# SUPERIOR---The Inland Sea

## "The Blue, the Fresh, the Ever Free"

AH, this is a trip to remember! Six glorious days on the Great Lakes, voyaging 1,600 miles from Sarnia to Sault Ste. Marie, Port Arthur, Fort William, Duluth and return. Six days of fresh air, sunny skies and blue waters. As long as you live you will recall with longing the delicious meals they serve on board the "Noronic," "Hamonic" and "Huronic." But, best of all to most of us, is the daily life on shipboard—the dances, promenades and concerts—the delightful days on the wide, shady decks of a magnificent Great Lakes liner. And the trips ashore: the luncheon at Prince Arthur Hotel, Port Arthur; the trip by train to Kakebeka Falls, near Port Arthur; the day in beautiful Duluth.

## SIX DAYS ON THE GREAT LAKES

### Sarnia--Soo--Port Arthur--Duluth

**Special Features—Dancing,** every week-day evening. **Refreshments. Concerts. Luncheon** at Prince Arthur Hotel, Port Arthur. Trip by train to **Kakabeka Falls,** near Port Arthur. **Golf meters. Afternoon Tea. "Northern Navigator,"** daily shipboard paper. **Mile Marsh Music. Moonlight Chorus on Deck. Social Hostess.**

Round trip continuous cruise rate, Sarnia to Duluth and return, including meals, berth and side trips—$74.75. Noronic, Hamonic and Huronic leave Sarnia (Point Edward Dock) at 4 p. m. E.T., Tuesdays, Thursdays and Saturdays. Special steamboat train leaves Union Station Tuesday, Thursday and Saturday at 10.02 a.m., via Hamilton and London, direct to steamer.

Buy your ticket to the West via Northern Navigation Water Way from any Canadian National-Grand Trunk Ticket Agent, or write for folder to F. D. GEOGHEGAN, Gen. Passenger Agent.

## Northern Navigation Company

**Canadian-National-Grand Trunk Route**


# HEALTH EDUCATION

## BY DR. J. J. MIDDLETON

Provincial Board of Health, Ontario

Dr Middleton will be glad to answer questions on Public Health matters through this columa. Address him at Spadina House, Spadina Crescent, Toronto.

Eating too much or eating too little is wrong, and leads to all sorts of trouble. In the matter of health there is probably nothing of such vital importance as food. Indeed it has been authoritatively stated that the duration of life depends to a large extent to the kinds of food we eat.

How much food does the average individual need for the complete nourishment of his body? That is a vital question, for as has already been said, too much food or too little food is harmful. Of the two, overeating is the most common, and leads to indigestion in its various forms, liver and kidney diseases, gout, arthritis, some forms of eczema and a general disinclination to mental and physical exertion, especially in very fat people.

The evils of undereating include lack of energy and strength, lack of stored-up power for emergencies, loss of weight, anemia, imperfect growth, deficiency diseases, the less direct effects of sleeplessness, sensitiveness to cold, and mental depression and irritability. These occur not only in the evidently starving, but in people whose diet is ill-chosen.

How much then, shall a person eat? Generally speaking, just so much that from year to year the body keeps in good condition for its work, and maintains a fairly constant weight, and one bearing a proper proportion to height.

One feature of dieting becoming more and more apparent is that when a person gets fat it is because he is eating too much food that produces fat, and when a person loses weight it is because he is not getting enough flesh-forming food. There are other causes of overweight and underweight but in the main the question is purely one of how much food and what kinds of food are eaten. Added to this of course is temperament, amount of exercise taken and the kind of life one leads. All these must be taken into account in deciding how much food is required, but again an index of this can in most cases be supplied by the physical condition of the person from day to day, and how his weight is maintained.

As a general rule, people eat too much, and especially too much meats. The diet should include a large amount of foods in their natural state, that is, raw, uncooked food such as the leafy vegetables and fresh fruits, which contain some of the essential vitamines.

But above all things the diet must be balanced, that is, must contain the essential amounts of heat-producing, fat-producing and muscle-producing ingredients, stabilized by vitamines which co-ordinate nutrition.

