

Farming and Agriculture :-: Special Features :-: Interesting Observations

EAST AFRICA AND WEATHER SERVICE

It is a long hark back to the beginning of Organized Meteorology. In 300 years before our era, had cooperative efforts at measuring the rainfall, and in Palestine some such measurements are said to have been made in the first century. From 1654, when the Jesuit Antinore, under the patronage of the Grand Duke of Tuscany, distributed instruments and sent observers in some European countries, for the purpose of making daily weather records, the history of this science has been nearly continuous. Within the next 100 years, similar undertakings were inaugurated in England, France and Germany; the most remarkable of the latter being the "Meteorological Society" founded at Mannheim in 1780, by the Elector Karl Theodor. Its secretary J. J. Hemmer, to whom its success is largely due, issued standard instruments and instructions to observers widely scattered over the globe, including two in the United States. The results of the observations taken by this organization down to the year 1792 has been published in twelve large volumes. The first attempt in the United States to organize meteorological observations under government auspices was made by the Army Medical Department. An order dated May 2, 1814, made it the duty of hospital surgeons to keep a diary of the weather. In 1817 a system of tri-daily weather observations was begun at land offices throughout the country. Local systems of observation were established by New York State in 1825 and Pennsylvania in 1837, and system of broader scope by the Patent Office in 1841 and the Smithsonian Institution in 1847. Eventually the work of taking meteorological observations throughout the country was centralized under the Signal Service, and finally under the present Weather Bureau, but for many years, beginning about 1882, "State weather services" were maintained by the several States of the Union in cooperation with the Federal Government, and one—that of Iowa—still exists. At present more than 6,000 meteorological stations are in operation in the United States under the direction of the Weather Bureau, in addition to which there are several small groups of stations in the country under local control. The total number of stations in all countries is probably more than 35,000. The majority of meteorological stations throughout the world are maintained chiefly or solely for the purposes of statistical climatology. In nearly every country, however, a certain number of stations perform the additional function of reporting the results of their observations regularly by telegraph or radio to central institutions for use in the preparation of weather forecasts and storm warnings. The data thus assembled are interchanged by means of radio broadcasts among the different countries in accordance with plans evolved since the World War by the International Commission for Synoptic Weather Information. Many of these broadcasts include reports of upper-air winds as observed by means of pilot balloons and also shipboard weather reports from various parts of the ocean. The vast system of weather observatories and stations that has gradually spread over the greater part of the globe is, in its entirety, one of the most striking products of modern civilization. It has spread into the heart of China, into the wilds of South America, and far inside the Arctic Circle. There is a station at Laurie Island, on the verge of the Antarctic, maintained by the meteorological service of Argentina, where the observers live in complete exile from the rest of the world for a year at a time. There are five stations in Greenland that report their observations twice a day by radio. Plans are now on foot to extend the network of stations toward both Poles. In the North an international organization headed by Dr. Nansen proposes to establish stations on the ice, far from land, while in the South one of the principal objects of the Wilkins expedition, now in the field, is to select sites for weather stations on the Antarctic continent. Several important meteorological stations are perched on the summits of high mountains, and in some cases access to them entails long and arduous climbing. This is true, for example, of the Mount Rose Observatory, in Nevada, and of the stations on the Sonnblick and the Zugspitze in Europe. Hundreds of stations make regular observations of upper-air conditions by means of kites, balloons or airplanes. The close cooperation that exists among the meteorological services of

