

Radio Stations in Far North Aid Forecasts, Says Col. Forde

As Weather of the North American Continent is Made in Arctic Regions—Radio Proves Invaluable

Montreal.—Enthusiastic about the services rendered by the Canadian government's radio stations on the prairies and in the Northwest territories, Colonel E. Forde, D.S.O., assistant director of signals, has returned to Ottawa after a 9,000-mile inspection trip. In the course of which he visited proposed district headquarters and signal units in military districts Nos. 10, 11, 12 and 13, and a number of projected air mail stations.

Colonel Forde's farthest north visits were at Aklavik and Herschel Island, at which are situated the most northerly of all the government radio stations. These stations, in the far Northwest, he explained, are invaluable in providing weather reports. In this area the weather for the greater part of North America is made, and reports from the district enable the meteorological stations to make accurate forecasts.

Development of civil aviation in the district has given the stations an additional value in supplying reports to the pilots, as discovery of minerals on the shores of the Great Bear Lake has led to a large increase in the number of planes operating in the district.

To complete the chain of stations which stretches north along the waterway system of Lake Athabasca, Great Slave Lake and the Mackenzie River, Colonel Forde thinks a new station at Fort McMurray is needed. It is a natural jumping-off place for air traffic, and to get weather reports from the north at present it is necessary to communicate with Edmonton by wire. Besides the northern stations which were erected primarily for meteorological and commercial purposes, Colonel Forde visited the many stations in the northern sections of Saskatchewan and Manitoba which have been erected in recent years to serve the growing air traffic in those areas.

Girl Guide News

The Marguerite grows in the fields and flowers chiefly in the late summer. It has an irregular shaped leaf, and a long graceful flower-stalk, at the end of which the flower buds open into a large, flat head.

We cannot call it a flower, as it really consists of a flat head of little yellow flowers, surrounded by a ring of long white bracts, each of which is also a true flower, although they look like petals.

They are very hardy flowers and live a long time in water.

I once read in a book that the Marguerite is the wisest of all flowers.

F. H. Martin of the 5th Leyton Company has sent us the following story of the Marguerite.

D. Rudyerd-Holman.

Legend of the Marguerite

Once upon a time there was an Eastern princess who had always seen only the dark-haired, brown-faced babies of her own country. One day Miftani, her wisest councillor, came to her with the story of a marvellous vision he had had, in which he had seen a little girl-child quite different from any children he had ever seen before. She had short, curly golden hair, and her face was the color of the most delicate rose. She wore a most exquisite gown of silver, and her beauty far exceeded that of the Princess herself. The Princess, although kind and good, was a little annoyed because the wise man had announced the child as being more beautiful than she, who was named by all "Marguerite," which means "The most beautiful of Lotus buds." Never could she imagine a baby with fair hair, or with a rose-bud complexion. Three years later Miftani came once again to the Princess to tell her of a vision. This time he had seen a beautiful lady weeping, for the child had died. Now Marguitta, like all the people of her land, believed that when a mortal died he left his soul in the keeping of a flower, and she at once commanded her slaves to seek for the flower in which was the soul of the beautiful little girl.

Again three years passed by and Miftani had a third vision. This time he saw an island in a blue sea; a beautiful island, named England, in its grassy fields fair-haired children played among the flowers, but Miftani noticed only one blossom, in which he knew must be the soul of the little girl, for its centre was the same color as the curly hair, and the silver petals reminded him of the wondrous crown. As soon as she was told, Marguitta and all her attendants came to the island. As she was walking slowly through a meadow, the Princess heard a tiny whisper, which sounded very much like her own name. Bending down, she found the flower she sought at her feet.

"Did you call me, little Golden Head," she asked gently.

"No, no," answered the dream-child, "I whispered my own name which is Marguerite."

"If we let a criminal select his own way to die most of them would choose to die of old age."—Lewis E. Lawes.

"A man only becomes educated when he knows why things happened when they did."—Aronbishop of York.

Economy Corner

Ham Baked in Milk
Slice of ham 1 inch thick, 1 tablespoon flour, 1 teaspoon brown sugar, 1 cup milk, ½ cup water. Bake in an oven until ham is tender.

Hot Vinegar
Will quickly reduce the pain or swelling caused by a sprain or bump.

Cold in Chest
A flannel dipped in boiling water and sprinkled with turpentine laid on the chest as quickly as possible will relieve the most severe cold or hoarseness.

Oatmeal Water
Put 1 cup of oatmeal in a stone jar; add 1 cup of sugar and the juice and rind of 3 lemons cut thin. Cover with 2 quarts boiling water and let stand until sugar is dissolved and the water is cold. Strain and chill.

