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? WHY THE WEATHER ?

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## THE TIPPING-BUCKET RAIN-GAUGE

There are several different kinds of rain-gauges in which the record of rainfall is made automatically and continuously. The one most widely used in this country is the "tipping-bucket" gauge.

This instrument is a remarkable combination of simplicity and ingenuity. The "bucket" is a little metal trough, pivoted in the middle, so that it can tilt back and forth, seesaw-fashion. It is divided into two compartments by a central partition. Rain falling into a funnel-shaped receiver at the top of the gauge flows into whichever compartment of the bucket is uppermost, until the weight of the water causes the bucket to tip, thus emptying one compartment and presenting the other to the incoming stream. When the second compartment is filled, the bucket tips in the opposite direction. The parts of the gauge are of such dimensions that each tip of the bucket corresponds to a depth of 0.01 inch of rainfall. The gauge is connected electrically with registering apparatus indoors, so that every tip of the bucket is recorded. The register sheet shows the time of occurrence as well as the amount of rainfall.

If you are of a mechanical turn of mind and the foregoing description interests you, why not visit a Weather Bureau station and inspect the instrument itself? You will find plenty of other interesting contrivances at the same place.

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