

AGRICULTURAL.

Northern Agriculture.

It is wonderful that growth is made by plants under the long continued light of the Arctic summer, notwithstanding the sun attains no great elevation above the horizon. The light, such as it is, is almost constant for weeks together, and this constancy makes up, in great part, for the shortness of the season. It is to be kept in mind, also, that the growth of vegetation is not wholly dependent upon the heat rays of the sun.

This becomes evident from the fact that wheat, for example, will grow in soil that, even in midsummer, is not thawed more than a foot below the surface. The limits of cultivation toward the pole are noticed in one of Mr. Vincent's books of travel.

In Siberia, agriculture ceases at sixty degrees of north latitude, but in Norway oats ripen under sixty-nine degrees, rye a half degree, and barley a whole degree further north. In Finmark the summer heat is intense, and daylight is continuous for ten weeks.

The rapid growth of vegetation in Finmark is almost incredible. During the short summer crops are sown, ripened and harvested. It has been found by experiment that in latitude sixty-five degrees north, barley will grow two and one-half inches, and peas three inches in the twenty-four hours for several consecutive days. Barley is harvested in ten weeks after being sown.

At Hammerfest, in latitude seventy degrees and forty minutes north, the grass grows underneath the snow, and hay is made in a month after the snow has left the fields. Here the Scotch fir flourishes vigorously, sometimes reaching an altitude of eighty feet. But a little further east in this same latitude, in winter, mercury and even brandy frequently freeze in the open air.

A Norwegian scientist has been engaged for thirty years in making experiments to determine the effects to the midnight sun, during the Scandinavian summers, on the wheat and other grain crops. The conclusion he reaches is that wheat, corn and other seeds imported from a warmer climate, when cultivated under this intermittent sunlight, become hardier as well as larger, and are better able to resist excessive cold. The colors of these grains are also gradually changed to a richer and darker hue.

These are not the only variations that plants undergo by exposure to a night and day sun. Wild and cultivated fruits, ripened in northern lands, have a much livelier aroma and flavor than the same fruits grown under more southern skies. That is particularly observable in the small fruits that are so grateful in the early part of the warm season.

The experiments of this Norwegian scientist derive double interest from the recent inquiries of Doctor Siemens, illustrating the power of the electric light when applied to plants and vegetables to quicken and invigorate their growth. The two investigations, though entirely independent, have led to the same scientific result.

Campbeltown Diseased Meat Case.

A Mr. Duncan Perrott of Glasgow writes as follows to the *Meat Trade's Journal*:—
DEAR SIR,—In reading over your *Journal* of the 16th inst. I find you there give an account of the tuberculosis case tried in the Central Police Court, Glasgow, before Stipendiary Gemmel, who, after hearing the evidence, imposed a fine of £20 or two months' imprisonment. This being the first case tried under the new Public Health Act passed for Glasgow, it is but right a few comments on the case should be made. The carcass of beef in question was seized in Campbeltown, a town in Argyshire, a long way distant from Glasgow, and entirely out of the jurisdiction of Glasgow, by the Superintendent of Police there, who called in Dr. Gordon of that town to examine the carcass, who condemned it as being unfit for human food. Asking the defender what he was going to do with it, he replied that he was dissatisfied with their decision, he was going to send it up to Glasgow to get it inspected there. It appears the Superintendent and Dr. Gordon consented to this, for they allowed him to do so. Immediately after they must have taken a remorse of conscience, for they at once telegraphed to the Greenock authorities to seize it, but they refused to interfere. They then telegraphed to the sanitary authorities in Glasgow to do so, which they did, and who prosecuted the defender, getting a conviction against him.

This is all very well. The punishment meted out to the defender may or may not have been right enough. What I wish to comment upon and protest against is the authorities of Campbeltown allowing this same carcass to leave their hands after being seized by them and condemned, and getting Glasgow to do their dirty work in prosecuting the defender, and causing the fair fame of Glasgow to be blasted through it. In the event of the defender not paying his fine he would have been detained for two months at the City's expense.

In my opinion there is too much laxity displayed in other towns by the authorities governing them in not being conversant with their powers, and whenever they make a mistake through a display of ignorance and red tape, apprise our officials of it, and get them to do what should have been done by themselves, and thus save themselves a great amount of trouble.

