

Helium Will Be a Big Aid To Airships and Balloons

(New York Sun)

How often has it been said, "Everything that exists has its use or will become useful under certain conditions." Sometimes when a new substance is discovered it is very hard to say at once just what value it will be, and frequently it is dismissed as useless without giving due consideration to its potentialities. It is safer to regard everything, even the most infinitesimal creature or plant or most insignificant invention of discovery of some value to mankind, for it is never possible to tell just when conditions will change to make valuable a hitherto useless product.

When in 1868, during an eclipse of the sun, the gas, called helium after its celestial progenitor—the Greek for sun is "helios"—was discovered through a remarkable piece of photography and subsequent analysis of the sun's spectrum, the discovery, as far as the industrial world in general was concerned, was thought to be useless.

The gas could not be found on earth. About thirty years later experiments were being made on meteorites, when

there was found a mixture of gases which gave the same spectrum as helium. This was the first time any one had seen the gas on this earth. Outwardly, of course, the appearance of helium was just the same as that of air—that is, it had no color nor any other visible signs to mark its presence. Shortly afterward the gas was also found to exist in the atmosphere.

Helium Non-Inflammable

All of this was thought to be of mere academic interest only. But the properties of the gas were found to be very interesting. It was ascertained that it was just twice as heavy as hydrogen. Hydrogen is also a gas and is the lightest substance known, being more than fourteen times lighter than air. It is for this reason that it is used in balloons and airships, for it possesses great lifting power. But the most serious disadvantage with hydrogen is that it will burn under certain conditions, and if the mixture of air and hydrogen is propitious it will explode with terrific violence.

Helium was found to be inert. Not only would it not burn or explode but it refused to combine with any substance known.

From time to time small quantities of helium were found in rocks, minerals, in some mine gases, in the gases of many mineral springs and in some natural gas, but these amounts were so small that enough could not be collected to try out its use in an experimental balloon. This continued until 1905, when it was found that natural gas produced in Kansas contained appreciable proportions of helium. The largest percentage of the substance in the Kansas gas was 2.13 per cent, but as the wells yield millions of cubic feet of gas a day a large amount of helium can be derived from them.

Investigations were then made in other States producing natural gas and it was ascertained that some wells in Texas and Oklahoma also contained small amounts of helium. At the present time the gas must be present in the concentration of at least one-half of one per cent to be commercially workable.

The process of separation from the other constituents of the natural gas is simple. Just at the end of the war we were ready to ship abroad thousands

SAVED FROM AN OPERATION

"Fruit-a-tives" Completely
Relieved Me

3928 UNION ST., VANCOUVER, B.C.
"I suffered with all the symptoms of Female trouble, with chronic Constipation and constant Headaches. I had pains low down in the back and sides of the body. A doctor advised me to have an operation.
I started taking "Fruit-a-tives" and this medicine has completely relieved me of all my misery and suffering.
I am free of pain and headaches and the terrible Constipation, and what saved me is the fruit medicine, "Fruit-a-tives."

Madam M. J. GORSE.

50c a box, 6 for \$2.50, trial size 25c.
At dealers or sent postpaid by Fruit-a-tives Limited, Ottawa.

SIR SAM LEFT A BIG ESTATE

Toronto, Dec. 10.—Sir Sam Hughes, former Minister of Militia, was worth \$800,000 when he died. His estate is almost wholly made up of Victory Bonds. Sir Sam liquidated his stock holdings and made investments in Victory Bonds a year before his death at the time of his death he still held considerable real estate in the West and coal lands in the Crow's Nest Pass district.

The whole estate is divided among Lady Hughes, the son General Garnet Hughes, now in England, and the two daughters, Mrs. Byron Greene, of Dale avenue, Toronto and Miss Aileen at home.

Some habits are acquired but the pie-eating habit is hereditary.



and of cubic feet of the gas to be used in military airships. There is no reason why the gas should not replace hydrogen for this purpose and for inflating commercial aircraft as well.

VENOS HELPED WESTMINSTERS

Boston, Dec. 11.—The Veno brothers of Chatham, N. B., were the principal factors in the 4 to 3 victory of the Westminister Hockey Club over Marquette Council, K. of C., here last night. Two overtime periods, one of ten and the other of five minutes were played. The game was the second of a series to determine Boston's two representatives in the United States Amateur Hockey Association. The Westminister was composed almost entirely of former Canadian players.

HEART WOULD BEAT LIKE A TRIP HAMMER

Heart trouble has of late years become very prevalent. Sometimes a pain catches you in the region of the heart now and then your heart skips beats, palpitations, throbs, or beats with such rapidity and violence you think it is going to burst.

You have weak and dizzy spells, sinking sensations, are nervous, irritable and depressed, and if you attempt to walk upstairs or any distance you get all out of breath.

