

No. 217

A Science Service Feature

Jan. 22

? WHY THE WEATHER ?

Dr. Charles F. Brooks,
of Clark University,
tells of

WET AND DRY SIDES OF MOUNTAINS

Up-hill winds tend to be cloudy and rainy or snowy, while down-hill ones are usually clear and dry, the reason for the difference being simply that rising air cools by expansion and thereby reduces some of its vapor to clouds and rain or snow, while descending air warms by compression and becomes relatively drier. Recent weather affords numerous examples in addition to the chronic wetness or snowiness of the west faces of our western mountains, and the dryness of west winds on the Great Plains and Atlantic slope.

The unusual northers of November and December in the Southwest brought abundant rainfall to the southern end of the Great Valley of California but continued dryness to the southward slopes beyond. The west-northwest wind New Year's Day caused half a foot of snow to fall at Syracuse, N.Y., where the wind had to rise over highlands, but no more than an inch at places ten miles and more farther west, and only two or three inches immediately east of Syracuse. In southern New England the same wind was clear and snowless.

(Tomorrow: Forecasting)

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