

TOWARD THE VOID OF SPACE

GREATEST HEIGHT ATTAINED
BY HUMAN BEINGS.

Appearance of the Sky, Sun and Stars
at an Elevation of One
Hundred Miles.

If, as reckoned, and as there seems no reason to doubt, the projectiles thrown into Paris by the new German guns from a distance of seventy-four miles mount fourteen miles into the air, they reach further into the vault of blue than any point hitherto attained by human effort. Next comes a "free" balloon that was sent up from Berlin carrying eight automatic instruments to record temperature and air density, a number of years ago. It attained an elevation of eleven and a half miles.

Mainly by the use of such instrument-carrying balloons much has been learned within recent years about the "sea of air" at the bottom of which we dwell. So rapidly does it "thin out" as one passes upward through it that no human being can survive for long beyond an elevation of four miles for lack of sufficient oxygen.

Half of the total volume of the atmosphere is below the three-mile level, and its density, roughly speaking, is halved for each three miles of ascent. The air contained in a box three feet cube, at sea level weighs twenty ounces; at an elevation of fourteen miles it would weigh less than one ounce.

Reached Height of 6 Miles

The highest level ever reached by a human being was attained by Doctor Berson, who, in 1893, voyaged in a balloon to a height of nearly six miles—the elevation of the loftiest clouds, such as we call "mares' tails," which are believed to be composed of snow-crystals or ice-crystals. He was enabled to accomplish this feat by taking a tank of oxygen with him, and his thermometer recorded a temperature of 54 degrees below zero.

The above-mentioned free balloon sent up from Berlin, which was called the Cirrus, noted with its automatic thermometer 75 degrees. Meteorologists are of opinion that at twenty-five miles above the earth's surface the temperature is never less than 200 degrees below zero, and that at fifty miles it is not far from the absolute zero of the outer void of space—525 2-5 degrees below zero.

100 Miles Above Earth

The highest elevation attained by land was reached in 1892 by W. M. Conway, who scaled the summit of Pioneer Peak, in the Himalayas. It is the loftiest point ever trodden by human foot—nearly 23,000 feet above the level of the sea. But Mount Everest, in the same great backbone of Asia, is more than a mile higher and presumably can never be climbed. There is not enough air on or near its top.

In the upper regions of the sea of air there is not only no air (adequate for human purposes) to breathe, but the cold is such that no warm-blooded creature could survive for a minute. The climate is an eternal winter, its temperature uninfluenced by the warmest rays of the summer sun.

But (supposing that we could survive there for a brief time) let us place ourselves in imagination at a level of 100 miles above the happy spot where at present it is our privilege to dwell. We look about us, and what do we see?

The blue sky? There is no such thing. The sky is jet-black—the stars scintillating in it with a brilliancy wholly unfamiliar. And how about the sun? It is inconceivably dazzling, but, in color it is not yellow or red. It is a brilliant blue. The aspect in which ordinarily it appears to us is due to interference with its blue rays by the atmosphere.

To Canada.

Dominion fair! Dear land so free! Thy sons speed on to victory, For honor and for thee! Keep thou in readiness thy hands To welcome them back from other lands,

When they come back to thee. O Canada! thou art so fair! Thy freedom breathes in God's pure air, Justice and liberty! God love and keep thee pure and strong! Guard homes, and all our hearts with song, And ever keep thee free!

Dear land! In honor stand thy hills! Our tears are mingled with thy rills! Our pulses beat with thine! We lay our valor at thy feet, That it may rise like incense sweet, And for thy glory shine!

O Fair Dominion! Land so free! Say! When thy sons return to thee, Sped on with victory! Still ever keep thy honor bright, Clear and serene, a beacon light, Oh! Canada the free!

Handel's Largo now largely considered a "church piece" was originally a purely secular work.

To tell the difference between porcelain and pottery, hold the article in the light. If transparent it is porcelain. Pottery is opaque and not so hard and white as porcelain.

Attractive Models



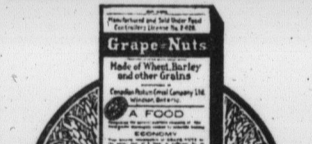
An original little romper or sleeping garment in peg-top effect. Developed in novelty material, it's a delight to the kiddies. McCall Pattern No. 8472, Child's Bedtime Romper. In 4 sizes, 1 to 6 years. Price, 15 cents.



