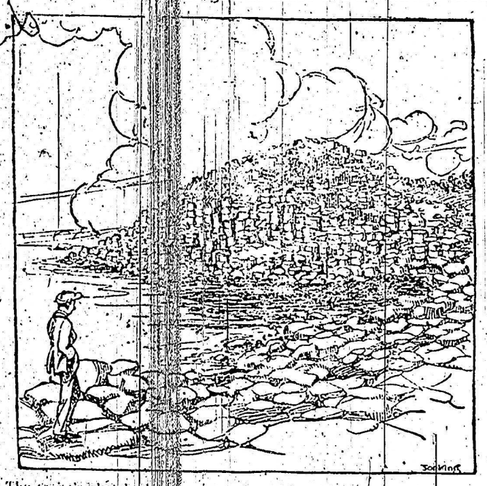
GRANITES COVERED CONTINENTS

That Was When Land Emerged at Close of Formative Period



The artist's sketch s[illegible] a formation of basaltic rocks on the coast of Ireland known as the Gi[illegible] Causeway. The formation is the result of a stream of molten rock p[illegible]g up through a fissure in the earth's surface. The column-like structure [illegible]he Giant's Causeway is thought to have been caused by contraction wh[illegible]ook place as the lava cooled.

Secrets of Science

By David Dietz

At the conclusion of th[illegible] formative period, as we have seen, [illegible] we were continents composed of l[illegible] rocks to which geologists give [illegible] name granites. Then there we[illegible] great oceans whose beds wer[illegible]posed of heavier rocks which are [illegible]own as basalts.

Those rocks which form[illegible] of the original lavas are known [illegible]rimary rocks because they were [illegible]st ones formed. They are some[illegible] called the fire-hardened rocks.

The geologist calls them [illegible]gneous rocks, from the Latin [illegible] meaning fire.

The original lavas from [illegible]ch the igneous rocks formed wer[illegible]y complex and not exactly alike [illegible]where. Consequently we would e[illegible] many variations in the igneous [illegible]s. We would, however, expect [illegible] in general uniformity.

The facts bear out th[illegible]ssumption. When geologists ex[illegible] samples of rocks which they [illegible]ve are those first-formed or pri[illegible] rocks, they find seven chief co[illegible]nts.

These are the oxides of [illegible] silicon, aluminum, calcium, pota[illegible] sodium and magnesium. By an ox[illegible] is meant the substance results fro[illegible] chemical combination of an e[illegible]t with oxygen.

The basaltic rocks ove[illegible] great weight to their richness in [illegible]. They also contain much magnesium and calcium.

The granite rocks owe their lack of weight to their poverty in iron. The granites contain much silicon.

The geologist also finds many rocks in the earth of igneous origin which are intermediate between the two types.

During the formative period, as we have seen, the slowly forming crust was frequently inundated by great streams of molten lava from below. It is therefore supposed that in many instances parts of the crust were remelted and that when they solidified again their constitution was greatly altered.

The study of the formation of igneous rocks constitutes one of the most involved and difficult sides of the whole subject of geology.

In addition to differing in composition, igneous rocks also differ in structure.

Some are crystalline, consisting of masses of irregular crystal. Others possess a grass-like structure and are called natural glasses.

Geologists believe that when the lava cooled slowly under high pressure, the crystalline structure resulted. When the pressure was light, natural glasses resulted.

In intermediate cases, rocks formed which consisted of crystalline centers surrounded by glassy structures.

Next Article: The Earth's Changing Surface.

NEW SCENIC AREA OPENED BY ROAD

THE LAKE LOUISE-FIELD HIGHWAY NEARS COMPLETION

Glories of Yoho National Park in British Columbia Accessible to Motors

Steadily year by year the motor car is making its way into the most remote regions of the country. It has forced many doors open hitherto inaccessible territory and brought about the projection of [illegible] undertakings of nationwide benefit.

