

—Dietz on Science—  
**WEATHER STUDY GREATLY AIDED BY BAROMETER**

Amateur Can Abtain Good Instrument Without Much Expense.

BY DAVID DIETZ

Script-Howard Science Editor

The amateur weather student will find his enjoyment of the subject greatly increased if he owns a barometer.

The mercury barometer, such as is used in the United States Weather Bureau stations, is an expensive device. It is unwieldy in the hands of the layman and therefore is not recommended to him. But good aneroid barometers are inexpensive and easy to use. A good one can be had for about \$5 although better models can be had at prices ranging up to \$30.

It is a mystery why more households do not contain barometers. The instrument is particularly useful to teach children the facts about the weather.

The aneroid barometer has a circular case with a dial at the front. A pointer, moving across the dial, registers the air pressure.

This type of barometer does not make use of a column of mercury. Instead there is a little metal box inside the case. Most of the air has been pumped out of this box. The pressure of the atmosphere causes the sides of the little box to be pushed in, the amount being proportional to the pressure.

The pointer is connected by a series of levers to the outside of the little box. As a result, a slight movement of the sides of the box is registered as a considerable movement of the pointer across the dial.

There is an extra pointer on the barometer which can be set at any point on the scale by moving a little knob. This extra pointer is very convenient in using the barometer.

**Reading the Barometer**

As a rule, the scale of the barometer is divided into four sections with the words "Fair," "Changeable," "Rainy," and "Stormy" written upon them.

But the fact that the pointer of the barometer happens to be in one of these sections does not indicate that weather of a corresponding nature can be expected. A single reading of the barometer tells very little about future weather.

It is necessary to have two readings which establish whether the barometer is falling or rising, in others words, whether a low pressure area or a high pressure area is moving in.

The observer should read the barometer and set the adjustable pointer over the pointer which indicates the reading. It is then possible, by glancing at the barometer a few hours later to see whether it is rising, falling, or standing still.

To forecast the weather, the observer must reduce the reading of the barometer to sea level. The local weather bureau can furnish the necessary information for doing this.

**Basis of Calculation**

For each 100 feet above sea level, .10 must be added to the reading of the barometer. It is also possible to adjust the barometer so that its readings are always those of sea level. This can be done by calling up the weather bureau and getting a sea level reading and then immediately adjusting the barometer to that reading.

The direction in which the wind is blowing must also be known to make a weather forecast. The direction of the wind is a clew to the quadrant or quarter of a cyclone in which the observer happens to be.

If the wind is southwest to northwest, sea level readings of the barometer have the following meanings:

30.10 to 30.20 and steady: Fair with slight temperature changes for the next day or two.

30.20 or above and falling slowly: Fair for next two days with slowly rising temperature.

If the wind is south to southeast, indications are as follows:

30.10 to 30.20 and falling slowly: Rain within twenty-four hours.

30.10 to 30.20 and falling slowly: Rain within twelve hours, as a rule, and increasing wind velocity.

**Clear Weather Forecast**

If the wind is south to southwest and the barometer reads 30.00 or below and is rising slowly, a clearing can be expected within a few hours followed by several days of fair weather.

If the wind is south to east and the barometer reads 29.80 or lower, and falling rapidly, a severe storm can be expected within a few hours, followed within twenty-four hours by a clearing.

If the wind is southeast to northeast, indications are as follows:

30.10 to 30.20 and falling slowly: Rain within twelve to eighteen hours; if falling rapidly, rain in less than twelve hours.

30.00 or below and falling slowly: Rain can be expected to continue for a day or two.

If the wind is east to northeast and the barometer falling, rain may be expected.

If the winds are east to north and the barometer reads 29.80 or below and is falling rapidly, a heavy rain and severe northeast gale can be expected.

A revolver was found in their possession, police said. Police were led to the house by a note found in a police box at Hiawatha and North streets, and they believe that Mrs. Mamie McDonald, wife of John, wrote the message. All three men had been vagrancy charges under \$2,000 bonds.

**ARREST 3 IN SHOOTING**

Trio Suspected in Affray Thursday Night Near Hospital.

Three men, suspected of implication in a shooting near Riley hospital Thursday, were arrested early today at a house at 1006 Bradley street. The trio arrested are John McDonald, 33; Walter Wilson, 22, and Max Sneed, 23. All are Negroes.

A revolver was found in their possession, police said. Police were led to the house by a note found in a police box at Hiawatha and North streets, and they believe that Mrs. Mamie McDonald, wife of John, wrote the message. All three men had been vagrancy charges under \$2,000 bonds.

