, silvered dial, revolving altitude scale 3000 feet, compensated for temperature, in morocco Case each \$ 21 25
- 5881. Like No. 5880, but altitude scale 6000 feet " 20 50
- 5882. " " 5880, " " " 12000 " " 21 25
- 5883. " " 5880, " " " 18000 " " 22 50

- 5890. Pocket pattern, bronzed case $2\frac{3}{4}$ 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 \$ 32 25
- 5891. Like No. 5890, but altitude scale 6000 feet " 31 50
- 5892. " " 5890, " " " 12000 " " 32 25
- 5893. " " 5890, " " " 18000 " " 33 50

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.

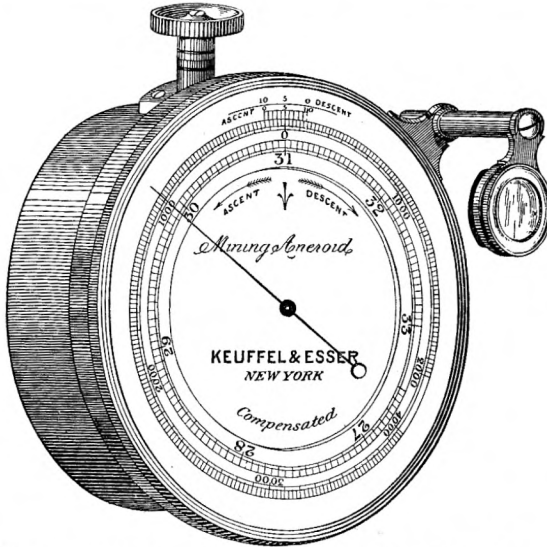
- 5895. Mining Barometer, like No. 5890, but reading 2000 feet below and 6000 feet above sea level each \$ 33 50

Sewed leather Sling Case for Barometers Nos. 5890, 5891, 5892, 5893, 5895 and 5910 (on next page) " 2 50

PLAIN DIRECTIONS FOR MEASURING HEIGHTS FURNISHED WITH EACH INSTRUMENT.

KEUFFEL & ESSER CO. NEW YORK.

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No. 5920.

- | | | |
|--------------|---|---------------|
| 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 \$ 32 25 |
| 5902. | Like No. 5900, but altitude scale 12000 feet | " 35 25 |
| 5904. | “ 5900, “ “ “ 18000 “ | “ 38 25 |
| 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 . . . | “ 50 00 |
| 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 feet, compensated for temperature, adjustable reading lens, in leather Sling Case . . . | “ 60 00 |
| 5916. | Like No. 5915, but altitude scale 14900 feet, reading to 2 feet, “ | “ 75 00 |
| 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 | “ 60 00 |
| | Sewed leather Sling Cases for Nos. 5915, 5916 and 5920, “ | “ 5 00 |

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.



POCKET THERMOMETERS.



No. 5930.

5930. Pocket Thermometers, mercurial, 5 in., Fahrenheit, opal glass scale reading to 2 degrees, nickelplated brass Case each \$ 85
5931. Pocket Thermometers, mercurial, 4 in., Fahrenheit, scale reading to 2 degrees, nickelplated brass Case with ring pendant " 50

BAROGRAPHS, THERMOGRAPHS, HYGROGRAPHS.

These Self-recording instruments are for many purposes preferable to reading instruments. They have been perfected, so that they now are 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. To one end of this pen is attached which automatically records on a graduated chart which travels by clockwork.

POCKET BAROGRAPHS



No. 5935.

5935. Pocket Barograph, compensated for temperature, reading to 4000 feet, in morocco covered metal Case Barograph, bottle of Ink and 50 graduated Charts, in polished mahogany Box each \$ 66 00
5936. Like No. 5935, but reading to 7800 feet " 60 00
5937. " " " " 15000 " " 60 00

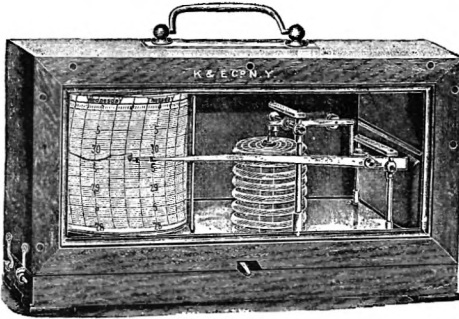
These self-recording aneroid barometers are of great advantage in many cases where the bulk and weight of the usual barographs forbid their use.

The Pocket Barograph measures $4\frac{1}{4} \times 3\frac{3}{4} \times 1\frac{1}{2}$ 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.

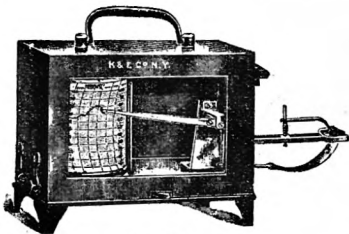
Notwithstanding its small size the Pocket Barograph is a relatively reliable instrument. It also indicates atmospheric changes, like other aneroids.

