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? WHY THE WEATHER ?

Dr. Charles F. Brooks,
of Clark University,
describes:

CHINOOK, THE SNOW-EATER

The Chinook is the warm wind of the Northwest. Its name is that of a tribe of Indians from the direction of whose camp the warm southwest wind reached the trading post, Astoria, at the mouth of the Columbia River. The use of the name soon spread to all warm winds in winter in the Northwest, and now the term is mostly applied to warm winds descending onto the Great Plains after passing over the Rocky Mountains. The warmth of these chinooks is largely the result of latent heat liberated during the copious precipitation of rain or snow on the windward slopes of the mountain ranges. This latent heat greatly hinders the cooling of the rising, expanding air, allowing it to reach the mountain crest at a moderate temperature.

Descending from there the air is warmed considerably by compression until it may be 15 or 20 degrees warmer when it reaches the plains than it was at the same level on the windward side. So much moisture has been removed that it has become very dry. As it strikes the snow-covered country the temperature frequently rises 20 to 40 or more degrees in 10 or 15 minutes. In one case, the rise was from 13 below zero to 38 above. The snow disappears as if by magic, for, because of the dryness of the air, it evaporates as well as melts. Many a time whole herds of cattle have been saved from starvation by the timely removal of deep snow.

The Chinook is the same as the Foehn wind of Switzerland, and similar winds are found in Greenland and New Zealand, in fact, wherever a mountain chain or highland and the strong winds of passing low pressure areas are associated.

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