

How The Weather Bureau Forecasts Storms, Frosts, and Floods

Washington, D. C., Jan. 22.—Many people have an idea that there is something mysterious and occult about the work of the weather bureau in forecasting the coming of storms, frosts and floods. Not a few think that the observers must necessarily get their data by reading the planets, the stars and the moon. As a matter of fact the forecaster of the bureau foretells the coming of disturbances in a businesslike way, very similar to that in which a man who has ordered a shipment of goods would estimate the date of its arrival.

Suppose a business man had ordered a carload of pineapples from the Hawaiian Islands. He would know the average time it would take the steamer to make the trip to the Pacific port, the average time for unloading and loading into refrigerator cars, and the average number of days to be allowed these cars for their trip across the continent to New York. His estimate, however, would be subject to error because the steamship might be delayed by fog, or the cars might meet with an accident.

Storms, like pineapples, as a rule do not originate in the United States. They come to us, some from the Philippines, Japan, Siberia, Alaska, Canada or the Gulf of Mexico. The weather bureau gets cable, telegraphic or wireless notice of a foreign storm. Station after station, or vessel after vessel, reports the storm's arrival in its neighborhood, so that the general direction and rate of progress can be determined very nearly. In fact, the arrival of some storms can be foretold ten days in advance.

The forecaster watch for the region of low barometer which is the storm center around which the winds blow. This whirl or eddy moves bodily forward with a general eastward drift of about 650 miles a day in our latitudes. As the lines of equal pressure (isobars) around the low center crowd closer together, the winds attending the storm increase in force. The forecaster determines the direction of movement of the storm and its velocity.

When weather disturbances are reported, the forecaster knows from experience about how long it takes them

to reach our Pacific Coast, and then how long after they will reach the Atlantic Coast. For example, if a storm coming from Siberia drifts eastward around the north pole and reappears in Alaska, it should appear in Washington and Oregon in about ten days; should get to the Great Lakes in six days and to the Atlantic Coast in seven or eight days.

Unexpected conditions may delay or divert storms from the straight track just as a refrigerator car may be thrown off its schedule or be shipped by accident on a wrong road. Some of these storms deplete themselves by running into regions of high barometer which are of greater magnitude and extent than the storm itself. Some of them, however, travel completely around the world.

To keep tabs on cold waves that come in the United States from Canada and Alaska, the weather bureau studies the Canadian weather reports. England sends reports from Iceland, the British Islands and Continental Europe, and daily reports come from St. Petersburg on the conditions in Russia and Siberia.

The same businesslike system used in tracing the track of a storm is applied in determining the arrival of frosts.

Flood forecasts are made in much the same way. Information as to the amount of rainfall at the head waters of streams that cause floods are covered by telegraphic reports sent by local observers. As this rain reaches the main channel, the height of water in the channel is determined by successive gauging stations. Past records establishing how much a height of 20 feet at Dubuque, Iowa, will 80 miles down the Mississippi. This plan is followed all the way down the river, and at each point full allowance is made for the effects of water from tributaries, and from additional and local rainfall. As a result of these observations in the recent flood, the people of Cairo had warning a week or ten days in advance. The Pittsburgh district can be given only 12 to 24 hours notice because a flood is upon them within 24 hours after a heavy storm.

EXHIBITS FROM PAINTED DESERT

San Diego, Cal., Jan. 22.—Former expositions have shown wild men and women from the Antipodes, but it has remained for the San Diego Exposition to find a whole nation of wild men within the borders of the United States, a whole vast area where nothing has progressed since before the invasion of Mexico by Cortez in 1517. This area is in northeastern Arizona and the Santa Fe Railway will cover ten acres of ground at the exposition with as close a copy of this country as is possible to produce.

This locality is known as the Painted Desert. Its a land where no white man has dared attempt agriculture or mining, where there is nothing but the Indian, his ancient civilization unaltered, living in six story houses of 100 rooms without an outside door doing the same things in the same way his forefathers did for centuries before white men came to America.

