

measurement of rainfall, the agent must instruct the assured to make arrangements with three disinterested reputable citizens to determine the exact time of rainfall at the place designated in the policy.—By *C. F. Talman*, in *Why the Weather?* (SS.).

SCIENTIST SAYS DESERT PLANTS STORE FIFTEEN-YEAR WATER RESERVE

New York Times, Jan. 15—A vine in the arid regions of Arizona and Sonora stores water in an expanded base in such quantity that it has been known to live on its reserves for fifteen years, Dr. Daniel T. MacDougal, director of the Desert Laboratory at Tucson, Ariz., said last night in a radio talk from Station WEAJ on "The Thirst of Plants."

"A tree cactus," he added, "may hold many hundreds of gallons of surplus water. Many plants in that region have now a water supply laid in which would keep them alive until 1933 or 1934. An acre of cabbage will use 2,000,000 quarts of water in a season, and 200 beech trees on an acre require nearly double that amount. One of these trees loses about eighty quarts of water as vapor daily from its leaves."

THE NAME "CHINOOK"

The name "chinook" is now most commonly applied to a dry wind, warm for the season, that blows down the eastern slopes of the Rocky Mountains over the adjacent plains, in the United States and Canada. It is identical in character with the Swiss foehn. In winter this wind causes snow to disappear with remarkable rapidity, and hence it is nicknamed the "snow-eater." The same name is, however, applied to other winds of western North America, including a warm, moist southwesterly wind blowing from the Pacific Ocean to the coastal region of Washington and Oregon; sometimes distinguished as the "wet chinook."

There has been much controversy over the history of the name. Much attention has been devoted to this subject by J. Neilson Barry, secretary of the Trail Seekers' Council, of Oregon, whose investigations indicate that the name was given first of all neither to the dry wind east of the Rockies nor to the "wet chinook" of the coast, but to a dry northwesterly wind experienced in summer at Astoria, Oregon. This wind came from the direction of the Chinook Indian villages on the opposite shore of the Columbia River, between Point Ellice and Cape Disappointment, and according to Mr. Barry, was first called "the Chinook wind," as a joke, about 1840 by a Mr. Birnie, who was in charge of the Hudson's Bay Company's post at Fort George, on the present site of Astoria. Birnie was a well-known character in the Northwest for many years, which probably explains why his nickname for the wind became popular and eventually spread far beyond its place of origin, with various applications.—By *C. F. Talman*, in *Why the Weather?* (SS.).

MARINE NOTES

(From *Hydrographic Bulletin*, U. S. Navy Dept., Washington, D. C.)

Waterspouts.—Second Officer J. Knapp, of the American steamer *Excelsior*, Capt. E. C. Wilson, reports that on December 19, 1931, at 10.50 a. m. (local time), in lat 36° 28' N., lon. 21° 50' E., four waterspouts in a row were observed. They were bearing west and traveling from southwest into the northeast. The spouts rose to a height of 50 to 60 feet, behind which was a long black corkscrew-shaped cloud rising from the water into the clouds. The wind was south, force 4; weather overcast and rainy; barometer 30.10 inches; and temperature of the air 56° F.