Warm summer afternoons call for cool, dainty dresses. The one illustrated serves this purpose most admirably. It is developed in contrasting materials. McCall Pattern No. 8464, Ladies' Sleeves Over-blouse. In 7 sizes, 34 to 46 bust. No. 8447, Ladies' Two or Three-Piece Skirt. In 7 sizes, 22 to 34 waist. Price, 20 cents each. These patterns may be obtained from your local McCall dealer, or from the McCall Co., 70 Bond St., Toronto, Dept. W.

An excellent coloring medium for gravies is strong tea. Many people prefer this to the usual burnt sugar and water, as the tea colors without giving the sweet taste which is to many people so objectionable.

To clean old jewelry, make a lather of warm soapsuds and add to it half a teaspoonful of sal volatile; brush the jewelry in this, afterward polishing with an old silk handkerchief or piece of wash-leather.



One of the finest teachers of food values — is Grape-Nuts

It's brimful of Nourishment Combines nicely with other foods and is Delicious Requires little milk or cream No Sugar and there's no waste Give It A Test

Canada Food Board License No. 2-924

WHAT THE WAR IS DOING

THE REACTION UPON US OF
COURAGEOUS YOUTH.

The Convictions and Consecrations of Our Sons in France Are Keeping Us From Despair of Life.

Never has there been an era in which youth has reacted upon age so powerfully and so profoundly as in this one through which the race is so painfully passing in this day of grace. The ancient saying, "Old men for council and young men for war," has lost at least one-half of its relevancy, because we are sitting meekly at the feet of the boys who are fighting in France like pupils at the feet of teachers. Not only are they outfighting us, but they are outthinking us. Their philosophy of life is finer, deeper, nobler than our own. When sitting at the "council" board our lips are sealed, while they discuss the deepest mysteries of this mortal life with an unexampled wisdom. Like the Jewish doctors in the temple when confounded by the testimony of the youthful Jesus, we are "amazed at their understanding and their answers."

See how these glorious young men have reacted upon our half-hearted loyalty to the Government by their unselfish devotion. Such has been the enthusiasm of the volunteers and the humble obedience of the conscripts at the chance to serve the nation that we stand abashed and have been compelled to re-evaluate our responsibilities and our duties as citizens of Canada.

See how they have reacted upon our love of luxury and ease by their cheerful abandonment of all those privileges and instruments of modern civilization which have become to most of us the very essentials of life.

Faith in a Better World

See how they have reacted upon us by their "hilarity of heroism" in the presence of danger and the endurance of pain. Is there any man living who is not a bigger and a better man for hearing how those boys of ours have endured the horrors of the trenches, the battlefields and the hospitals of France?

See how they have reacted upon our philosophy of life and particularly of death. In simplicity and sincerity and with an astounding conviction and faith they have accepted the fundamental ideas that life is service and death is immortality. Hear one of them say on the eve of battle: "If I would, Blighly, if killed, the resurrection!"

"I am no longer afraid of death; I have learned to consider it as an investment!" said another.

The prevailing conception of life on the battlefields of Europe to-day, among the Allied soldiers, anyway, is that it extends beyond the grave. So profound is this conviction that it has all but eliminated the skepticism produced by modern science, "falsely so called." Like radiating circles from the presence of these young men in the presence of death in all its most horrible forms have swept around the world and changed the convictions of millions of human beings about the nature of existence.

It is the hopes, the convictions, the purposes and the consecrations of our sons in France that are keeping us from despair of life. We whose sun is setting could not endure the strain of seeing our old world splitting asunder but for their indomitable faith in a new and better one.

This is their world flow. They are saving it and will reconstruct it, and us old folks with it, we believe.

SEA-BEANS GROWN ON LAND.

Gulf Stream Bears Them Northward From Caribbean Shores.

Along the Atlantic beaches in Florida are picked up great numbers of "sea-beans"—very pretty things, about the size of a hickory nut, mossy, and utilizable for the making of trinkets. Often they are worn as watch-charms. They are almost incredibly hard and susceptible of a high polish, being first sandpapered and then finished by industrious rubbing with champagne skin. Sailors and fishermen prepare them in this manner, and by cutting in odd ways, for sale to tourists.