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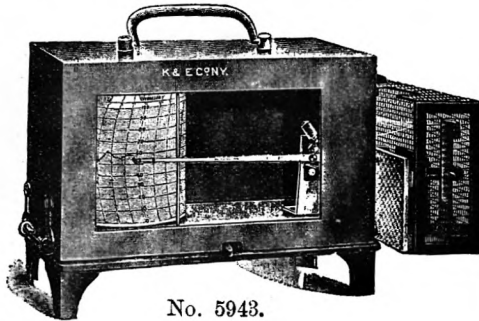


No. 5941.

5940. Barograph, small size; registering one week; from 28 in. to 30.5 in. atmospheric pressure, by twentieths inches. Series of 5 vacuum boxes cylinder $2\frac{3}{8}$ in. diameter $\times 2\frac{3}{4}$ in. high. In polished mahogany Case with handle, hinged cover with glass-paneled front. With Charts for one year and bottle of Ink each \$ 40 00
5941. do. do. but large size; series of 8 vacuum boxes, cylinder $3\frac{3}{8}$ in. diameter $\times 3\frac{3}{8}$ in. high " 55 00
- 5941 H. Gimbal Hook for suspending Barograph from ceiling on shipboard " 6 00



No. 5942.



No. 5943.

5942. Thermograph, registering one week; from 0 to 100 degrees Fahrenheit by 2 degrees; cylinder $2\frac{3}{8}$ in. diameter $\times 2\frac{3}{4}$ in. high. In weatherproof metal case with handle and glass-paneled front. With Charts for one year and bottle of Ink each \$ 40 00

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, thus imparting motion to the recording lever.

5943. Hygograph, registering one week; from 0 to 100 per cent, of moisture by single per cent. Cylinder $3\frac{3}{8}$ in diameter $\times 3\frac{3}{8}$ 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 \$ 60 00

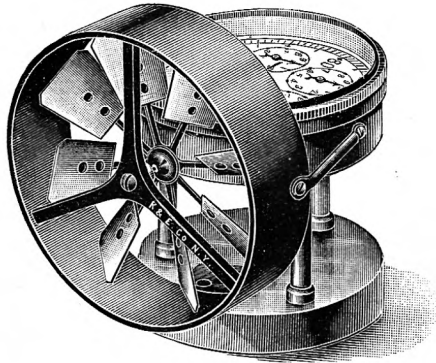
The sensitive member of this instrument consists of a bundle of fine hair, which expands and contracts under variations of humidity, which motion is imparted to the recording mechanism.

Extra charts for period of one year for Nos. 5935, 5936, 5937, 5942, per set \$ 2 00
do. do. do. for Nos. 5940, 5941, 5943 " " 2 50



ANEMOMETERS.

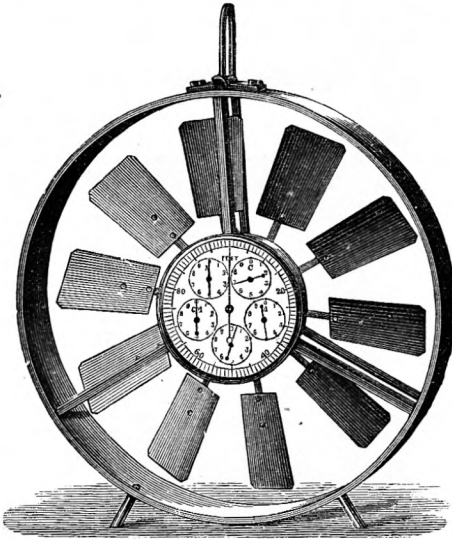
Anemometers are used for the measurement of the velocity of air currents in mines, tunnels, sewers, public buildings, hospitals, etc. As now constructed by us, these instruments embody a number of important mechanical improvements, among which may be mentioned the **zero setting arrangement**. Setting 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 correction table. Our instruments are constructed to **measure air velocities up to 2000 feet per minute** and should not be used in temperatures exceeding 300° F.



No. 5952.

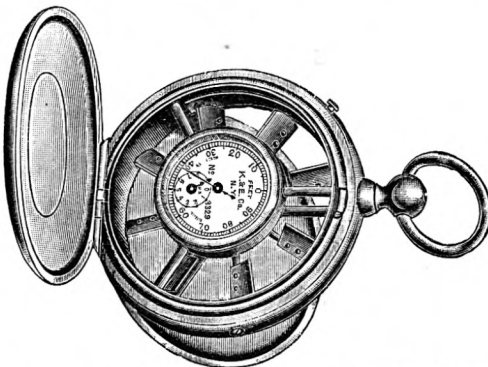
- | | | |
|---------------|--|---------------|
| 5950. | Improved Portable Air Meter, with disconnector, vane 2½ in. diam., registering to 1000 feet, in polished mahogany Case | each \$ 19 00 |
| 5950Z. | do. do. do. but with Zero Setting arrangement | “ 21 00 |
| 5952. | Improved Portable Air Meter, like No. 5950, but registering to 10,000,000 feet | “ 21 00 |
| 5952Z. | do. do. do. but with Zero Setting arrangement | “ 25 00 |

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No. 5965.