The latest achievement in this connection is the completion of a motor highway across the famous Kicking-horse pass in the Canadian Rockies, opening up the previously inaccessible glories of the Yoho valley and Emerald lake, in Yoho National park, to the motoring world. The engineering staff of the Canadian National Parks has practically completed work on the new road and it is expected that it will be open for traffic by the end of June next year. The new road continues westerly from near Lake Louise, gradually ascending to the Divide and thence descending through the Kickinghorse pass to the Yoho valley, utilizing in part the British Columbia, a short section of the donated Canadian Pacific right of way. Between the summit of the Divide and Field, a distance of 11 miles, there is a drop of over 1,200 feet. The descent was formerly made by the railway in a series of thrilling hairpin curves which gave travelers glimpses of some of the most scenery in the world. The grade it was often necessary to use four engines to pull a train up to the Divide. The construction of the spiral tunnel is one of the most engineering feats of this kind and adds to the comfort of passengers and railway-men the ease of operation of some but deprives the travelling public of most remarkable views. This account in recent years, hundreds of lovers have been in the habit of alighting from the train at Hector and walking down by the old grade to Field. The motorist of to-day will, however, soon be able to glide down from the summit by safe and easy grades and enjoy at his leisure the magnificent panorama unfolded along the way.

Magnificent Views.

This will include high views looking up the Yoho valley with the magnificent icefields visible at its head, the splendid Wapatik escarpment walling its eastern side and to the west the rugged outlines of mount Burgess with the glacier-crowned head of mount President showing beyond. Three miles before reaching Field the road will connect with the existing motor road which reaches 8 miles up the Yoho valley as far as Takakkaw falls, a splendid cascade over 1,150 feet in height, which is fed by the Daly glacier between mounts Niles and Balfour. Another road 7 miles long leads from Field to Emerald lake, one of the most beautiful lakes in the Rockies which is known to beauty lovers the world over. At Emerald lake a beautiful Canadian Pacific Railway chalet provides accommodation and there are small but adequate bungalow camps at Wapta lake and Takakkaw falls, both under the management of the Canadian Pacific railway.

Picturesque Route.

This year the Government also began operations on the construction of an additional road from Field to the western boundary of Yoho park. There it will link up with a highway now under construction by the Government of British Columbia from Golden east. Once these two roads are completed there will be opened to the motorist a scenic loop route probably without parallel in the world which will include a great part of the finest scenery of the Rockies. From Calgary the road will proceed west to Banff, from that point to Castle, from Castle to Lake Louise, thence down to Field and along the magnificent canyon of the Kicking-horse, one of the most spectacular regions of the Rockies, to Golden, thence south, via the Columbia or Windermere valley to the western gate of the Banff-Windermere highway, returning over that road to Banff. The Banff-Windermere highway is already connected on the east, via Calgary, and on the west by the Columbia River road with the 4,600 mile loop, known as The Grand Circle Tour, stretching down the Pacific coast to southern California and returning via Arizona, Utah, Idaho, Wyoming, and Montana. The highway touches throughout its length ten national parks in the United States and Canada, and the Canadian section is by no means the least attractive part of the tour. The growth in travel over the Banff-Windermere highway, in the past two years indicates the tourist possibilities involved through the construction of the new road and there is little reason to doubt that within a few years it will be the means of attracting thousands of visitors annually to the Canadian National Parks.

The Wrong Man.

Miss Flirt—"Hurry to the door, Mary, and let Mr. Smith in. He has rung twice."

Maid—"That isn't Mr. Smith. It is the other young gentleman."

"Oh, wait a minute, then. I must change the photographs on the mantlepiece."

INECTO RAPID

The world's best hair tint. Will restore gray hair to its natural color in 15 minutes.

Small size, $3.30 by mail
Double size, $5.60 by mail

The W. T. Pember Stores Limited
129 Yonge St. Toronto

ONE SURE WAY TO GOOD HEALTH

Is Keeping the Blood Rich and Red—Dr. Williams' Pink Pills Make Rich, Pure Blood and Restore Health.

