FOR FARMERS, STOCK BREEDERS AND GARDENERS

FUR FARMING and ITS ACTIVITIES

The Future of Fur Farming Depends Largely Upon Those Engaged in it—Producing Scrubs And Culls Will Not Bring Success —Follow the Advice and Judgment of Those Fox Men of Experience —Qualifications of a Good Fox Dog—Catching Animals a Natural Tendency—Caution Against Introduction of Disease. Question And Answer.

THE FUTURE OF FUR FARMING

It is always dangerous to assume the role of a prophet for things rarely work out as one thinks they will with the result that the man who attempts to dip into the future seldom enhances his reputation. However, a man writing on the fox industry has to take chances even with his reputation so a few guesses, more or less, may not do any special harm.

In order to foretell the future one must be familiar with the past and the present. If one wishes to make a sane prophecy he must take under review the past with its series of seemingly unrelated events, with the hope of discovering the trend of things. Everyone knows that fur farming is an industry with a very brief history. It only seems like the other day when a fox farm was a curiosity; now there are fur farms — hundreds of them — in every Province of Canada, in many state of the American Republic, as well as in many other parts of the world. There are tens of thousands ranch-raised silver foxes in the world today.

Fox Farms were started to meet a human need. Silver Fox furs were in great demand; the supply was decreasing. The problem was to increase the supply, but how? The first pair of silver foxes, produced in captivity, was the answer.

From time immemorial furs have been worn by humans, originally for warmth and comfort; later for warmth and comfort, plus style. Undoubtedly silver fox furs are a luxury; one has to face the facts. A lady would live just as long if she never owned a silver fox stole, possibly she might not be so contented and happy, but nevertheless ladies could—thousands are obliged to—worry along without having a silver fox fur of any kind or description. This is merely emphasizing the fact that silver foxes are not staples like cattle, sheep or pigs but occupy a unique position.

To the writer it has been nothing short of remarkable that silver fox furs should have stood up so well during the years. Remember during the war what good prices were realized for silver foxes. Remember when the big coal miners strike took place in the British Isles, how the auction sale of silver foxes had to be postponed? I can recollect the bitter disappointment of fur farmers when word was received of the announcement of the postponement of the auction sale. However, they worried unnecessarily, for a month later when the sale of silver foxes took place in London, most satisfactory prices were realized and all fox farmers breathed easily again.

In contrast to the way in which the silver fox industry has reacted to adverse conditions, I need only point to the fluctuations, the ups and downs, of such staple articles as hay, potatoes, beef and lumber. The potato farmer realizes good prices one season and possibly the next year he can hardly give them away.

Without the facts of history before him one would at once conclude that when hard times come, luxuries would be the first to be hit, while staple articles would stand up under the strain. As a matter of fact the reverse very often is true and it is remarkable that it is true.

Unfortunately, the fox industry has at different times received a bad check. Sometimes the men engaged in an industry are so close to it that they can't see straight. When a crash comes they are so overwhelmed with the financial catastrophe that they fail to see any light in the black skies. I know some people who are not farmers that get "the blues" and sometimes they have very serious attacks of them indeed. The encouraging thing is that "blues" are seldom fatal and recovery very often comes swiftly. It is not to be wondered at that many of those engaged in fur-farming are at present feeling the pinch. It is reassuring, however, to realize that silver foxes were not the only furs to be affected. As a matter of fact the staple furs seemed to suffer more from the shock than did silver foxes.

"The future of fur-farming depends upon those who are engaged in it.

Whether you who have a pair or a few pairs of foxes near your barn make a success of this part of your business, depends upon you. Even if fox furs sell for a much lower figure than today's prices there will still be money in fox farming for you provided you are able to produce animals of high quality in reasonable numbers. If you can't produce anything but scrubs and culls then there is no future in fur-farming for you; better quit while the quitting is good or get down and under your job in real earnest. Don't fool yourself into believing that your foxes are first class and that those belonging to your neighbours are poor. Find out the facts. If you don't know foxes yourself consult someone upon whose judgment you can implicity depend. Only a comparatively small number of the foxes in the world are really worth ranching, especially in view of the insistent demand for animals of high quality. Be wise and build up your herd. Improve your animals with a view to producing a large percentage of well furred, medium silvers, with first class brushes and large clear white tips—foxes good at both ends. Don't believe the man who says that white tips don't count; he's fooling you. If you follow religiously the advice that I have given, you can look forward to the future with complete confidence and assurance that fur farming will prove profitable to you.

