



Fragile Individualism

**S**NOWFLAKES by billions of billions fall each year, yet no two have ever been found exactly alike.

Of a fragility and perishability celebrated since Villon's time (and long before it, too), snowflakes are no less individualistic than the most rugged, hardboiled member of human society who goes round bragging that he is not as other men, but a genus all to himself—for which his hearers no doubt often give thanks, though they may say nothing.

The human comparison is not so inapt, at that; for like the human race or any other generic subdivision of the material world, snowflakes have basic unifying similarities under their distinctive differences. We humans are all made of the same chemical complexes; snowflakes are all crystallized water. Every normal one of us has two arms, two legs, one head, and so on; every snowflake is a six-sided crystal. There are twin snowflakes—Siamese-twin snowflakes with connecting links between them—just as there are human

• RADIO

WHAT COSMIC RAYS TELL US, by Dr. H. Victor Neher, California Institute of Technology.

Tuesday, January 22, 4:30 p. m.

OUR STONE-PELTED PLANET, by
H. H. Nininger, of the Nininger Laboratory.

oratory.

In the Science Service series of radio addresses given by eminent scientists over the Columbia Broadcasting System.

twins. Yet if you examine the very closely similar tiny hexagons of ice at the opposite ends of a "dumb-bell" snowflake, you will find at least microscopic variations between them, just as you will find slight differences between "identical" human twins.

The analogy might be pursued even further. There are "races" of snow-flakes, just as there are races of human beings. Some are of a Spartan severity in outline, simple six-sided figures, or unbranched six-pointed stars. Others have a veritable rococo wealth of lacy, feathery, sub-branching little spars of crystal standing out from their six principal shafts. And there are intermediate forms.

Just as races of men are as a rule native to separate and particular regions of the earth, so are these "races" of snowflakes native to particular regions of the air. The straight-sided little

flakes are born of the higher clouds, where the cold is severe and living conditions for crystals doubtless harder. Thus they are naturally the Puritans among their kind. The graceful, more ornamental flakes are the offspring of the lower clouds, where the temperatures and other conditions are not so forbidding of artistic beauty. They are, so to speak, the natural citizens of a cloudland Province.

It is a fascinating outdoor sport, easily practiced, to carry a tolerably strong hand-lens on days when dry, unmatted snow is falling, and to stop occasionally to examine the flakes that light on your coatsleeve.

There is only one condition attached, like the "but you must not" of a fairy-godmother tale. You must not breathe while you are studying snowflakes. To them you are a Fiery Dragon.

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ETHNOLOGY

## Cowboy and Indian Folksongs Tell of Southwest Culture

THE cowboy singing "Home on the Range," the Spanish peasant relaxing against an adobe wall strumming lazily on a guitar and humming "Rancho Grande," and the Indian appealing in song to the spirit of the mountain, though of different racial heritage, show a common close contact with nature and unite in giving scientists an impression of the culture of the Southwest.

The history of the development of these haunting songs was described to the American Association for the Advancement of Science by Prof. A. L. Campa, of the University of New Mexico.

Nature is the inspiration for most of these songs, Prof. Campa indicated. The cowboy yearns "for the land where the buffalo roam, where the deer and the antelope play," for the lone prairies, the coyote's howl, and the footfalls of his trusty horse. And in the Spanish song, the desert, the cactus are all important.

In the South, life is easier, more languid. There it is "Carry me back to old Virginia," and "My old Kentucky Home." In the West, it is "Home on the Range." In the Spanish tropics, it is "weeping willows," "soft breezes that

blow," and "gliding canoes along peaceful waters."

But to the north, in the arid deserts and bare canyons, it is the "corrido," the ballad that tells of death, long horseback rides, flying bullets, and desert cactus.

Educated man becomes uniform, standardized, artificial, hedged in by conventions, and forever conscious of those around him; he reflects the personality of others rather than his own, Prof. Campa pointed out.

Men in isolated communities reflect nature. They are different because they are themselves.

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