

## THINGS ATMOSPHERIC

How They Relate to Agriculture and Production.

Old Sol Must Be Considered—Frosts a Little Late or Early Decrease Farm Profits—Moist Air a Better Blanket Than the Dry.

(Contributed by Ontario Department of Agriculture, Toronto.)

ATMOSPHERIC temperature has ever been a matter of much concern to agriculturists. A high temperature, although necessary and beneficial in some cases, is detrimental in others, but in each case requires a liberal amount of precipitation. On the other hand the destructive frost of late spring and early autumn is an unpleasant but frequent visitor to the agriculturist. Man has harnessed much of nature and made it his servant, but as yet no one can say that man can control the atmospheric temperature, although he may modify it in a few instances or overcome some of its disastrous effects.

The primary source of all heat is the sun. Old Sol shines and heat and light travel the intervening 92,000,000 miles of space with a velocity of 186,000 miles per second. Some of this heat is absorbed in its transit by dust particles, water-vapor and the air itself, thus increasing the temperature of the air. The remainder is absorbed by the earth and thus raises its temperature and the temperature of the air in contact with it. The latter has the greatest effect on air temperature.

Local conditions have a great effect on temperature. Water requires about five times the quantity to raise its temperature one degree as does soil, thus large water areas tend to prevent high temperatures. Also, as there is always slow evaporation and it requires about 300 times as much heat to evaporate one gallon of water as to raise its temperature one degree, the temperature is kept more moderate. Large swamp and bush areas free large quantities of water to the atmosphere, as well as retaining the spring water longer in the country and consequently have a moderating effect.

Frosts are also prevented by water, swamp and bush areas because they produce a high humidity and are not so readily cooled as large land areas. Air of high humidity acts as a better blanket as it were, than the dry air. Also the temperature at which dew is formed is higher and the lowering of the temperature may be sufficiently retarded to eliminate any danger of frosts.

The type of agriculture in any section is decided by its air temperature. Any new crops which are imported must first become acclimatized to that climate before they are a success. Winter cereal crops of Ontario and the hay crops are not affected by extremely low temperature unless growth is started by warm weather followed by low temperature or by heaving of the soil about the roots. Late spring and early fall frosts cause much damage. If the temperature does not drop below 23 degrees Fahrenheit until the tenderest vegetation suffers, but, if below it, wholesale destruction results. High temperatures cause strong evaporation from the leaves of plants and thus the need of a large amount of precipitation to prevent stunting or death itself.

In a pamphlet by A. J. Connor of the Meteorological office, Toronto, an interesting relation between the growth and yield of wheat and the temperature is set forth. Both yield and growth are increased by a low temperature and a low range in temperature. A critical period appears to exist in the latter part of the 90 days following the sowing and if the weather in this period is warm and dry, with great temperature range, the wheat plants will head quickly and the harvest be light, but if the cool moist conditions exist heading will be postponed and the yield increased. Thus it remains a matter of seeding at the proper time to insure the cool moist or the warm dry weather in the Western Provinces the sowing is early, namely, the last of April, throwing the critical period about the middle of July, the variability of the temperature of which is the critical factor. However, the rule there is the earlier the better, while in Ontario we are unable to sow spring wheat sufficiently early to procure that desired cool moist weather, nor can it be obtained by late sowing.

Most cereals are best adapted to the temperature regions, and especially to those of low temperature and small temperature range. Consequently the above temperature effect is applicable to all. Fruits as a rule require a higher temperature region but not a high temperature range. Many fruits, however, have a wide distribution and is the result of variety.—R. C. Moffatt, O. A. College, Guelph.

**The Rural Teacher and Agriculture.**  
For a teacher to be able of covering the subject as a whole even in most superficial way is not to be thought of after one month of training at a Summer School. Certain teachers may develop certain hobbies such as nature study or the school garden; one may be an amateur botanist and interest the school in collecting weeds and grasses; another may make collections of insects; another may lead the school in making a survey of the crops grown in the school district, or the breeds of live stock. These and other studies are important contributions to the study of agriculture, and may be followed to great advantage as diversions from the regular school courses.—President J. B. Reynolds, O. A. College, Guelph.