They are of many varieties, and formerly there was a good deal of mystery about their origin—the supposition being that they were seeds of plants that grew somewhere in the depths of the sea. This theory easily accounted for the quantities of them thrown up on the shore by the breakers.

It is now known, however, that they are in reality the seeds of pod-bearing vines that grow profusely along the Caribbean littoral. Each pod contains several of them, arranged like peas in a pea-pod. The vines grow most commonly on or near the banks of streams, by which the beans (dropped from the ripened pods) are carried to the sea.

The gulf stream, sweeping northward up the Florida coast, brings with it millions of the floating beans, which are cast up on the beaches. Some of them are as much as three inches in diameter, but deemed of no value.

In Europe violin pupils usually receive two or three lessons a week the year around.

INTRODUCING THE FISHERETTE

A New Experiment in War Work For Women—Plucky Nova Scotians Take to Fish Cleaning.

This is not the kind of wartime occupation that can reasonably be advocated for Canadian girls in general. But it is a stimulating example that should prove an incentive to men and women alike. These hardy Eastern women have eschewed the easier paths open to them and have delivered chosen the rocky trail which has known no other feminine feet in the history of Canada's industries.

Easily in the season though it is, glowing accounts are coming from British Columbia of what girls have done in berry-picking in the far West. In the middle West they are operating tractors and driving cultivators and standing shoulder to shoulder with their men in running the farms. But in the far East they have gone a step further. They have donned men's oil-skins, rubber boots, and sou'westers. They are not farmerettes; nor are they berry-pickers nor dairy-maids. They are—well, let us introduce them to you—Canada's first fisherettes!

Anyone who knows the native life of Scotland can summon up in this connection a vivid picture of the Highland "fishwives." So they call them in the land of cakes and herring! They were really the precursors of our fisherettes—with a difference. These Canadian girls are young and strong, and the necessity

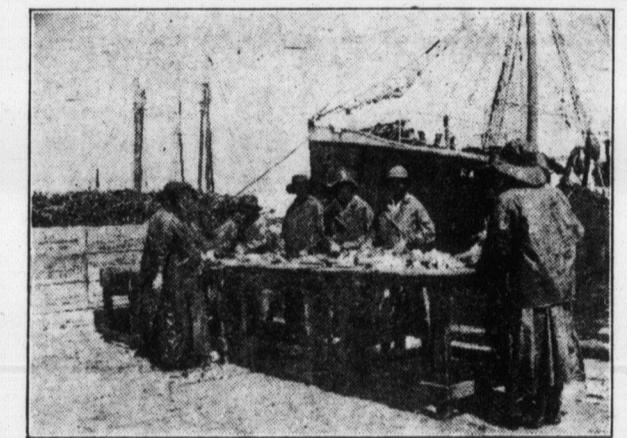
Fish Corporation of Canada, Nova Scotia, to employ this dozen or so of girls to handle the big fish in sheds—to clean them and skin them and prepare them for the market.

It was of the fisher folk that the plaintive song was written, "For men must work and women must weep." It does not look much like it when you see this picture! You feel more inclined to say "Cheer! for Canada's daughters. Men must fight and women must work."

These women are not weeping—although their sweethearts and brothers are in France and some of them are beneath the sod. They are—cleaning fish.

It sounds prosaic enough, but patriotic work is often prosaic and hard and tedious. There is little romance about it on this side of the Atlantic. There is not even the inspiration of direct contact with war's actuality. It is simply a hard level grind—sometimes objectionable, often monotonous.

What these girls are doing is not even easy. They are not playing with suckers. These fish are big fellows—heavy to handle, cumbersome and slimy. In learning the girls get their hands cut with the fish knives often enough. But they are mighty deft about it and are fast earning a reputation for rapid, skillful work.



These girls are replacing men who have gone to the front.

of war rather than the custom of the ages has led them to take up this work.

But the Highland fishwives—who can ever give them full credit for the faithful labor of years, the toil of their lives, the rigor of their work? Many of them grew old and bent before their time because of the everlasting burden of fish they bore in the creels on their backs. They were picturesque to look at—but they were beasts of burden, more like the women of France who dragged along the plow yoked to their bodies, than like normal human beings. In the days before the war when their business flourished, they were about as many striped petticoats as Miss Hook of Holland. On their heads were shawls or "mutches."

