

AGRICULTURAL WONDERS.

Flowers Developed by Electricity Become Terrible Make Tobacco Good.

Electricity is about to find a new employment in horticulture. Spring vegetables are already being forced by its aid for market. There is no doubt that roses and other flowers can be made to bloom more plentifully and more profitably with its assistance. In short, the discovery affords promise of possibilities not yet estimated.

The Department of Agriculture at Washington has been experimenting in this direction for some time past. It has been found that lettuce is particularly susceptible to the influence of the electric light, by means of which it can be grown for market in two thirds the usual time. Other vegetables respond likewise in varying degrees. But everything depends upon the proper regulation of the light, and how to do this can only be learned by careful study of the results produced under all sorts of conditions. The effect of the electricity being to hasten maturity, too much of it causes lettuce to run to seed before the edible leaves are formed.

It must not be imagined that electricity is employed for such purposes as a substitute for sunlight. It is merely used in a supplementary fashion. The greenhouse that has the sun in the daytime is illuminated at night with arc lights, toward which the plants incline their leaves and flowers, accepting quite innocently these artificial counterfeits of the orb of day. It was supposed hitherto that vegetables required intervals of darkness for their healthy development, just as animals need sleep; but it has been shown that, supplied with electric rays, they will go on growing thrifty between sunset and daybreak. Staying up all night seems to do them no harm so long as the dissipation is properly regulated.

On the same principle that beer is selected by the prudent as a less demoralizing beverage than whisky, the electric gardener employs opal globes to diminish the intensity of the light. When it is left bare and permitted to shed its unfiltered rays upon the plants, the latter grow pale, run up quickly in stony stalks, and soon die. It remains to be discovered exactly how much electricity is beneficial, and during precisely what period of the development of the vegetables it ought to be applied.

The influence of electricity upon the color and productivity of flowers has been shown to be extraordinary. Tulips exposed to its light have deeper and richer tints, flowering more freely, and developing longer stems and bigger leaves. Fuchsias bloom earlier under like conditions. Petunias also bloom earlier and more profusely, growing taller and more slender. It is the same way with many other flowers. In fact, there is every reason for believing that the electric light will be very profitably used in future as an adjunct to forcing establishments for both flowers and garden vegetables. Already one market gardener in New Jersey is employing it with a success which he reports as marvelous.

Another surprising investigation which the U.S. Department of Agriculture is conducting has to do with tobacco.

An important part of the curing of tobacco is its fermentation, which occurs during the process known as "bulking." The leaves are packed closely together in large piles, and after a while the mass heats, the tobacco being said to "sweat," and the aromatic compounds which contribute to its taste and odor are formed. These phenomena of fermentation are caused by bacteria.

Now, each sort of tobacco has its own kind of bacteria, which gives it aroma and flavor incidentally to feeding upon it. Here comes in a wonderful discovery, for it has been ascertained by experiment that poor tobacco, when inoculated with the bacteria naturally belonging to fine tobacco, obtains the taste and quality of the later. Thus by a simple operation it is easy to transform inferior leaves into first-class material for cigars, which the consumer may readily be led to believe are from the Vuelta Abajo.

Thus far the matter has not passed beyond the experimental stage. The trials were performed by propagating colonies of bacteria belonging to first quality tobacco in beef tea, and then sprinkling the latter upon the inferior leaves. After these leaves had been packed together and permitted to ferment, they were found to have all the bouquet and other desirable qualities of the fine brand. So complete were the results that expert judges were unable to tell the difference. They can undoubtedly be secured on a large scale at a small cost, perhaps by merely spraying the poor tobacco with a decoction of a superior quality, transferring by this means the vegetable organisms whose assistance is desired.

How We Beat the Yankees.

Most people forget the splendid defense of Canada, made early in the century, by the handful of Canadians—225,000, total population of Lower Canada, and 75,000 in Upper Canada—against eight millions of the United States.

When Britain was involved in the struggle with Napoleon, its commerce ruined by the "Berlin Decrees" and the "Orders in Council," its army and navy engaged in Spain and the Baltic, the States thought it a favorable opportunity for annexing Canada, and, in spite of all concessions, declared war.

The Americans thought the war would be a mere promenade, and on July 12th, 1812, General Hull from Detroit issued a proclamation offering peace and liberty to Canada if it submitted, slavery and destruction if it did not.

