

HARNESSING THE WIND

AN ELECTRIC FARM OPERATED BY A WINDMILL.

How One Farmer Has Solved the Problem of Motive Power For His Machinery.

Over in the hills of Wisconsin there is a farm equipped with numerous electrical devices, all of which are operated by power from a windmill. The location of the farm, on one of the highest hills in the State, is unusually favorable for wind power. By this means the owner, Mr. J. F. Forrest, has been able to equip his farm with every conceivable apparatus for the business of the farm and for the convenience and pleasure of the family.

In the home they have a suction vacuum carpet-cleaner, an electric toaster, flat-iron, warming-apparatus, electric fans, various kinds of lamps, churn, washing-machine, and many other conveniences.

Excavating For a Silo. When the writer made his first visit to the farm last September he found them busy preparing to put up a silo to hold their big crop of corn. As the location is a natural gravel hill, in order to save going up so high, they had dug down perhaps twelve or fifteen feet. A carrier, such as is used for moving manure from stables, was let down into this pit, and nearly half a wagonload of stones and gravel was shoveled into it. When the visitor saw the rope hitched to such a heavy load he said, "Why, Mr. Forrest, you do not expect that storage battery to handle all of those awful big stones, do you?"

"I think it will handle it; we will see." He "pressed the button," and up mounted the cargo of sand, gravel and stones, and off it shot to a wagon on a little distance away, dumped itself, and then came back to the starting place, all the work of the sixteen-foot windmill.

There are machines galore all over his buildings, ready to start up in an instant at any time, day or night. There is quite a nice engine-lathe, feed-grinders, corn-sheller, grain-elevator, emery wheel, sheep-shearing machine, a buzz-saw to cut firewood which will cut off logs, I think, six or eight inches through, even of hard oak. In fact, there is a machine for every farm purpose, all ready to be called up for instant use all around the various buildings, and even outdoors. Not the least desirable of all the conveniences on this wonderful farm is the beautiful electric automobile which Mrs. Forrest operates very skillfully.

Storage Batteries Necessary. Now a word about the windmill power and storage batteries. The objection has always been to wind-power, as everyone knows, that it is very irregular; but when you once get this irregular force bottled up in a storage battery, then you have the most efficient and steady power in the world. In my boyhood days I had visions of having a windmill pump water into a great elevated tank, and then use the water to run little water motors with power; but such a tank (aside from the expense) would never do for running automobiles, because it could not be carried around. The storage battery can carry itself and have power enough to run a carful of passengers fifty or even a hundred miles or more. I asked Mr. Forrest how much work could be done without the storage battery. He said he could run his wife's flat-iron, and it would do fairly well for grinding grain, with a mill so arranged that it would not choke up when the wind slackened, etc.

Mr. Forrest's arrangement is something like this: When he is charging a storage battery, for instance, when the mill comes to a certain speed it makes electric contact so as to send a charge into the batteries. If the wind slackens again so that the charge in the battery might run backward, this connection, or switch, as it is called, cuts off the current automatically. If in a gale the mill should go too fast the current is interrupted in a like manner, and the momentum of the windmill swings it out of the wind.

How the Apparatus Works. Let us put it this way for illustration: When the mill gets up to the proper speed the current passes through the batteries, or by the batteries, and does the work. When the speed or power gets to be more than is needed for the work it is doing, the surplus piles up, as it were, in the storage battery. In a like manner, when the wind goes down so there is not speed enough to do the work, the battery turns in and assists the windmill.

The great drawback to this whole business of harnessing the wind is the expense of the storage batteries. Mr. Forrest has three of them. He has become so familiar with them that he remodels them, and I think has built a few himself. His experience is that a battery lasts longer, and keeps in better repair, where it is used almost every day, than where it is permitted to stand a long time idle.

My visit to this wonderful electric farm has convinced me that the time is rapidly approaching when the work now done by wood, coal and gasoline, will be accomplished by the simple expedient of harnessing the wind.

