

A Science Service Feature

Intended for use  
March 6, but  
released on receipt

? WHY THE WEATHER ?

Mailed Feb. 27, 1926

By Dr. Charles F. Brooks  
of Clark University

HOW SNOWFLAKES FALL

It is fascinating to watch snowflakes come, giving the effect of feather beds being shaken aloft, their descent is most diverse. Some twirl round and round. Most simply settle slowly, with edges bending upward. Big flakes come faster than the little ones, and, presumably, would not be big had they not been picking up smaller flakes as they fell. But if one wishes to observe the act of a large flake capturing a small one he must look sharply for a long time. In the course of ten minutes of careful watching during a fall of large flakes there were seen only three instances of what looked like collisions of snowflakes in the air. This seemed very remarkable in view of the great number of large flakes coming down. While the total motion of the flakes was considerable their motion relative to one another was very small. When an eddy carried one flake round a sharp curve its neighbors would also go round the curve at the same time, and their relative positions would remain much the same.

The rate at which snowflakes fall is about 2 to 5 feet a second. The two foot rate applies to the light individual crystals, while the three to five foot rates apply to the heavier ones. Feather-size bunches of flakes fall at about 4 to 5 feet per second or even more. Sleet, of course, comes down much faster, and so does rain, falling perhaps five times as fast as snowflakes, but never more than about 25 feet per second. The fastest of all are large hail stones, which, if one inch in diameter, may fall 50 feet per second, and if two inches in diameter about 75 feet per second. This explains why big hailstones may be dangerous.

(All rights reserved by Science Service, Inc.)

-----  
SCIENCE SERVICE.  
21st and B Sts.,  
Washington, D. C.