Put something by for a *sunny* day!

WHEN the horizon brightens with an opportunity that may lead to your success and prosperity, do not let it find you unready to take it on.

Through lack of capital, many men have been forced to see their opportunities pass—in many cases all that was required was a very small sum to invest.

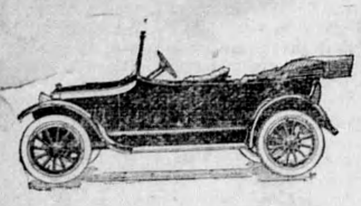
A few dollars saved each week or month, deposited to your credit in a savings account at The Bank of Toronto, with the interest it earns, will soon accumulate to a substantial sum. Have it ready when the call comes for your venture.

Your savings account is invited.

14

R. P. BELLAMY
Manager
FEVERSHAM

THE BANK OF TORONTO



CHEVROLET "FOUR-NINETY" TOURING CAR, equipped with electric lights and starter, highest type two-unit system, single wiring used. Complete lamp equipment, Mohair tailored one man top, top cover and side curtains; tilted windshield; speedometer; electric horn; extra rim and carrier on rear; complete tool equipment, including jack and pump. Foot rest, robe rail, pockets in each door. Price $895, f. o. b. Oshawa, Ont.

CHEVROLET

Made in Canada

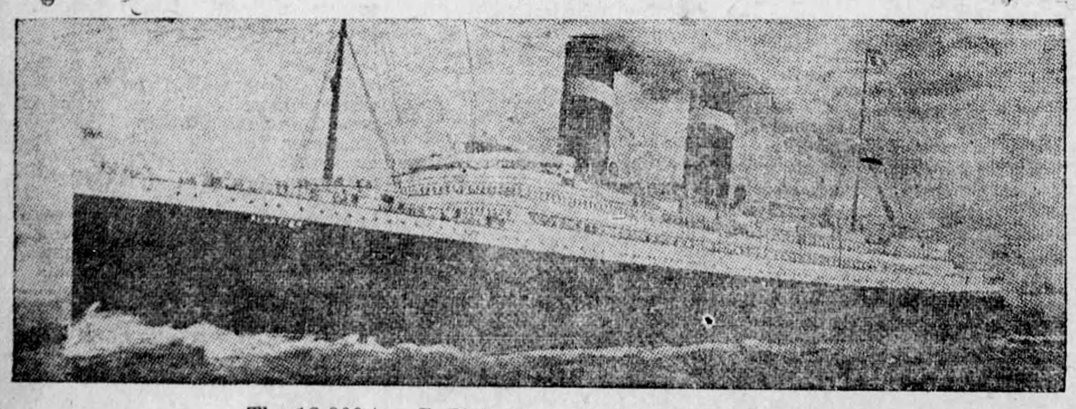
Behind every effort there is always an aim, an ideal. With the manufacture of Chevrolet cars this aim and this ideal is to build a car at the least possible price that is consistent with quality and good workmanship.

The success that the Chevrolet organization has achieved in this direction is evinced by the growing preference for Chevrolet cars by all who want the utmost in value and service.

D. McTAVISH & SON

FLESHERTON, - - ONTARIO

A Great Shipping Record



The 18,000 ton C. P. O. S. Liner "Empress of France."

At the outbreak of war the Canadian Pacific Ocean Services, Ltd., had in commission in the Atlantic and Pacific services thirty-eight steamships, with an aggregate gross tonnage of 341,399 tons. Since August, 1914, the construction of four steamships, previously authorized, having a gross tonnage of 67,000 tons, has been completed, and twelve steamships of 76,000 gross tons have been purchased within the same period. During the war fifteen steamships were lost by enemy action or through accidents at sea, and eight have been sold to the British Government after having been requisitioned, and one sold to an Indian Prince who later presented it to the British Government for use as a hospital ship. The construction is being proceeded with at the Clyde yards of the Fairfield Shipbuilding and Engineering Company, of a ship 625 feet long between perpendiculars, having a gross tonnage of 22,000 tons. This ship will be known as the Empress of Canada. Three passenger ships of the intermediate class for the Atlantic service are to be put under construction at the yards of John Brown & Son, and the Fairfield Shipbuilding Company. At the end of the last fiscal year the company had in ocean service twenty-eight steamships, of a gross tonnage of 264,430 tons, and six steamships under order or purchased but not delivered, having a gross tonnage of about 88,600.