RHEUMATISM A MYSTERY

This Trouble is Rooted in the Blood and Can Only be Cured by Enriching the Blood.

Some diseases give immunity from another attack, but rheumatism works just the other way. Every attack of rheumatism invites another; worse than that, it reduces the body's power so that each attack is worse than the one before.

If any disease needs curing early it is rheumatism, but there is scarcely any disease that physicians find more difficult to treat successfully. When a medicine does cure rheumatism therefore it is worthy of special notice. Medical authorities agree that the blood becomes thin with alarming rapidity as rheumatism develops. Maintaining the quality of the blood is therefore a reasonable way of preventing and combating rheumatism. That it works out in fact is shown by the beneficial effects which follow the treatment of rheumatism, acute, muscular and articular, with that great blood tonic, Dr. Williams' Pink Pills.

That thousands of people who have taken Dr. Williams' Pink Pills for their rheumatism have been cured is a fact beyond dispute. That rheumatism does not return as long as the blood is kept rich and red is equally true. If therefore you are suffering from rheumatism in any form you should lose no time in giving Dr. Williams' Pink Pills a fair trial. Mr. A. E. Hinton, Western Ave., Toronto, says: "Up to about a year ago, my wife had suffered for nearly three years from rheumatism, from which she suffered greatly. She had been under the care of several doctors, besides spending dollars on advertised cures, but did not get any relief. One day talking to a fellow clerk, she said her sister had been cured of this trouble by Dr. Williams' Pink Pills. Although not feeling very hopeful I took two boxes home that evening and urged my wife to try them. By the time they were used they had done her so much good that she required no pressing to continue the treatment, and after taking six or seven boxes she was completely cured. As I have said this was about a year ago, and she has had no return of the trouble since. I feel very grateful for the immense good Dr. Williams' Pink Pills have done my wife, and I hope other sufferers will benefit by her experience."

You can get these pills through any dealer in medicine, or by mail at 50 cents a box or six boxes for \$2.50 from The Dr. Williams' Medicine Co., Brockville, Ont.

THE FIRST BRITISH BARRAGE.

The Effect of a Concentrated Effort on the Part of the Artillery.

The Boche batteries were celebrating the new year—in fact they were a little previous, because it was but noon of December 31, and the year was 1915—at Ypres.

Ever since daylight the Canadians had been having a beastly time of it. The Boche five-point-nines had been coming over with unceasing regularity and the British artillery was replying with a feeble fire. They claimed shortage of ammunition and in reply to the repeated calls from the infantry for shells they would sing out—"You 'ad your allowance."

The Canadians got pretty mad at this continued shelling, and a friend asked a runner whether they couldn't do something to distract the Boches' fire.

"That's all right," was the answer; "this is Fritz's last day. Wait till to-night!"

He waited—this friend. Exactly at the stroke of midnight pandemonium broke loose. It sounded as though all the express trains in the world were running overhead, and well it should. Thirty 12-inch howitzers had been rolled into position during the day and were at that moment flinging half-ton projectiles onto the German batteries.

The British bombardment went on for twenty-four hours; and for three weeks afterward there was not a solitary heavy German shell fired on that sector. Which all goes to show another form of tactics—the holding back of shells for a concentrated effort.

Soap for Wounds. Common yellow soap, the kind used by housewives in washing clothes and dishes, has been found to be a wonderful cure for wounds in French hospitals, and its use has spread to the British medical stations. A solution is made from a cake and injected into soldiers' wounds, even in the latest instances into the deepest bullet holes, where it has proved itself to be a superior antiseptic to hydrogen peroxide and most other germ killers and in addition a strangely effective healer of torn tissues.

Wounds treated with soap need few or dressings and lessen pain far more than do wounds treated with other antiseptics. These facts greatly expedite the work of the surgeons, who can handle more men than when using other solutions.

Not a minute should be lost right now in looking up your seed supply for 1918 planting.

