

stead for a law office, commercial vocation.

Association may counteract this system, if they will petition school boards of each district, that they engage the services of

Moreover, the organization more interesting, educative and a Science Club Library in each town, that the majority of farmable reading material. Many books, but literature of the as the ambitious youth desires to prevent its constantly being stocked with tales without an atom of types are rarely seen. Fiction each us a little of the English emotions; science books and up clear and independent thinkers, show us a real beauty as a lasting source of information even the poorest farmer can afford, and indirectly place at which he could beautify his live stock and farm con-

bread alone." Recreation is longevity. The play spirit the junior farmers. Dignity laid aside at times. Athletic formed and the young fellows have a good time in an old style once a week. The of running contests, tug-of-war everything in fact, which combines freedom from conventional ideas. They make life more satisfactory carefully studying their characteristics with them in their ambitions, by allowing them and by teaching them the advantages of country life. More- should encourage soci- butterfly society of the cities. regularly in their homes for ment. The young people in ed would undoubtedly secure could cause them to conclude, as natural abode, a garden of ent, either as a health-builder, ore of wonders.

LEONARD LA ZERTE.

Making Attractive.

ADVOCATE":

of success in an endeavor to will result from the combined efforts rather than from individual effort. Movement must be to some form of club or society, improving rural life.

establishment of a club, the a meeting place, and I would l, size and style in accordance lth of the surrounding pop- known as a "Community ose of holding business meet- ional classes, and the var- ch a hall is necessary. Such e community for the com- ial property of any set or nent in ways too numerous Farmers could inaugurate a , and the "old folk" could y possible. A drive shed in lding would prove of great on of horse shelter permit- e living at a distance. The g place procured, an im- now be arranged.

any walk of life, a measure and a degree of amusement arable. Education is to-day incidental to success; much ained by concerts, dances, gatherings; thus it can be y its existence by providing on to its members and the onnection with the organiza- ld be formed. Agricultural nd varieties of seed, and can be discussed. Beside orted over all by this pro- fluently will be developed which may very reasonably e attention must be paid e question; arrange for as sible; endeavor to cater to munity; increased oppor- eighbors produces a sense urroundings, make the e of the neighborhood at rural conditions will

ns can be improved in- modern methods of farm- as much labor machinery ne age, and in the manu- s are performed manually rmed mechanically; and o the farm. The milking

machine, litter carrier, etc., lighten the barn labor, and increase the efficiency of farm operations, and the older folk can make the farm more congenial and attractive to the young by installing such devices when financial circumstances permit. The same opportunity for increased efficiency exists in the house, and much of this work can be performed by the juniors. If circumstances do not permit of a complete water system put in a kitchen sink and drain, place the pump in the woodshed or kitchen and obviate the carrying of water to and from the house; install a "dumb waiter" and save mother or sister a journey down and up stairs for every little item wanted from the cellar. Investigation along these lines will reveal to the young farmer numerous ways in which he can lighten labor in the house, thereby providing more attractive surroundings for the women folk. The use of obsolete methods and machinery in farm operation, and the absolute unhandiness of many farm homes is largely responsible for much rural exodus. The young and developing mind naturally wishes to be modern and up-to-date, operating in convenient and efficient circumstances, and if rural conditions do not permit of this a fresh field of activity is sought, usually far removed from the farm. The young farmer should remember that rural conditions will be materially improved when agriculture is properly represented, hence he should not vote Party, merely because "Dad" does; support an organization that proposes to have the industry represented by its followers and test the theory that a farmer could better legislate for agriculture than a lawyer or physician.

Therefore, Juniors and Seniors, both of the agricultural world, if you would have your calling and surroundings attractive, organize and co-operate, provide education and recreation, be modern and embrace improvements, remember there are disadvantages to all callings, have your industry properly represented, endeavor to cultivate and observing and analytical disposition an you will perceive that nature offers many counter-attractions to the lure and lights of the city.

Temiskaming Dist.

NORTHERN SCRIBE.

AUTOMOBILES, FARM MOTORS AND FARM MACHINERY.

Cleaning Reflectors.

How can I clean the reflectors in headlights of car without spoiling the high polish, which is given them.

D. H. B.

Ans.—The reflectors of head-lights are covered with a composition that is very easily removed by rubbing. It is almost impossible to restore the polish to reflectors. By the gentle use of a cloth soaked with alcohol, a beneficial effect is sometimes secured.

AUTO.

