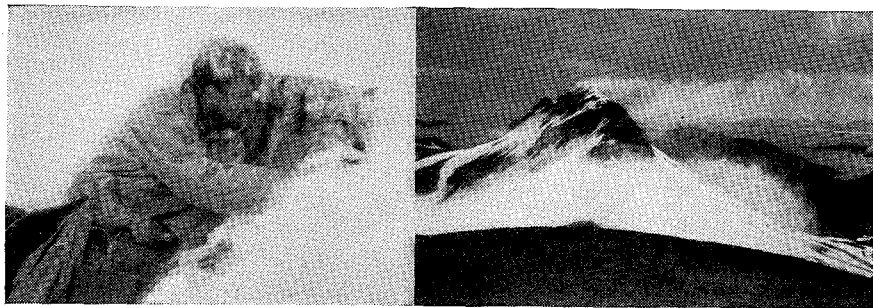


Are Aleutians the Source of America's Weather?

Father Hubbard, Alaskan Explorer, Believes Meeting of Air-Currents
There Governs the Climate of the Continent



The beginning of a storm in the Aleutian Islands: a view of a wind-swept peak.
(Left) Father Hubbard and his dog Katmai digging in during a 100-mile gale

Last April the Rev. Bernard R. Hubbard, widely known as the "Glacier Priest" because of his extensive Alaskan exploration, predicted a devastating drought for the Middle West. The drought certainly arrived. Last week, in an interview for *THE LITERARY DIGEST*, Father Hubbard made another forecast—that the coming winter will be a normal one, and not, as some observers have foretold, a season of exceptional cold.

Such forecasts are notoriously dangerous, for the weather is fickle and subject to change on short notice. The explanation offered by Father Hubbard for his predictions is interesting, and fits in with the classical theory of air-mass movements.

In brief, the explorer believes that most storms that move across the North American Continent originate in or near the Aleutian Islands, that curved row of rocky islets and shoals extending outward from the Alaska Peninsula into the Pacific Ocean. Down from the north, through Bering Strait, sweep the cold currents of the Arctic waters, bringing with them cold air-masses from the region of the Pole. These currents, coursing southward through the Bering Sea, are caught and stopped by the Aleutians.

The Source of Storms

From the south, meanwhile, comes the warm Japan Current, bringing with it masses of warm, moist air from the balmy Pacific. These contrasting air-masses meet at the Aleutians, and the great cyclonic whirls are begun which bring with them weather changes for the Continent.

The cyclonic storms move eastward because of the rotation of the earth. They pass over the shore-line of the Continent at about Vancouver Island, where small whirls are split off by the mountains, to move southward into California. The main masses continue eastward, and, somewhere, in the region of the Great Lakes, they encounter more masses of cold air sweeping southward from Hudson Bay.

On account of the momentum of the Aleutian storms, the Hudson Bay air-masses are swept aside, Father Hubbard believes, and are caused to move across upper Quebec and Labrador instead of descending into New England.

Last spring he perceived less snow on the Rockies than usual, and soon afterward received word from Eskimo friends in the Aleutians that the weather there was colder than it had been for several years. For some unexplained reason the Japan Current was not coming as strongly as in the past, with the result that the usual storms were not being formed over the islands. On this circumstance the explorer based his prediction, later amply fulfilled, that there would be fewer rain-bearing storms for the Middle West during the summer.

The period of abnormal weather in the Aleutians is now over, he said last week. Storms are again being formed over the islands. This will result in normal weather for the Middle West and the East—warmer weather than last year because the storms sweeping across the Continent will again deflect the cold air-masses moving southward from Hudson Bay. "When it is cold in the Aleutians it will be cold in New England," he said, "but when the weather is normal in the islands it will be normal throughout the Continent."

Father Hubbard, who last summer penetrated parts of the Aleutians hitherto unexplored by white men, will return next summer to study the languages and tribes of the Eskimo. As in past exploration trips, he will probably be accompanied by students of Santa Clara University, where he is head of the department of geology.

Correlating Eye and Voice

A method of studying the movements of the eye in reading aloud, and correlating them with the actual pronunciation of the words, has been announced in *Science* by Prof. Joseph Tiffin of Iowa University.