Gunns Shur-Gain Fertilizer

Practical Designs



For the youngster who is just beginning to walk, as well as for his brother a few years older, this design is particularly good. McCall Pattern No. 7738, Child's Bloomer Dress. In 3 sizes, 2 to 6 years. Price, 15 cents.



A splendid idea is this for an over-dress, to be worn over a waist. The three-piece skirt is in round or instep length. McCall Pattern No. 7617, Ladies' Overdress. In 5 sizes, 34 to 42 bust. Price, 20 cents.

These patterns may be obtained from your local McCall dealer, or from the McCall Co., 70 Bond St., Toronto, Dept. W.

WINTER WEATHER HARD ON LITTLE ONES

Our Canadian winters are extremely hard on the health of little ones. The weather is often so severe that the mother cannot take the little one out for an airing. The consequence is that the baby is confined to overheated, badly ventilated rooms; takes colds and becomes cross and peevish. Baby's Own Tablets should be given to keep the little one healthy. They regulate the stomach and bowels and prevent or cure colds. The Tablets are sold by medicine dealers or by mail at 25 cents a box from The Dr. Williams' Medicine Co., Brockville, Ont.

REPORTING THE SERMON.

Opinion of a Highland Hostess Regarding Her Lodge's Shortland.

A kilted regiment, while on the march in a part of Scotland, halted for a Sunday of rest at a remote village in the Highlands, and some of the brave laddies were billeted on the inhabitants.

One old lady had to find lodging for two of the soldiers, Sandy and Tam, and she was delighted to know they were going to the kirk in the evening. She herself was unable to go, and her pleasure increased when one of her guests, who happened to be an accomplished writer of shorthand, promised to tell her everything that the minister said in his sermon—although she had her doubts as to how he would be able to remember it all.

The two "kilties" came back from church, and Sandy read the sermon from his notebook, to the admiration and astonishment of his landlady, who had never heard of shorthand, and could not understand how anyone could write as fast as the minister spoke.

When Sandy had finished and the good lady had expressed her thanks for the privilege of hearing the sermon, she asked him to let her look at the book he had been reading from. She seemed much disappointed, however, because she could make nothing of it.

At last, after a close inspection of the mystic signs, she said to the blushing warrior:

"You're a grand laddie and a verra gude reader, but I must tell ye, and if I was your ain mither I wad hae to admit it, ye're the verra wurst writer I ever came across."

Peanut and Cottage Cheese Loaf.—Three-quarters cup kidney beans, one cup cottage cheese, half cup ground peanuts, one tablespoon chopped onion, one cup bread crumbs, two tablespoons drippings or savory fat, one cup cooked tomato, one cup cooked rice, salt, pepper. Bake the loaf in a moderate oven twenty-five minutes and serve with pimento or green pepper sauce.

THE MESSINES GRAND STAND.

How a Canadian Engineer Officer Watched the Big Fight.

The featured participant of this story was a Canadian engineer officer. The tale can never be proved true because the C.E.O. has since "gone over"—never to return.

He was stationed in front of Messines Ridge. His work as an engineer attached to the British Army had carried him to this position and he could go no further. As his work was completed he was just waiting round—for something to happen. A British artillery officer happened along.

"Now that everything's finished, when is it coming off?" he asked the gun officer.

"We're going to touch 'er off to-night, perhaps," he replied with a twinkle in his eye.

"By jove, that's bully. Say," he added, "where can I find a good seat to get in on it?"

The artillery officer pointed to the crest of a hill which at that time was being methodically shelled by the Boche guns.

"That's a jolly good view—but it's too near the orchestra," he laughed.

"Oh, that'll be all right," was the reply. "The Boches will be too busy to attend to the hill."

About eight o'clock, when the British guns opened for a preliminary bombardment, the Hun batteries stopped and the engineer took himself up on the hill. He looked about him until weary, then lay down in a shell hole to sleep. Early in the morning the big guns stopped firing suddenly. He awoke. Half asleep he tried to discern what was happening. He climbed out of his shell hole and stood looking at the ridge.