Don't fail to whitewash the stable once a year; twice would be better.

## The "Spotter" an Insult to All Moral Sense.

Welland Tribune and Telegraph:—Welland has been honored in entertaining in these last few weeks a company of "spotters" under the employ of the Attorney-General's department. Their mission in life is to secure convictions on the Ontario Temperance Act.

A "spotter" is the lowest creature in the animal kingdom. He may look like a man but he is not a man, for he has neither character, honor, nor manhood.

Let us look for a moment at some of the episodes in the spotters' history in Welland in recent days:—

- 1.—The making of a respectable Welland home a house of assignation.
- 2.—The making drunk of a company of girls.
- 3.—The enticing of a boy of 16 to buy a bottle of liquor.
- 4.—An orgy of drink'n' and drunkenness.

These four items make an unsavory chapter as has ever appeared in these columns. We appeal to the churches of Welland, to the temperance sentiment of Welland—does temperance rest upon such foundations as these? Mothers and fathers who have supported temperance measures in the hope that it would mean a better Canada and a better environment for the young, how would you like that son of yours to go into the "spotter" business? Is it not a fact that the whole moral sense of the community is outraged and insulted?

If the O. T. A. must lean on the "spotter" it had better never be seen.

## Pays to Raise and Test Good Ones

According to the talk at the New York State sale, Dygert Bros. paid \$230 for Clycyla Kornkyke when she was a heifer. They tested her, and in their hands, she made several records including the 36.01 lbs. butter and 769.8 lbs. milk in a week. They sold the cow in the sale for \$3600, her yearling son, King Kornkyke Clycyla for \$775, her daughter, Topsy Kornkyke Segis for \$1550, and the young calf of Topsy for \$525, making a total of \$6,470 for the four. It certainly pays to raise good Holsteins if you give them an opportunity to show what they can do in official work.

A woman who succeeds in getting her husband to give her an allowance large enough so that she is able to save part of it, is a better financier than her better half.

**MEDICAL**  
**L. J. LEATHERDALE, M.D.**  
OFFICE HOURS:  
10 to 12 a.m., 2 to 4 p.m.  
7 to 9 p.m.  
JARVIS, ONTARIO.

**SOCIETIES**  
**I. O. O. F.**  
JARVIS LODGE NO. 191  
Meets every Monday evening at 8 o'clock.  
N. G. J. Dollar; F. S. N. R. Pond.  
R. S. J. S. Burwash, Treas., Jas. Haslett.  
Visiting Brethren Welcome.

**HOTELS**  
**AMERICAN HOTEL**  
R. A. NELLES, PROP.  
Best Accommodation for the Travelling Public.  
Near G. T. R. Station,  
JARVIS, ONTARIO.

**GEORGE L. MILLER**  
CONVEYANCER AND  
REAL ESTATE DEALER  
AGENT CANADIAN NATIONAL RAILWAYS  
JARVIS, ONTARIO.

## Clearing Out Sale of Groceries

## Note the New Prices

Pepper, per lb.	45c
Lemon Extract	2 for 25c
Boik Tea	55c
Mustard (bulk) per lb.	35c
Cream of Wheat, pkg.	58c
2 in 1 Shoe Polish, box	10c
Orange Marmalade, glass, reg. 35c for 30c	
Spices at lowest prices.	
Smoked Sliced Beef, tin.	35c
All Fancy Cakes, lb.	36c
Wash Boards	50c
Palm olive Soap, bar.	10c
Fancy Soap	10c
Goblin Soap	3 for 25c

All Goods at Reduced Prices

**Thomas Harris**  
BUTCHER -- GROCER

**LEGAL**  
**ARRELL & ARRELL**  
Barristers, Etc.  
HAMILTON CALEDONIA  
Sun Life Building. Roper's Block  
Money to Loan at Lowest Rates.  
Harrison Arrell, S. Cameron Arrell  
County Crown Attorney.