Photographic records of the eye and the "sound track" produced by the voice show that the voice lags about a second behind the eye. This may be taken as a measure of the speed of thought: the time required for the mind to recognize the word and transmit the necessary orders to the speech apparatus. The record also shows that the eye does not travel smoothly along a line of type, but proceeds by a series of jerks.

Science Snap-shots

Welded Houses: Foreshadowing a day when single family houses will have steel frames, put up inexpensively and noiselessly by welding, experts have been experimenting with welded steel for this use. The largest house built by this method, so far, is being erected in the Ottawa Hills residential section of Toledo, Ohio.

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Migratory Bird Reserve: The Federal Government is planning to spend \$1,000,000 to provide a resting and nesting place for wild ducks, wild geese and other migrating birds on the Snake River, a small tributary of the Niobrara River, in Cherry County, Nebraska. Marshes and a lake of about 10,000 acres will be made by damming the stream. The site is on the main flyway of birds migrating between the Mexican Gulf district and Western Canada.

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New Depth-Finder: Capt. R. S. Patton, director of the United States Coast and Geodetic Survey, has announced the development of improved apparatus for obtaining depths under water by means of echo sounding. The new equipment is fast and sensitive: it can take twenty soundings a second in depths from six to 120 feet, and therefore at a cruising speed of ten miles an hour obtains a sounding every ten inches. It will measure differences in depth within an accuracy of about one inch.

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Grapes From South Africa: A new pest-eliminating treatment, consisting of subjecting the fruit to high temperatures for a brief period, has enabled growers of grapes in South Africa to enter their product on the American market for the first time this winter. Hitherto an embargo has been enforced against South African grapes on account of insect pests.

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"Aging" Wood With Gas: Manufacturers of imitation antique furniture, designers of art wood interiors, and builders of motion-picture sets supposed to show ancient woodwork are obtaining the desired effect of antiquity by treating the wood with the flame of an oxy-acetylene blow-torch, it was reported recently in *Oxy-Acetylene Tips*. The job is finished by rubbing down and applying filler, oil and wax.

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Warm Winds Aloft: The air-layer 145 to 220 miles above the earth, called the ionosphere, is fairly constant in temperature, and is disturbed by warm winds having a temperature of 300 degrees Kelvin, or about eighty degrees Fahrenheit, it was reported recently to the *Physical Review*, by Dr. E. O. Hulburt of the Naval Research Laboratory. The ionosphere winds blow in all directions from the point directly beneath the sun, and their paths are similar to those of streams of a liquid poured on a rotating sphere.

Dry Tomahawks Sharpened for the Warpath

While Kansas W.C.T.U. Leader Calls on Modern Carry Nations to Wield Hatchets, Wet States Complain "Arid" Dixie's Illicit Moonshine Is Leaking Across Mason-Dixon Line

CARRY NATION is dead, but her spirit goes marching on. The hatchet-wielder of the 'nineties left a pile of bar-room wreckage which her younger sisters of to-day promise will be as nothing to the scene of desolation they will make with smashed mirrors, broken bottles, split mahogany, and ruined paintings.

Anyone who believes that repeal killed prohibition sentiment has only to witness the spirit of the W.C.T.U. sisterhood to-day. The granite shaft erected by the Carry Nation Monument Association at the previously unmarked grave of the woman whose hatchet blazed the way to national prohibition is no more firmly based than the determination of the W.C.T.U. to try once more to dam the nation's distilleries and breweries.

Kansas, where Carry Amelia Nation began her devastating career like a six-cylinder tornado, will know the hatchet again, if Mrs. Mary Frazee, President of the Women's Christian Temperance Union of Arkansas City, carries out her intention. It was at Wichita, in Kansas, which had been legally "dry" and illegally "wet" for more than half a century, that the fifty-four-year-old Amazon for the first time took a bartender by surprise, carried the saloon by assault, smashed a \$1,500 mirror to pieces, toweled "Cleopatra at the Bath" with a volley of stones, swept off all the bottles and glasses with a mighty sweep of an iron bar, and shrieked "Glory to God! Peace on earth; good-will toward men," until a detective enveloped her in his arms and carried her off, screaming, to jail.