Suddenly there went up, one after the other, a number of enormous sheets of earth, smoke and flames, which rose slowly until each formed a huge mushroom. Apparently they were a mile high to him.

Then he was knocked head over heels by the shock of the explosion. He was stunned for the moment, but soon realized his position and roused himself. To him it sounded as though every British gun on the British front was firing as fast as it could.

Exactly one hour and a half afterward he was on the ridge, following the infantry and carrying on his work. He afterward learned that so well had the aerial photographers detected the German batteries that eighty per cent of them were put out of action ten minutes after the explosion occurred on the ridge.

CARE OF INSANE SOLDIERS.

Mental Cases to be Maintained by Dominion Government.

Provincial institutions will be entrusted with the care of the members of the C.E.F. returned to Canada suffering from insanity, but the Dominion Government will pay for their maintenance. This decision was reached in the conference of the Military Hospitals Commission, the Board of Pension Commissioners and the representatives of the provincial governments held in the M.H.C. headquarters Tuesday.

Heretofore the Military Hospitals Commission and the Board of Pension Commissioners have paid a flat rate in hospitals for the insane for the 350 men suffering in varying degrees from mental ailments. By the new arrangement they will pay provincial institutions for their maintenance and in addition Sir James Loughheed on behalf of the government agreed to pay an extra allowance per capita, which sum will be directed to the equipment and maintenance of the buildings.

Over 50 per cent of those now receiving treatment in institutions had been suffering from mental diseases before they enlisted and eventually would have become public charges in the ordinary course of events.

Murine's Granulated Eyelids. Sore Eyes, Eyes Inflamed by Sun, Dust and Wind quickly relieved by Murine. Try it in your Eyes and in Baby's Eyes.

Murine Eye Remedy. No Stinging, Just Eye Comfort. See how to use Murine. Ask Murine Eye Remedy Co., Chicago.

The Limit. The following amusing story concerning Madam Sarah Grand, the well-known novelist, was told to me recently by a personal friend of hers.

It appears that the gifted author of "The Heavenly Twins" is very astounded. One day her friend, calling on her unexpectedly, found her with a big awkward volume on her knee, heated, excited, and evidently very much put out.

"Is anything the matter?" asked the caller.

"Oh, yes," she answered, desperately. "I've lost my pen, and I want to write to catch the post."

"Why, where are you looking for it?"

She glanced at the questioner and then at the book.

"I believe," she faltered, "I was looking for it among the p's in the dictionary."

The morning breakfast food is varied in this menu by frying the cold leftover mush and serving it with syrup. The milk, usually served with the cereal and most essential to health, must be introduced in another form. By serving cocoa for supper this is accomplished satisfactorily.

Minard's Liniment Cures Diphtheria.

Are Very Popular in Prince Edward Island

Mr. M. Arseneault Tells What Dodd's Kidney Pills Did For Him.

They Gave Him Quick Relief From Headache and Backache—He Recommends them to All Sufferers.

Cape Egmont, P.E.I., Jan. 28th.—(Special).—Dodd's Kidney Pills have numerous friends in this tight little island, and among the most enthusiastic of them is Mr. Mathurin Arseneault, of this place.

"I recommend Dodd's Kidney Pills to all who suffer," Mr. Arseneault says. "I had been troubled with headache and backache about two years till I read in Dodd's Almanac how many sufferers had benefited by using Dodd's Kidney Pills."

"I decided to send for two boxes. Before I had finished taking them I was feeling as well as ever."

"It gives me great pleasure to say a few words for Dodd's Kidney Pills. All over the island you find people who tell of benefits received from Dodd's Kidney Pills. They are recognized as the standard remedy for kidney ills. Acting directly on the kidneys, they refresh and invigorate those organs. The result is that they do their full work of straining all the impurities, all the seeds of disease, out of the blood. That is why Dodd's Kidney Pills are recognized as a tonic."