In another article I will deal with some of the foods that contain vitamines and try to show how necessary the vitamines are to health.

# HOTTER SUN, COLDER EARTH, SAYS EXPERT

## SOME PARADOXES IN NATURE.

### Old Sol Rises Before it is Up and Sets Before it is Down.

A rainstorm dries the air; more goes up than comes down; as the sun sets the air grows warmer; the hotter the sun grows, the colder the earth becomes; the sun rises before it is up and sets after it is down; these are strong statements and sound like a fairy tale, but they are all true. Dr. W. J. Humphreys, quoted in the annual report of the Smithsonian Institution which has just been made public, explains all of them. They are perfectly well known to scientists, if not to laymen.

As everyone knows, Dr. Humphreys declares, water evaporates and is taken up in the air as vapor. This action is continuous all over the earth and the atmosphere would soon become very soggy if it weren't dried out. Rain is the collection, or condensation, and precipitation of these moisture particles, consequently the more it rains the less water there is left in the atmosphere, or the drier the air becomes.

The second of Dr. Humphreys' paradoxes seems flatly to contradict the old saying "whatever goes up most come down." However, as the writer expresses it, vertical circulation in the atmosphere is only gravitational action, consisting in the sinking of relatively cold and therefore dense air, and rising of warm and light air. Contradicted air descends, expanded air ascends. Therefore, mass for mass, the volume of ascending air is always larger than that descending. In terms of mass, also, Dr. Humphreys says, descending air is less than ascending, for air while rising contains immense quantities of water in suspension, which does not return to earth with that air, but as rain, hail or snow. The air that rises from the land surface is greater in mass by at least 20,000,000 tons per second, the measure of world precipitation, than that which descends, he says.

**Not Hottest at Noon.**

The third paradox is merely a way of stating that the warmest part of the day is not at noon, when the sun is at meridian or overhead and should seemingly be pouring down greater heat, but several hours later in the afternoon. That is because the surface of the earth and the lower layers of air continue to absorb more heat from the upper layers for some time after the latter have been receiving the maximum amount of heat radiation from the sun.

While it is not yet universally conceded that the next puzzler, "the hotter the sun, the colder the earth," really is true. Dr. Humphreys states, the evidence in favor of it is already very strong. There are several explanations offered. The first is that increased radiation from the sun causes earth's air currents to flow more rapidly, bringing down a greater quantity of cooler air from high latitudes to lower. He rejects this explanation, however.

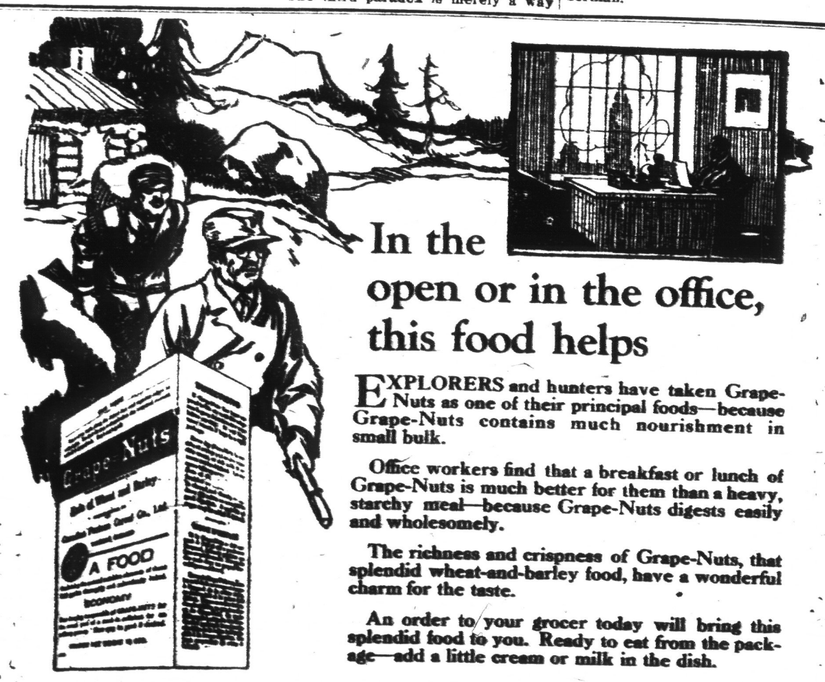
The temperature of the sun itself varies and sun spots are eruptions caused by heat activity. It is shown, he continues, that earth's temperature varies with spot activity; that the more spots there are on the sun the cooler the earth temperature becomes, and vice versa. Also, that the sun's corona, in large measure only so much dust, must interfere with passage of radiation through it. Hence: Hotter sun, more spots; more spots, denser corona; denser corona, less radiation received on the earth and warmer climate ensues.