We know of no remedy that will do so much to make the heart regain strength and vigor, regulate its beat and restore it to a healthy normal condition as will

MILBURN'S HEART AND NERVE PILLS

Mrs. Chadwick, Delhi, Ont., writes: "I had palpitation of the heart, and the least exercise, such as going upstairs or up a hill, my heart would beat like a triphammer and at times I was dizzy-headed and had a sinking sensation as if my time were near."

A friend suggested I try Milburn's Heart and Nerve Pills, so I procured three boxes, and by the time the first one was used I began to improve. In all I took six boxes, and now although in my 66th year I feel like a young girl, no dizziness or heart-thumping, and can walk miles without fatigue. At time of sickness I weighed 120 lbs., now I weigh 150."

Price 50c a box at all dealers, or mailed direct on receipt of price by the T. Milburn Co., Ltd., Toronto, Ont.

SELLING BEER IN VANCOUVER

Vancouver, Dec. 11.—To bring the beer question to a show-down a number of hotels in Vancouver have reopened their bars for the sale of malt liquor and are doing a rushing business.

The increase in the number of clubs obtaining charters is said by hotel men to be the cause of their decision to force matters to an issue.

Hotel proprietors claim that the clubs have little or no investment at stake while they have thousands of dollars tied up in first class buildings.

Local police authorities met in session here Saturday to discuss the situation and decided that there was nothing they could do until Feb. 1, when by virtue of new charter powers the city of Vancouver assumes "control and regulation" of all clubs within the municipality.

PRAISE FOR N.S. PREMIER

Mr. Frank J. D. Barnjum, of Annapolis Royal, sent the following message of congratulations to Premier Murray yesterday:

"Hon. George H. Murray,
Prime Minister of Nova Scotia,
Halifax.

"Accept heartiest congratulations on the splendid result of the polls in Nova Scotia. Once again have the people of Nova Scotia affirmed their faith in the grand old Liberal Party, of which you are the honored and well-beloved leader in this Province. You retain a larger amount of affection in the hearts of the people than at any time in your twenty-five years of faithful and unmatched public service as leader of the Government in this Province. Annapolis County is proud of its contribution to this wonderful victory.

(Sgd.) FRANK J. D. BARNJUM."

THE SNOWSHOE TRAIL.

The last lone star has left the sky,
The ghost of a moon swings low,
The tall still mountains wait for the hour,
When the winter roses blow,
There is no stir and there is no sound
In all the drifted world,
The bear is asleep and the wolf is at home,
And the white owl's wings are furled.

Then before the crust beneath our feet
Grows damp in the soft spring gale
Hey, up and away till the break of day
Over the snowshoe trail!

It is all one desert so white and still
Where the winds have forgotten to blow
And only the weasel's tiny tracks
Are etched in the speckless snow.

And the long tree shadows are blue as steel,
And the trunks are as black as night,
And the racers flit through the sleeping world
Like deer in frantic flight.

For the hour flies fast, and the drifts are deep,
And the light is clear at our back,
So hey, and away, till the break of day,
And three cheers for the snowshoe track!

—L. LAMPREY.

CHARLOTTE RUSSE.

If you can purchase stale or fresh lady fingers or little sponge cakes this is an easy dessert. Line a desert bowl with them and fill with whipped cream. It is made of jam or minced fruit on top of the cakes before adding the whipped cream.

FRUIT FLUFF.

This is god when made of ripe grapes. Skin them and rub through coarse sieve put in dessert glasses and cover with sweetened whipped cream and serve very cold. Ripe bananas or minced canned pineapples can be used to advantage in the same way.

This can be made with almost any nice fruit jam combined with a little fruit jelly if you have it on hand. Beat the whites of eggs to a stiff froth and then stir in the jam and jelly and sweeten to taste with a very little powdered sugar. Possibly there will be enough sugar in the jelly and jam. A nice combination is raspberry jam and currant jelly.

CURLING CLUB PREPARES FOR SEASON

Management Committee Series
in Two Sections With Play-
off—Points Competition.

The Fredericton Curling Club held one of its regular meetings Monday night and transacted some important business.

Pres. C. W. Hall filled the chair and gave an interesting review of the year's play and forecasted a good season for the club.

Management Committee Series.

The Management Committee presented its report. To carry out the recommendations of the Committee the club will select twenty-two skips Friday night. These skips will choose their ranks. The latter will compete in two sections until one rink is left in each group. A play-off between them then will take place, after February 26th.

It also was decided to have the Points Competition. This will be in three classes, Senior, open to all members; Junior, open to curlers of three years' experience; Novice, open to curlers of no experience.

Meeting at Moncton.

Walter Limerick was selected as delegate from the club to the meeting of the New Brunswick Branch of the Royal Caledonian Curling Club at Moncton on Thursday. President Hall also may go to Moncton.

Two new members were elected to the club, Theo. Barker and Arthur A. McF. Brown.