I have been writing altogether about fox farming, but undoubtedly money can be made in other lines. I have the feeling, however, that silver fox farming will for many years to come stand pre-eminent.

In conclusion I wish to sound a note of encouragement and of warning.

Fur farming is undoubtedly here to stay. It will have its ups and downs, all industries have. It is not a get-rich-quick scheme but a legitimate undertaking, which requires a man's best thought, energy and attention; a job to be proud of. Time is required to learn the business and a man who gets a swelled head in fox ranching is due for a fall. Silver fox farming will always be profitable for the man, who can raise particularly high grade animals free of parasites, and who conducts his business wisely and economically. To those who are discouraged, I bring this message of hope and cheer for the future. Silver fox farming is not all silver and gold, but has in it wonderful possibilities, which may be realized by you if you are willing to face the facts; if you are made of the right stuff; if you try to learn from others; if you will use your head; if you will strive and hold cheap the strain—the effort required to attain an objective.

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Canadian Field Seed Imports

Of the field seed imported into Canada for the year ending June 30, 1934, according to the market service report of the Dominion Seed Branch, the United States supplied 3,517,869 pounds of field corn; 3,450,879 lbs. of timothy; 1,570 lbs. of alfalfa; 302 lbs. alsike; 150,913 lbs. blue grass; 3,041 lbs. field beans; 122 lbs. flax; 445,111 lbs. millet; 168,268 sorghums; 190 lbs. soya beans; 313 buckwheat; 10,308 1-2 lbs barley; 62,211 lbs. oats; 940 lbs. speltz and emmer; 2,440 lbs wheat; 1,702 lbs. bent grasses; 312 lbs. clover; 4,897 lbs. fescue Chewing's; 6,997 lbs. other fescues; 5,717 lbs. orchard grass; 5,593 lbs. red clover; 122,508 lbs. red top; 6,000 lbs. Italian rye 508 grass; 5,380 white clover; 124 lbs grass mixtures; 9,006 lbs. other grasses; 6,420 lbs. mangels; 26,167 lbs. rape; 30 lbs. field peas; 1,083 lbs. field rutabagas; 3,993 lbs sugar beets; 67, 868 lbs sunflower; 3,429 lbs. field turnips; 72,996 lbs Sudan grass; and 6,130 lbs. vetches.

During the same period Great Britain supplied Canada with 2,000 lbs. of barley; 4,440 lbs. oats; 18,216 lbs. speltz and emmer; 60 lbs. wheat, 200 lbs. timothy; 1,140 lbs. bent grasses; 111 lbs. brome grass; 100 lbs. clover; 224 lbs. fescue Chewing's 6,032 lbs. other fescues; 12,4000 lbs. orchard grass; 80 lbs. red clover; 112 lbs. red top; 18,360 sudan grass (English perennial); 25 lbs. Italian rye grass; 2,200 lbs. sudan grass; 26,310 lbs. white clover; 249 lbs. grass mixtures; 8,640 lbs. other grasses; 281,633 lbs. mangels; 13,147 lbs. rape; 300 lbs field peas; 111,768 lbs. rutabagas; 2,470 lbs. sugar beet; and 38,871 lbs. field turnips.

Field seeds from New Zealand were 3,041 lbs. bent grasses; 101,572 lbs. fescue Chewing's; 32,036 lbs. rye grass (English or perennial); 1,120 lbs. Italian rye grass; 500 lbs. grass mixtuers; 7,106 lbs. other grasses; Holland supplied 400 lbs. creeping bent grass; 1,200 lbs. fescues; 200 lbs orchard grass; 400 lbs. rye grass (English or perennial); 200 lbs other grasses; 14,475 lbs mangels; 350 lbs rape; 10,796 lbs. field rutabagas; 2,475 lbs. sugar beets; 11,054 lbs. sunflower; 8,175 lbs. field turnips; and 2,240 lbs. speltz and emmer. Danish exports of field seeds were 224 lbs. fescues; 6,976 lbs orchard grass; 360 lbs rye grass (English or perennial); 3,360 lbs. white clover; 5,608 lbs. other grasses; 661 lbs. mangels; 1,061 lbs field turnips; and 4,400 lbs vetches. France supplied 700 lbs grasses; 817 lbs. mangels; 25 lbs. field rutabagas; 2,260 lbs. sugar beets and 13 lbs. field turnips. Germany sent 200 lbs. fescues; 24,200 lbs. white field clover; 800 lbs. other grasses; 609,572 lbs sugar beets; and 150 lbs. field turnips. Poland contributed 16 lbs. vetches and 1 pound of red clover, while Japan sent 45 lbs. of rape, and Hungary 3,300 lbs. of white clover. All the foregoing amounts do not include the garden seeds imported into Canada.