**Light Rays Are Bent.**

The paradox of the sun rising before it is actually up and setting after it has actually gone down is explained by the sending of light waves when passing through the air. A stick when placed in clear water seems to bend; a light ray when sent through the air does actually bend. The rays from the rising sun are bent when they strike the air envelope. This angle varies according to well-known laws, but on the average the light from the sun is bent thirty-four and one-half seconds of degree, so that the upper limb of the sun when first seen is actually half a degree below the horizon. As the angular diameter of either sun moon or star is less than this fraction it follows that when the sky is sufficiently clear the whole of either may be seen before even its topmost portion is geometrically above the horizon.

While the reverse is not absolutely correct astronomically, it is added, when sun, star or moon set, because of the slight modification of refraction due to earth rotation, nevertheless the difference is exceedingly slight. Consequently, as the light rays are bent upward by earth's atmosphere the sun has actually gone down before it is seen by a terrestrial observer.

Forest conservation is a subject to be approached in a business-like manner. Harvesting the matured crop of timber is not properly done if steps are not taken at the same time to plant the seed and cultivate the forest for succeeding crops.—Western Lumberman.

## In the open or in the office, this food helps

EXPLORERS and hunters have taken Grape-Nuts as one of their principal foods—because Grape-Nuts contains much nourishment in small bulk.

Office workers find that a breakfast or lunch of Grape-Nuts is much better for them than a heavy, starchy meal—because Grape-Nuts digests easily and wholesomely.

The richness and crispness of Grape-Nuts, that splendid wheat-and-barley food, have a wonderful charm for the taste.

An order to your grocer today will bring this splendid food to you. Ready to eat from the package—add a little cream or milk in the dish.

## Grape-Nuts THE BODY BUILDER

*"There's a Reason"*

Made by Canadian Postum Cereal Co., Ltd., Windsor, Ontario


# GROWING BOYS AND GIRLS

### Need Rich, Red Blood to Keep Up Health and Strength.

It is a mistake to think that anaemia is only a girl's complaint. Girls probably show the effect of weak, watery blood more plainly than boys. But many boys in their teens grow thin and weedy, showing that they have not enough blood, or that it is thin and watery. Let the boy in this condition catch cold and he will lose his strength and his health becomes precarious. To overcome this trouble give both your weak boys and girls Dr. Williams' Pink Pills and see how soon good appetite returns and the weak boy or languid girl becomes full of activity and high spirits. Mrs. P. Garvey, R.R. No. 5, Mono Mills, Ont., tells what this medicine did for her young son. She says:—"Three years ago, my little boy, who was then 11 years old, was very pale and weak, he would take fainting spells and complained of a pain about his heart. One day a lady friend who noticed his run-down condition told me her daughter had been in a similar state and found new health through Dr. Williams' Pink Pills. I therefore got a supply for my boy, and by the time the first box was used his appetite seemed better, and by the time he had taken half a dozen boxes everyone was surprised at the change in his condition, he was such a fine, healthy looking boy. He had grown tall and stout, with no signs of his former run-down condition. I believe Dr. Williams' Pink Pills are unexcelled for anyone weak and run down."

Dr. Williams' Pink Pills are sold by all medicine dealers or by mail at 50 cents a box or six boxes for $2.50 from The Dr. Williams' Medicine Co., Brockville, Ont.

### Never Give Up in Despair.

If you ever feel that your little boat,
Adrift on the Sea of Life,
Is really not worth the effort
To win in the world's great strife,
Thrust at the oars with hope in the heart,
And think of a land most fair,
You are sure to reach if you struggle on
And never give up in despair.