Lambs for the British Market.

To the Editor of *The Empire*.

SIR,—Your issue of the 7th inst. contains a letter from Alderman Frankland regarding the lambs which were shipped from this college farm in the month of May. In that letter the alderman mentions that he expects me to supplement his letter with another, explaining the methods of feeding by which the lambs were brought to so high a state of perfection. To do this will afford me very much pleasure, and with your concurrence, Mr. Editor, I promise you a letter very shortly giving this information, and also a summary of the financial statement relating to the transaction. I may mention further that a bulletin will be put in the hands of the Department of Agriculture about a month hence, giving full details of the whole transaction in all its phases.

In the meantime I desire to say that I am greatly pleased with the more important features relating to this venture. I never did feel so much concern regarding the price that would be paid for the lambs, as regarding their acceptability in the English market. This matter I regard as forever settled at rest. In addition to what Alderman

Frankland has stated so well in his letter regarding the quality of these lambs, I may add that the English press have been loud in their praises. Since these lambs have pleased the people of England so well, I have no hesitation in saying that we can easily give them lambs in the future which will please them even better. These lambs were good, but not so good as this country can furnish.

The lambs composing the shipment were purchased by Mr. Storey, the farm foreman in the month of September last. They were bought in the counties of Lanark and Carlisle, and brought thence to this farm, where they were shorn and pastured for a time on rape. They were then fed in sheds until the end of April, when they were shipped to Britain. Without waiting to give details in this letter, I may say that the financial aspect of the venture is satisfactory.

These lambs received no more attention than can be given by any farmer who has shed room for feeding lambs in winter. As will be shown in my next letter there are no mysteries about their feeding, nor is there anything in the slightest degree complicated. They were fed on food such as any farmer may grow, in almost any part of the Dominion.

It is to be hoped that our farmers will give this matter the attention which its importance demands. There are, doubtless, great possibilities connected with the future of this trade. It may yet become one of the most important industries of Canada. I go further, and say that it is likely to become one of the most important industries of the country; nay, it is almost certain to become one of our most important industries, and I ask the farmers of all Canada to note this fact, and to weigh it well. If each farmer of this province were to fatten but six lambs a year for this market he would get a return of about \$54 for good average lambs for his outlay. This is a paying return, as our farmers very well know. We would then have 1,00,000 lambs for annual shipment. This would bring annually into the country more than \$16,000,000 of British money—a larger amount than is now obtained for our export of cheese from the whole Dominion. The chief obstacles would arise in connection with the transport of the lambs, and these would relate to the lack of shipping accommodation. Notwithstanding, it is certainly true that there are splendid possibilities in reference to this trade.

Ald. Frankland dwells with a satisfaction bordering upon enthusiasm on the quality of these lambs. They brought, he says, 17 cents per pound dressed weight, "the highest quotation in the wholesale market." They also killed well, dressing 6½ lbs. each. Our farmers should have no trouble in raising lambs which would dress 75 to 80 lbs. each when one year old, and of a quality the very best. The alderman speaks of the ready sale and good prices obtained for lambs of the Shropshire and Hampshire breeds. Along with these may be mentioned the Oxford Down and the Southdown. If the sires belong to one or other of these breeds the lambs may be of any grade, so long as they are average in quality.

Ald. Frankland has certainly performed well the task assigned him. He has let the people of England know through the agricultural press that our farmers can supply them with mutton equal to that grown upon the varied herbage of their mountains, and in unlimited supply in the near future. For so doing he is deserving of the thanks of the farmers of all Canada.

Yours, etc.,
THOMAS SHAW.

Ontario Agricultural College, Guelph, June 11, 1891.

Agricultural Notes.

The statement made in the British House of Commons by Mr. Chaplin, Minister of Agriculture, in regard to the recent detention of Canadian cattle is briefly as follows:—Two cargoes of cattle were landed about noon on May 24, 603 from the steamship Huron and 399 from the steamship Mongolian, and placed in the same shed. Upon inspection one beast was found badly affected with some form of lung disease. The inspector telegraphed next day to the department that he had detained the cattle, and sent the lungs for examination to London. Upon the 26th—the day afterwards—the lungs were examined, and the animals were released about noon on the same day, that is to say, after being detained for 48 hours. All cattle coming from free countries, of which Canada is one, are detained by the orders which have been in force for many years, for not less than 12 hours for inspection, and very commonly for 24. Some of the cattle were branded, but that would be no guarantee against disease, and sporadic disease can be distinguished by experts from pleuro-pneumonia. The Minister regards the question as so serious that it ought not to be decided except after the most careful inquiry.