LIVE FOXES FOR N. Y. STATE

Salisbury, N. B., Dec. 10.—A valuable shipment of live foxes was made from this place today, when 100 pairs of "silver blacks" were entertained for ranches in New York state. This shipment was from the big ranches at Colville's some five miles from Salisbury village. It is understood that the price realized for the lot was in the vicinity of \$100,000. This is the skinning season at the fox ranches and many valuable pelts are being taken off at the various ranches hereabout.

GIRLS OF TODAY.

Oh, the girls of today are a terrible lot!
They do thousands of things that their mothers dared not;
And my grandma would turn in her narrow cold grave
Could she witness this day how young ladies behave.

Oh, their skirts are too short and their voices too loud,
Yet shall I confess it? I am old but I'm proud
Of these natural girls, they're so healthy and free.
Will I know they're not perfect, but still they please me.

From the hoopskirt and bustle they've come a long way;
Free from trains and tight lacing—no wonder they're gay!
But, my grandmother dear, they're as fine and as true
As the maidens who lived in the days that you knew.

Yet my hair has grown gray hearing grandmothers tell
Of the girls of their day when I know very well
That they, too, were just human and much like the rest;
Youth in each generation is full of life's zest.

Then fear not for these lassies, they will weather the gale;
They're a capable crew, well equipped for the sail.
They're just natural girls and tom-rows, I wot,
They'll be the best mothers in the whole blessed lot.

MARGARET LOUISE KEENAN.

"One advantage the fellow has who doesn't own an automobile," remarked the Man on the Car, "is that nobody is looking for his number."

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For Infants and Children
In Use For Over 30 Years

Always bears the
Signature of *Chas. H. Fletcher*

Cook's Cotton Root Compound.

A safe, reliable regulating medicine. Sold in three degrees of strength—No. 1, \$1; No. 2, \$3; No. 3, \$5 per box. Sold by all druggists, or sent prepaid on receipt of price. Free pamphlet. Address: THE COOK MEDICINE CO., TORONTO, ONT. (Formerly Windsor.)

FOR SALE

Chicago and New York stock—Single comb buff minorca cock, \$6. Rose comb black minorca cock and two hens \$12. Apply to Mystic Poultry Yards, Torry-born Station, St. John, N. B.



WOMEN ADORE FLOWERS

and it's quite natural. They themselves are the flower of our race. so why shouldn't they feel tenderly towards the modest blooms of Nature's garden? If you are a man, satisfy this longing of womankind for flowers by ordering from us regularly. If you are a woman treat yourself to a bunch of cut flowers every little while.

Ada M. Schleyer

326 CHARLOTTE STREET
'Phone 217.

FOR SALE

Barred Plymouth Rock Cockerels of imported stock. The birds are of the same strain as my pen of twenty hens which in January last produced thirty-one dozen eggs. The proper birds to breed from if you want genuine winter layers.

Price from \$3 to \$5 each while they last.
Apply to—

West End Poultry Yards

Brunswick St. Fredericton, N. B.



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SECURITY AND HAPPINESS
Lies in the NOURISHMENT that is accorded in Infancy. You can be certain of the nourishing properties that our milk contains. It is Pasturized and represents the acme of dairy results.

DRINK PASTURIZED MILK

(It's Healthy)
FARMERS' CO-OPERATIVE
DAIRY CO., LTD.
King Street.

Cockerels for Sale

I have for sale a few choice Barred Plymouth Rock cockerels of high laying strain, which I will sell for \$3 each. All imported bred to lay stock. Apply to J. N. Ferguson, York Street.

Mrs. J. E. Johnston

Has re-opened in her
OLD STAND

88 York Street

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NEW AND COMPLETE LINE OF FURS

OF ALL DESCRIPTIONS

Mrs. Johnston will be pleased to see all her old customers and as many new ones as possible.

Ladies' and gentlemen's furs remodelled and repaired.
Give us a call or ring up 728-41.

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:- AT :-

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We wish to announce the following prices for suits made up of Scotch, English and Canadian Tweeds at \$45.00, \$50.00 and \$60.00.

Also a few lines of Heavy Blue Cheviot Serges at \$55.00 while they last. Excellent values. Call and inspect the goods. Fit and workmanship the best.

THE INFLUENCE OF ADVERTISING ON THE PUBLIC MIND

HOW MANY PEOPLE know the names of the highest mountain peaks in the world?

FOR INSTANCE, "Kinchinjanga" is the name of one of the highest mountains in the world. It is 28,156 feet high.

PIKE'S PEAK is only 14,108 feet high—but it gets credit for being higher because it is advertised. ADVERTISING will bring many unknown things into prominence during the coming years.

NOW IS THE TIME, when so many articles and commodities of trade are flooding already overstocked markets, for the man with goods to sell to let the people know all about it.

THE BEST WAY to let the people know is to advertise in the newspapers.

YOU HAVE SEEN THIS in the Daily Mail—let the public know what you have to sell through the advertising resources of this newspaper.

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