**Radio Dial Twisters**

**SATURDAY**  
—5:15 P. M.—  
CPCA (1120)—"Columbian Mrs. Jones" to WEAP.  
—6 P. M.—  
CBS—Evan Evans, baritone with "Buddy Rogers' orchestra."  
—7 P. M.—  
NBC—Rainbow Reflections to WZN (720)—Kemo's orchestra.  
—7:30 P. M.—  
NEC—Denny's orchestra to WJZ.  
—8 P. M.—  
WLS (870)—"Rogers' orchestra."  
—8:15 P. M.—  
KDKA (980)—Behind the scenes.  
—8:30 P. M.—  
CPCA (1120)—"Imperial Concert" (840)—Linger Ashlee with "Philadelphia orchestra concert."  
—8:45 P. M.—  
CBS—Koschei, Ukrainian "Choir" with "Russia's orchestra."  
—9 P. M.—  
WZN (720)—"Old Favorites."  
—9:15 P. M.—  
WBBM (760)—"Musical Memories."  
—9:30 P. M.—  
KDKA (980)—"Petite orchestra."  
—9:45 P. M.—  
CBS—Male Quartet to WEAP.  
—10 P. M.—  
WMAQ (750)—"Gloria."  
—10:15 P. M.—  
WBBM (760)—"Grier's orchestra."  
—10:30 P. M.—  
NEC—"Spy Story" to WZN.  
—10:45 P. M.—  
WBBM (760)—"Wayne King's orchestra."  
—11 P. M.—  
WMAQ (750)—"Organist."  
—11:30 P. M.—  
CBS—Bertram's Saturday Review.  
—11:45 P. M.—  
WBBM (760)—"Harris' orchestra."  
—12:00 A. M.—  
WJW (750)—"Scores."  
—12:15 A. M.—  
WBBM (760)—"Paxton orchestra."  
—12:30 A. M.—  
CBS—Ann Leaf & Charles Carlisle.  
—12:45 A. M.—  
CBS—"Arnhelm's orchestra."  
—1:00 A. M.—  
CBS—Jerry Freeman's orchestra.  
—1:15 A. M.—  
NEC—Male Quartet to WEAP.  
—1:30 A. M.—  
WBBM (760)—"Asawa's orchestra."  
—1:45 A. M.—  
WJW (750)—"Dream Ship."  
—2:00 A. M.—  
WBBM (760)—"Vivian's orchestra."  
—2:15 A. M.—  
NEC—Male Trio to WJZ.  
—2:30 A. M.—  
WBBM (760)—"Trini's orchestra."  
—2:45 A. M.—  
WMAQ (750)—"Bavarian Ensemble."  
—3:00 A. M.—  
CBS—"Organist."  
—3:15 A. M.—  
WBBM (760)—"Pizzlers."  
—3:30 A. M.—  
WBBM (760)—"Dancers."  
—3:45 A. M.—  
WBBM (760)—"Gordon Carpenter's orchestra."  
—4:00 A. M.—  
WBBM (760)—"Sign off."

**WFBM (1230) Indianapolis**

(Indianapolis Power and Light Company)

**SATURDAY**

—9:00 A. M.—  
Indianapolis Power and Light Company.

—9:30 A. M.—  
Elder Michaux and congregation (CBS).

—10:00 A. M.—  
Evan Evans (CBS).

—10:30 A. M.—  
Philadelphia summer concert (CBS).

—11:00 A. M.—  
Saturday review (CBS).

—11:30 A. M.—  
Isham Jones orchestra (CBS).

—12:00 P. M.—  
Jerry Freeman orchestra (CBS).

—12:30 P. M.—  
Charlie Davis orchestra (CBS).

—1:00 P. M.—  
Kirk Douglas orchestra (CBS).

—1:30 P. M.—  
Gus Arnhelm orchestra (CBS).

—1:45 P. M.—  
Sign off.

**SUNDAY**

—9:00 A. M.—  
Melody Parade (CBS).

—9:45 A. M.—  
Marion Carter (CBS).

—9:45 P. M.—  
Entertainers.

—10:00 P. M.—  
"The Builders."

—10:30 P. M.—  
Noon—"Did You Know?"

—11:00 P. M.—  
"Second Toughest."

—11:30 P. M.—  
"Second Toughest."

—12:00 A. M.—  
"Second Toughest."

—12:30 A. M.—  
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