On August 16th this same General, with 2500 troops and 37 guns, surrendered Detroit to the British General Brock, with 40 regulars, 250 Canadian volunteers 700 Indians, and 5 guns!

Two months later the Americans failed in an attack on Queenstown, near Niagara Falls, when one of their Generals, with 900 men, surrendered, after a terrible slaughter, to a Canadian force, mainly militia and volunteers, not so numerous as the prisoners. The war went on with alternate successes and defeats by land and sea, the only great and signal defeat on the British side taking place when the veterans released from Spain had come to the rescue of the Colonists, and the British General was in command of the fleet.

What dimensions the war might have ultimately assumed, we may judge from the fact that the Canadians, after losing a whole fleet, had just launched a 100-gun man-of-war on Lake Ontario, when peace was made on the status quo ante bellum in 1815.—[Spectator.

Mount Vesuvius is again in a state of eruption.

The recent census returns have revealed a very satisfactory state of things in regard to Toronto industries. The amount invested purely in manufactures is the enormous sum of \$32,000,000. The number of people employed in the various factories is 26,400, and to these is paid in salaries \$9,400,000 annually. The value of the product of these industries is shown to be \$45,000,000 per year. The returns also show the reassuring fact that wages in Toronto are considerably higher than in the United States, the average here being \$355 a year, whilst over the border in the same line of industries the average is only \$309 per year.

COFFEE CAKE.—One cupful of sugar, one cupful of melted butter, one cupful of New Orleans molasses, one cupful of strong coffee, one egg, one teaspoonful of baking powder, one teaspoonful of ground cloves, one teaspoonful of ground cinnamon, one half pound each of raisins and currants. four cupfuls of sifted flour.

The Rich Man's Son.

The rich man's son inherits lands, And piles of brick and stones and gold, And he inherits soft white hands, And tender flesh that fears the cold. Like soft hands, and tender flesh, many diseases are inherited; especially tendencies to Asthma, Consumption, Bronchitis, and Stomach and Liver troubles; but there is a remedy, known as the "Golden Medical Discovery," which overcomes these diseases, and cuts off all tendencies toward a fatal result. Dr. Pierce of Buffalo, has put this remedy within the reach of all, so that even the poor as well as the rich, can obtain it. It is worth more to you than "piles of brick and stone and gold." Ask your druggist for it. It's guaranteed to benefit or cure in every case, or money paid for it will be refunded.

A good word is an easy obligation, but not to speak ill requires only our silence, which costs us nothing.

Let the World Know You are in It.

It seems almost a crime for a man to "hide his light under a bushel." If he has something new, that will benefit the human race, he should make it known. Old-fogy physicians tread the beaten path of their grandfathers, denounce advertised remedies, and never learn anything new. Medical science knows no parallel to Dr. Pierce's Favorite Prescription, compounded by a physician of skill and long experience, especially for the maladies which afflict women. It effects a permanent cure of those agonizing disorders which attack her frail organism, and is an anchor of hope alike to delicate girls and suffering women; contains no deleterious drugs. A guarantee on the bottle-wrapper, refunding the price in case of failure. Of druggists, \$1.00.

Dost thou love life. Then do not squander time, for that is the stuff life is made of.

The Secret of his Wealth.

A millionaire said "The secret of my wealth" is in the word, S-A-V-E; and the secret of my health is in the word, S-A-G-E. By this last he meant Dr. Sage, whose Catarrh Remedy cured him of one of the worst cases of Catarrh, and thereby saved him from much suffering and premature death, enabling him to make his millions, and enjoy life. The cures made by this medicine are simply wonderful.

The smart men of the world are those who put the shoulders of others to the wheel.

Baffles Human Conception.

Nature's all-powerful healer is discovered and when imbibed freely radiates the arterial network of the body, and rushes off all effete, deadly poisonous matter. Also it contains all the 16 elements of ripe molecular life, builds up every weak part, restores nerve and vital power, is the sunshine of life, the wonderful. So say all that use St. Leon Water.

Do good to all, that thou mayest keep thy friends and gain thine enemies.

Dr. Williams' Pink Pills contain in condensed form the elements for building up the blood and nerve system. When broken down from overwork, mental worry, abuse or excess, you will find them a never-failing cure. Sold by dealers, or sent on receipt of price—50 cents a box, 6 boxes, \$2.50—by addressing The Dr. Williams Med. Co., Brockville. Take no substitute.

He who waits to do a great deal of good at once, will never do any.