A moth or butterfly is said to have become so troublesome and destructive in a forest in Bavaria that it was necessary to destroy it. Children were employed to collect the caterpillars and were paid so much per bucketful. This was found expensive and ineffective, so enormous fly-papers were tried. These also had no appreciable result. Finally, it is said, an electric search light in connection with a blowing fan was designed. The insects are attracted by the light and fly near the lantern; they are then drawn into the suction pipe by the air draught and carried to a sort of mill which mixes them with a little flour. The resulting compound is then used for poultry food.

A new industry has sprung up in Germany. The young leaves of the wild strawberry are picked, carefully dried, and used instead of Chinese tea, which they are said to approach very closely in flavor. An addition of young bramble and woodruff leaves is said to add to the flavor.

One remedy to prevent squirrels, mice and birds finding planted corn, is to harrow the ground immediately after planting to cover the planter tracks, and then to scatter corn about the border of the fields and in the vicinity of the squirrelholes as soon as the corn begins to come up.

The wool clip in Australia this year is the largest in the history of the colonies and will reach \$100,000,000 in value. There will be 20,000,000 bushels of wheat for export. The colonies generally are said to favor trade with the United States.

Fences are the costliest item of so-called farm improvements, involving an unproductive capital of \$700,000,000 in this country. They occupy the best land, because of accumulated richness near and beneath them.

MR. AND MRS. BOWSER.

"Mrs. Bowser," began Mr. Bowser as he came downstairs the other morning, "is this house run on a system or is everything expected to take care of itself?"

"What do you mean?" she asked. "I mean that I have been looking for a shoe-string for the last hour and a half and that nothing of the sort is to be found!"

"No; I don't believe there is one in the house."

"I presume not! I presume the two hundred pairs I bought in Detroit the day before we left have all been chewed up by the cat or sold to the ragman. If there's a worse-run house than ours in America I'd like to see it!"

"Why, Mr. Bowser, you only brought home three shoe-strings, and you used two of those to tie up your papers!"

"Well, where's the other?"

"I can't tell. We may have lost it in moving and unpacking."

"Don't doubt it in the least. While a shoe string is not as big as a piano or as valuable as a clock, the loss of it shows a want of system, a reckless extravagance truly discouraging. Have you got a piece of clothes-line in the house?"

"I—I don't think so," she stammered. "Probably not! Probably gone to join the shoe-string! I must have something to tie up my shoe with, however, and I will use a piece of stovepipe wire."

After breakfast, when ready to go out, he said: "Mrs. Bowser, I hope you will take this reason to heart. Carelessness in a wife is a very reprehensible trait."

"You are just as careless as I am!" she protested.

"No, ma'am! No ma'am! I never mislay anything, forget anything or lose anything! Very few husbands do. I will go around the world with a pin in my vest and bring the same one back with me. If you go out on the street to-day you had better have a policeman go with you. If not, you'll lose your purse or be robbed of your cloak."

When Mr. Bowser came up to luncheon he entered the house with a smile on his face and the door-mat in his hand, and said:

"I found a boy walking off with this mat! Has any one taken the range out of the basement? It's a wonder to me they haven't come in after the carpets!"

"That's a mat the girl put out in the barrel to be carted away," she explained.

"Oh! It is! More reckless extravagance, I see! Mrs. Bowser, I want to sit down with you some day and have a long talk. I think you mean well, but you are deficient in judgment, and your knowledge of the world is very, very limited."

"Do you know everything?" she sarcastically queried.

"Mrs. Bowser," he replied, as he folded his hands under his coat-tails and assumed his favorite attitude, "there are probably one or two things I don't know! I don't claim to know it all, and I don't say you know nothing whatever. The husband who does not, however, know forty times as much as his wife, would be considered a stick of a man. Did you go out this morning?"

"I did."

"Was your bonnet taken off your head?"

"No, sir!"