If ever your soul is down in the depths
With the weight of the old world's scorn,
Which passes you by with unconcern
And leaves you all forlorn,
Then trust in "our Father in heaven,"
Who awaits at the top of life's stair,
The mortal who battles old Satan
And never gives up in despair.

If ever the world seems against you,
Think not you are quite forgot,
For hidden away in some one's heart
There is often remembrance sought.
And though we may wonder that God conceals
Life's beautiful thoughts so fair,
It is His mysterious manner.
So never give up in despair.

# CHOLERA INFANTUM

Cholera infantum is one of the fatal ailments of childhood. It is a trouble that comes on suddenly, especially during the summer months, and unless prompt action is taken the little one may soon be beyond aid. Baby's Own Tablets are an ideal medicine in warding off this trouble. The regulate the bowels and sweeten the stomach and thus prevent the dreaded summer complaints. They are an absolute safe medicine, being guaranteed to contain neither opiates nor narcotics or other harmful drugs. They cannot possibly do harm—they always do good. The Tablets are sold by medicine dealers or by mail at 25 cents a box from The Dr. Williams' Medicine Co., Brockville, Ont.

### Beginning His Education.

I remember the first day I went to school, writes John Burroughs in his charming sketch of his boyhood. I recall vividly the suit mother made for me out of some striped cotton goods with a pair of little flaps, or hound's ears, on my shoulders that flopped about as I ran. I accompanied Olly Ann, my oldest sister.

I remember struging with the alphabet; the letters were arranged in a column; the vowels were first, and then came the consonants. The teacher would call me to her chair three or four times a day and, opening the spell book, point to the letters and ask me to name them. I remember that one boy, older than I,—Hen Meeker by name,—on one occasion stuck on "e."

"I'll bet little Johnny Burris can tell what that letter is," said the teacher. "Come up here, Johnny." Up I went and to the humiliation of Hen promptly answered, "E."

"I told you so," said the schoolmarm.

How long it took me to learn the alphabet in that arbitrary manner I do not know. But I tackling the a—b, abs, and slowly mastering those short columns. I remember also getting down under the desk and tickling the bare ankles of the big girls who sat in the seat in front of me.

The summer days were long, and little boys had to sit on the hard seats and be quiet and only go out in the regular recess. The seat I sat on was a slab turned flat side up and supported on four legs cut from a sapling. My feet did not touch the floor, and I suppose I became tired; one afternoon I fell asleep, and when I awoke I was on a couch in a neighbor's house; the smell of camphor pervaded the room. I had fallen off the seat backward and hit my head on the protruding stones of the unplastered wall.

But the neighbor's wife was a motherly body and consoled me with flowers and sweets and bathed my injuries with camphor, and I suppose little Johnny was soon himself again. I have often wondered if a small bony protuberance on the back of my head dated from that collision with the old stone schoolhouse.


Minard's Liniment for Dandruff.

# With The BOY SCOUTS

### A Real Need.

Whenever a real need exists, sooner or later something is found to meet it. A real need existed for something to fill with wholesome activity the spare time of boys—and the Boy Scout Movement developed to meet it. This organization, which has spread so amazingly during the last few years, has many claims to consider, but none so fundamental as this basic principle of keeping the boys so busy doing useful things that there will be no time for them to engage in harmful activities.

The thing about the Boy Scout Movement that has surprised many people is the fact that it works. People had become accustomed to consider boys as being naturally mischievous and destructive, to look upon the period of adolescence as a time of tribulation, like the teething age of babies, which must be borne with patience and resignation. "What!" they exclaimed, "Make boys want to do useful things? It just can't be done!" Then the Boy Scout Movement came along and did it.

Scouting has been a success because it was built to fit real boys and not mythical animals. The Boy Scout plan goes right into the realm where real boys live and brings them the food their spirits crave—a code of honor, romance, mystery, adventure. Now that the job has been done, it is easy to see that it is a very simple thing—nothing at all but making an interpretation of life that a boy can warm up to and understand.