Very different is the Canadian fisherette! Her outfit is all-enveloping, smart and utilitarian. She is recruited from the ranks of the younger women on the fishing coast. She is taking the place of her sweetheart or her brother. She has entered the "big fish" game. In other words, she has cut ice in an entirely new spot. For years the large fish companies on the East coast have been bringing girls out from Scotland to work in their factories, to can and pickle and pack—to handle the herring and other small fish.

But it remained for the Maritime The Canada Food Board has been telling Canadians for months past that they must eat more fish. At last people are beginning to realize it, with the result that the demand for fish is increasing, and the Atlantic dealers are having a busy time keeping the markets supplied with the now-famous ten-cent-a-pound fish. So many of the fishermen have heard their country's call to arms that it is doubly hard to cope with Dominion and European demands.

And here is where the fisherette comes in.

If women can help on the farms, in the factories, in industries of every kind, they are surely fitted to take their places by the fishermen, and if they cannot go out in dories to catch the precious sea food, they can at least have a share in handling it on shore.

There are hundreds of girls by the coast who might take this to heart. They are on the spot. Their strong young hands and stout hearts are needed in the fishing business. The trail has been blazed. Will they follow in the wake of the pioneer fisherettes? And will the example set by this handful of girls inspire women in other parts of the country to cast about for the most useful and necessary forms of work to engage in—even if they have to break new trails?

A business succeeds only as it serves. The present American sugar ration is three pounds per person per month. That in England is two pounds; in France one and one half pounds and in Italy one pound. Sometimes in France and Italy it is not possible to get sugar enough to give out this meagre ration.

At ten minutes after five o'clock, when the first pink streaks of dawn were reddening the eastern sky, the new hand came around the corner of the barn.

The farmer dropped the fork he was wielding and stared long and hard at the tardy one.

"Well," he asked in tones of heavy sarcasm, "what have you been the hull forenoon?"

MONEY ORDERS. A Dominion Express Money Order for five dollars costs three cents.

As an evidence of the enthusiasm which has been inspired by the Food Board's campaign for the cultivation of vacant land the St. Thomas Horticultural Society proposes to lease from 200 to 500 acres of land for 1919. They expect to raise from \$5000 to \$10,000 by \$10 shares for this purpose. Cereal crops are to be raised to help meet the food shortage.

Minard's Liniment Cures Gargot in Cows

Sir Frederick Bridge has been the organist at Westminster Abbey since 1882.

Minard's Liniment Cures Diphtheria.

Somewhere.

Somewhere fighting for the right
In some stricken land,
In the garb of war bedight,
Gallant soldiers stand.

Somewhere sleeping on the breast
Of the kindly ground,
Lie the noblest and the best,
Lost but also found.

Somewhere caring for the pain,
Often, even now,
Gentle nurses wipe the stain
From the wounded brow.

Somewhere in their charity
Men and women give
Prompt relief to misery,
That the poor may live.

Somewhere praying in their love,
Mothers, sisters, wives,
Call on Him who reigns above
To protect dear lives.

Somewhere One who cannot swerve
From His promise given,
Writes the names of all that serve,
In the book of Heaven.

LEMON JUICE IS FRECKLE REMOVER

Girls! Make this cheap beauty lotion to clear and whiten your skin.

Squeeze the juice of two lemons into a bottle containing three ounces of orchard white, shake well, and you have a quarter pint of the best freckle and tan lotion, and complexion beautifier, at very, very small cost.

Your grocer has the lemons and any drug store or toilet counter will supply three ounces of orchard white for a few cents. Massage this sweetly fragrant lotion into the face, neck, arms and hands each day and see how freckles and blemishes disappear and how clear, soft and white the skin becomes. Yes! It is harmless.

DRESSED FLEAS OFF MARKET.

This Mexican Product, As Well As Others, No Longer Profitable.

Sad news comes from Mexico. Dressing fleas for market is no longer a profitable business, and the little insects have disappeared from the showcases of curio stores.

Dressed fleas were long a staple article in the stores and shops in Mexico. In little boxes no bigger than the blunt end of a lead pencil these adorned fleas could be seen through reading glasses in all the glory of their wedding or christening finery. Mexican women toiled for days dressing the diminutive insects, using the point of a needle to attach the bits of bright cloth and lace to the bodies of the wee pests.

The dressed fleas appeared as miniature persons, with hats, dresses and suits covering their tiny forms.