Things to Do and Things Not to Do to Insure the Long Life of a Rope.

1. When taking it from the coil always remove it from the centre by laying coil flat on floor with inside end at bottom and pulling this end up through the centre.
2. Do not drag the rope over the ground, over sharp or rough objects. Do not drag one part of a rope over another part.
3. Do not store away rope when it is wet. Dry it thoroughly.
4. Do not store rope near places where any kind of acid is stored or where acid has been stored. The slightest trace of acid will shorten the life of a rope. Keep the rope out of the reach of animals.
5. Slings and small ropes should always be hung up in dry places that are well ventilated. Large ropes should be stored on gratings raised above the floor.
6. When ropes are to be spliced or knotted follow the accepted rules for the best knots and splices.
7. Always buy good rope; it will pay you. Remember that human life and property are often jeopardized by the breaking of a rope. Use care.

The Vacuum System.

There are three methods by which gasoline is fed through the carburetor to the combustion chambers of a motor car. The simplest idea is that of gravity, the gasoline tank being placed at some point in the car well above the carburetor. One position is under the front seat, and another under the cowl. The simplicity of this arrangement recommends itself very highly, but there is always the difficulty that when the tank is practically empty, and the machine going up a grade, that the gasoline will not feed into the carburetor. Instances are not common where under these circumstances drivers have been compelled to back their cars up stiff hills. There is another disadvantage to the gravity system, and it is contained in the fact that perhaps the safest place to carry fuel is at the rear of the car, where it is away from dangers due to passengers smoking or the car turning over in a ditch. You can readily understand that a gasoline tank working under the gravity system cannot be placed at the back of the body unless it is at a point higher than the carburetor, and this for obvious reasons is out of the question.

The second system of gasoline supply is what is commonly called "air pressure feed." This invention calls for the development of pressure by pumping and,

of course, makes necessary a series of pipes. The inconvenience of such a method has not recently met with much popular favor.

At the present time the vast majority of better class cars are equipped with a vacuum gasoline system, which makes use of a small tank, installed under the engine hood cover at a point above the carburetor. This little tank is connected by means of thin tubing to the intake manifold, to the gasoline storage tank, and to the carburetor. When a motor is in operation, and the pistons are going up and down, their action calls for gasoline through the carburetor. It is this pumping of the pistons that pulls the gas from the fuel supply, wherever it may be located, into the vacuum tank. There are two chambers in the vacuum system, the upper one being for filling, and the lower one for emptying. There is a valve between the two chambers that closes when the suction of the pistons on the intake stroke establishes a vacuum in the upper chamber. Of course, you are familiar with the fact that nature abhors a vacuum, and so when the vacuum has been created it develops a suction of fuel from the gas tank. This, in a general way, will give you some popular ideas regarding systems of gasoline feeding. There are very few things that can happen to embarrass the gravity method. If the pipe from the tank to the carburetor becomes blocked with foreign matter, you will simply have to clean it out by air pressure or a thin wire. Any other troubles that may arise can be easily remedied, because the system itself is as simple as ABC. When your pressure method of fuel supply becomes difficult of operation, it might be well to command the services of an expert, unless the trouble is very apparent and easily cared for.

The main things to remember about a vacuum tank are these: when a leak occurs in the outer wall, a simple job of soldering will restore matters to normal. If you find a leak in the tubing, either put in a new part, or have the vent closed up by a mechanic. Sometimes the carburetor connection in the bottom of the tank may become loose. It is an easy matter to tighten it up. It will be a wise policy on your part not to tamper with the vacuum system until you are sure that the difficulty you are attempting to locate is not in some other piece



Fairview Posch.

Highest priced female at the Canadian National Holstein sale, Toronto, April 10 and 11. Consigned by A. E. Hulet, Norwich, and sold for \$1,380.

of mechanism. Bear in mind that if "tickling the carburetor" brings the gasoline along, that the vacuum system is doing its work. Should occasion arise to remove the top of the tank, the utmost care must be exercised in replacing it as the joint, from the very nature of the work required, must be air tight. Sometimes a hole develops in the float. When this happens, bore another hole in order that any gasoline inside of the float may be poured out. Then solder up both holes and test the float in water, making sure that the leak has been repaired. Sometimes dust and dirt and foreign matter gets into the gasoline supply tank, and runs along the feed pipe to the vacuum system. In order to prevent trouble, there is a screen in the vacuum system where the gasoline enters. It will be a good idea to clean this screen at frequent intervals in order that the passage of the gasoline may not be blocked. It might also be a good idea for you to drain your gasoline through a screen or chamois, when filling the storage tank; or if it is not possible to do this, make it a rule to clean out the vacuum system once every two or three months.