First of all, a Boy Scout must take the Scout Promise. That's a perfectly natural thing. The Knights of the Round Table swore an oath or promise and so did the pirates that sailed the Spanish Main! So the Boy Scout pledges himself on his honor to do his best:

1. To do my duty to God and the King.
2. To help other people at all times.
3. To obey the Scout Law.

The Scout Law referred to in the promise covers ten points: A Scout is trustworthy, loyal, helpful, friendly, courteous, kind, obedient, cheerful, thrifty and clean.

These are sturdy virtues that appeal to the spirit of chivalry that lives in the heart of every boy, and when enhanced by the sacredness of a solemn boyish oath they have gripping appeal that works wonders in the growing character. With these virtues firmly planted in a boy's mind and a habit of his daily life during his formative years, there is little danger of his forsaking them entirely in later life.

These virtues are made vital by a programme of activities which gives a boy an opportunity to put them into actual practice. He is given commissions to perform and is trusted "on his honor as a Scout" to carry them into effect. The feature of service to others is emphasized by encouraging Scouts to do "a good turn" to somebody every day. This "good turn" idea is taken very seriously. It has inspired thousands of boys to the point where they volunteer to wash dishes and tend babies. And there can be no severer test than that! The idea of thrift is driven home by requiring a Scout to earn and deposit money in a bank before he can advance from the rank of Tenderfoot to that of Second Class Scout and from the latter to the coveted position of First Class Scout. Bravery is expected of Scouts as a matter of course, moral bravery, as well as bravery of spirit and physical bravery.

The Scout principles are made interesting by hiking, camping, first aid, knot-tying, woodcraft, handicraft, pioneering, and all the other things of the same character that boys like to do. But no activity is included in the Boy Scout programme without a good reason; each must serve its purpose in contributing something to the character development of the Boy Scout activities and the Scout Promise and Scout Law are so closely interwoven that it is impossible to separate them.

The Boy Scout Movement does not interfere in any way with the boy's duties at home or in school, but it does supplement these two great training forces with a third, which completes the circle. It used to be home, school and undirected leisure. Now it is home, school and Scouting; and the greatest danger point in a boy's life—his undirected leisure time—has been covered. Schools and homes are both beginning to feel the beneficial effect of the new force which has entered the lives of thousands of Canadian boys.



O. McPherson,
Furniture Dealer, Undertaker,
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Minard's Liniment Co., Ltd.
Yarmouth, N.S.:

Dear Sirs,—Since the start of baseball season we have been hindered with sore muscles, sprained ankles, etc., but just as soon as we started using **Minard's Liniment** our troubles ended. Every baseball player should keep a bottle of your liniment handy.

Yours truly, **W. E. McPherson.**
Secretary of Armstrong High School Baseball Team.


**Couldn't Speak English.**

"Edward," asked a teacher in a school on the East Side, "why were you absent from school this morning?"

"Oh, some one stole my coat on me."

"What's that? Stole your coat on you?"

"Aw, teacher," interjected Edward's brother. "He's ignorant; he can't talk English. He means some one stole his coat off him."


Minard's Liniment for sale everywhere


A wind tunnel for testing airplanes is a long tube through which air is blown at a known speed and in which there is placed an exact model of the airplane to be tested.


ISSUE No. 30—'22.


# MUNN AND WIFE NOW ENJOYING BEST OF HEALTH

### Toronto Couple, After Putting Tanlac to the Test, Declare it Restored Them Both to Splendid Condition.

"My wife and I put Tanlac to the test and we both think it is a wonderful medicine," said Edward Munn, of 123 Rose Ave., Toronto, Ont.

"For three years I was in a general run-down condition from stomach trouble and indigestion. The little I ate would cause gas to form so badly I was miserable most of the time. I was troubled continually with constipation and frequent dizzy spells made me feel like I would fall if I stooped over. I was always having headaches and towards the last I got so weak I was fagged out all the time.

"I hadn't gotten far on Tanlac before I knew I was getting better and now I feel fine in every way. My wife was badly run down, too; and Tanlac was just as effective in her case. We are now enjoying excellent health and are glad to recommend Tanlac for it certainly does the work."