**KELLY, PORTER & KELLY**  
Barristers, Solicitors, Notaries, Etc.  
W. E. KELLY, K.C. J. PORTER  
County Attorney. County Treasurer  
DAVID E. KELLY  
Solicitors for Norfolk County Council  
SIMCOE ONTARIO

**Brandram Henderson PAINTS**  
Have just put in a stock of the well known Brandram-Henderson Paints, Oils, Varnishes, Etc.  
If you intend to do any painting this spring call and see our stock and get prices. It will pay you.  
Also Lumber, Coal, Cement and Wire.  
Car of Steam Coal Just Arrived—\$11.00 Ton  
**W. J. BAILEY**  
Lumber and Coal Dealer, JARVIS

**Shop in Simcoe At OUR Expense**  
We Refund Car Fare from Jarvis on a cashbase of \$8.00 and over, Hazersville \$10.00 and over, and from Nelles Corners on \$12.00 and over.

**LEGAL**  
**ARRELL & ARRELL**  
Barristers, Etc.  
HAMILTON CALEDONIA  
Sun Life Building. Roper's Block  
Money to Loan at Lowest Rates.  
Harrison Arrell, S. Cameron Arrell  
County Crown Attorney.

**KELLY, PORTER & KELLY**  
Barristers, Solicitors, Notaries, Etc.  
W. E. KELLY, K.C. J. PORTER  
County Attorney. County Treasurer  
DAVID E. KELLY  
Solicitors for Norfolk County Council  
SIMCOE ONTARIO

**Brandram Henderson PAINTS**  
Have just put in a stock of the well known Brandram-Henderson Paints, Oils, Varnishes, Etc.  
If you intend to do any painting this spring call and see our stock and get prices. It will pay you.  
Also Lumber, Coal, Cement and Wire.  
Car of Steam Coal Just Arrived—\$11.00 Ton  
**W. J. BAILEY**  
Lumber and Coal Dealer, JARVIS

**Shop in Simcoe At OUR Expense**  
We Refund Car Fare from Jarvis on a cashbase of \$8.00 and over, Hazersville \$10.00 and over, and from Nelles Corners on \$12.00 and over.

**LEGAL**  
**ARRELL & ARRELL**  
Barristers, Etc.  
HAMILTON CALEDONIA  
Sun Life Building. Roper's Block  
Money to Loan at Lowest Rates.  
Harrison Arrell, S. Cameron Arrell  
County Crown Attorney.

**KELLY, PORTER & KELLY**  
Barristers, Solicitors, Notaries, Etc.  
W. E. KELLY, K.C. J. PORTER  
County Attorney. County Treasurer  
DAVID E. KELLY  
Solicitors for Norfolk County Council  
SIMCOE ONTARIO

**Brandram Henderson PAINTS**  
Have just put in a stock of the well known Brandram-Henderson Paints, Oils, Varnishes, Etc.  
If you intend to do any painting this spring call and see our stock and get prices. It will pay you.  
Also Lumber, Coal, Cement and Wire.  
Car of Steam Coal Just Arrived—\$11.00 Ton  
**W. J. BAILEY**  
Lumber and Coal Dealer, JARVIS

**Shop in Simcoe At OUR Expense**  
We Refund Car Fare from Jarvis on a cashbase of \$8.00 and over, Hazersville \$10.00 and over, and from Nelles Corners on \$12.00 and over.

**LEGAL**  
**ARRELL & ARRELL**  
Barristers, Etc.  
HAMILTON CALEDONIA  
Sun Life Building. Roper's Block  
Money to Loan at Lowest Rates.  
Harrison Arrell, S. Cameron Arrell  
County Crown Attorney.

**KELLY, PORTER & KELLY**  
Barristers, Solicitors, Notaries, Etc.  
W. E. KELLY, K.C. J. PORTER  
County Attorney. County Treasurer  
DAVID E. KELLY  
Solicitors for Norfolk County Council  
SIMCOE ONTARIO

**Brandram Henderson PAINTS**  
Have just put in a stock of the well known Brandram-Henderson Paints, Oils, Varnishes, Etc.  
If you intend to do any painting this spring call and see our stock and get prices. It will pay you.  
Also Lumber, Coal, Cement and Wire.  
Car of Steam Coal Just Arrived—\$11.00 Ton  
**W. J. BAILEY**  
Lumber and Coal Dealer, JARVIS

**Shop in Simcoe At OUR Expense**  
We Refund Car Fare from Jarvis on a cashbase of \$8.00 and over, Hazersville \$10.00 and over, and from Nelles Corners on \$12.00 and over.