To make the breath pure and the stomach sweet as a nut chew Adams' Pepsin Tutti Frutti Gum. Sold by all Druggists and Confectioners. 5 cents.


They are never alone who are accompanied with noble thoughts.

GIBBONS' TOOTHACHE GUM.

For sale by Druggists, Price 15c.

A.P. 591.

Children always Enjoy It.



SCOTT'S EMULSION

of pure Cod Liver Oil with Hypophosphites of Lime and Soda is almost as palatable as milk. A MARVELLOUS FLESH PRODUCER. It is indeed, and the little lads and lassies who take cold easily, may be fortified against a cough that might prove serious, by taking Scott's Emulsion after their meals during the winter season. Beware of substitutions and imitations. SCOTT & BOWNE, Belleville.

MAGIC SCALE FOR DRESS FITTING. Taught by Miss Chubb, general agent for Ontario. 2561 Yonge St., Toronto, Ont.

AGENTS WANTED—For "Out of Darkness into Light, or the story of my Life," by Joseph F. Hess the converted Prize-Fighter and Saloon-Keeper. The story of his travels and the life he led are more thrilling than the page of fiction. Send for circulars and terms. WM. BRIGGS, Publisher, Toronto, Ont.

Wonderful Portrait of a King.

Many remarkable stories are told concerning the wonders of penmanship, such as the work of John J. Taylor, of Streator, Ill., who once wrote 6000 words on the blank side of a postal card; and the Austrian Jew who wrote the 400 letters on a grain of wheat; but in the estimation of the writer, Gustave Dahlberg, a Swedish university student, has eclipsed them all. This wizard of the pen has made a portrait of King Oscar, the whole in microscopic letters, forming short and long extracts from the Bible. The right eye of this wonderful portrait is made up of even verses from the Psalms of David; the left of verses from the Proverbs of Solomon, the Book of Chronicles, and the Song of Solomon, containing in all, 317 words and 1709 letters. The King's uniform is composed of the whole of the first fifty Psalms. The exact number of words and letters in the whole portrait is not stated, but judging from the fact that it took 1709 letters to make one eye, the whole number of letters in this triumph of the penman's art cannot fall much short of 50,000. In making the name of the King alone, Dahlberg, used all the Royal Greek prayer and the CXXVI and CXXVII Psalms. The portrait, which is said to look life-like and natural, is on tinted paper of the kind known as "Haynes' Standard," and is so small that a Canadian half-dollar laid upon it comparatively hides it from view. Taken all in all, it is accounted the most wonderful piece of penmanship ever executed.

Struck With Lightning

Neatly describes the position of a hard or soft corn when Putnam's Painless Corn Extractor is applied. It does its work so quickly and without pain that it seems magical in action. Try it. Recollect the name—Putnam's Painless Corn Extractor. Sold by all druggists and dealers everywhere.

A knotty problem—the highest possible speed for ocean vessels. A man full of spirits is not naturally given to sober reflection.

The London tailors have asked the County Council to fix the same rate for women's work as for men's.

Newfoundland purposes to hold an industrial exhibition at St. John's next October for the general display of industrial workmanship, the products of the Newfoundland fisheries, agricultural products, and specimens illustrative of mines, and for the study of natural history, in giving this exhibition, the Government takes the most advanced ground on protection, while the manufacturers and other producers from Canada, England, and the United States are invited to exhibit, and assured of an entry "free of duty for that purpose," the prizes and premiums to be awarded will go to local exhibitors only. The competition will be among the people of the island, but they invite foreigners to show their products as an object lesson to their own people.



SYRUP OF FIGS

ONE ENJOYS

Both the method and results when Syrup of Figs is taken; it is pleasant and refreshing to the taste, and acts gently yet promptly on the Kidneys, Liver and Bowels, cleanses the system effectually, dispels colds, headaches and fevers and cures habitual constipation. Syrup of Figs is the only remedy of its kind ever produced, pleasing to the taste and acceptable to the stomach, prompt in its action and truly beneficial in its effects, prepared only from the most healthy and agreeable substances, its many excellent qualities commend it to all and have made it the most popular remedy known.

Syrup of Figs is for sale in 75c bottles by all leading druggists. Any reliable druggist who may not have it on hand will procure it promptly for any one who wishes to try it. Manufactured only by the

CALIFORNIA FIG SYRUP CO.,
SAN FRANCISCO, CAL.
LOUISVILLE, KY. NEW YORK, N. Y.