Her hatchet became a symbol; her name a watchword for the White Ribboners and a terror to the "trade." Dead these many years, her ghost comes back to haunt the scenes of her early raids. "My fighting blood is up," Mrs. Frazee is reported to have said. "I am ready to go in with my hatchet anywhere the law is being violated. I mean a hatchet, and I am not speaking figuratively. Every woman promised to-day to take her hatchet and go with me if it becomes necessary."



Wide World

Mrs. Ella A. Boole

This was two days after the State had voted to retain its fifty-four-year-old prohibition amendment. The organization voted also to send a letter to President Roosevelt reminding him of "his promise to protect the dry States."

By a curious paradox, wet States say the shoe is on the other foot, and are seeking protection from the flood of illicit liquor poured into them from the "dry" States. It is in the "dry" States of Dixie, report Federal authorities, that the moon shines the brightest, and moonshine flows the longest. Cheaper than lawful liquor, the imitation finds a ready market in the citadels of repeal.

A Militant Program

Nothing daunted by these lapses, Mrs. Ida B. Wise Smith of Des Moines, President of the National W.C.T.U., is clinging to the flying coat tails of prohibition. At its national convention in Cleveland she told 1,000 delegates that "a new saloon is here, infinitely more dangerous than the old," and urged with a vigor still youthful despite her sixty-two years that a five-point, five-year program of education and action be instituted against alcohol, and "allied social perils."

"A single legalized saloon to-day, with the social allure which modern advertising gives is a greater menace to a community," she said, "than any number of speakeasies. These could be closed by honest officials, but the saloon continues because the State authorizes it." For forty years Mrs. Smith has carried on the good fight. Intensely religious, she has received honorary ordination in the Church of Christ, can recite several thousand verses.

Her fondness for blue dresses in no wise detracts from her militancy, and she only laughed when she received ten cents in an anonymous letter saying the dime was to start a fund to clear her out of the country. In spite of the dictionary, she says that temperance always has meant to her "total abstinence."

Her program—adopted by the convention—includes continuance of the campaign to eliminate liquor advertising from the radio and the press. "The W.C.T.U.," she said, "has never ceased to fight for abolition of the liquor traffic. Neither will it falter, nor compromise, until that great enemy of the body, soul, and society is utterly abolished."

Mrs. Smith was ably seconded by Mrs. Ella A. Boole, of Brooklyn, New York, World President of the W.C.T.U., who, in a church address, said that "experience has shown that the experiment of legalizing the sale of liquor means an increase in consumption," and that "Christian people can advance the cause of temperance by being

total abstainers, and by refusing to serve or drink intoxicating liquors."

Brave words, a layman might say, from women uncowed by defeat. For of those States which voted on the question of repeal in the recent election, Kansas was the only one to vote dry. West Virginia, Florida, Nebraska, Idaho, Wyoming repealed their dry laws.

More disheartening to the dries, perhaps, is the statement of R. E. Tuttle, acting supervisor for the Atlanta district of Georgia, Alabama, Florida, and South Carolina, that the moonshiners in dry Dixie lead the nation in the production of illicit liquor. Florida is out of the dry column now, but the "dew" still percolates through her glades. In his district, said Mr. Tuttle, there are approximately twice as many stills in operation as during the peak prohibition years. Moreover, the moonshine is of inferior grade.

In August of this year, Mr. Tuttle's chart showed, 513 stills were captured in the Atlanta district, which compared with 279 stills captured the same month in 1932. In the New York district, a wet region with many times the population of the South-eastern States, only fifty stills were captured in 1934, as compared with 129 in 1932. The increase of moonshining in the Southern territory Mr. Tuttle attributed to the attempt of the makers to invade wet territory and undersell legal manufacturers.

This reminded the Baltimore *Evening Sun* of a pertinent paragraph in the Rockefeller report issued before repeal:

"If, in the end, a few dry strongholds remain, they should not forget they have a responsibility to the States in which intoxicants are legally obtainable. . . . Such surviving dry areas will become a paradise for
(Continued on page 29)



Wide World

Mrs. Ida B. Wise Smith