Good Cure For Colds
An excellent cure for cold is to cut up a Spanish onion in thin slices and between each layer place brown sugar. The syrup resulting from this is of great value to heavy colds. A mixture of turpentine and vaseline. It is invaluable to rub on the chest in treatment of colds.

Chopping Walnuts
When using walnuts put them on a piece of wax paper and roll them with rolling pin instead of cutting them up. It is much easier and the wax paper saves the oil in the nuts.

Crows Reverse Migration Under Stimulus of Light
Washington.—Why birds fly north in spring and south in autumn may be answered as a result of tricking crows into a reverse migration.

Dr. William Rowan, of the University of Alberta, in reporting to the National Academy of Sciences his experiments with crows, says the supposed invariable migratory instinct appears due to some hormone. This is an extremely important chemical substance released in the blood stream by one of the glands of internal secretion which is believed activated by the length of day.

Through use of artificial lights he changed the "seasons" for a group of crows so far as day and night were concerned. Released from their specially equipped aviary, the birds, for the most part, took an opposite route from that followed by another group of crows held captive under natural conditions and set free a few hours earlier.

Praise
He made his little world a place,
Where mignonette in safety grew.
He edged the narrow yard with grace,
Built shelters for a bird or two.

His neighbors knew him as a friend,
The children thought him "lots of fun."
What more than this at life's long end
Do we repeat of anyone?

The needs of life he understood,
He faced the world with smiling eyes.
Must one be brilliant to be good?
Must one be famous to be wise?

Perhaps man's greatest praise can be,
When all the toil of life is done,
He loved all things of land and sea
And children thought him "lots of fun."

—Edgar A. Guest.

IT IS SAID—
Peach is one of the most popular colors in home furnishings, and it sometimes beautifully with orchid, reseda green or yellow, and peach and blue is regarded as especially smart.

Percale is fast becoming a favorite fabric for summer draperies and is shown in both large and small designs. Brass articles and faucets will look like new if rubbed with vaseline and polished with a soft cloth.

White Signal New Curb On Lightning Damage
Schenectady, N.Y.—The latest man-made curb for lightning destruction is a small white signal.

It jumps into view on high tension line towers whenever lightning strikes or when for other reasons the electrical power get out of hand and flashes outside insulators.

The white target is a signal for a lineman to climb the tower and look for lightning damage. It is operated by instruments capable of measuring in split millions of a second the extra surge of power that comes over alone when lightning strikes.

English "Bobbies" at Play



After holidaying at Cowes, the King and Queen made their first visit to Scotland in two years. Above—The King stops to chat with Major R. D. Hunter, commander of guard of honor at Ballater station.

Vitamin B Found Short In Fruits and Vegetables

Berkley, Calif.—Changing food habits of American families cause the lack of Vitamin B which stunts children's growth, believes Dr. Agnes Fay Morgan, of the University of California. Dr. Morgan passed a year in study of diet of undernourished children between the ages of eleven and thirteen years.

"This change in food habits," Dr. Morgan says, "of the American people has in general been looked on as physiologically not injurious, because the supposed increase in the use of milk, fruits and vegetables was thought to overbalance any nutritive loss involved in the substitution of sugar for cereals, and particularly for wheat products.

"But the protein content of the average succulent vegetables and fruits is practically negligible as compared with that of cereals, and our work has shown that vitamin B of wheat products cannot be replaced by the minute amount of vitamin B in vegetables and fruits."

Mistaken Friends
How many good but mistaken friends love to tell us what martyrs they are! They are the cause, not the effect, of martyrdom.

High and Low Temperatures
But in summer the temperature at Verkhoyansk sometimes rises to the 90s, once reaching 93, with plenty of humidity, and various cereals and vegetables can be cultivated in the region. So if the pole of cold is considered as that place having the lowest summer temperature or the lowest average temperature, it must be somewhere else upon the map.

In this connection it is suggested that certain northward-facing precip-



Polleemen, with tiny balloons on their hats, fight with canes, one of features of recent mounted police tournament and horse show in England.

Two of the North's Five Poles Still Attract the Explorer

Pole of Cold May Be in Siberia—While Greenland May Prove to Be Centre of Winds

A Canadian flying expedition has just succeeded in charting with aerial cameras the North Magnetic Pole area, which was discovered by Captain James Clark Ross in 1831 and relocated by Captain Roald Amundsen. The expedition, led by the Canadian Air Force, was the first since 1903 to 1905, just before finding the Northwest Passage.

There are five poles in the Arctic regions to stimulate the imagination of explorers. One is the North Pole, visited by Peary, by Byrd and by the Amundsen-Ellsworth-Nobile expedition. Another is the Magnetic Pole. The third is the Ice Pole, known as the Pole of Inaccessibility until Amundsen, Ellsworth and Nobile flew over it in the dirigible Norge in 1926. There are also a Wind Pole and the Pole of Cold.