- | | | |
|---------------|--|---------------|
| 5953. | Biram Anemometer, 3 in. diam., reading to 1000 feet, with disconnector, in polished mahogany Case | each \$ 17 50 |
| 5953Z. | do. do. but with Zero Setting arrangement. | “ 19 50 |
| 5957. | Biram Anemometer, like No. 5953, but 4 in. diam., reading to 1000 feet, in polished mahogany Case. | “ 18 00 |
| 5957Z. | Like No. 5957, but with Zero Setting arrangement. | “ 20 00 |
| 5958. | Biram Anemometer, like No. 5953, but 4 in. diam. reading to 100,000 feet, in polished mahogany Case | “ 20 00 |
| 5958Z. | Like. No. 5958, but with Zero Setting arrangement. | “ 23 00 |
| 5963. | Biram Anemometer, like No. 5953, but 6 in. diam. reading to 1000 feet, in polished mahogany Case | “ 20 00 |
| 5963Z. | Like No. 5963, but with Zero Setting arrangement. | “ 22 00 |
| 5965. | Biram Anemometer, like No. 5953, but 6 in. diam. reading to 10,000,000 feet, in polished mahogany Case | “ 28 00 |
| 5965Z. | Like No. 5965, but with Zero Setting arrangement | “ 32 00 |

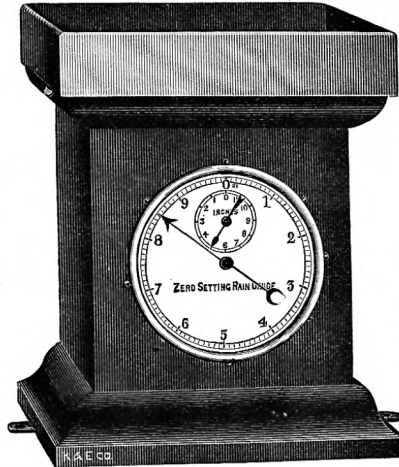


No. 5968.

- 5968.** Watch-pattern Anemometer, 2 in., registering to 1000 feet; hunting case, with disconnector. The two covers, when open form a base for the instrument each \$ 30 00

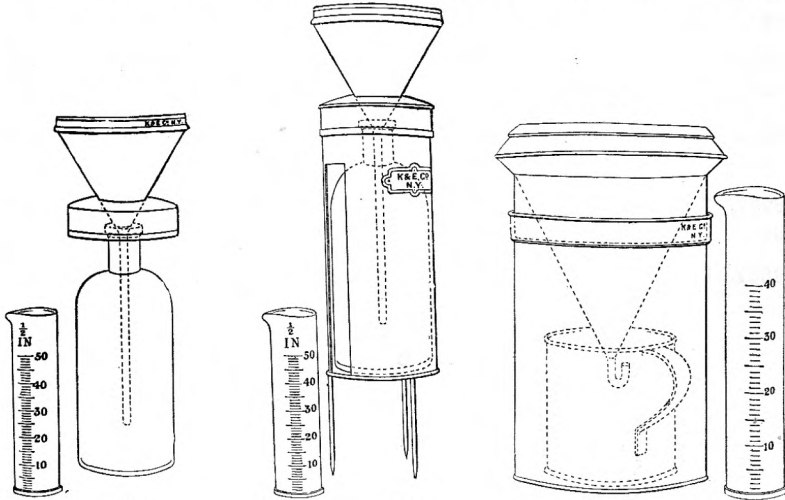


RAIN GAUGES.



No. 5971.

5971. Registering Rain Gauge, zero-setting, metal case $8\frac{1}{2} \times 8\frac{1}{2}$ in. $\times 10\frac{1}{4}$ in. high, records up to 12 inches of rainfall by 100ths inches. The copper receiver is of improved design . . . each \$27 00



No. 5980 G. 5980.

5982 G. 5982.

5984.

5984 G.

5980. Rain Gauge, Howard's model, simple construction, with graduate reading to $\frac{1}{100}$ in., . . . each \$ 4 00
 5982. do. Symon's model, with prongs to prevent tipping, with graduate reading to $\frac{1}{100}$ in., . . . " 5 00
 5984. do. Glaisher's model, a very reliable instrument, with graduate reading to $\frac{1}{100}$ in., . . . " 7 00

Extra Graduates	No. 5980 G.	5982 G.	5984 G.
each	\$ 90	90	1 00