AUTO.

THE DAIRY.

At the Oregon experiment station it was found that the loss of fat in whey with careful handling, during the process of making cheddar cheese was about 10 per cent. greater with pepsin than with rennet.

About 90 per cent. of the foreign solid matter in bottled milk, settles to the bottom of the bottle where it may be seen. It has been found that 83.72 per cent. of fresh manure and 10.96 per cent. of air-dried manure is soluble in milk, so that every care should be exercised to keep milk from becoming contaminated.

From experimental results secured at the Iowa Agricultural Experiment Station it was found that with the continued use of pure-bred Guernsey, Holstein and Jersey sires, the first generation produced an increase of 45 per cent. and the second generation 110 per cent. of milk over their scrub dams and grandams. The increase in butter-fat was 39 and 102 per cent. respectively.

A writer in a recent issue of the Journal of the American Medical Association concludes that "certified milk, produced with scrupulous care, under the oversight of a reliable medical commission and then properly handled in the home, is the ideal solution of the milk problem, at least as far as the delicate infant or invalid is concerned." This conclusion followed a general discussion of the properties of raw milk and the alteration of some of these properties by heating the milk.

Experimental data from 29 cows, collected in Kentucky shows that fat production declined on an average .1 pound and milk production 1.5 pounds on the day of most evident heat. Some cows were not affected by oestrus and a few increased slightly in milk and fat production, while a few sensitive or nervous cows were greatly affected. One cow dropped from a test of 3.7 in the morning, at the onset of heat, to 1.9 at night, while the next day her test rose to 7.3 per cent of fat.

A recent writer in the Journal of Agricultural Research shows that all samples of high class corn silage examined, contained lactic, acetic and propionic acids. The crops and crop mixtures under examination from which first-class silage was secured and which showed an acid fermentation similar to corn silage were as follows: Oats and peas in any proportion, oats, peas, wheat and peas, clover, and clover and wheat straw. A mixture of alfalfa and wheat straw made silage unfit for feeding purposes.

Act to Regulate the Purchase of Cream.

Dairymen will remember that the Ontario Legis-

lature passed an Act in 1916 called the Dairy Standards Act, the object of which was to improve the quality of dairy products and to make the payment of milk and cream by test, compulsory in the Province. This Act was not enforced and is not in force now, although there have been some representations made recently to the authorities, to the effect that the important principle of paying by test should now be adopted.

At the present time the Ontario Legislature has passed or is about to pass an Act to regulate the purchase of cream. The following is a copy of the provisions of the Act, one or two of which are taken directly from the Dairy Standards Act:

"1. This Act may be cited as The Act to Regulate the Purchase of Cream.

"2. All cream purchased for sale, shipment or fat content.

"3. (1) In determining the fat content of cream supplied to a factory, the sample of cream taken for testing shall be weighed into a test bottle officially stamped and shall weigh 9 or 18 grams.

(2) Every person who makes a Babcock test of milk or cream supplied to a factory shall proceed in accordance with the official method and shall observe the details of making and reading the test as set forth in Bulletin No. 266 of the Ontario Department of Agriculture, or revised edition of the same.

"4. Any person who violates any provision of this Act or who falsifies in any way, or over-reads, or under-reads the Babcock test, shall, upon summary conviction thereof be liable to a penalty of not less than \$10 nor more than \$50.

"5. For the purpose of carrying into effect the provisions of this Act or any section of this Act according to their true intent, the Lieutenant-Governor in Council, on the recommendation of the Minister of Agriculture may make such regulations as may be deemed necessary, advisable or convenient, and may impose penalties for the violation thereof, and such regulations shall have the same force and effect as if incorporated herein.

"6. The penalties imposed by or under the authority of this Act shall be recoverable under the Ontario Summary Convictions Act."

It is also proposed to change the legal standards for butter fat and total solids in whole milk, from 3 per cent. of butter fat and 12 per cent. of total solids to 3.25 per cent. of butter fat and 11.75 per cent. of total solids.

This Act may be said to be the direct result of work done by the Ontario Milk and Cream Producers' Association and is levelled at a few unscrupulous creamery operators who have been detected, during the course of some preliminary investigational work, in paying for cream on a basis of test lower than the