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? WHY THE WEATHER ?

By Dr. Charles F. Brooks
of Clark University.

SNOW CRYSTAL FORM

Microphotographs of snow crystals show their marvellous diversity and beauty of form and structure, perfect flakes often exhibiting a remarkable symmetry, even to the smallest details of pattern. W. A. Bentley of Jericho, Vt., has made an internationally famous collection of thousands of these snow crystal photographs. Such is the individuality of each flake that no two are identical.

The form of a snowflake depends partly on its meteorological history. It may start high aloft as a tiny ice disk or needle. Balloonists have sometimes found themselves surrounded with such ice particles, so small as to be scarcely visible except for their glint in the sunlight. These tiny particles on falling to lower, moister regions may serve as centers for the growing flakes. The final flakes may be imperfect fragments left after most of the crystal has evaporated. The largest and most beautiful branching forms generally occur with surface temperatures near freezing. A single large flake may be composed of several adherant crystals. Two crystals at the ends of a bar are sometimes noted, the whole form resembling a collar button, or pedestal. Small flakes are more characteristic of colder, drier weather. Form is probably dependent upon the chemical composition of the flake as well as on weather conditions. One observer claims that "a snowflake with six thin rays has a base of chlorine and that an hexagonal disc flake has a base of ammonia. If this hypothesis proves correct, we should expect to find branching forms most prevalent near the oceans where salt spray is carried up into the air."

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