"Very lucky! You are to be congratulated. I don't!"

"Mr. Bowser, where's your watch?" she interrupted.

"My watch, Mrs. Bowser—my watch is—great Scott!"

He dropped his hand to find the chain, but it was not there. He felt for the watch, but it was gone.

"Did you leave it at the jeweller's?" she asked, as he stood with open mouth and stared at her.

"Jeweller's! No! It's gone! I've lost it! I've been robbed!" he shouted, as he danced around.

"It can't be. Feel in all your pockets."

"Pockets! Pockets! Do you 'spose I carry my watch in my coat-tail pocket? I tell you I've been robbed!"

"Well, don't take on so; your wallet is safe, isn't it?"

"G-gone!" he gasped, as he put his hand up—"watch and wallet both gone!"

"You must have been robbed in some crowd," she suggested.

"Robbed! Crowded! Robbed! Of course I've been robbed!" he shouted, as he paced about. "Git that infernal cat off that lounge and lemme lay down, for I'm so weak I can't stand up! Where's that camphor?"

She ran for the bottle as he flopped down, and for the next three minutes he had his nose in the opening.

"You ought to go to the police at once," she finally said.

"G-gone! G-gone!" he gasped.

"But how could you have been robbed?"

"I dunno! Hold the bottle a little higher."

"You are so careful, you know."

"Yes."

"You never mislay anything or forget anything."

"No."

"And never lose anything, and have so much worldly wisdom."

"Oh! my head!"

"I can't make it out. I am so careless that I might lose a shoe-string in moving here from Detroit, but you—"

"Don't talk to me! Over \$600 gone!"

"A woman tried to steal my reticule in Buffalo and I had her arrested, but it seems that you—"

"Gone! Gone!" he groaned.

"Haven't you no idea of when it was taken?" she persisted.

"No!"

"Well, I am sorry, but this will be a great lesson to you. You will be more"—

"Mrs. Bowser!" he interrupted as he suddenly sat up. "I see through it all now. It's as plain as daylight!"

"What do you mean?"

"I thought it necessary this morning to give you a little advice. I felt it to be my duty as a husband. This is your way of getting even!"

"Why, Mr. Bowser?"

"Don't you Mr. Bowser me! It's as plain as that chair over there!"

"How could I rob you or tell any one else to?" she demanded.

"Never you mind! I see it all! Its all right, Mrs. Bowser—all right! Just let go this camphor bottle and take a seat in the other room! A husband will bear a great deal from the woman he loves, but when crowded too far he turns at bay. I have turned. As soon as I feel a little bit better

we will come to an understanding, and you can probably take the noon train for your mother's in Detroit. Robbed. Plundered! But I see through it and know my duty!"

TRAVELERS OF THE PULPITS.

"Sending Up a Note" in Old-Time New England Churches.

In the small country villages all the inhabitants were brought together in the closest intimacy, personal and neighborly, in their several homes and in the meeting-house, say the *Atlantic Monthly*. They knew each other's most private affairs and experiences—the birth of a child, espousals, sickness, absence from home, and death. Whatever social or class distinctions existed in any place—and there were such for the "seating" of each congregation was a method of "dignifying superiors"—the humblest family and individual in the precinct could introduce their wants and woes in the public prayers. So the minister, as he mounted the pulpit, had in his hand one or many "bills" or "notes" offered by individuals or families by name, stating the occasion or circumstances, specifically, under which the sympathizing prayers of the whole congregation were desired. Instances were not unusual in which, if there were many such papers, the minister after reading them aloud, would pin them to the pulpit cushion, and, opening his eyes for an instant, would refresh his thought of them, one by one, and then frame a fitting intercession or petition. A purposed journey or a return, the experience of a misfortune or disaster, the birth of a child, serious or protracted illness, bereavement, and the various dispensations of providence, devoutly regarded, would be the burden of these petitions. There certainly was something helpful and touching in these usages in close communities, in which no one was a stranger in life or fortune to all the rest. Of course much, very much, if not all, of the fitness and grace of such intercessions depended upon the gifts of the minister, his choice of words and phrases, his delicacy, unctiousness, refinement, and dignity of manner and speech, his saying just enough, and at times his reserve in utterance. There were possibilities of infelicity and blundering, and of a large range in failures of taste and sentiment. The risk was of formality, repetition of phrase, and sameness of language. The minister might fall short of the definiteness, the individuality, of specific references in such cases, disappointing the listening petitioners for whom he was a proxy. There were in the ministry occasionally, and not infrequently, men of eccentric ways, of quaint speech, sometimes very literal and overfrank and plain, whose expressions might include or suggest judgments, opinions, on matters to be borne up in prayer. Such a case comes authenticated to us, in which a husband sought relief from the trial and exhaustion of tending an invalid wife in a protracted and hopeless malady by sending up a "bill" on several successive Sundays. Perhaps the minister also shared in the weariness of these repeated calls on his intercession, well knowing the certainty of the impending issue. So he framed his petition "that the Lord, if it seemed good to him, would raise her up, or that she might be speedily and gently removed."