NOTES OF A NATURALIST

In a recent interview, Prof. E. S. Wiggins, of Toronto said that the abnormal weather conditions of the past winter and the "spasms" of cold experienced in various parts of the Northern Hemisphere are due to astronomical causes. They are the results of the close approach of Jupiter to the Earth and our cold spell of a short while ago was closely related to the occultation of that planet by the moon. While not entitled to speak with greater authority than any other laymen, I find this explanation eminently satisfactory. Perhaps my outlook on this occasion may be classed as empirical, but in the course of a long series of observations, I have invariably found that occultations and conjunctions of the planets have induced disturbances of the weather more or less marked. In one remarkable instance which I read of, a disturbance was predicted by Saxby from the data of a future conjunction of certain planets. In due time the conjunction took place and the "Saxby Gale" followed. But why have we had such a wonderful winter here while South East Europe has experienced some of the roughest weather for a century? And why was the temperature of Greenland (which is generally known as the "Ice-box") 50 degrees above zero in the early part of February, and at the same time the canals of Venice were frozen over with ice-boats and skis the order of the day? I have been interested in the experiments carried on at New York University, to determine just how roosters can throw off their limbs, an action which they indulge in under certain circumstances. A fisherman may be holding a lobster, and apparently without any visible movement on the captive's part, the captor is holding only an unattached leg! Dr. Wood has found out how this is done. The lobster flips off his leg at will by flex-

NEWSY FARM NOTES

OUR PEAT DEPOSIT A message has come in from a gentleman who has a peat deposit on his farm, asking me to write a line or two on this subject. Ah me, what a long time it is since I sat beside a peat fire! So, as it happens, I do know a little about it and hasten to share my knowledge with the enquirer. There are many deposits on this Island and some day in the near future when wood, which is already getting scarcer, is too valuable to burn, peat will come into its own. Peat deposits are found on both sides of the Atlantic, but in the cooler regions only; they do not occur, roughly, between Lat. 45 degrees North, and 45 South. They have long been worked in Ireland, indeed in most districts there is no other fuel; and in Cumberland Eng. in my boyhood, the farmers mixed small coal, and coal dust, with the peat before it was dry, and formed it into briquettes about the size of a cricket ball, to which they gave the name "cats." Peat in those districts varied greatly. Some forms resembled compressed hay; some are condensed to a compact dark brown material looking like a black clay and drying to the semblance of lignite. It always contains much water, up to 90 percent, and of course this must be removed before using the peat for burning or any other of its many applications. The "winning" of the peat is done in this fashion. With a long narrow spade the peat-worker opens a trench about a foot deep, and removes a "sod" from 2 to 4 feet long. When in his judgment he has gone far enough along, he removes another slice parallel to the first and so on till he has taken the top layer off. If the deposit is a deep one, he works it in "steps."

Violet Rays For The King

Special treatment given the King is described by a physician in the following article in the London Daily Mail. The great advantage of treatment by ultra-violet rays lies in their effect upon the blood. Besides the ordinary red corpuscles (the tiny discs which give the blood its characteristic color) there are a minority of small white cells floating in it. The first might be compared with the merchant navy, which carries cargoes of oxygen. The second, flying the white ensign instead of the red, is more uniform in composition; it is carbonized and pressed and the residual water driven off, till at last it is almost equal to the best coal and has a lower sulphur content, about a tenth that of ordinary coal. Many other products are hidden in those peat beds. In Ireland they are getting beside a useful coke, ammonium sulphate, paraffin tar, acetic acid, ammonia, and calcium acetate for the manufacture of acetone. It may also interest my correspondent to know that Sir W. Ramsay and R. W. Wallace, in the Old Country, produced 26 gallons of motor spirit (alcohol) from a ton of peat, and by a further refinement of process 40 gal. of spirit and 66 lbs. of ammonium sulphate to the ton, is claimed. Processes to transform peat into wrapping paper, and also to convert its nitrogen into nitrates, already exist: in fact every peat bed is a potential fortune. But we are shy of co-operating to realize that fortune. At Alfred, Ontario, there is a Government owned plant in operation which is said to have produced 15,000 tons of air dried peat last year. The Dominion Fuel Board's Report says that in fuel value 22 tons (nearly) of peat are equal to 10 tons of American Anthracite.