Ten Thousand Substitutes. Ten thousand substitute food articles have been introduced into Germany since the war, according to a statement made in the Berlin newspapers by Professor Juckenaek, a prominent German food expert. He mentions as the most striking examples of successful substitution the following: Artificial butter, eggs, salad oil, honey, milk, coffee, tea, sugar, tobacco, fish, sausage, cheese and caviar. Some of the substitutes are directly harmful but others are so good that they will outlive the war and become regular articles of consumption, he asserts.

The publisher of the best Farmer's paper in the Maritime Provinces in writing to us states:

"I would say that I do not know of a medicine that has stood the test of time like MINARD'S LINIMENT. It has been an unfailing remedy in our household ever since I can remember, and has outlived dozens of would-be competitors and imitators."

Less Sugar for Candy. Preliminary steps have been taken to curtail the use of cane sugar in the manufacture of candies. Manufacturers have been informed of the necessity for saving such sugar and are now endeavoring to adjust their business to the requirements of the situation.

The money spent for candy in the United States and Canada in the past year is double the amount of money needed to keep Belgium supplied with food for a year.

Minard's Liniment Cures Colds, Etc. Island is a "Warship."

The island of Ascension, in the Atlantic, is the property of the British Admiralty, and is borne on the Navy List as a vessel, being classed as a tender to one of His Majesty's ships of war. The island is governed by a naval captain, and the men stationed there (chiefly Royal Marines) are subject to the same rules as they would be on board ship. There is no private property in land, so there are no rents, rates, or taxes. The flocks and herds are public property, and the meat is issued in rations; so are the vegetables grown on the farm.

New York state has passed a law requiring counties with a population of 35,000 or over to erect and maintain tuberculosis hospitals.

LEMONS MAKE SKIN WHITE, SOFT, CLEAR. Make this beauty lotion for a few cents and see for yourself.

What girl or woman hasn't heard of lemon juice to remove complexion blemishes; to whiten the skin and to bring out the roses, the freshness and the hidden beauty? But lemon juice alone is acid, therefore irritating, and should be mixed with orchard white this way. Strain through a fine cloth the juice of two fresh lemons into a bottle containing about three ounces of orchard white, then shake well and you have a whole quart pint of skin and complexion lotion at about the cost one usually pays for a small jar of ordinary cold cream. Be sure to strain the lemon juice so no pulp gets into the bottle, then this lotion will remain pure and fresh for months. When applied daily to the face, neck, arms and hands it should help to bleach, clear, smoothen and beautify the skin.

Any druggist will supply three ounces of orchard white at very little cost and the grocer has the lemons.

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CANADIAN TIMBER GROWTH.

In France Yields of 30,000 to 45,000 Board Feet Per Acre Are Common.

Lt.-Col. J. B. White, woods manager of the Riordan Pulp and Paper Company, Montreal, and for the past two years in charge of forestry work in England and France, stated recently that if yields of 30,000 to 45,000 board feet per acre were frequent in France, as his own investigations had shown, there seemed no reason why Canadians should tolerate the relatively small productivity of timberlands in Eastern Canada where soil and climatic conditions were not dissimilar to those of France. One plot, measured by Col. White, contained 100,000 board feet within an acre. Such a showing did not tend to increase our satisfaction with Canadian lands producing only two to three thousand board feet per acre.

MONEY ORDERS. Buy your out of town supplies with Dominion Express Money Orders. Five dollars costs three cents.

It matters not what money crops you grow, give your soil a change. Introduce legume crops frequently and constantly. They will keep nitrogen and humus in the soil, keep the soil mellow and friable and open the subsoil to other roots.

Minard's Liniment Cures Garget in Cows

When you put a porridge saucapen to soak always fill it with water.

The prevalent guess is that next year is not going to be as good as the average for crops. All the more reason to do your best work.

ANY CORN LIFTS OUT, DOESN'T HURT A BIT! No foolishness! Lift your corns and calluses off with fingers—It's like magic!

Sore corns, hard corns, soft corns or any kind of a corn, can harmlessly be lifted right out with the fingers if you apply upon the corn a few drops of freezone, says a Cincinnati authority.