The steamships lost through enemy action were the following:—Calgarian, 17,515 gross tons; Carthaginian, 4,444 tons; Ionian, 8,268 tons; Hesperian, 10,920 tons; Lake Michigan, 9,288 tons; Milwaukee 7,323 tons; Montreal, 8,644 tons; Mount Temple, 9,792 tons; Montfort, 6,578 tons; Missanabie, 12,469 tons; Medora, 5,135 tons; Miniota, 4,928 tons; Pomeranian, 4,421 tons.

The ships lost through accidents at sea were: the Corinthian, 7,333 tons; Lake Manitoba, 9,674 tons.

The eight steamships sold to the British Government were the Montezuma, 8,360 tons; Montcalm, 5,505 tons; Montrose, 7,207 tons; Mount Royal, 7,998 tons; Mongolian, 4,838 tons; Numidian, 4,836 tons; Ruthenia, 7,208; Tyrolia, 7,535 tons. The S.S. Empress of India was purchased by an Indian Prince and presented to the British Government for use as a hospital ship. Her gross tonnage is 5,954. The total tonnage lost through enemy action and other causes is 126,552, and the tonnage sold is 59,421, a grand total of 185,973 gross tons.

Ships purchased during the war are as follows:—

Botsford, 4,782 tons; Dunbridge, 6,650 tons; Holbrook, 6,655 tons; Montezuma, 5,038 tons; Montcalm, 6,542 tons; Medora, 5,135 tons; Mattawa, 4,874 tons; Miniota, 4,928 tons; Methven, 4,852 tons; Mottisfont, 5,692 tons; War Beryl, 10,800 tons; War Peridot, 10,800 tons. Vessels built and added to the fleet during the same period were the Missanabie, 12,469 tons; Metagama, 12,420 tons; Melita, 13,967 tons; Minnedosa, 13,967 tons.

ALL BUSINESS SCHOOLS ARE NOT THE SAME.

Feature 2. Watch for the others. The authority in all Business Systems, Accounts, etc, is the Chartered Accountant. The Northern Business College is the only School in Canada in charge of a Fellow of the Institute of Chartered Accountants.

Get the best. It pays.

NORTHERN Business College

Owen Sound, Ont.

C. A. FLEMING, F. C. A., Principal
G. D. FLEMING, Secretary.
(Mention this paper when writing)

Automobile Instructions

(FOR LADIES AND GENTS)

Now is the time to take advantage of the winter months to obtain a thorough knowledge of the Automobile. The man who owns or expects to own an Automobile will find this course financially profitable, or the young man who wishes to become an expert chauffeur will be prepared for a good paying position with easy work. This course consists of over hauling of motors, timing of valves and ignition systems, starting and lighting systems, troubles, etc. Write for booklet, or better still visit our school and be convinced. (We have special classes for ladies).

Orangeville Automobile School
East Broadway, Orangeville, Ont.

Hog For Service

Pure bred Yorkshire Boar for service. Terms—$1.50 at time of service.

J. F. COLLINSON,
1 mar Ceylon.

C. P. R. Time Table.

Trains leave Flesherton Station as follows:

Going South	Going North
7.53 a. m.	12.01 p.m.
4.27 p.m.	9.18p. m.

The mails are closed at Flesherton as follows: For the north at 10.40 a.m. and 7 p.m.; and the afternoon mail south at 3.40 o'clock. For morning train south mail close at 9 p. m. the previous evg

CONTAGIOUS ABORTION

A Too Common Trouble With Some Farm Mares.

Cause of the Disease Discovered—Method of Spreading Described—Measures for Control—Oyster-shell Bark Louse With Its Treatment.

(Contributed by Ontario Department of Agriculture, Toronto.)

CONTAGIOUS abortion of mares is due to a specific bacillus (Bacillus abortivus equinus) which gets established in the uterus, fetal membranes and foetus, setting up local inflammation leading to expulsion of the foetus dead or alive at any time during pregnancy.

The symptoms of approaching abortion are not usually in evidence until just before abortion takes place. Then the animal is seized with colicy pains, restlessness and straining, and a swollen vulva with a mucous discharge is noticeable. After abortion, the symptoms are more specific. There is a chocolate brown fluid discharge from vulva which has a typical offensive odor, and the foetal membranes are inclined to remain intact, thus necessitating artificial removal to prevent blood poisoning.

The disease has been known in Europe for many years, but it was not found on the American continent until 1886 when it appeared in the Mississippi valley. Since then it has spread far and wide in the United States and Canada. Although many investigations were made both in Europe and America, it was not until 1912 that the cause of the disease was discovered. In that year E. S. Good, of Kentucky, discovered the bacillus which causes the disease. The same year Dr. Schofield, of Toronto, discovered the same bacillus in some cases of joint ill in colts which had developed in districts in Ontario where contagious abortion of mares was prevalent and the following year found the same bacillus in cases of contagious abortion of mares in Ontario.