**LEGAL**  
**ARRELL & ARRELL**  
Barristers, Etc.  
HAMILTON CALEDONIA  
Sun Life Building. Roper's Block  
Money to Loan at Lowest Rates.  
Harrison Arrell, S. Cameron Arrell  
County Crown Attorney.

**Shop in Simcoe At OUR Expense**  
We Refund Car Fare from Jarvis on a cashbase of \$8.00 and over, Hazersville \$10.00 and over, and from Nelles Corners on \$12.00 and over.

**Brandram Henderson PAINTS**  
Have just put in a stock of the well known Brandram-Henderson Paints, Oils, Varnishes, Etc.  
If you intend to do any painting this spring call and see our stock and get prices. It will pay you.  
Also Lumber, Coal, Cement and Wire.  
Car of Steam Coal Just Arrived—\$11.00 Ton  
**W. J. BAILEY**  
Lumber and Coal Dealer, JARVIS

**Shop in Simcoe At OUR Expense**  
We Refund Car Fare from Jarvis on a cashbase of \$8.00 and over, Hazersville \$10.00 and over, and from Nelles Corners on \$12.00 and over.

**LEGAL**  
**ARRELL & ARRELL**  
Barristers, Etc.  
HAMILTON CALEDONIA  
Sun Life Building. Roper's Block  
Money to Loan at Lowest Rates.  
Harrison Arrell, S. Cameron Arrell  
County Crown Attorney.

**KELLY, PORTER & KELLY**  
Barristers, Solicitors, Notaries, Etc.  
W. E. KELLY, K.C. J. PORTER  
County Attorney. County Treasurer  
DAVID E. KELLY  
Solicitors for Norfolk County Council  
SIMCOE ONTARIO

**Brandram Henderson PAINTS**  
Have just put in a stock of the well known Brandram-Henderson Paints, Oils, Varnishes, Etc.  
If you intend to do any painting this spring call and see our stock and get prices. It will pay you.  
Also Lumber, Coal, Cement and Wire.  
Car of Steam Coal Just Arrived—\$11.00 Ton  
**W. J. BAILEY**  
Lumber and Coal Dealer, JARVIS

**Shop in Simcoe At OUR Expense**  
We Refund Car Fare from Jarvis on a cashbase of \$8.00 and over, Hazersville \$10.00 and over, and from Nelles Corners on \$12.00 and over.

**LEGAL**  
**ARRELL & ARRELL**  
Barristers, Etc.  
HAMILTON CALEDONIA  
Sun Life Building. Roper's Block  
Money to Loan at Lowest Rates.  
Harrison Arrell, S. Cameron Arrell  
County Crown Attorney.

**KELLY, PORTER & KELLY**  
Barristers, Solicitors, Notaries, Etc.  
W. E. KELLY, K.C. J. PORTER  
County Attorney. County Treasurer  
DAVID E. KELLY  
Solicitors for Norfolk County Council  
SIMCOE ONTARIO

**Brandram Henderson PAINTS**  
Have just put in a stock of the well known Brandram-Henderson Paints, Oils, Varnishes, Etc.  
If you intend to do any painting this spring call and see our stock and get prices. It will pay you.  
Also Lumber, Coal, Cement and Wire.  
Car of Steam Coal Just Arrived—\$11.00 Ton  
**W. J. BAILEY**  
Lumber and Coal Dealer, JARVIS

**Shop in Simcoe At OUR Expense**  
We Refund Car Fare from Jarvis on a cashbase of \$8.00 and over, Hazersville \$10.00 and over, and from Nelles Corners on \$12.00 and over.