Egg Laying Contest

Report of the Prince Edward Island egg laying contest for the week ending August 7, 1934.

Std.	Owner's Name	Pts.
1	William Sansom	2072.7
2	Mrs. J. F Easton	1934.6
3	Exp. Station Ch'town	1929.3
4	Mrs. J. D. McFarlane	1926.6
5	Mrs. Roland Easter	1914 6
6	Exp. Station Ch'town	1758.0
7	Exp. Station Ch'town	1640.8
8	Mrs. J. H. McPhail	1637.7
9	Wm. Robert Brown	1581.2
10	Dr. J. R. Cunningham	1486.8
11	S. R. Pendleton	1399.8
12	S. R. Pendleton	1249.8

Weekly production 53.4 per cent.

Leading pens for week:

Pen	Eggs	Points
2	51	59.9
1	44	52.8
7	44	50.9
9	43	45.3
8	40	41.0

Leading hens to date:

Pen	Hen	Eggs	Points
9	4	216	251.8
9	7	217	249.8
1	9	207	243.7
8	1	209	239.1
2	9	199	232.3

F. A. Driscoll, Manager of Contest; Dr. J. A. Clark, Superintendent.

The Muskoka Forest

During their investigations of an outbreak of the eastern hemlock looper caterpillar in the regions of Muskoka Lakes in the province of Ontario the results of which are published in the June number of Scientific Agriculture, officers of the Dominion Entomological Branch noted that the regional forest might be divided into three main types. One type included old stands of hemlock, either pure or mixed to a small extent with white pine and different hardwoods, such as the sugar maple and American elm. This type of forest is mostly over 80 years old and has not been touched by fire but was most exposed to the recent hemlock looper attack. The undergrowth is composed of ground hemlock and blueberries, and in the very dense stands the soil is covered with needle debris only. Natural reproduction of hemlock occurs in places where windfalls have brought in sufficient light.

Old stands of white pine which cover mostly the south and southwest sides of the hills and the drier situations represent the second type. These white pine stands are also mature and apparently suffered only little from fires. Frequently the stands are mixed with hardwoods such as white and red oak, yellow and white birch. Hemlock is scattered here and there only and was not attacked by the looper.

The third type covers land recently burned over. It consists of hardwoods with scattered hemlock and white pine, and seems to be the preparatory stage for either the first or second type. Very few old hardwood stands can be found. Birches and poplars begin the process of reforestation on the bare land, on account of their light seed and their ability to grow on poor soils. Maples come next in succession, and some oaks occur here and there. In moist situations these young stands are mostly so dense that no other flora is able to exist beneath them. On south slopes and in dry places, this process of natural reforestation meets many obstacles, the soil being covered with blueberries and weeds which are strong competitors with forest reproduction.

THE MARKETING ACT

To Improve Methods and Practices In Marketing

At the annual convention of the Canadian Society of Technical Agriculturists, which was also attended by the Canadian Seed Growers' Association, at Macdonald College, Quebec, Dr. Barton, Deputy Minister of Agriculture, Ottawa, gave a lucid explanation of the new marketing act which is in its formative stages and is officially known as the Natural Prducts Marketing Act,1934. The preamble of the Act reads "An Act to improve the methods and practices of marketing of natural products of Canada and in export trade and to make further provision in connection therewith." The assumption clearly is that the methods followed in marketing are not satisfactory and that undesirable practices obtain. The Act is, therefore, intended,, said Dr. Barton, to provide legislation by means of which these methods and practices can be changed.

The legislation provides what may be called permissive powers which may, or may not be, exercised. Until they have exercised, the provisions of the Act do not become effective as law. These powers are centred in the Givenor-in-Council, the Minister administrating the Act, a Dominion Marketing Board, and local boards which may be created under the Act. All powers that may be granted by Order-in-Council under the Act for the administration of marketing schemes will be vested in the Dominion Board. These powers in turn may be delegated to a local board, and the local board will become the administrative body under the general supervision of the Dominion Board.

Thus, the local boards, under the supervision of the Dominion Board, will enable those who produce and market natural products to constitute control machinery of their own through which they may regulate the movement, direct the sale, without power of buying and selling or of fixed prices, and to determine practices that shall prevail in the marketing of such products. In other words, the local board can control the movement of the product. It may deal directly with only a part of the product or with all of it. The local board may direct shipments in any quantity, through any agency, to any market at any time, or it may withhold them, and this direction have reference to different puality or grades of the product. The local board may also regulate distribution and shipping practices, such as methods of sale, consignment, etc.