When the United States government limited passports to persons on necessary business the tourist travel to Mexico ceased, and automatically so did the demand for dressed fleas.

Jumping Mexican beans, another offering of the curio stores, have ceased to be sold for the same reason. Hundreds of these little, wormy beans were sold to travellers from the United States.

Drawn work, pottery, hand carved canes, mantillas and Mexican confectios are rapidly disappearing from the shops, and many of these curio stores have closed their doors since the tourist embargo became effective.

Minard's Liniment Cures Colds, Etc.

He Wanted to Know

At his customary rising hour of 4 a.m. the employer got up, dressed, lit a lantern and went forth to start the chores. He fed the stock, milked three cows, split some wood, and single-handed, ministered to the chickens, meantime filled with wonder, which turned to disgust, at the unaccountable tardiness of his employee.

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ROYAL YEAST CAKES

MADE IN CANADA
BAKING POWDER COMPANY LIMITED

England From the Clouds. The magic and beauty of England can only be understood when viewed from the romance and mystery of the clouds, writes an alman in the Westminster Gazette. No other country has such color in the air, such varied and mysterious forms and shapes of clouds, such ceaseless change and multifarious beauty. The mystery and wonder of the universe are always waiting for us to explore and are always open to our airmen. It may be dull November and a smoky city; we climb into the machine and mount aloft, and in a few minutes we are under the bright sunshine and deep blue sky. The gloom of earth is replaced by pearly white clouds with their infinite variety of shape rimmed with the rainbow.

Minard's Liniment Cures Distemper.

Concoited of Him. Professor Phirstboy prided himself upon his advanced and enlightened views concerning women and their place in the scheme of things.

He sat next a very clever woman at a little dinner he attended the other night, and, in reply to a remark of hers, cried:

"My dear lady, I go farther than believing in women's suffrage; I maintain that man and woman are equal in every way."

"Oh, professor!" said the lady very sweetly, "Now you're bragging."

Minard's Liniment Co., Limited.

Gentlemen, I have used MINARD'S LINIMENT on my vessel and in my family for years, and for the every-day ills and accidents of life I consider it has no equal. I would not start on a voyage without it, if it cost a dollar a bottle.

CAPT. F. R. DESJARDIN.
Schr. Storke, St. Andre, Kamouraska.

To strengthen shirt or blouse buttonholes, stitch round and round with the machine after the buttonholes have been worked over.

FOR SALE

WEEKLY NEWSPAPER FOR SALE. In New Ontario. Owner going to France. Will sell \$2,000. Worth double that amount. Apply J. H. C. O'Brien Publishing Co., Limited, Toronto.

WILL EQUIPPED NEWSPAPER. In New Ontario. Owner going to France. Will sell \$2,000. Worth double that amount. Apply J. H. C. O'Brien Publishing Co., Limited, Toronto.

PEDIGREE NEWFOUNDLAND. Puppies that noble breed now so nearly extinct. We have some very fine ones. R. A. Gillespie, Abbotford, Que.

PREPARED BLACK SUEDE. Fur Hares weighing fifteen pounds at maturity. Charles Reschke, Van-Kies, Hill, Ontario.

AGENTS WANTED

AGENTS WANTED—\$1,000. YOU can make it in your country with our fast selling Combination Cooker. One in every house. Write for first month's agent sales 20 in two hours. Others dealing up \$10 daily. No capital necessary. Goods shipped to reliable men on time. Territories going fast. Write quick to secure your field. Combination-Products Co., Thomas Bldg., Foster, Que.

MISCELLANEOUS

CANCER, TUMORS, LUMPS, ETC. Internal and external, cured without pain by our home treatment. Write us before too late. Dr. Belman Medical Co., Limited, Collingwood Ont.

SMOKE TACKETTS

T&B PLUG

HIRST'S PAIN EXTERMINATOR

Promptly relieves rheumatism, lumbago, neuralgia, sprains, lame back, toothache and all similar troubles. Hirst's stops the pain in every household. All dealers, or write us.

HIRST REMEDY COMPANY, Hamilton, Can. HIRST'S Family Salve, (50c). HIRST'S Pecorol Balm of Balm and Balm, (50c). BOTTLE

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CUT FINE FOR CIGARETTES - CUT COARSE FOR PIPE

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