STRAWBERRIES COME HIGH

The illustrious members of the French Academy of Science, recently had an epicurean treat. Imagine them tasting strawberries with the care and thoughtfulness which a gourmet gives to a glass of rare wine. These were no ordinary strawberries. They had cost \$5 each, ripening beneath an artificial sun. The President of the Academy, M. Mangin, who had kept everybody guessing as to the contents of a big basket before him, at last opened it with a flourish, and announced: "Gentlemen, we will now have some electric strawberries!" He revealed fifty little pots, each holding one strawberry plant: the leaves were pale green and the berries large, luscious, and bright red. They had been grown in the cellar, the president explained, under two Tungsten electric lamps of 1,200 watts each, which kept constantly burning. Each lamp, of 45,000 candle power, was placed at a distance of about five feet from the plant, illuminating a surface fifteen feet square. The plants started growing the first day they were submitted to the treatment and the flowers formed fruit; and ripened in forty days, just half the time it normally takes in Summer in the open air. By this means strawberries could be obtained all the year around, M. Mangin assured his audience, but some of the eminent professors seemed disposed to treasure their berries rather than eat anything so little which had cost so much. The Tungsten lamps employed in the process are especially rich in the yellow and orange rays which are essential for germination and ripening.

A NIGHT OUT—PERHAPS

A meeting of the Masonic Lodge will be held on Thursday night in the hall.—New Zealand paper. Unfortunately most wives are up to the Masonic Dodge—Punch.

Minard's Liniment for Sore Throat.

Sugar Beet Pulp

Is recognized as one of the best and most profitable feeds at this season of the year. We now have on hand a good supply which we are selling at a low price compared with other feeds. Special prices in ton lots or more. Ask for prices and advertising matter. A. Horne & Co. WHOLESALE & RETAIL 4431-2-9-12-14.

TURNIPS

Grown from our Hazards Improved (Bronze Top) and "Millpond" Purple Top Swede Seed imported by us direct from the growers (on Contract) in England and bringing good prices in the AMERICAN MARKET.

Sugar Beet Pulp

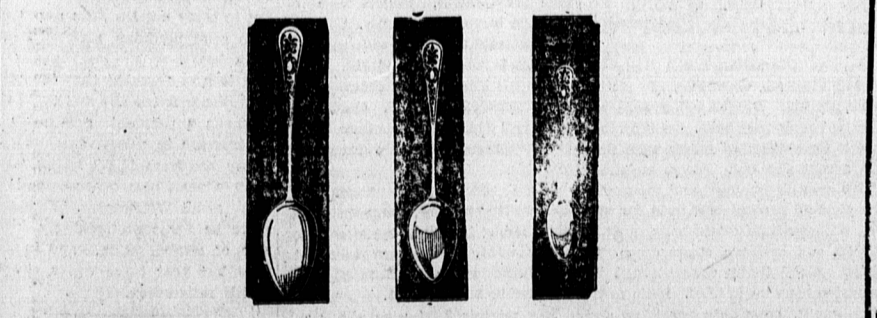
Is an excellent substitute for TURNIPS and the price (with us) is very low considering the prices of other feeds. Therefore feed SUGAR BEET PULP and sell your Turnips for export. This is good business and sound logic. Try it and see how it works out. We have several carloads of SUGAR BEET PULP on hand and no further supplies can be purchased until next OCTOBER or on the New Crop. Get our low prices by the bag or in ton lots. WHOLESALE and RETAIL Carter & Co. Ltd.