The Wind Pole may possibly be in Greenland, where British and German expeditions are now conducting meteorological observations. The Pole of Cold is still to be located definitely. Some of these poles are shifting in character, though they can be placed fairly well upon maps. Of this type are the North Pole and the Magnetic North Pole. The former, at the tip of the axis on which our earth rotates, moves about in a circle with a radius of thirty to forty feet.

The Magnetic Pole
The Magnetic North Pole, which attracts the needle of the compass because it is at the axis of the great electric dynamo constituting the earth, moves over a considerable area, slowly but measurably over a period of years. The position generally given is near Lat. 79 degrees N., Long. 97 degrees W. on the Canadian mainland at a place called Boothia Felix or Boothia Peninsula. In summer this is a green and grassy lowland; in winter it is no longer green but has the appearance of a cold prairie. Many ships have visited the region, some coming to grief on jagged rocks just below the surface of the Gulf of Boothia.

The Ice Poles, so named by Amundsen because the term "Pole of Inaccessibility" no longer applied when he crossed it by dirigible, lies between the North Pole and the Alaskan shore, forming a rough triangle with that pole and the Magnetic Pole. It is at the centre of the great field of floating ice, covering 1,000,000 square miles, on which the North Pole lies.

Location of Ice Pole
Because the warmth of the Gulf Stream clears the ocean of ice to within 600 or 700 miles of the North Pole on the Norwegian side, the centre of the Ice Pole, and hence the location of the North Pole on the Alaskan side, when Amundsen passed over the Ice Pole he saw nothing below him but solid ice, so thickly packed that not even a rift of water appeared.

No man has ever set foot at the Ice Pole. The hardships of reaching it by dog sledges have been considered too great, and the Amundsen party reported that the condition of the ice was such as to prevent a landing by either dirigible or plane.

Yes, cold as this territory must be in the dead of winter, explorers do not believe that the temperature there, or at the North Pole itself, ever falls to the level of 68 degrees below zero, once reached at the village of Gledstone, near Havre, Mont. To find the pole of cold, therefore, scientists must look elsewhere. In fact, they must have to look for two or more cold poles instead of one.

One pole of cold—that having the lowest winter temperature of which there is record, has been fixed tentatively on the mainland of Asia, near the Siberian village of Verkhoyansk, some 1,400 miles from the North Pole. The coldest winter temperature that can ever occur there is somewhere between 90 and 95 degrees below zero, while the coldest possible at either the North Pole or the Ice Pole is believed to be about 30 degrees warmer.

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Electrical Change Felt Instantly Around World

Washington.—A recently observed electrical phenomenon that sweeps the entire world at the same instant between 6 and 8 p.m., Washington time, is described to the American Geophysical Union by Dr. O. H. Gish, of the Carnegie Institution.

It is a change connected with the earth's electrical charge. This charge, says Dr. Gish, tends to acquire a high value during the hours named. The cause is not definitely known, but is ascribed to some still "elusive, unknown" factor that maintains the earth charge.

Existence of this charge is shown by study of atmospheric electricity. The same studies show that the charge fluctuates and has given some indication of the universal time schedule of these changes.

Britain Builds Fastest Boat

Coastal Defense and Protection for Trade Routes Chief Purposes of Craft

London.—Flying boats which are said to be faster than any others in the world of equal size and payload carrying ability, and which have been designed and constructed in the customary secrecy with which the British Air Ministry surrounds all of its developments, are being successfully flown by British operators.

Possible future military necessity is seen as the purpose for which the craft have been produced. Coastal defense and long-range protection for trade routes are said to be the main objectives behind the use of these new flying boats, while as civil aircraft they give increased comfort and greater carrying capacity.

One of the new service types of this design built by Short Brothers, of Rochester, has four Rolls-Royce water-cooled engines developed as a result of the experience gained in last year's Schneider Trophy race. They are machines of exceptional size, having many gunners' positions, and yet are easier to handle and faster than some of the single-seater fighters now used by the Royal Air Force.

The engines are mounted in tandem, the front motor driving tractor air screws, while the rear one drives pusher propellers. The civil machines of this type also have four engines and a commodious cabin and are much larger than the cabin flying boats which heretofore have been in general use on the water airlines of Imperial Airways.

Britain already has established a definite lead in Europe for large-size flying boats and these new ships are likely to increase the lead. Meanwhile, an invention which, it is said, is capable of increasing the speed of planes which are fitted with radial type engines is now being mounted on the standard planes of the Royal Air Force.

The invention is an adaptation of the Tvenemund ring, used during the war. It was first tried in model form in comprehensive wind tunnel tests and is said to have added twenty-five miles an hour to the top speed of planes. These results were borne out when the ring was adapted to full scale planes.

