

Canada's Young Farmers and Future Leaders.

A Town Boy's Summer on the Farm.

EDITOR "THE FARMER'S ADVOCATE":

I am going to attempt to write an article about my experiences while obtaining my examinations through farm employment during the past summer. I do not claim to be in possession of any fund of special facts, so that the following will be merely a recital of what many others in similar positions to myself have experienced and observed during their terms of employment in the country.

If farmers only realized what they add to their own reputations, and how much more work they can exact from their employees by adding kindness and liberality rather than meanness and roughness to their wages, I feel sure that farming as a profession would not be half so unpopular among town boys as it is at the present time. One lad's employer makes him feel almost as though he had taken him into partnership, and uses him as he uses his own family; another employer haggles over a few days' wages, is continually talking about the high cost of living at mealtime, and growls at his hired man as though he placed him in the class with his horses. The result is that the latter's hired man leaves him at the first opportunity, and naturally tells all his friends the particulars about the "place," and his former employer is surprised to discover that few will hire with him at any price, while his neighbor, who uses

his hired help "white," is lauded everywhere and never has any trouble obtaining help. I have in mind several cases where friends of mine obtained employment on farms where "grub" was scarce, and of others where there were "all kinds of it." Needless to say, in each case a different kind of recommendation was given, and nearly all the young men included in their stories the statement that, "they didn't care about the work, so long as there was lots to eat." In my own experience I found that hearty meals and cheery words made me fit for any work which might happen to come my way.

We didn't finish seeding last spring until after the middle of June, and even then most of the seed was "muddled" in. Some of the fields we had to leave without harrowing, as the rain would come on almost at any time and practically at all times. However, I noticed that when the harvest was off the ground that was not harrowed apparently yielded as much as the ground that was harrowed; although none of the crops were anything in comparison to those of other years. In making this statement I must not forget the hay crop, which has seldom been surpassed in this part of the country, either in quantity or quality, for you will remember the perfect weather that we had about the middle of July, at which time we had haying in full swing. On the farm where I worked we harvested clover as heavy as three loads to the acre, and that was from the first year's seeding. It seems to me that here lies the comforting feature of the farming profession. Farmers are not dependent upon one crop alone for their living. If a crop fails there are always others to fall back on.

One of Nature's laws is that those depending on her shall not be left desolate. Can the world, I mean the general public, be credited with such kindness?

Although hay was plentiful, we had to economize with it to offset the scarcity of other feed, and I soon found out that the horses could do as much work and looked just as well when they received a regular and carefully measured allowance of hay and oats, as when their mangers were kept full to the brim. In this connection, if I might be allowed to make the suggestion, I think that the scarcity of feed this year ought to teach farmers a lesson. Several farmers have told me that they were planning, by means of careful and thoughtful management, to winter as much stock and make as much money as usual this year. Now, if they can get along as well one year with a poor crop as they can another year with a good one, it is plainly time that lessons in economy should be forthcoming. Applying this to all Canada, I believe that were the lessons of sacrifice and economy taught by the present national crisis, practiced in times of peace and prosperity, in future years this war might be termed a national blessing.

Taking everything into consideration my experiences during the past summer have been everything but unpleasant. Football and lawn socials in the evenings, and kind friends at all times far more than offset the blazing sun, the blistered hands and tired limbs, and I know of no place where anyone can spend their holidays more pleasantly and profitably than on a farm, even if three parts of the fun consists of work.

Perth Co., Ont.

STUDENT.

Automobiles, Farm Machinery and Farm Motors.

Fire-Side Arguments.

Have you yet attended a meeting of the "Hot-Stove League"? In other words, has the cold weather brought your friends closer to the fire in a mood to discuss the automobile and its summer performance? Whether this opening event has occurred or not, it cannot be long delayed, and here are a few more suggestions that will in all probability provoke endless discussion.

Perhaps you have heard of the words "Chamber and Gather" as applied to front wheels. The former can be described as the amount of divergence from the vertical, and the latter as the amount of "toe-in." Front wheels must, of necessity, steer easily and also allow for even wear upon the tires. Now, the chamber allows the point of road contact to get closer to a position under the king bolts, and the gather obviates any tendency towards abuse of the casings by result of uneven usage. Never allow the front wheels to get out of their proper alignment, as the tires will not give you the mileage that would ordinarily be available.

Speaking of tires, if your machine is going to be laid up for some little time it is not a bad policy to wash them with some brand of pure soap and water, and then wrap them in strips of cloth or thick paper and store them away in a place free from light and with medium temperature. If it is not possible to remove your tires during the period in which your auto is out of commission, perhaps it would be as well to invest a few dollars in jacks and so-elevate the motor that the rubber will not, at any place, be touching the floor. If you cannot take any of these precautions, in all events keep the tires well filled with air and move your machine from time to time in order that the rubber at the different points of contact may not become dead and inert.

Were you ever driving along the road when you found that the radiator cap had become loosened and that brown drops of water were being sprayed upon the hood? The indication was perfectly plain—the water in the radiator was dirty. It might be well, once or twice a year, to take a solution of common soda and pure warm water and run it through the radiator by the operation of the motor. Afterwards drain off the liquid and clean out your machine with water before re-filling for road use.

In the summer season, people are constantly talking about the saving of gasoline. Do you realize that radiator and hood covers will economize on fuel in winter-time. This has been established beyond any question. The covers do not allow the engine to cool off rapidly and so reduce the amount of effort necessary to its starting. Some of these accessories are simply plain wool and cotton material, others are built up of grain artificial leather, heavily padded and quilted in diamonds, and the others have been constructed of silk mohair. The prices are extremely reasonable, and there is no doubt but that the benefit accruing from them justifies the expense.