Powers of extemption may be delegated to the local boards, also powers of conducting a pool for the equilization of returns recieved from the sale of the regulated product; and also powers to compensate any person for loss by withholding, by order of the board, any regulated product from the market, or through forwarding any regulated product to a specified market, pursuant to any order of the board. Compensation may also be granted for loss due to depreciation of the currency of the country to which shipments were sent by order of the board. The local board may also be delegated to assist by grant of loan the construction or operation of facilities for preserving, processing, storing, or conditioning the regulated product, and to assist research work relating to the marketing of such product.

Where local boards do not exist, or in cases of emergency, provision is made in the Act for regulating the marketing in inter-provincial or export trade by the Dominion Marketing Board. Another important point is the provision under Order-in-Council, in prevailing unsettled conditions in trade, to regulate or restrict importation into Canada of any product which enters into competition with a regulated Canadian product. Power is also given in the Act to prosecute persons exploiting or injuring the trade or commerce of the regulated product. This provision is made in the interest of producers, marketers, and consumers alike. For the purpose of administration, for instance, the dissemination of information, all persons engaged in production and of giving effect to regulation plans, etc., to obtain a licence from the board.

High Class Canadian Honey

In order that the high standard of Canadian honey may not be imperiled, the following sanitary conditions are to be observed and maintained in accordance with the regulations under the Fruit and Honey Act, 1934. All buildings or rooms in which honey is extracted, packed, or stored must be maintained in a clean and sanitary condition. All appliances, including extractors, pumps, uncapping machines, or other equipment used in the handling of honey from the apiary to the final containers must also be kept clean and sanitary. All operations in connection with the preparation and packing of honey must be carried on carefully and with strict cleanliness. All persons engaged in the preparation, handling, and packing of honey must be free from all communicable disease, and the coverings used by them to protect their clothing or persons must be of material easily cleaned and be kept reasonably clean. No lavatory, sink, cesspool, or buildings in which animals are housed must be so situated or maintained as to permit any odours or fumes therefrom to pervade any room or building in which honey is being extracted, packed, handled or stored. All honey intended to be used for food found by an inspector in any apiary, packing plant or warehouse, to be in any way unfit for food purposes will be placed under detention and held for disposal as the Minister of Agriculture may direct. All transportation vehicles must be clean and sanitary.

FARM NOTES

INVADING THE INVADERS

Before it had been generally recognized that the outbreak of European larch sawfly in Southern British Columbia was likely to become serious, the Entomological Branch of the Dominion Department had acted with promptitude in stemming the invasion, and have now followed up their attack by shipping thousands of parasites which will feed on and kill the larch sawfly. The parasites sent to the west were obtained from the Quebec Provincial Park Reserve at Riviere du Loup through the co-operation of the Provincial Forester for Quebec Originally imported from Great Britain and bred at the parasite laboratory at Belleville, Ont., of the Entomological Branch, these killers of the sawfly were distributed in Quebec where they were feeding on the larch sawfly which has caused so much damage to the woods in the Gaspe Peninsula. Gathered up and reared once more at Belleville, the new brood of parasites in their thousands have been dispatched to B. C. At the same time, the entomologists working on the B. C. outbreak discovered a parasite there which is a stranger to the East but which they believe may be useful in combating the Gaspe Peninsula raiders. A large supply of the B. C. parasites, therefore, has been sent to the east to re-inforce the fighters of the Gaspe sawfly. The whole movement bears witness to the single-mindedness and alertness of Canada's entomologists in combating insect pests, and also draws attention to the close co-operation existing, not only between Dominion and Provincial departments but among scientific research workers in general in the Empire.

Honey Damage Defined

As applied to honey, the word "damage", according to the regulations under the Fruit and Honey Act 1934, means injury caused by over-heating, any objectionable flavour or aroma from floral source, honey-dew, taint of smoke, or other flavours or aromas foreign to honey. "Serious damage" means any injury or defect that seriously affects the eating or shipping quality of the honey, such as fermentation, excessive foreign material or other causes. In turn, "foreign material" means visible pollen, wax particles, insects, or other substances foreign to honey. According to the regulations, also, containers must be clean and sound. This means containers free from rust, dust, stains, leaks, and unsightly distortions caused by rough handling, and free from any danger of imparting any foreign odour or flavour to the honey contained therein.