Thin, pale people lack the power of resistance to disease that rich, red blood gives. Nervous breakdown is the result of thin blood. So is anaemia, indigestion, rheumatism and many other troubles. People suffering from thin, impure blood need just the help Dr. Williams' Pink Pills can give. For more than a third of a century Dr. Williams' Pink Pills have been popular as a tonic restorer. Thousands upon thousands of letters from grateful people have proved the rare value of this medicine. The first effect of the pills is usually to stimulate the appetite; then the spirits revive; and restless sleep at night gives way to health-restoring sleep. For sufferers from anaemia, nervousness, general weakness, digestive troubles, rheumatism; or the after-effects of influenza or acute diseases, Dr. Williams' Pink Pills are a restorative of the utmost value. If you are weak or ailing give these pills a fair trial and the result is sure to be beneficial.

"Dr. Williams' Pink Pills have done wonders for me," writes Mrs. Russell Hill, Norwood, Ont. "I was run-down and could not eat or sleep and was very nervous. I was pale and would sometimes faint. I took a lot of doctor's medicine but it did not help me. It was a real trial to do any housework, or to go about, and I got so that I scarcely cared whether I lived or died. One day while reading a paper I saw an advertisement about Dr. Williams' Pink Pills. It described a case very much like my own and I decided to give the pills a trial. I had not been taking them long when I could feel a change for the better. I continued the pills until I had used eight boxes, when I felt like a new woman. Every disagreeable symptom had vanished and I gained in weight, and a good color returned to my face. All this I owe to Dr. Williams' Pink Pills and I am now never without them in the house, and any time I feel out of sorts they are my first aid. I gladly bear this testimony in the hope that it will benefit some other sufferer."

Two useful books, "Building Up the Blood" and "What to Eat and How to Eat," will be sent free by The Dr. Williams' Medicine Co., Brockville, Ont., if you mention this paper.

Dr. Williams' Pink Pills are sold by all dealers in medicine or will be sent by mail, post paid, on receipt of price, 50 cents per box.

Oh Mother! What Can I Do?

How many times a day do your babies ask you that question? And how often are you able to suggest some interesting game for them to play, some amusing occupation for a rainy day? If you'd like always to have a practical, helpful suggestion for them, read this snappy new feature.

Pull the paper bag down over your head. Now mark where your eyes and nose and mouth come. Take the bag off and cut holes in it to make a false face. You can make several and color them with your crayons if you wish.

Her Mistake.

Mrs. Hugging was in court. She was charged with assault and battery, and the recipient of her unkind attentions was none other than the husband whom she had promised to love, honor and obey.

"So you broke an umbrella over your husband's head?" remarked the magistrate. "What have you to say?"

"It was an accident, sir," replied the accused.

"How could it have been an accident?" queried the magistrate quickly.

"Well, sir," explained the woman, "I didn't mean to break the umbrella."

A Good Bargain.

The doctor was awakened in the small hours of the morning by a resident who lived some distance from the centre of the town, and asked to make a call. They got into the doctor's car and drove furiously to the man's house. Upon their arrival there the caller alighted and said, "How much is your fee, doctor?"

"Three dollars," said the doctor in surprise.

Counting out the money the man said, "Here you are, doc, that darned thif of a garage man wanted five dollars to drive me home."

To improve the flavor of ham, boil it in the usual way, and then wrap in a buttered paper and bake in the oven for an hour.

Farmerette for Canada.

The smile on the face of Miss Helen M. Pierce, of Liverpool, is due to the fact that she was the first girl of that city to receive permission to go to Canada under the new £3 scheme which provides for the transportation of agriculturists and household workers from Great Britain to Halifax, Saint John, or Quebec for the sum of £3. Miss Pierce is shown here on board the Canadian Pacific liner Montnairn on which she arrived in the Dominica recently.

By the new plan for the stimulation of an immigrant movement from the United Kingdom to Canada, the Imperial Government, the Canadian Government, and the steamship and railway companies, offer farmers and domestic workers transportation to a destination in Canada at a lower rate than has been known in a generation.

Less Than Kin.

He was a hill man,
And she watched the spray
Until he came and won her
All in a day.

Sea-folk will talk all day,
But mountain-folk are still
And the tide dashes vainly
Against a cliff's will.