A large part of the more serious, interesting, and important concerns in a rural community would find their way into the prayers of the sanctuary. Sometimes the minister, bent on some public or private rebuke or censure, would dare the venture of insinuating it in his prayer rather than in his sermon.

Apples in June.

Apples aplenty in June are not a new thing in London. English people have taken from Canada to a large extent a liking for having such fruit on the table, and the liking is growing. The luxury is within the reach of families who are far from being wealthy. The demand is supplied principally by Australia, and the fruit growers of that country are displaying a fine enterprise over it. The Australian apple is ripe about Christmas, and by the time it reaches the English market it does not come into competition with the home supply, nor with the rapidly growing quantity that Canada sends.

The article in *The Nineteenth Century* "From Albert Nyanza to Indian Ocean" is by Lieut. W. G. Stairs, a Canadian whose conduct won high praises from Mr. Stanley. It is characterized, like his former article, by modesty and good sense, and is pleasant as well as instructive reading. He makes some interesting observations on the presence of black women in caravans. It is a great mistake, he says, to suppose that black women hinder the rapid marching of a caravan in Africa; they are of immense help to the men, and consequently to the leader of an expedition. They carry the cooking pots and food enough to last themselves and their husbands six or eight days, prepare the meals, wash the clothes and get the camp ready, besides enlivening all with their pleasant chatter and singing. Usually they are the equals of the men in marching ability. He remarks also that in a single day's march the Zanzibari would leave most Englishmen behind, but after that his feet would become tender and the white man would pass him.

Whether Sergius Stepaniak the Nihilist can be relied upon to furnish American readers with an impartial account of the Czar's dealings with his Jewish subjects is a question. But there can be no doubt that Stepaniak is well acquainted with the condition of the Jewish people in the centres of Russian population, and from that point of view it is interesting to know what he has to say on the subject. Some writers would have the readers of English, French and American newspapers believe that the Jews are in a large measure themselves responsible for the persecution which is being carried out against them. Stepaniak removes that impression at all events. Instead of the majority of Hebrews amassing riches by the practice of usury, he tells us that most of them live in extreme poverty, while the "paternal Government" never interferes but to goad them into utter despair by pretty tyranny extortions, and so forth. Stepaniak, strangely enough, takes the ground that the truly patriotic Russian, who is nothing if not a pillar of the Greek church, opposes the present anti-Semitic policy. He would make the Government alone responsible and redeem the reputation of his countrymen from the shame of carrying on a religious persecution.

FREAK OF A CYCLONE.

A Railroad Train Turned Completely Round.

"A Yarn" Which Some People Will Find It Difficult to Believe.

An old driver, known as Hande Dan told in perfect good faith the other day the following extraordinary adventure:—
"When I was pulling passenger out on the K. P. it was my proud boast that in the three years I had been on the run I had never been late. I always got over the road according to the time-card without regard to washouts, wrecks, and such—in fact, I was building up a world-beating record, until a cyclone one day laid me out so scandalous that I resigned as soon as I got to the end of the run. Yes, sir, in three minutes the record I had been three years a-buildup' was smashed so fine that a search warrant couldn't locate where it stood. And what made it so aggravatin' was that I had to double thirty-six miles of road that I couldn't turn in mileage for."