For little cost one can get a small bottle of freezone at any drug store, which will positively rid one's feet of every corn or callus without pain.

This simple drug dries the moment it is applied and does not even irritate the surrounding skin while applying it or afterwards.

This announcement will interest many of our readers. If your druggist hasn't any freezone tell him to surely get a small bottle for you from his wholesale drug house.

The Soul of a Piano is the Action. Insist on the "OTTO HIGEL" PIANO ACTION

The Cause of Heart Trouble

Faulty digestion causes the generation of gases in the stomach which inflate and press down on the heart and interfere with its regular action, causing faintness and pain. 15 to 30 drops of Mother Seigel's Curative Syrup after meals sets digestion right, which allows the heart to beat full and regular.

Rheumatic Aches

Drive them out with Sloan's Liniment, the quick-acting, soothing liniment that penetrates without rubbing and relieves the pain. So much cleaner than musky plasters or ointments; it does not stain the skin or clog the pores. Always have a bottle in the house for the aches and pains of rheumatism, gout, lumbago, strains, sprains, stiff joints and all muscle soreness.

Sloan's Liniment

Machinery For Sale

1 WHEELLOCK ENGINE, 18x42. New Automatic Valve Type. Complete with supply and exhaust piping, flywheel, etc. Will accept \$1,200 cash for immediate sale.

1 ELECTRIC GENERATOR, 30 K.W., 110-120 Volts D.C. Will accept \$425 cash for immediate sale.

PULLEYS, Large size. 28x66—\$30; 12x60—\$20; 12 1/2x48—\$12; 12x36—\$8.

1 BLOWER OR FAN, Buffalo Make. 14 inch discharge—\$30.

REAL ESTATES CORPORATION, LTD. 60 Front St. West, Toronto

NO ALUM



It is many years since there was on hand in Ontario so generous a winter supply of both grains and general roughage, with the exception of corn, which is lower than usual in bin and silo, says a bulletin of the Department of Agriculture.

Minard's Liniment Cures Rheumatism.

In cold weather clothes pins are apt to freeze to the clothes and cause a tear when removed. This can be avoided by first soaking the pins in salt and water.

MISCELLANEOUS

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

WELL EQUIPPED NEWSPAPER and job printing plant in Eastern Ontario. Insurance carried \$1,500. Will go for \$1,200 on quick sale. Box 69, Wilkes Publishing Co., Ltd., Toronto.

Doctors Recommend Don-Opto for the Eyes

Physicians and eye specialists prescribe Don-Opto as a safe home remedy in the treatment of eye troubles and to strengthen eyesight. Sold under money refund guaranty by all druggists.

Babies With Itching, Burning Skins Sleep

And tired mothers rest after giving baby a hot bath with Cuticura Soap followed by a gentle application of Cuticura Ointment. Peace falls on distracted households when Cuticura enters. Trial free.

For free sample each address post-card: "Cuticura, Dept. N, Boston, U.S.A." Sold by druggists throughout the world.

THOSE AWFUL CRAMPS

Suggestions that may save Much Suffering

Marysville, Pa.—"For twelve years I suffered with terrible cramps. I would have to stay in bed several days every month. I tried all kinds of remedies and was treated by doctors, but my trouble continued until one day I read about Lydia E. Pinkham's Vegetable Compound and what it had done for others. I tried it and now I am never troubled with cramps and feel like a different woman. I cannot praise Lydia E. Pinkham's Vegetable Compound too highly and I am recommending it to my friends who suffer as I did."

—Mrs. GEORGE R. NAYLOR, Box 72, Marysville, Pa.

Young women who are troubled with painful or irregular periods, backache, headache, dragging-down sensations, fainting spells or indigestion should take Lydia E. Pinkham's Vegetable Compound. Thousands have been restored to health by this root and herb remedy.

Write for free and helpful advice to Lydia E. Pinkham Medicine Co. (confidential), Lynn, Mass. Only women open and read such letters.