Comparatively few white men have penetrated this district. None has remained there. At long intervals a scientist has penetrated the fastness of the red and yellow hills. Indians emerge from it occasionally but they invariably return. Their homes are the identical buildings erected many centuries ago. Their pottery is the same, used for the same purposes and in the same rude manner. Their customs and tribal laws remain unchanged since when no man knows to the contrary. They irrigate small patches of grain just as did their forefathers. The country repels even the hardy prospectors. Trees, except those petrified into stone are not seen. No two hills are of the same color. The very rocks are variegated in hue. The pitiless sun scorches all vegetation encouraged by the winter and spring rains.

Members of the Santa Fe exploring party declare the Painted Desert rivals the wonderful Grand Canyon of the Colorado in grandeur and beauty of scenery. A second party has been sent into it to gather material for the great exhibit the railway will install at the San Diego Exposition, to contain everything possible to bring from that region, a territory that seems to have been forgotten by Nature herself.

SOME RECENT FOOD SEIZURES

Washington, Jan. 22.—On recommendations of the Department of Agriculture, a number of seizures of food products, as indicated below were made. None of the following cases has as yet been tried but all will shortly be brought before the courts when it will be determined whether the government's charges are justified.

One cask of lemon flavor, alleged to have been shipped by N. Loewenstein & Co., Chicago, was seized at Indianapolis, Ind., Dec. 9, on the ground that it was adulterated and misbranded in that a dilute terpenes lemon flavor had been added to the product. 2 cans of Oil Wintergreen Leaf, al-Dowe, Spring Glen, N. Y., were seized at Boston, Dec. 15 on the ground that the production was misbranded in being labeled "Oil Wintergreen Leaf" as examination showed it to be a mixture of oil of wintergreen and methyl salicylate.

288 cases of Tomato Conserve, alleged to have been shipped by C. D. Stone & Co., New York, were seized at Chicago, on Dec. 16, on the ground that it was adulterated in that the product consisted in whole or in part of a filthy, decomposed or putrid animal or vegetable substance. 4 bags of Dried Apples, alleged to have been shipped by A. J. Turner Philpott, Va., were seized at Baltimore, Dec. 16, on the ground that they were adulterated in that the product consisted in whole or in part of a filthy, decomposed or putrid animal or vegetable substance.

Trade with World advertisers. Last Friday evening the Elks gave a snowball party, which was a very pleasant affair. The decorations were artistically arranged to represent the name. Snow, icicles and a snow man were in evidence and behind a snow covered arbor the orchestra played for the jolly crowd of dancers. A dainty lunch was served at midnight. It was one of the most pleasant parties to be given in the city this winter.

Mr. and Mrs. S. P. Plummerfelt left Saturday for Cheyenne, where they spent several days visiting at the P. Boland home.

SHEPHERD AND FLOCK.

The root crop fed to the flock now will be the key to success, says the Farm Journal. Roots go a long way in giving tone to the general health of the flock.

If you haven't enough clover hay for all winter save it for the time when the lambs come. Roots fed with the grain make both doubly valuable.

It is poor economy to feed timothy hay to sheep. Sheep are the most timid and nervous creatures, and fear or nervous excitement is always very damaging.

Fill up low places in the sheep yard, and tolerate no wet or icy places where the sheep exercise.

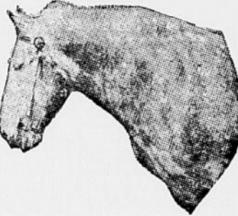
CARE OF HORSES' FEET.

Many Excellent Animals Ruined by Improper Treatment.

Good and bad feet are largely inherited in horses, yet very often good feet are ruined by bad treatment, writes J. L. Buchanan in the National Stockman. If colts are foaled with crooked feet and especially if the hind feet turn over sideways you can soon remedy this trouble by keeping inside of bottom of foot rasped down and toe cut back a little, leaving the outside alone. A few trimmings will make the foot straight. Thus every producer of horses should be the owner of a good horsehooper's rasp and use it when needed.