"You see, we left Salina at 2 p. m., with the Denver express. We got to Brookville and then to Ellsworth right on time. Our next stop was at Oakley. It had been pretty cloudy all afternoon, and about two miles out of Ellsworth I noticed a cloud, blacker'n midnight, that seemed to rise up out o' the prairie about a mile away on the right-hand side of the track. It blossomed out at the top and started obliquely toward the track and in the direction we were going, with a roar that sends a cold chill down my back when I think of it to this day. I saw that it would cross the road about a mile ahead and just about the time we got there. Right there I made the mistake of my life. I should have stopped and let that stemwinder go on; but I remembered that it would make us late at Oakley, surer'n guns if we did, so, thinkin' of my record, I pulled her open to head off the cyclone."

"Jim Doolittle was frin' for me then. Jim comes over on my side and looks at that stemwinder a minute. 'Dan,' he says, down-hearted like, 'it's pretty hard lines for a feller that's gone through three head-end collisions and two spells of the grip to get done up in a low-down cyclone.' Just then that tornader took a sharp twist and headed straight for us. I remember thinkin' how nice it would be if I knew how to pray, and then, when I had dug the sand out of my eyes so's I could see, there we was bowlin' along so nice and quiet that I made up my mind that I had been dreamin' about the cyclone."

"Pretty soon we pulled up at a station, and I got down to oil 'round, when Jerry Blake, the conductor, comes busting up with his time-card in one hand and his watch in the other."

"Dan," says he, 'what town's this?'"

"Why, it's Oakley, of course," says I, without lookin' up."

"Of course, must be," says Jerry. "We are due at Oakley at 3:06, and it's just 3:06 now. There can't be no doubt about it bein' Oakley. But I'll be blowed if I ever knowed before that Oakley was so much like Ellsworth."

"I raised my eyes and there was 'Ellsworth' over the waiting-room door in letters a foot high. I got right up and pulled out for the next town without saying a word. The next stop ought to have been at Linwood, but the town we got to looked enough like Brookville to be its twin brother. Jerry tottered up to the engine so pale that a snow-drift would have looked like a heap of charcoal beside him."

"Dan," says he, 'I'll never touch another drop of whisky so long's I live, so help me gracious!'"

"Sh-h!" says I, 'go back to the baggage car and don't say nothin'. I'm with you on that pledge, and off we goes again."

"We ought to have got to Wallace, but after a lively spin of twenty minutes we pulled into Salina, right where we started from an hour and twenty minutes before. There couldn't be no sort of doubt about it, for out comes the trainmaster foaming at the mouth and wants to know what in blunkety-blunk-blunk-blunk we meant by laying out the express two hours. You see, he thought we hadn't started on the run yet, when the fact was we had got over thirty-six miles of road when that blamed cyclone took up the whole train, turned it end for end, and set it back on the rails again, and there we had started on the back track without ever slippin' a turn. And that wasn't all. The baggage, and express, and postal tellers had dumped out mail and truck as though we were goin' straight ahead; and the brakies had hustled off way passengers at the same stations they got on at, and there was no end of investigations, and damage suits, and confusion generally in consequence."

Never Again.

Miss Vixen: "I am almost positive Fred Hathway intends proposing to me to-night, mamma."

Mrs. Vixen: "What makes you think so, my dear?"

Miss Vixen: "He acted so mysterious when I met him on the street this morning."

Mrs. Vixen: "Mysterious? How?"

Miss Vixen: "Why, when I met him he blushed and stammered like a silly school-boy, and finally blurted out that he would like to see me alone this evening. He makes me very ennu'd."

Mrs. Vixen: "Well do you intend to see him?"

Miss Vixen: "Oh, yes, I'll see him. But you mark my words, if he proposes to me to-night he'll never propose to another girl if he lives to be 100."

Mrs. Vixen: "I hope you won't decline his offer insultingly?"

Miss Vixen: "No, I'll accept him."

Multiplication Table for All.

The Gambler's—Won times one is won.
The Tobacconist's—Chew times one is chew.

The Slave's—Free times one is free.
The Society Leader's—Fore times one is fore.

The Musician's—Fife times one is fife.
The Invalid's—Sicks time one is sick.

The Religionist's—Seven times one is heaven.

The Cannibal's—Ate times one is ate.
The German's—Nein times one is nein.

The Roofer's—Tin times one is tin.
The Baker's—Leven times one is leven.

The Fairies'—Twelf times one is tw'elf.