**LEGAL**  
**ARRELL & ARRELL**  
Barristers, Etc.  
HAMILTON CALEDONIA  
Sun Life Building. Roper's Block  
Money to Loan at Lowest Rates.  
Harrison Arrell, S. Cameron Arrell  
County Crown Attorney.

**KELLY, PORTER & KELLY**  
Barristers, Solicitors, Notaries, Etc.  
W. E. KELLY, K.C. J. PORTER  
County Attorney. County Treasurer  
DAVID E. KELLY  
Solicitors for Norfolk County Council  
SIMCOE ONTARIO

**Brandram Henderson PAINTS**  
Have just put in a stock of the well known Brandram-Henderson Paints, Oils, Varnishes, Etc.  
If you intend to do any painting this spring call and see our stock and get prices. It will pay you.  
Also Lumber, Coal, Cement and Wire.  
Car of Steam Coal Just Arrived—\$11.00 Ton  
**W. J. BAILEY**  
Lumber and Coal Dealer, JARVIS

**Shop in Simcoe At OUR Expense**  
We Refund Car Fare from Jarvis on a cashbase of \$8.00 and over, Hazersville \$10.00 and over, and from Nelles Corners on \$12.00 and over.

**LEGAL**  
**ARRELL & ARRELL**  
Barristers, Etc.  
HAMILTON CALEDONIA  
Sun Life Building. Roper's Block  
Money to Loan at Lowest Rates.  
Harrison Arrell, S. Cameron Arrell  
County Crown Attorney.

**W. M. HOSKIN**  
JARVIS, ONT.

—has been appointed the exclusive Sharples dealer for this territory. Because—we want you to get Sharples Service with Sharples machines. You can get repairs or supplies the same day. Furthermore, our local agent will demonstrate to you the superiority of any Sharples machine. The Sharples Separator saves cream thrown out by all other separators because it **skims clean at all speeds**, due to the wonderful Suction-feed.

**SHARPLES**  
Famous Suction-feed  
**SEPARATOR**

- the only separator that will skim clean at widely varying speeds
- the only separator that gives cream of unchanging thickness—all speeds
- the only separator that will skim your milk quicker when you turn faster
- the only separator with just one piece in the bowl—no discs, easiest to clean
- the only separator with knee-low supply tank and once-a-month ciling

Take a trip into our local agent's store today and see for yourself the above exclusive Sharples advantages and what they mean to you in cream saved and in convenience.

**SHARPLES MILKER** The world's fastest milker—and fast milking increases the milk yield. Produces 1.25 lbs. of milk per unit per minute—one man can easily operate four units. Used on over 300,000 cows daily.

The Sharples Separator Co., Toronto



If you buy out of town and I buy out of town what is going to become of our town? The dollar you spend in Jarvis will eventually "Come home to Boost."

## JARVIS' BUY-AT-HOME CAMPAIGN

Read these articles with care, they may present something you have not thought of before. Patronize the home merchants, whose ads. appear here. They are your neighbors and will treat you right. The money you spend with them stays in circulation in Jarvis and neighborhood and benefits the town.

**LOCAL MARKETS ARE ESSENTIAL**  
Equal Responsibility for Their Support Rests Upon the Farmers and Merchants.  
**MUST ASSIST EACH OTHER**  
Prosperity of Community Depends Upon Each of These Two Classes Buying Products and Goods of Each Other.

When It Comes to Supplying the needs of this community in the line of Groceries and Dry Goods. We feel proud to state that our lines cannot be surpassed. A complete line of everything kept in stock, and the service we at all times extend to our patrons is deserving of your patronage.

**MILLER BROS.**  
General Merchants  
Always at Your Service  
Anything in the line of Real Estate, Fire Insurance, Loans & Conveyancing will be given the strictest attention by me. If you are considering the sale of your home or farm see me.  
**GEO. L. MILLER,**  
Real Estate and Insurance.

**GOODS OF QUALITY!**  
By buying at home you have the advantage of seeing the goods you are paying for and know what you are getting. The quality of our goods will always bear inspection, and we invite you to come and look over stock. Groceries always fresh.