While horses are going without shoes a good rasp should be kept close at hand so all irregularities of feet may be kept rasped off. The feet of horses allowed to stand too long on a dry, hard floor or on a pile of heated manure are apt to get too dry and hard, in which case I should recommend a little fish oil rubbed on the upper edge of the hoof just at the edge of the hair, not over the shell of the hoof, because it would shut the air and moisture out. If put on at junction of hoof and hair the hoof will take up the oil, and it will help to grow and toughen the hoof. I have known horses to stand on hot manure until it burnt all of the lower part of the hoof out.

It is a splendid idea to keep horses on the ground all you can. Continuous



The draft breed of horses that stands second in importance to the Percheron in France is the Boulonnais. A picture of the head and chest of a stallion of that breed is shown herewith. An American admirer of the Boulonnais said recently: "It would do some of our horse dealers good to see these patient beasts, harnessed to those great springless long bodied carts in the streets of Boulogne, moving with a quick, agile stride, and a load, including the vehicle, of well over four tons behind them. The Boulonnais is a fast walker and moves straight forward with the head held aloft, exhibiting the greatest ease in his movements."

shoeing is ruinous to any horse's feet unless frequently changed. I know of horses allowed to carry their shoes for three months, and some until they are worn off. No wonder so many horses' feet are ruined. We frequently see colts shut in stables for all winter and no attention paid to their feet, and by spring their hoofs are two or three and even four inches too long and pasterns sprung back and toes turned up until you would declare that both feet and pasterns were ruined. Yet when properly trimmed and turned out to pasture they soon come all right.

Blacksmiths often damage a horse's foot by holding rehot shoes too long at one place and by making shoes too short and narrow, producing contracted hoofs, corns, side bones, etc. Blacksmiths are often in a hurry and sometimes fit the foot to the shoe instead of the shoe to the foot, which is the proper way. Another fault of too many smiths is they do not cut or trim enough from the bottom of the foot and, on the other hand, cut back too much of the shell in order to make the foot fit the shoe, exposing too much of the tissues of the foot, thus allowing water to soak in and oil to evaporate. The enamel or coating of the hoof should not be broken or removed more than possible.

Warding Off Milk Fever. Cows may come down with milk fever during any season of the year on new green grass as well as on winter feed, but the attacks are most common in winter and spring, before turning on grass. One attack makes a cow prone to a second, but that may be warded off by ample exercise and light, laxative rations during the last two months of pregnancy. The cow should be dried off at least six weeks before calving. Feed plenty of bran and flaxseed meal to keep the bowels freely open and make the cow take outdoor exercise every day. Milk the affected teats three times a day, massaging the quarters thoroughly at each milking time, and at night rub thoroughly with a mixture of one part each of fluid extract of pokeroot and belladonna leaves and six parts of

DAIRY WISDOM.

Be sure the calves have a warm and sunny corner in the barn for the winter. No young thing grows well in the dark.

Feed a layer from the top of the silo every day to prevent waste. Don't attempt to cut out sections of the ensilage, for it will spoil for several inches on all exposed sides.

For the milking herd clover or alfalfa hay and wheat bran and oatmeal with ensilage will make a most satisfactory and economical ration.

Get a thoroughbred butter bred bull calf now, if you have none, and grow him well to begin to improve your dairy herd next year.

With a good dairy sire and a careful selection of helper calves from the best cows a man of moderate means can in a few years own a herd that will compare favorably in production with herds of pure blood.

SHEDS FOR SHEEP.

Buildings Should Be Made With Wide Doors to Prevent Crowding.

Many ewe lambs are lost in the winter through crowding in yards and pens. It is natural for sheep to crowd together, and they therefore require plenty of room, writes a correspondent of the Iowa Homestead. They also need to be kept in small apartments set off from the main sheds so that one band cannot trespass on the place of any other.

I believe that fifty are enough to be kept in one shed, and if this shed is twice as long as wide and has a door at one end and all doors at the side opposite the feed racks everything in the shed will be most convenient, entrance as well as exit being convenient and safe. Pregnant ewes should be kept in pens or sheds like these.