Late Blight And Rot Disease of Potatoes

(Experimental Farms Note)

It has been demonstrated by experimental work conducted by the Division of Botany, Dominion Experimental Farms Branch that approximately one-third of the possible potato crop may be lost yearly because of late blight and rot in th field. It has been further demonstrated that fifty to almost one hundred per cent of th's loss can be prevented by thorough spraying and that keeping quality of the sprayed potatoes is much improved.

This destructive disease appears in almost any potato field during late August or early September and is recognized by the appearance of dark water-soaked spots on the leaves. In wet weather a fine gray mildew covers these areas on the under surface of the leaf. In reality this growth is made up of many branches bearing countless numbers of spores, which are, in fact, the seeds or fruiting bodies of a parasitic mould which feeds inside of the leaf and in so doing kills the leaf in affected parts. This parasite is the late blight fungus and the affected area on the leaf is late blight. The spores, of course, spread the disease. On the tubers it appears as purplish to dark brown sunken areas liable to cause a destructive rot in storage.

Late blight may be controlled by spraying with Bordeaux mixture, making the applications at least five times for the Irish Cobblers and six to eight times for Green Mountains, beginning when the plants are about six or eight inches high. The later applications are very important. The spray mixture generally recommended is composed of 4 pounds of blue stone (copper sulphate), 4 pounds of lime and 40 gallons of water. Lime may be of the hydrated form and should be of the best grade procurable. Stone lime is most satisfactory and should be thoroughly slaked. The most economical method is to prepare a stock solution of the blue stone and the lime in suitable containers. Casks of 40 gallon capacity are a convenient size. In the first cask place about 30 gallons of water, and dissolve in it 80 pounds of blue stone by suspending the chemical overnight to save time in a sack just below the surface of the water. When the chemical is dissolved add sufficient water to make up to 40 gallons. In the second cask place 80 pounds of the best stone lime and slake it by adding water gradually. When the process is complete add sufficient water to make up to 40 gallons. These casks contain 2 pounds of blue stone and lime respectively, per gallon. The casks should be covered to prevent evaporation and exclude dirt and other substances which may interfere with proper application of the spray mixture. To prepare the mixture for spraying, first determine the capacity of the spray tank. Assuming this to be 80 gallons, pour into the tank 72 gallons of water and add 4 gallons of the thoroughly stirred blue stone solution (8 pounds of blue stone) and also 4 gallons of the well stirred milk of lime (8 pounds of lime). The lime solution should be strained through cheesecloth or other suitable material or the strainer provided with the sprayer. The stock solutions of blue stone and lime should never be mixed before further diluting with water.—R.R. Hurst, Dominion Laboratory of Plant Pathology, Charlottetown, P. E. I.

The Viking raspberry, originated at the Vineland, Ont., Horticultural Experiment station from a cross between Cuthbert and Marlboro varieties, has been found highly promising in Michigan according to a report from the U.S. Department of Agriculture.

NEWSY NOTES

BY AGRICOLA

MORE EPITAPHS

An American general—I forget who—once said at a banquet in his honor that he liked "taffy" better than epitaphy. So it seems did one Northumbrian, when he left instructions for the stone-cutter to carve on his tombstone the lines:

"Poems and epitaphs are but stuff;
Here lies Robert Barras, that's enough."

This terse inscription is to be seen in the churchyard at Bedlington, At South Gosforth, about two and a half miles from Newcastle, in the churchyard is the quaint epitaph on one John Ramsay, in two verses:

"Ye politicians, stop and pause—
A Patriot lieth here,
Who lov'd his country and its laws
And liberty held dear.

To Mathematics he inclin'd;
His mind was always gay,
A husband good and parent kind
Was honest John Ramsay."

John died in 1782, before the term politician had attained its present questionable significance. While admitting that, at times, some very crude stuff found its way onto the "churchyard stone," there is no question that modern taste, which prohibits all originality, has greatly lessened the interest of the epitaph hunter.

Haltwhistle, on the South Tyne, was the burial place of the Ridley family, one of whom Nicholas, Bishop of London, was burnt at the stake for his opinions in 1555. His brother John survived him by several years and was buried at Haltwhistle where his tombstone may still be seen propped against the south wall of the ancient church. The stone is six feet high and bears, beneath two escutcheons, a curious rhymed inscription in the uncouth spelling of the age:

John Redle that sum tim did be
The lard of the Walton gon is he
Out of the val of mesre

His bons lie under thes ston;
Al friends may be glad to haer
When hes soul from paen did go
Out of thes world as doeth apper
In the yeer of our Lord A. 1562.