Method of Spreading.—The disease is spread mainly by the discharges from the vulva of aborting animals. If a mare that has aborted is served before all discharges from the vulva have ceased and the genitalia have been efficiently disinfected, then the stallion is liable to get contaminated with the bacillus and spread the disease to other mares which he subsequently serves. If the discharges from an aborting mare are allowed to contaminate the bedding or other materials that other mares come in contact with, then the mares are liable to contract the disease. If the discharges are allowed to contaminate water or food materials that are given to other mares, the latter are liable to contract the disease.

Measures for Control.—1. Three months must elapse between abortion and subsequent breeding.

2. Mares that have aborted must not be bred if there is evidence of uterine catarrh, even after three months.

3. Mares that have aborted must only be bred at the end of the stallion season.

4. Application of an efficient disinfectant to the external genitalia of the stallion after each service in affested districts.

Measures to Be Employed at Time of, or Subsequent to Abortion.—1. Isolation of mare at first sign of approaching abortion.

2. After abortion the foetus and membranes should be burned, if possible, or buried deeply in quick-lime.

3. Those handling the foetus and mare should disinfect hands and clothing.

4. Bedding should be burned and the stall washed with a strong disinfectant.

5. External genitals, thighs and tail of mare should be washed daily with a good disinfectant. Two per cent. bacterol, lysol, or cresol, is satisfactory for this purpose.

6. Isolation of mare should be maintained for at least a month or until all evidence of uterine discharge has ceased.

Treating the animal with drugs, as carbolic acid, black haw and methylene blue, though popular in some districts, cannot be recommended as being of any value.—Dr. J. H. Reed, O. A. College, Guelph.

Oyster-shell Scale.

This is a very common orchard insect. It attacks not only apples but also pears, plums, currants and many ornamental and shade trees and bushes. Full grown scales are found almost exclusively on the bark and are easily recognized by their oyster-shell appearance. They are about ⅛ of an inch long, 1-24 inch wide, taper towards one end and in color resemble closely the bark.

The injury is caused by their sucking the juices out of the bark and thus weakening the trees. When very abundant they almost completely cover the bark and in that case may kill either the whole tree or portions of the branches. Most infested trees, however, are not killed but only weakened.

Control.—Spraying the trees just before or just after the buds burst with lime-sulphur solution, 1 gallon to 8 or 9 gallons of water, is a satisfactory remedy. The regular Codling Moth spray with one gallon of lime-sulphur to about 39 gallons of water, to which two pounds of arsenate of lead paste or one pound arsenate of lead powder is added will also help greatly, because it will hit the young scale insects just after they have hatched, while they are still unprotected and easily destroyed. Dead scales may remain on the trees for several years after date of killing. Pruning the trees early makes it easier and cheaper to spray them well. —Prof. L. Caesar, O. A. College, Guelph.

MEDLEY ABOUT MEDALS.

Trafalgar Medal Was Refused by Sailors, Who Threw It In Sea.

The Trafalgar medal was struck in pewter for the lower deck. The seamen were annoyed at its shoddy appearance, and most of the recipients threw their decorations into the sea, says Tit-Bits.

The Soudan medal of 1896-7 has a ribbon in which yellow and black are separated by a narrow stripe of scarlet. These colors were chosen to symbolize the driving out of the black Dervishes from the yellow desert by the "thin red line."

Another ribbon which has an interesting significance is the yellow, blue and yellow suspender of the Khedive's Soudan medal. Here we have typified the blue Nile running through the sandy plains of Egypt.

The authorities have never been in a hurry over issuing medals; there are two instances on record when those entitled to rewards have been called upon to wait fifty years for their decorations.

The Victoria Cross was designed by Queen Victoria and the Prince Consort. For a long while it was made of the bronze obtained from cannons captured in the Crimea. Now, the makers use cannon taken in the Boxer Rising.

For Jellalabad a very ugly medal was struck, and those who received it grumbled in no measured terms. A really artistic piece was then provided, and all who possessed the first were requested to exchange it for the second. Not one per cent. of the recipients applied for the better medal.

Until the year 1914 the long service ribbon for the army was similar to that for the Victoria Cross. The only difference was in width, the latter being a fraction of an inch wider. Such was official intelligence.

No less than eleven ribbons recognized by the authorities are entirely blue.