Sheds should be made outside of convenient yards, forming one side of the yard. The front of the sheds inside the yards should be all doors, and these should not open in the usual way, but be made to slide on rollers, by which they are hung to the front of



It is better to grow into the sheep business than to go into it, and the question with most farmers should be, "How can I raise better lambs and more desirable wool per head from the flock that I now have?" This can be done by using pure bred rams of certain well known breeds. Most writers advocate raising "full bloods" and are opposed to crossbreeding, but that is not always practical for the average farmer. The illustration shows a pure bred Ryeland ram.

the building. Sheds of this sort completely prevent accidents which otherwise would be happening continually through the crowding of the sheep going in or out of the sheds. It will rarely be necessary to move these doors, as they may be open all the time with convenience. There may however, be stormy weather at times; then the sheep, the lambs especially, may need protection, when the doors may be closed. Handles should be put on the doors with which to move them. The rule should always be in all respects in the management of sheep that all accidents should be provided against, and then there will be no losses to be regretted when it is too late.

Keep the Mature Sows.

The way some farmers have of selling all their large, mature sows and keeping young things that have not developed from which to raise pigs is a woeful error that brings disaster to many an otherwise successful breeder. Look to it that the mature sows which show large litters and prove themselves to be careful mothers, with full udders, are kept to repeat their good performance. Breeding gilts, picked each year from the litters of well matured sows, become stronger with succeeding generations and are increasingly able to farrow and bring up large litters of thrifty pigs.

Quality in Steers.

Quality in a beef animal is indicated by the following points: Fine, soft hair; loose, pliable skin of medium thickness; dense, clean bone of medium size. The possession of quality does not always mean that the steer has better feeding ability, although it has a marked effect upon the value of the steer after being fattened. Exceptionally vigorous, rough, coarse steers often fatten more quickly than steers that have quality, but are delicate and dainty eaters. For the reasons above mentioned the steer with good quality usually proves the more profitable.

VITAL STATISTICS.

NOTICE TO PROPER OFFICERS: Wherein physician is employed it shall be the duty of the parents to give notice to the proper officer within whose jurisdiction they reside, of the births and deaths of their children, or of the presence of any infectious or contagious disease occurring within their household, within twenty-four hours or three days if outside of incorporated limits of cities, towns or villages, as to births and deaths only, of such occurrence and the oldest person next of kin, the keeper or other proper officer of every workhouse, poorhouse, reform school, jail, prison, hospital, asylum, or other public or charitable institution, shall give like notice of any birth death, infectious or contagious disease occurring among the persons under its charge. Whoever neglects or refuses to give such notice within the period of twenty-four hours, or three days if outside of incorporated limits of cities, towns and villages as to births and deaths only after the occurrence of such birth, death or infectious or contagious disease, shall upon conviction forfeit a sum not to exceed twenty dollars, to be collected as other fines are collected, by law.

The above and foregoing is published in accordance with Section 289, Revised Codes 1905.

J. A. KRAMER, County Auditor for Ramsey County, N. D. Dated at Devils Lake, N. D., this 2nd day of January, 1913. 1-4t

NOTICE OF MORTGAGE SALE.

Notice is hereby given that certain mortgage, made executed and delivered by Mary Lyons, a widow, individually, and Mary Lyons, as guardian for Joseph Lyons, an incompetent person, and Irene Tibbets, mortgagors, to E. T. Moen, mortgagee, bearing date the 29th day of December, 1912, filed for record in the office of the register of deeds in and for the county of Ramsey and state of North Dakota, on the 31st day of December, 1912, at 11:10 a. m., recorded in book 32 of mortgages at page 65, will be foreclosed by a sale of the premises and hereinafter described at the front door of the court house in the county of Ramsey, state of North Dakota, at the hour of two o'clock in the afternoon of Monday, the 2nd day of March, 1913, to satisfy the amount due upon such mortgage on the day of sale.

The premises described in such mortgage, and which will be sold to satisfy the same are described as follows: to-wit: The southeast quarter of section Nine (9) township one hundred fifty-five (155) north of range sixty-five (65) west of the 5th P. M.

There will be due upon such mortgage at the date of sale the sum of Nine Hundred Thirteen dollars and thirty-two cents (\$913.32).