ONTARIO FOX BREEDERS INCREASE MEMBERSHIP FEE

Increasing the membership and at the same time increasing the funds was apparently the main object of the executive of the Provincial Fox Breeders' Association at the annual meeting yesterday, in the Carls-Rite Hotel. The financial statement, as read by the President, showed that there was a great need for more funds if the association was to carry on. The membership had been increased during the year, but the fee had been reduced from \$3 to \$1 to achieve this, with the result that the association now found itself without funds. The President claimed that only a small number of the ranchers throughout the Province took advantage of this reduction of the fee, and though the membership had increased to 142, it was not enough, when you considered that the number of ranchers in the Province registered with the National Association was 866. Many plans were put forward to interest ranchers, but it was finally decided that the only means by which the association could continue to function, was to raise the fee again, and ask the National Association for funds to cover any deficit that might occur. It was also decided to further impress upon all ranchers that the association was organizing for the sole purpose of furthering the interests of the fox breeders, and that when difficulties arise they should immediately get in touch with the association. A report showed that there was a great demand in the United States and European countries for high-grade animals, and a ready market was always waiting the Canadian breeders. The association decided to change the name from "Ontario Branch" to Provincial Silver Fox Breeders' Association. To affiliate with the National body, the President claimed, they would have to have a membership of 33 1-3 per cent of the ranchers in Ontario, and so an effort must be made to interest more breeders. Dr. Ronald Law, acting manager of the Experimental Fur Farm at Kirkfield, Ont., gave an interesting address regarding conditions at the farm. He told of the way the animals were taken care of there, the methods employed, and what they expected to accomplish in the future. "At the farm will be found a great variety of wild life, including silver, red cross and white fox; also fisher, raccoon, marten, mink, lynx, beaver, muskrat, skunks, and deer and moose" he said. "We have also water fowl including Canada Geese, wild ducks of many variety and wild swans. It is true that we have not as yet on hand a large number of the animals, as they are hard to secure

Headquarters for Silver Foxes For a number of years I have made SILVER FOX PELTS MY SPECIALTY My connections with Paris, London and Leipzig assures you best results. My commission is 5%. All other Raw Furs bought outright. Ship early and get best results. P. J. DROLET, 205 St. Paul St., W. MONTREAL, Can. 8533-10-20 tuast 12 w

Greatest Premium Yet Offered



"Everbrite" White Metal Spoons

For every yearly, new or renewal subscription received to The Charlottetown Guardian it will entitle the sender their choice of a half Dozen Tea or Dessert "Everbrite" White Metal Spoons.

Here is your opportunity to get in on a real premium. Act at once and avoid disappointment later.

Only a limited number will be given away.

Any Subscriber sending in their own renewal and one new yearly subscription will be entitled to the full dozen.

Send in your subscription without delay.

THE CHARLOTTETOWN GUARDIAN



"IMPERIALS" are Ideal Winter Fox Food

At this season all ranchers are interested in obtaining of large litters of young foxes. Proper feeding of the vixens at this crucial time is most essential. Our outstanding successful feeders have found IMPERIALS to supply the necessary food requirements of the breeding season. They also correct irregularities, keeping the animals healthy and vigorous and in addition, ensure vixens a plentiful flow of milk for the young pups.

Winter feeding of IMPERIALS has practically eliminated destruction of young by females. RESULTS JUSTIFY CLAIMS FOR IMPERIALS

The largest litters born last season and also the highest average of pups raised to maturity were in ranches where IMPERIALS comprised a most important part of the daily winter diet.

Keep a liberal supply of IMPERIALS on hand at all seasons. Sold by leading distributors or direct from factory.

IMPERIAL BISCUIT CO., LTD. BOX 500 Phone 721. Charlottetown, P. E. I.

Tomatoes From West Indies

Garden tomatoes, similar to those grown in Canada, are invading the Canadian markets to compete with those grown in the United States, and grown, in large measure, in hot houses, according to Lionel Devaux, representative of the Island of Montserrat, who is here to examine possibilities of bringing British West Indian fruits and vegetables to Canada in the Winter and Spring months.

The first shipment of tomatoes, from Montserrat and the Windward and Leeward Islands, has already arrived here and was received favorably by local merchants. Mr. Devaux said that fruits from the West Indies can be marketed here at prices which will compete with those imported from the United States.

NOT PAUPERS

"The way for you to straighten out your financial difficulties is to try to live within your means from now on."

"Within our means? Certainly not. We may be poor, but we're not as badly off as that."—Life.

Mr. and Mrs. Hopgood Rayner, Clermont, were visitors to the city Tuesday.

Miss Olive Dalsell, New Annapolis, is at present a guest of her sister, Mrs. William Clark, Borden.