That was the oldest tombstone that I came across in my rambles in the country, and the hardest to decipher. The second line means that he was laird of Walltown where he had a castellated tower

There are a good many noteworthy epitaphs in Northumberland but time (and space) forbids their mention. I will therefore conclude with one from Chillingham Church, which gives practical advice:

"My friends, go home,
And cease from tears,
I must lie here
Till Christ appears."

SOME NATURE NOTES

Has any of my young friends seen a lizard lately? Of course I am joking, because none of them ever saw a lizard in his (or her) life. What we call a lizard is in reality a salamander, and in 1839 Dr. Philip Cox, a naturalist from the mainland, found three different kinds here. I have seen one species, a harmless little fellow, with a row of yellow spots along his sides, but that was "quite a spell" ago. The others I've never seen.

All Salamanders, like all well-regulated children, pass part of their time in the old swimming hole: they are amphibious in their early stages. The lizards don't like the water; they love to sun themselves on dry sandy banks, and "the hotter the better" semes to be their slogan, so they are tropical creatures.

A long time ago, in mediaeval times, people said many hard things about the poor salamanders. One old writer advises anybody bitten by a salamander to prepare his "winding sheet," and says that the victim needs as many doctors as the creature has spots! Another stronge belief was that the salamander is quite at home in the fire. I believe it was Aristotle who set this idea away, from hearsay; but Pliny the Roman naturalist, who put a salamander into a fire, to try this out, says with great surprise that it burnt away to a powder, instead of strolling round enjoying the heat! Benvenuto Cellini, in his fascintaing autobiography—which you must read some day—also tells about putting a salamander into the fire; and no doubt many others "tried the same trick." But the salamander never enjoyed it as much as they thought it would.

When I was a little boy, my grandfather had a "salamander" in the house, but it was for lighting a fire. It was a stout kitchen poker, with a large head, shaped like an old-fashioned flat-iron. When a fire was to be made, say, in the parlor, the salamander was thrust into the kitchen fire till red-hot. It was then thrust between the bars of the grate, into the wood and coal in the parlor fire-place, which at once broke into a blaze. All old-time houses had these implements.

Just before the electric storm of July 25th many species of insects found their way into the house, among them three wasps. Two of them turned out to be the common Vespa diabolica, but the third was new to me. I found it to be Vespa norvegicoides, a new species, separated some years ago by the late F. W. L. Sladen, at that time Dominion Apiarist. It is distinguished by the very narrow yellow bands (without any projections—not "embayed") round the abdomen. This is the sixth species of wasp I have found on the Island. Sladen gave a list of 14 species for all Canada.

"Our" bats, which retired to a hole in the barge-board of the house last fall, have not put in an appearance this year. Was the long cold winter too much for their vitality? Have readers noticed whether they are scarce as compared with other years? Too bad, if they are gone, for they helped to keep the mosquitoes down.

A curious meteorological phenomenan occurred on the evening of July 24th, to which one of the family called my attention. At 8 p.m. with the moon nearly full, riding serenely in the southern sky, divergent rays resembling those of the setting sun, arose from a point in the south-east. They lasted perhaps fifteen minutes, then faded. "I've seen something like that before," I said and then followed a long hunt over my "weather book." It was on March 21st, 1932, that streamers, which I had likened to search-lights arose from the south-east about 9 p.m. The moon was full on the 22nd. On both occasions there was a fall of the barometer with disturbance the next day. What is the explanation?

THE GYROTILLER

About a quarter of a century ago I had a chat with an Islander (long deceased), who told me that his father, who was a Devonshire man, used a "zubziler" (subsoiler) to break up the hard pan underlying his fields. As far as I could gather, this was a kind of plough, which was run along in the furrows of a ploughed field, and cut into the "hard pan" underneath, breaking it up, but not bringing the subsoil to the surface. My informant lamented because the younger generation did not like to work as thoroughly as their fore-elders did. How ever that might have been (or may be) the operation meant better drainage of the soil, more moisture capacity, freer aeration, and, for some crops deeper rootage.

The breaking up of the hard pan has been looked upon as a desideration in Britain for many years. The problem has been solved, says a writer in the Yorkshire Post, by the invention of the "gyrotiller." For at last ingenious minds have succeeded in producing something better than the plough, and have made a rotary implement combining "three or four normal acts of cultivation in one."

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