E. T. Moen, Mortgagee.

CITATION HEARING PETITION FOR APPOINTMENT OF ADMINISTRATOR

State of North Dakota, County of Ramsey.

In County Court, Before Hon. E. H. Griffin, Judge.

In the matter of the estate of Hans Anderson, Deceased.

Barbara Anderson, petitioner.

vs. Alfred Anderson, Andrew Anderson, John Anderson, Rosie McCallan, Henry Anderson, Clara Anderson, Silver Anderson, Beneda Anderson, Martin Anderson, Joseph Anderson, Freda Anderson and Terlie Anderson, respondents.

The State of North Dakota, and the above named respondents and all persons interested in the estate of Hans Anderson, Deceased.

You, and each of you, are hereby notified that Barbara Anderson the petitioner herein, has filed in this court petition praying that letters of administration upon the estate of Hans Anderson late of the County of Coulees in the county of Ramsey, and state of North Dakota, deceased, be granted to John McCallan, and that the said petition will be heard and duly considered by this court on Saturday the 28th day of February, A. D. 1913 at one o'clock in the afternoon of that day, at the court rooms of this court, in the county of Ramsey and state of North Dakota, and you, and each of you, are hereby cited to be and appear before this court at said time and place, and answer said petition, and show cause, if any there be, why the prayer of said petition should not be granted.

By the Court, E. H. GRIFFIN, Judge of the County Court.

(SEAL) Dated the 13th day of January, A. D. 1913.

Let service of the above citation be made by publishing the same four times in the Devils Lake Weekly World, and personal service on all respondents residing within the state of North Dakota.

E. H. GRIFFIN, Judge of the County Court. 3-4t

CERTIFICATE OF INCORPORATION

State of North Dakota, Department of State:

To All Whom These Presents Shall Come:

WHEREAS, Ben E. Burt, A. W. Burt, Anselm Wolf and others have filed in this office a copy of their Articles of Association and an Organization Certificate, as provided in Sections 4636 and 4637, Chapter 21, Revised Codes, 1905, said Chapter being the law governing the organization and management of State Banks, setting forth all the facts required to be stated in said Sections, and have in all respects complied with the requirements of the law governing the organization of State Banks as contained in the Chapter hereinbefore referred to;

NOW, THEREFORE, I, P. D. Norton, Secretary of State of the State of North Dakota, by virtue and authority of law, do hereby certify that said parties, their associates and successors have become a body politic and corporate, under the corporate name of SOUTHAM STATE BANK (of Southam)

And by that name are hereby authorized to commence the business of banking; to adopt and use a corporate seal; to sue and be sued; purchase,

hold and convey real and personal property, as provided by said Chapter; to have succession for a period of twenty-five years; to make contracts and to have and enjoy all the rights and privileges granted to State Banks under the laws of this State, subject to their Articles of Incorporation, and all legal restrictions and liabilities in relation thereto.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the Great Seal of the State, at the Capitol in the City of Bismarck, this fifteenth day of June, A. D. 1912. (Seal) P. D. NORTON, Secretary of State.

FARMERS ATTENTION!

Kirchoff & Cooper, the People's Market, are paying 7c per pound for hogs, live weight.

Rev. Stein of the German Lutheran church of this city went to Rugby, where he held services Sunday.

Mr. and Mrs. Thos. Burke and Mr. and Mrs. George Duncan of Minnevaunauk were visitors in our city on Saturday.

Last Thursday evening Mr. and Mrs. Frank Johnson of Lake township entertained a number of their friends and neighbors. The evening was most pleasantly spent, after which a dainty lunch was served.

Beautiful Photos

Are made only by the photographer who understands his business and has the proper equipment.

That is why we are increasing our business every day. We have the latest equipment and facilities for doing good work, and when you sit for a picture at our gallery you can rest assured that the work will be first class in every respect.

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Devils Lake, North Dakota

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and our aim will be to give the consumers full value for their money. If you want full weights right prices and prompt service call up phone 116.

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J. Q. Adams
Devils Lake, N. D.