TORONTO BISCUIT AND CONFECTIONERY CO make the best goods. Try them and see.

GARFIELD TEA cures Constipation, Sick Headache, restores the Complexion. Get Free Sample at GARFIELD TEA AGENCY, 317 Church St., Toron.

DR. TAFT'S ASTHMA CURE never fails; send your address, and we will mail free trial bottle. DR. TAFT'S ASTHMA CURE, FREE TEL. N.Y. Canadian Dept. 186 Adelaide St. W., TORONTO CANADA.

YES Consumption and all Lung Troubles are cured by **ARABIAN BALM** the Blood, gives new Life and Health. Wholesale by Evans & Co., (Limited) Montreal.

WANTED—By a Canadian House a Man with \$5,000 to buy an interest in their business, and go to England and take charge business controlled by them. P.O. Box 23, Toronto.

MANUFACTURE DRY PRESS & PLASTIC BRICK MACHINERY.

Ungrateful People.

You may rest upon this as an unflinching truth, that there neither is, nor ever was, any person remarkably ungrateful, who was not insufferably proud; nor any one proud who was not equally ungrateful. Ingratitude over looks all kindness, because pride makes it carry its head so high. Ingratitude is too base to return a kindness, and too proud to regard it—much like the tops of mountains; lofty, yet barren, which produce nothing, which yield nothing, which feed nobody, which clothe nobody, yet are high and stately and look down upon all the world about them. It was ingratitude that put the poniard into Brutus' hand, but it was want of compassion which thrust into Caesar's heart. Friendship consists properly in mutual offices and a generous strife in alternate acts of kindness to an ungrateful person sets his seal to a flint and sows his seed upon the sand; upon the former he makes no impression, and from the latter finds no production.

There is nothing at all incredible in the statement that the Russian Government is hoarding in granaries, for the use of the army, the grain recently bought ostensibly for the relief of the famine sufferers. It is well known that the greater part of the proceeds of the "famine loan" was devoted to the War and Marine Departments, and the Government has shown throughout a stolid indifference to the sufferings of its subjects, of which the action now alleged against it would hardly be an extreme instance. The famine and the persecution of the Jews have had one good result in enlightening mankind upon the nature of the Czar's Government. Any outbreak of Nihilism henceforth will be accepted, not as a criminal act, but as the only form of protest available against a cruel and stupid despotism.

DR. WILLIAMS' PINK PILLS FOR PALE PEOPLE

Are a BLOOD BUILDER and NERVE TONIC.

They supply in condensed form ALL the substances needed to enrich the Blood and to rebuild the Nerves, thus making them a certain and speedy cure for all diseases arising from impoverished blood, and shattered nerves, such as paralysis, spinal disease, rheumatism, sciatica, loss of memory, erysipelas, palpitation of the heart, scrofula, chlorosis or green sickness, that tired feeling that affects so many, etc. They have a specific action on the sexual system of both men and women, restoring lost vigor.

WEAK MEN (young and old), suffering from mental worry, overwork, insomnia, excesses, or self-abuse, should take these PILLS. They will restore lost energies, both physical and mental.

SUFFERING WOMEN afflicted with the weaknesses peculiar to their sex, such as suppression of the periods, bearing down pains, weak back, ulcerations, etc., will find these pills an unflinching cure.

PALE AND SALLOW GIRLS should take these Pills. They enrich the blood, restore health to the system, and correct all irregularities.

Beware of Imitations. These Pills are sold by all dealers only in boxes bearing our trade mark or will be sent by mail, post paid, on receipt of price—50 cents a box or 6 for \$2.50. THE DR. WILLIAMS MED. CO., Brockville, Ont., or Morristown, N.Y.

WATSON'S COUGH DROPS.

Are the best in the world for the Throat and Chest, for the voice unequalled.

R. & T. W. Stamped on each drop.

MONEY! MONEY! ME!