After Waterloo the chief engraver of the mint was commissioned to prepare a fitting medal for presentation to the leaders of the victorious armies. He did so, but took thirty years to complete the work.

The medal for Culloden was the first to be provided with a ribbon of definite pattern. Before then each wearer suspended his decoration with any sort of ribbon he pleased.

Stay In Bed to Grow.

How many people are aware that we are shorter when standing than when lying, and taller in the morning than in the evening? asks Tit-Bits.

An Englishman was the first to discover this, but afterwards Dr. Marand, of the Royal Academy of France, made several experiments to prove the theory. He found after a year's trial that usually in the night he gained almost three-eights of an inch, and lost almost as much during the day. The cause of this is to be found in the different state or condition of the cartilages which go to make up the spine.

The joints of this part of our bodies are separated and yet joined by particular bony substances, everyone of which has a springy resilience. These are capable of yielding on all sides without bending the backbone or spine itself. Of course, the difference is scarcely perceptible in one joint alone, but the combined effect is appreciable. Naturally when the spine is supporting the weight of the head it is liable to be contracted, and we are taller after lying down for some time than after we have been walking about all day with our bodies in an upright position, with the spine supporting the weight of the head.

At night time, when we lie down in a more or less horizontal position, these top parts do not weigh so heavily, and the springy muscles being expanded, our spines consequently become longer.

Another proof of this is to be found in the increase of height sometimes experienced by invalids who have spent a long time in bed, and also in the fact that the most rest a young child has the taller he will grow.

King Gets Unexpected Gift.

King George has, it is said, recently received a most welcome gift from an unknown donor. It is a complete set of war stamps issued in the occupied parts of France and Belgium by the Germans, and also a set of the stamps issued by the Bolshevik Government.

Stamp collecting has always been one of His Majesty's favorite hobbies, and his sets, artistically mounted by himself, are probably the finest in the world. He possesses the celebrated "Baden Powell" stamp, issued during the defence of Mafeking. This was given to the King when he was Duke of York by Queen Victoria (who received it from Baden-Powell) accompanied by the stiff memorandum: "Even the circumstances of the siege in no way justified the substituting of his head for ours."

Perpetual Motion.

The nearest approach to perpetual motion was a clock constructed in 1774, by James Cox, a jeweler of Shoe Lane, London, Eng. This clock kept the scientific world guessing for years. The energy that made it run was derived from the changes in atmospheric pressure—a barometer was the sole motive power. Ferguson, the scientist, saw this clock; said it unquestionably would run until its parts wore out. The last heard of it, it had been sent as a gift to the Chinese emperor, from whom it later was stolen.

Costly Salmon.

After paying a big sum for the use of the salmon river the English visitor was very unlucky, having got nothing for the first five days. On the last day, however, he killed a nice salmon. "Hamish," said the gentleman to the boatman, "do you know that fish has cost me about £50?" "Awheel, sir," quoth Hamish, "then it's a mercy ye didna catch ony mair!"

TEMPERATURES OF AIR

The Atmosphere and Its Relation to Agriculture.

High and Low Temperatures Sometimes Beneficial and Sometimes Hurtful—Old Sol the Primary Source of Heat and Light—An Interesting Study of Air—Live Stock Notes.

(Contributed by Ontario Department of Agriculture, Toronto.)

ATMOSPHERIC temperature has ever been a matter of much concern to agriculturalists. 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 agriculturalist. 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 travels the intervening 92,900,000 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 temperature of the air in contact with it. The latter has the greater effect on air temperature.

Local conditions have a great effect on temperature. Water requires about five times the quantity of heat to raise it's 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 has 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 arrested 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 section before they are a success. Winter cereal crops of Ontario and hay crops are not affected by extremely low temperatures 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 28 deg. F. only 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 sowing, and if the weather in this period be warm, 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 weather in the critical period. 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.

All cereals are best adapted to the temperate regions and especially 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.

Live Stock Notes.

This is the time of year when horses are in danger of getting too much hay and too little exercise. Idle horses will keep in much better condition if given regular exercise, and if their supply of hay is wisely restricted.

Stables that are well ventilated and lighted, even though on the cold side, are more comfortable and more healthful than dark, steamy, warm stables.

Young cattle and breeding stock of beef breeds enjoy a short outdoor run every day during winter, and treatment of this kind promotes health.

Breeding ewes must have abundant exercise if vigorous, healthy lambs are looked for.

Good alfalfa or clover hay, with about four pounds roots, or two or three pounds of silage, per ewe, per day, makes a good ration.

Roots fed to horses not at hard work will cut down the cost, as well as add variety, to the ration.