He knows not how to answer
Her salt tide of talk,
He goes no further from his hills
Than a day's walk!

Though she climb to roof or hill-top
As if her soul to save,
All that her eastward staring sees
Is a hill-wave.

Hill-folk cannot easily
Speak what they feel,
But his look follows her
Like a dog at heel.

Far up a hillside
Sea cannot climb
Her tide of talk is going out
Before its time.

Destiny that mated them
Was less than kind or human;
All in a day to tether
Hill-man and sea-woman.

Isabel Fiske Conant.

BABY'S WELFARE DURING FEBRUARY

Should be Most Carefully Guarded by All Mothers.

February is one of the hardest months of the year on little ones. It is a month of cold, blustery days that prevent the mother taking her baby out for the fresh air so necessary to its welfare. Baby is consequently confined to the home. More often than not the rooms are over-heated and badly ventilated and the little one catches cold or grippe. What is needed to keep the baby well is a gentle laxative that will regulate the stomach and bowels; banish constipation and indigestion and in this way will either prevent or break up colds and grippe. Such a laxative is found in Baby's Own Tablets. They are mild but thorough in action; are absolutely safe and they are guaranteed to contain neither opiates or other harmful drugs. They never fail to be of benefit to little ones and may be given to either the newborn babe or the growing child.

Baby's Own Tablets are sold by all dealers in medicine or may be had by mail, post paid, at 25 cents a box from The Dr. Williams' Medicine Co., Brockville, Ont.

A blind chameleon ceases to change its color, and remains dark in tint. The reason of this peculiarity has never been explained.

Are there going to be any regrets tomorrow about that good meal you're all set to blow away tonight. Better take Seigel's Syrup. Any drug store.

Then She Went.

It seemed as if the visitor never would go away. She had been there a month or more, and gave no signs of departure. One day the small boy of the house was looking at her very intently at the table.

"What is it, Johnny?" she inquired, graciously, as do those who are receiving undeserved benefactions.

"Ain't no part of your head gone, is there?" he asked.

"Of course not! Why do you ask such a queer question?"

"'Cause I heard mamma say you were eating your head off, and I wanted to see if there was any marks on it."

Beware of Overloading.

Avoid overloading your tires and when it is absolutely unavoidable help the tires to handle the extra load by putting in more air. If the overloading is likely to be continuous change your tires for larger ones.

Minard's Liniment for frost-bites.

Midwinter Calm.

On a soft open day in midwinter
When elm trees in fawn-colored jackets
Etch delicate outlines and clear
On the whetstone blue of the air;
When limbs from young maples droop down
And dapple with shadowy tracery
The fronts of colonial houses
Like a lowbrow's daring the hour
The moon steals the gold from the sun,—
The trees in this Puritan village
From the rough-barken roots of wild oaks
Turning black as the snow drifts about them
To the tips of tall birches that stretch
For a glimpse of their brother the sky,
Breathe a tranquillity deeper
Than the leaf-blowsy quiet of June.

Think with what stillness and patience
Northern trees wait for the spring!

The brooks are so mute that the snap
Of a clean block of ice in the stream,
(Clean but for grasses stuck through it)
Disturbs like the voice of a child
Crying out in the hush of church service;
And the neighborly town-meeting fathers
Spread out in the shoemaker's doorway
Reminiscing and loafing together,
As if hibernation were useful
For men as for trees in midwinter.

—Wilbert Snow in The Monitor.

Tuberculosis.

"Tuberculosis lies round about us in our infancy" might be the radiogram broadcasted by any town or township in Ontario. Ontario has been wondering for some time to what extent tuberculosis was attacking her child population and is now informed by two surveys, one urban and one rural, that 32 out of every 100, (or 426 out of 1392 examined) apparently healthy, normal children gave evidence that germs of this disease had gained entrance into their bodies. In addition, 94 suspicious cases and 14 active cases of tuberculosis were found.

The common source of infection was the adult open case. Every person, but particularly a child, who has been in close contact with a tuberculosis patient should be examined by a doctor who has studied the disease.