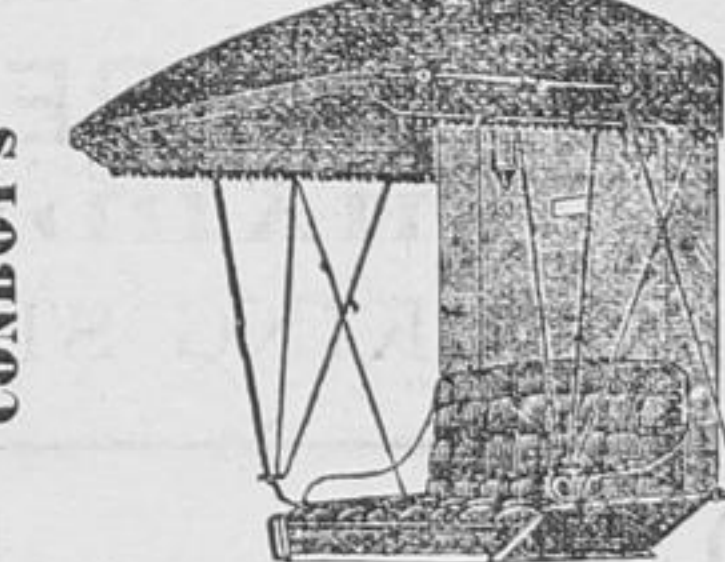
LONDON AND CANADIAN LOAN AND AGENCY CO LTD

103 Bay Street, Toronto.

Capital.....\$5,000,000.

Money to Loan on improved farms, city and town property on liberal terms of repayment and at lowest current rates. MUNICIPAL DEBENTURES PURCHASED. Apply to local appraisers or to J. F. KIRK, Manager. Choice farms for sale in Ont. & Manitoba.

CONBOYS IMPROVED CARRIAGE TOPS



are the best in the market and have patented improvements not found in any other make, order one from your Carriage maker. Take no other kind.

SOLID COMFORT IS IN A CUP OF Johnston's Fluid Beef, PALATABLE, - STRENGTHENING, - GRATEFUL, SATISFYING.

OAT MEAL SKIN SOAP



Containing a large percentage of the flour of Oatmeal. It makes and keeps Lady's hands soft and smooth. It cures eczema and all diseases of the skin.

Be Sure You Get the Genuine. THE ALBERT TOILET SOAP COMPANY.

THE T. EATON CO. (LIMITED.)

TORONTO, FEBRUARY.

Merchandise of every class that goes well together, for all sorts of people, of every use and taste.

That's a short and easy way to tell of the merchandise of such a store as this.

It differs from the ordinary store in that it is big enough to deal in most everything that people need; it can buy of the maker, use experts in every sort of goods, provide the means of doing everything quickly, easily, cheaply, well—in a word—it has what the people want, and sells as they want to buy.

Such a store—chosen by people from all over the country, because it serves them well, means more than you think.

It means getting the best the world over for the money, picking out the best without knowing all, drawing the fashion from the stuffs even when the fashion-prophet misleads; having a choice for the women who change with every little breath of what's called "style," and suiting every customer, whoever they may be, and whatever their wants.

That's only a hundredth part of the merchandise of such a store!

Writing for samples is simple enough and we're always glad to send them, but sometimes some people don't think. If you want a carpet, a new bonnet or a tooth brush we expect you to buy in person. Lots of merchandise can't be sampled. You can tell us just what it is you do want and the chances are you'd get it right. That's next best thing to not coming at all.

THE T. EATON CO., (LIMITED)

YONGE ST. QUEEN ST.
250, 192, 194, 196, 198, 200. 10 and 12 - - TORONTO

All under One Roof.

HARTSHORN'S SELF-ACTING SHADE-ROLLERS

Beware of Imitations.

NOTICE AUTOGRAF OF STEWART HARTSHORN AND THE GENUINE HARTSHORN

PERFECT DIGESTION INSURED.

ADAMS' PEPSIN TUTTI-FRUTTI.

Office of Dr. E. Guernsey, 528 Fifth Ave. New York, October 22, 1891.

Physiology teaches that a certain amount of saliva secreted by the salivary glands of the mouth, and mixing with the food before or after it passes into the stomach, is essential to digestion. The chewing of your Tutti-Frutti Gum, before or after a meal, especially when combined with the valuable digestive "Adams' Pepsin," not only increases the flow of saliva but adds so materially to its strength as to insure a perfect digestion at the same time correcting any odor of the breath which may be present.

ROBERT GUERNSEY, M.D.

Sold by all Druggists and Confectioners in 5c. Packages, or for boxes of assorted samples which will be sent by mail, postage paid to any address on receipt of 25 cents.

Address THE TUTTI-FRUTTI, A. V. CO., 60 Yonge St., Toronto, Ont.