There are a few interesting things to remember about cone clutches which, as you know, are utilized for the purpose of taking the load from the motor after it has been started and putting it to use. Never get oil or grease into the clutch housing, as there is a duty for them to perform and they may cause the clutch to slip. Also remember that constant use or abuse makes the clutch hard and unresisting. It is sometimes good policy to apply very fine fuller's

earth. A small quantity of neatfoot oil is also good, and some car owners claim that turpentine has its advantages. We would advise those drivers who wish to exercise the utmost care, that it is well to control the car with the throttle as far as possible, but never, under any circumstances, have your foot in any position that will make it difficult to reach the clutch in a hurry.

If your auto has been standing for any length of time these cold mornings, you will experience a little difficulty in starting. Under these circumstances do not forget to pull the button on the cowl or instrument board. Of course, we refer to the button which cuts the air from the carburetor. Should you not have an appliance of this kind, the same effect can be produced by asking a friend to hold his or her hand over the air intake of the carburetor. There is another method, and that is by pressing up and down the little button on top of your carburetor. From either one of these three operations you will get a rich mixture which should take fire readily. In the old days we primed the motor by pouring in gas, the same way that we primed a pump by pouring in water. The movements we have described, however, take the place of the antiquated system of priming.

Why do some cars of standard manufacture have three-quarter instead of U doors in the tonneau? This can be explained when we state that in the machines referred to the engine has been sunk in the frame in order to provide a better motor balance. The policy of the company has been "Safety First." U doors are very comfortable, but, where big power plants have been installed, it is not always possible to give this minor convenience and guarantee safety at the same time. We mention this as the matter frequently comes up for discussion. Speaking of motor balance, we need only say that the lower the centre of gravity, the greater the ease and surety of operation in any piece of machinery.

AUTO.

Stopping the Car.

EDITOR "THE FARMER'S ADVOCATE":

In your issue of the Advocate of October 19, under the heading, "Automobiles, Farm Machinery and Farm Motors," there appears an article dealing with the stopping of a motor car to which I cannot agree.

The first paragraph says: "Never stop your car by using the service brake if it is at all possible to utilize the clutch, and never under any circumstances use the brake without first pressing down the clutch." I think that this is very poor advice and the arguments in its favor wrong. I give herewith my reasons for saying that in order to stop a motor car the service brake should be used with the clutch engaged.

1. "Economy in tires." In stopping a car if the clutch is released before applying the brake the rear wheels are allowed to slide when the brake is applied. If the brake is applied with the clutch engaged the rear wheels must revolve. The sliding of the rear wheels on the road surface you must agree is more wearing on the tire than the revolving action would be.

2. If the road surface is wet the tires will slide when the brake is applied if the clutch is released. This causes skidding, which at all times is very dangerous. If the brake is applied with the clutch engaged

the rear wheels must revolve, and while revolving the tendency to skid is removed.

3. A car can be stopped much quicker by applying the brake with the clutch engaged. For when the brake is applied in this manner the car cannot slide and the momentum is at once stopped; the brake working on the drum acts against the engine, giving greater friction to the tires and so stopping the car.

I have been informed that one of the test cases in examining for chauffeur's permit is to see how the applicant would stop his car. If he releases the clutch before using the brake marks are scored against him.

I drive a Cadillac car and have been instructed by one of the mechanics to release my clutch as seldom as possible. I have been driving for some eight years now, and find personally that the use of the service brake while the clutch is engaged is the more satisfactory method of stopping my car.

York Co., Ont.

NORMAN H. CAMPBELL.

Ans.—The best newspaper and engineering authorities in the automobile world do not agree with your contention, but rather with ours. Let us repeat that it is never wise to stop your car by using the service brake, if it is at all possible to utilize the clutch. The success of the automobile business must inevitably rest in direct ratio to the economy with which machines can be operated, and there is no shadow of doubt regarding the advisability of bringing any vehicle to a complete stop solely by shutting off the power. When this method is pursued, it is not only saving in gas but in tires and machinery. It must be patent to anyone, that a brake should not be asked to fight against the speed of an engine as well as the momentum of the car, and this it is necessary to do if the clutch is not released. When your clutch is engaged, one wheel does the skidding, but when it is out, two wheels perform the same operation and the latter is the safer. This is an established fact.

AUTO.

Can You Tell Iron From Steel?

In many instances a farmer is at a loss to know whether a piece of metal is iron or steel, be it in a machine or in bar form.

There are numerous methods used to distinguish between these, of which the following are the four most common:

First: The method most commonly used is to tap the metal with another piece of metal or to drop it on a hard surface, a concrete floor will serve, and note the sound made. If the metal has a clear ring it is steel, if a very dull or dead sound it is iron.

Second: Examine the surface and corners of the piece in question. If the surface has a glass smoothness and the corners are sharp it is steel. If the surface be rough and the corners somewhat rounded, it is iron.

Third: Touch the metal to an emery wheel and observe very closely the sparks given off. If all the sparks burst after leaving the wheel it is steel. In steel some of the sparks burst and then the particles burst again. In iron this never happens and but very few of the sparks burst.

Fourth: A final method, if the person is still in doubt, is to break the metal. If the fracture shows up fibrous with a dull appearance, it is iron. If the break is clean and the particles have a luster it is steel.—H. A. Schott, Colorado Agricultural College, Fort Collins, Colorado.