Milk from tuberculous cows was showed to be the one and only source of infection in many children, both town and rural. This led the committee to urge "that children be protected from the milk of tuberculous cows, and that milk from uncertified herds for the use of children should be pasteurized."

To assist physicians who have not facilities at their disposal in detecting early tuberculous disease in people who have been exposed to opportunities for infection is the reason for the Traveling Tuberculosis Clinic of the Department of Health. The clinic is staffed by two chest specialists and a nurse, its equipment includes an x-Ray outfit, and it is sent free upon request of physicians in different localities.

Warned.

The fresh young traveling salesman put on his most seductive smile as the pretty waitress glided up to his table in the hotel dining room to get his order and remarked:

"Nice day, little one."

"Yes, it is," she replied, and so was yesterday, and my name is Ella, and I know I'm a lovely girl and have pretty blue eyes, and I've been here quite a while, and I like the place, and I don't think I'm too nice a girl to be working here. My wages are satisfactory and I don't think there's a show or dance in town to-night, and if there was I wouldn't go with you. I'm from the country and I'm a respectable girl, and my brother is the cook in this hotel, and he was a college football player and weighs three hundred lbs.; last week he pretty nearly mined a $25-a-week traveling man who tried to make a date with me; now what'll you have, roast beef, roast pork, Irish stew, hamburger or fried liver?"

BETTER HOMES IN CANADA

Write for a copy of the MacLean Builders' Guide which contains plans by leading Canadian Architects, and helpful information on building, financing, decorating, furnishing and gardening. Profusely illustrated. 192 pages. 20 cents a copy. Questions answered. MacLean Building Reports Ltd., 344 Adelaide St. West, Toronto.

If, when making pastry, a little lemon juice is added to the water, it will make the pastry lighter and remove all taste of fat or lard.

Minard's Liniment relieves headache.

Before washing ebony brushes, rub the wood thoroughly with vaseline. This will prevent the ammonia or soda used in the washing water from spoiling the ebony.

From Kidney Diseases

Authorities Say 50% Due to Neglect

Kidney disorders are largely caused by poverty of the blood causing nervousness, headache, sleeplessness etc. Warner's Safe Kidney and Liver Remedy helps improve the condition of the blood and its circulation as well as removing waste matter and poisons from the blood.

Don't neglect the first symptoms but use this 50 year old remedy. Neglect will soon have serious troubles developing.

Sold by all druggists. Price $1.25 per bottle. Warner's Safe Remedies Co., Toronto, Ontario.

ISSUE No. 7—'26.

RED ROSE TEA

"is good tea"

You've been intending to try Red Rose sometime. Why not now?

EASY TRICKS

Not Very Easy

This stunt will tax the skill of the most agile imitator of any party. The next time one of your friends demonstrates his steadiness of hand—as he will—try to coax him properly—propose this one. If he succeeds in doing it he will be an exception.

He is to take a candle in each hand. One is to be lighted and one unlighted. He is then to set on a bottle as in the illustration and to place the heel of one foot on the other.

He will find it rather difficult to do this, but he may succeed in keeping his balance. The rest of the stunt, however, is the most difficult of all. He is to light the unlighted candle from the lighted one.

The stunt can be done by a person who has good command of his muscles and who will practice it well.

(Clip this and [illegible], with other of the series, [illegible] scrapbook.)

Short and Sweet.

Talleyrand, it seems, [illegible] to write letters, and when he [illegible] to escape answering a note [illegible] as telegraphic. Two answers [illegible] were recently sold, both addressed to a widow who remarried.

In answer to the n[illegible] of the death of her husband he wr[illegible] "My dear [illegible] Affectionately yours."

When the co[illegible] told him of her second mar[illegible] back: "My dear [illegible] Congratulations. Affectionately."

Minard's Liniment for [illegible]

Discarded tins of [illegible] collected by the dust-carts of [illegible]ham are melted down [illegible]

INVENTIONS WANTED

Fortunes are made from [illegible]. Send for list of inventions [illegible] and "Patent Protection" booklet and "Thinker"

SHIPMAN & CO. THE OLD RELIABLE FIRM REGISTERED PATENT A[illegible] OTTAWA, CAN.