Tanlac is sold by all good druggists. Advt.

### What Are These Scents?

What are these scents that drift along the breeze,
And fill the sordid, dingy city street
For one brief space with fragrances as sweet
As golden apples of Hesperides;
What dim Arcadian meadows lent us these
Faint breaths of loveliness from otherwhere,
That let our hearts a fleeting moment fare
Beyond the withered, brown, dust laden trees?

Perchance the buds and blooms of long ago
When this was open country, still come back
On windy summer evenings to bestow
On prisoned folk the blossomings they lack—
Vague, wistful ghosts, that mourn 'mid slums unclean,
Old orchards and old meadows' vanished green.

—Charlotte Becker.


Minard's Liniment Relieves Neuralgia


London contains eighteen farmhouses—nine in Woolwich, five in Lewisham, two in Greenwich, and one each in Hammersmith and Wimbledon.

**MONEY ORDERS.**

The safe way to send money by mail is by Dominion Express Money Order.

The fastest trains in the world are two on the Great Western Railway, England, which at certain stages of their journeys travel at a speed of 78.5 miles per hour.


Minard's Liniment for Burns, etc.


Two new inventions are a wireless receiving station in a match-box, and a wireless receiver that can be worn like a finger-ring, with an umbrella as aerial.


Trade Vaseline Mark
CARBOLATED
PETROLEUM JELLY

A VERY efficient antiseptic when used as a first-aid dressing for cuts, scratches, bruises, insect bites, etc. Keep a tube in the house for emergencies.

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THRESHERS' BELTS AND SUCTION hose, new and used, slightly subject to approval at lowest prices in Canada. York Belting Co., 115 York St., Toronto, Ont.

America's Pioneer Dog Specialists Book on
DOG DISEASES
and How to Feed
Mailed Free to any address by the Author,
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# CUTICURA HEALS LARGE ERUPTIONS

On Face. Sore and Disfiguring. In Blotches and Burned.

"Small pimple-like eruptions came first on my face. They were sore and disfiguring, and were also large and red. They festered and came to a head, and they were in blotches and burned.

"I had these on my face for about a month before I used Cuticura Soap and Ointment. I could feel the pimples getting better after a few days' treatment, and I used one cake of Cuticura Soap and one box of Cuticura Ointment when I was healed." (Signed) Miss Florence Thayer, Wright, Quebec.

Cuticura Soap, Ointment and Talcum promote and maintain skin purity, skin comfort and skin health often when all else fails.

Sample Each Free by Mail. Address: "Lymans, Limited, 344 St. Paul St., W., Montreal." Sold everywhere. Soap 25c. Ointment 25 and 50c. Talcum 25c. Cuticura Soap shaves without mug.


# OF INTEREST TO WOMEN

### Nurse Recommended Use of Lydia E. Pinkham's Vegetable Compound

Bothwell, Ontario.—"I was weak and run down, had no appetite and was nervous. The nurse who took care of me told me to try Lydia E. Pinkham's Vegetable Compound, and now I am getting strong. I recommend your medicine to my friends, and you may use my testimonial."—Mrs. D. Maxwell, R. R. No. 2, Bothwell, Ontario.

The reason why Lydia E. Pinkham's Vegetable Compound is so successful in overcoming woman's ills is because it contains the tonic, strengthening properties of good old-fashioned roots and herbs, which act on the female organism. Women from all parts of the country are continually testifying to its strengthening, beneficial influence, and as it contains no narcotics nor harmful drugs it is a safe medicine for women.

Lydia E. Pinkham's Private Text-Book upon "Ailments Peculiar to Women" will be sent you free upon request. Write to The Lydia E. Pinkham Medicine Co., Lynn, Mass.


# ASPIRIN

UNLESS you see the name "Bayer" on tablets, you are not getting Aspirin at all

BAYER

Accept only an "unbroken package" of "Bayer Tablets of Aspirin," which contains directions and dose worked out by physicians during 22 years and proved safe by millions for

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| Colds | Headache | Rheumatism |
| Toothache | Neuralgia | Neuritis |
| Earache | Lumbago | Pain, Pain |

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."