**J. A. BURWASH,**  
General Merchant.

I have just opened up and have taken the agency for the Farmers Cocksutt line of farm implements, also the Adams' make of wagons. Come in and get my prices on anything you may need, and I will assure you in advance of every courtesy possible in my line.

**HERBERT PEACOCK, Implements**

I Have Said It Before and Say It Again.  
You can get better prices as well as quality in footwear at my store than in the city. My stock is of the best quality. Also carry a good line of harness, whips, etc. Bring in your harness now for repairs.

**A. H. LANGRAN,**  
Saddler and Shoes

If You Have a Blowout, Stone or Bruise, Puncture or if your tires need re-treading bring it to me and I will show you how to save money on your tire bills. I have a complete vulcanizing and tire repair plant, and the service rendered is your guarantee of good work.

**J. W. MORRISON,**  
Tire Repairman

**In the Line of Groceries**  
I always aim to keep my stock fresh and clean. You can always return anything you buy from me that is not satisfactory. I carry at all times the choicest cuts of beef, pork, lamb, in fact, everything in the meat line. I solicit your patronage, guaranteeing to service in advance.

**THOS. HARRIS,**  
Groceries and Meats

**General Hardware Needs**  
At C. T. Carter's Everything in Hardware, Builders and Contractors Supplies, Farm Needs, etc. You can depend on any line of Hardware you purchase from me. Coal Ranges, Coal Oil Stoves and Heaters always kept in stock. Full line of Paints.

**E. T. CARTER, Hardware**

**Pure Drugs Are Essential to health.** We carry a full line of 100 per cent. pure drugs—and medicines. Big line of toilet articles and sick room supplies and everything usually carried in a first-class drug store. Buy in Jarvis.  
**JARVIS DRUG STORE**

Service is the Measure of a Bank's Usefulness  
We think we give the best. Our facilities are at the disposal of all who appreciate courteous consideration and the best terms consistent with sound banking. We are always glad to be consulted.  
**BANK OF HAMILTON, Jarvis-Nanticoke**  
J. H. BROWN, Manager.

Bring Your Old Shoes to Me  
I will make them look like new. These are the days when it is necessary to cut down your expenses. I also have a fine line of men's and ladies' shoes to select from.  
**J. W. NORMAN,**  
The Old Veteran Shop.

Seldom Will You Find a Combination of grocery and bakery giving the service and quality of goods I do. I do not fear competition of any nature because the groceries and baked goods I sell cannot be duplicated anywhere.  
**D. C. ALLEN, Grocer and Baker**

A Drive to and From My Garage is an economy drive. If you spend some money with me you will save money. If I attend to your car it will render a faithful accounting. Oils, Greases and Accessories.  
**E. W. ANDERSON, Garage**

Used Piano, Small size Thoroughly overhauled in our Hamilton repair department—a good practice Piano—Price \$175.  
**C. S. McCARTER,**  
Representing Gerard Heintzman, Canada's Greatest Piano.

Get your next job of paperhanging, painting or decorating be done by me. My long and wide experience in Jarvis is your guarantee of a service well rendered. I also sell wall papers of every description. Look over my samples before buying elsewhere.  
**W. M. MACHELL, Paperhanger.**

**In the Line of Meats**  
You cannot beat the OLD VETERAN SHOP. Everything I have in stock is "proven best by every test." I invite your patronage with the assurance that you will be satisfied. Carry a good line of all vegetables in season.  
**E. MACHELL, Meat Market.**

**I Am Always Prepared**  
To do all kinds of Sheet Metal Work, Trimming and Spouting. If I do your work you will be sure it is done right. No job too big or too small. I am always prompt and my prices as well as service is right.  
**W. R. OWEN,**  
Plumbers and Tinmiths

HEAD OFFICE HAMILTON

**BANK**

Blacks

Shall the eating


**W**  
jails w  
Since  
"Booze

—Before in-Council Ontario Comm. 1919-1920 Net ind

Import conditions, the province express

**Vote**  
Let us shu  
Ontario

"The  
... is



**Oxfords,**

**A. H. L.**