Puzzle Find the Principal

PRIZE LIST
[illegible] Watches
[illegible]5 Cameras
25 Clocks
HUNDREDS OF OTHER PRIZES

If you can solve this puzzle and win one of the above prizes. Will you do this? If so, just mark the PRINCIPAL [illegible] and send it to us at once, and if it is correct we will send you the Perfume to sell right away.

Selfast Specialty Co. Waterford, Ont.

Don't Cough!

Take a few drops of Minard's in syrup or [illegible]. Gives quick relief.

Famous last words: "Watch me do sixty miles an hour!"

Minard's Liniment for sore throat.

Classified Advertisements

GRATIS—LITTLE FRIEND TO EITHER SEX, mailed in plain envelope. Paris Sp. Co., Montreal.

LADIES WANTED TO DO PLAIN AND LIGHT sewing at home; whole or spare time; $18 weekly. Work sent anywhere; no canvassing or particulars, National Manufacturing Co., Montreal.

FITS—EPILEPSY PERMANENTLY STOPPED by Tredo's Remedy. Simple home treatment, 35 years' success, thousands testimonials. Write at once for free book. Tredo's Remedies Limited, Dept. Y, 70 Adelaide East, Toronto, Canada. (Cut this out.)

AGENTS WANTED

WANTED—One reliable man in every town, merchant preferred, to take orders for best Custom-Made Clothes in Canada. Highest commissions.

REX TAILORING CO., Ltd.
TORONTO 2

WANTED

CIGAR STORE INDIAN

Formerly used in front of Tobacconist Store. Must be in good condition. State price and where can be seen.

H. WATKINS
73 W. Adelaide St. Toronto

WOMAN COULD HARDLY WALK

Mrs. Horn Tells how Lydia E. Pinkham's Vegetable Compound Restored Her Health

Hamilton, Ont.—"I have taken Lydia E. Pinkham's Vegetable Compound and would not be without it now. I had a female trouble so badly I could hardly walk and I was all run-down and could hardly get around to do my housework. I would be in bed three or four days at a time. I was told by a friend to try your Vegetable Compound. I did, and by the time I took two bottles I was beginning to get around again. I took ten bottles in all, and now I have all right again and doing my own work. I have grown up to work for, so I have plenty to do. I also used Lydia E. Pinkham's Sanative Wash, and I think it is good. But I owe my health to the Vegetable Compound, and I think a piece of it was a new man; we are better off. I would do one with it if it cost much more."—Mrs. Nettie Hodge, 28 St. Matthews Avenue, Hamilton, Ontario.

Do you feel broken down, nervous and weak sometimes? Lydia E. Pinkham's Vegetable Compound is excellent to take at such a time. It always helps, and if taken regularly and persistently, will relieve this condition.

Cuticura Complexions Are Fresh And Clear

Daily use of Cuticura Soap prevents clogging and irritation of the pores, the usual cause of pimples and blackheads, while the Ointment soothes and heals. Always keep Cuticura Talcum on hand; it is cooling and refreshing.

Sample Each Free by Mail. Address Cuticura Dept. "Birchmore, Ltd. Montreal." Price 25c. Ointment 25 and 50c. Talcum 25c. Soap Cuticura Shaving Stick 25c.

Genuine ASPIRIN

BAYER

Proved safe by millions and prescribed by physicians for

Colds Headache Neuritis Lumbago
Pain Neuralgia Toothache Rheumatism

DOES NOT AFFECT THE HEART

Safe

Accept only "Bayer" package which contains proven directions.

Handy "Bayer" boxes of 12 tablets
Also bottles of 24 and 100—Druggists.

Aspirin is the trade mark (registered in Canada) of Bayer Manufacture of Monoaceticacidester of Salicylicacid. While it is well known that Aspirin means Bayer manufacture, to assist the public against imitations, the Tablets of Bayer Company will be stamped with their general trade mark, the "Bayer Cross."