The device consists of a wider ring air-floil of cambered sections which completely encircles the radial engine. The purpose of this is to keep the flow of air past the projecting cylinder heads smooth and close to the body of the plane. Without the ring the air flow becomes broken and forms numerous eddies.

These eddies increase the drag or resistance, thus reducing the speed. In the full-scale tests it was found that 27 per cent. less power was needed to drive a plane at 145 miles an hour with the new ring than without it.

London Air Traffic Has One-Way Route

Air Ministry Takes Steps to Prevent Plane Collisions
London.—The air over London has become so crowded that the Air Ministry has issued one-way traffic regulations. They affect virtually the entire London flying area, and include Hanworth, Stagline, Northolt and Harmondsworth Aerodromes. The normal flight between Heston and Hanworth takes but a few minutes, and the distance is only three and one-half miles, but the new one-way route necessitates a trip of thirty-five miles.

Captain V. H. Baker, Chief Pilot at the Heston Airport, said the ruling certainly will be a safeguard in bad weather. Air Ministry officials stated that it was essential to avoid the possibility of frequent collisions.

Dogs Have Brains As Well As Hearts?

Whether animals think and reason has long been a moot question. Most naturalists now are of the opinion that the so-called lower animals have a limited capacity to think and reason and that their minds differ from those of human beings merely in degree and not in kind. It is the high development of man's brain that separates it from that of the ape, the horse and the dog. Many animals show considerable intelligence in certain matters, especially in obtaining food and escaping from enemies. Instinct experienced through many generations, plays a much larger part in animals than it does in human beings, and reasoning capacity varies in different individuals and different species of animals just as it does in different individuals and different species of mankind. That the dog possesses an imagination and can picture mentally absent objects is indicated by his grief over the loss of his master and his capacity to dream. A considerable degree of intelligence is exercised when the baboon throws a missile at an intruder and when the elephant breaks off a twig and uses it for a fly brush. Recent experiments indicate that crows in the wild state have the ability to count up to three or four.

Latest News Printed in Paper While It Is Being Delivered

London.—Something new to Londoners in the way of fast delivery of late news to readers has been accomplished by the London evening newspaper, The Star, which is regularly operating a "Stop Press" printing establishment in its largest delivery van. The equipment comprises a complete composing frame and type cases, and a suction-fed printing machine capable of printing anything up to three 30-line news items at a speed up to 10,000 copies an hour.

News items are received by radio from the offices of The Star and are set-up and run off in the so-called blank "Judge column" as fast as they are received. The printing can be done as the van is rushing deliveries to the more distant suburbs, but it is more customary to install the van outside Big Horse-race, football, or other sports meetings, enabling the spectators at the meeting breaks up to buy London papers with the very last-second news in them.

The van is also equipped with a special amplifier and two public address loud-speakers through which broadcast microphone announcements can be made.

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A friend is a person who keeps on laughing at our stale jokes.

Bush Mail A Lon

Only Three House Trip of

In the Australian outback, a man and his horse may travel 200 miles on the lot of the post as he is called, writes a contributor to Telegraph.

He collects his township, and the lonely road, while from a week to a month he will use just as frequently as a coach or buggy in far North, during horse are necessary for bridles, bridles.

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Otherwise he slides it is customary, in of charity, to give whatever food he him on part of his Turned.

A mail train with seven horses, are necessary. A mail train with seven horses, are necessary. A mail train with seven horses, are necessary. A mail train with seven horses, are necessary.

The mailman with the Government's income by cutting through in one lone was the only passenger could also act as a postman at least, a mails, proceeds to know what his position not so the bush mailman stays on the road, he will retrace track, and enter life. The writer, very creditable, equal entertainments, first mailman to a from anywhere. Long journeys; country; scorching tedious and trying usually something from the corner, sometimes straight mentioned once on the track, and had bury him on the spot made a just authorize him to Swollen rivers we claimed their postal is no outlook post had his breakdown, lorry into a bound washed down on injured man dragged miles on foot to the where he collapsed. Involved in a smash horses of the "Tough unharmed," his passenger was from anywhere, a kind are not infrequent. But the mailman with the smooth British calm, to realize it, no vice does more than the postman of CODDLING.

It happened in a where they kept any foot rule to a pencil plaster and cautions. If necessary, you or a horse shed in A farmer stopped him to rub the of a cow, and two returned with a "Look here," he would be little more throw yourself on counter. The other some en-us-De-ment, and hang me on the cow after I was.

"It hasn't hurt be in the grocer.

"Can't say it has farmer; but over a sweet-smelling glass, nothing but look at the duck pond and

Pat was applying blacksmith's the m. him. "Listen," the "I'm going to bring from the fire and lay when I nod my head, this hammer." Pat obvers to the letter; never nodded his head