

Automobiles, Farm Machinery and Farm Motors.

More Timely Suggestions.

We had a visitor the other day who discussed with us rather fluently the different automobile departments that are being conducted by various publications and the subjects threshed out in them from time to time. He said that he was very interested in them because he had owned a car of some make or other since 1911. His chief complaint against many magazines and journals was based upon the fact that much of the information provided was too technical and in consequence, as he very aptly put it, "over his head."

"Keep on pounding in the timely stuff," was his advice "and always write it in popular style. I have read a great many stories about automobiles but have been compelled to give them up because they dealt with complex electrical matters or difficult mechanical propositions. What I want is the plain unvarnished truth served up so that I can understand it."

We thought that we had told practically the whole story in relation to the care of cars and winter service but we found out after talking with our interviewer, that we had neglected certain details which, if not important to our mind, were at least very vital with him. For instance, we have given you suggestions regarding the use of alcohol but we know now that we failed to state that the alcohol in the solution with which you filled your radiator evaporates very quickly. It is there-

fore necessary to add a pint of pure alcohol at intervals in order to make up for the evaporation and to keep your solution at standard. We are also conscious of the fact that while we told you to change the oil in the crank case at regular periods, we did not emphasize the necessity for this operation. We do so now and with apologies. As we have stated on many previous occasions the ordinary commercial gasoline marketed at the present time contains considerable kerosene or coal oil. This crude fuel does not burn until a high temperature has been reached in the cylinders and so in consequence, some of it gets down past the pistons and into the crank case where it destroys some of the qualities of the oil. The ordinary lubricant prevents wear and kills noise but gasoline and kerosene are not in any such classification. If you are making long trips with your automobile very little of the kerosene will get past the pistons, but if you are making many short trips the case is different. Every time your motor cools off it must be heated up again to a point where the kerosene and gasoline will burn or otherwise the low grade portion of the gas will be blown into the crank case. Kerosene is not the only thing that does not burn in a cold motor. You must remember that a certain amount of condensation takes place and this also affects the lubricant around the crank, or in the crank case.

Our articles have dwelt at some length upon the care

of the battery but we find that many people do not even now know the amount of care that should be exercised. The battery requires more frequent inspections in the cold months than it does in the warm months. The evaporation in winter is certainly not as great as in the summer but the starting of a cold motor puts a greater load upon the battery than the starting of a hot one. The result is that the battery develops a greater internal heat and, of course, much more evaporation takes place. If, in the inspection of your battery, you find a green substance on the terminals, this will indicate that there is a poor connection. It will become necessary for you to disconnect the terminals and wash them with a heavy solution of baking soda. It is also well to subsequently apply a coating of vaseline to the surface of the terminals.

There are some owners who only use their cars during four or five of the summer months. These motorists should remember that a machine that is laid away for a long time frequently develops rust on the cylinder walls. To prevent any such happening it is advisable to remove the spark plugs and squirt in some lard oil on the tops of the pistons. By turning over the motor you can now distribute this oil along the walls of the cylinders and thus effectively prevent rust.

This is our final article upon the care of cars in winter time. If there is any point that we have overlooked we shall be pleased indeed, to take it up individually.

AUTO.

Canada's Young Farmers and Future Leaders.

The County Short Course.

There was a time when comparatively few farmers or farmers' sons had an opportunity of acquiring scientific knowledge on agricultural problems. Their information was gained under the exacting, and oftentimes harsh, school-master experience. They knew that certain things had to be done in order to reap a harvest from the soil, and that better results were obtained in the dairy and feed lot with some feeds than with others, but they were unable to delve into the whys of these things on their individual farms. And so they labored on in the dark with more or less success, but in many cases without that enjoyment in the work due to knowledge of the fundamental principles underlying plant and animal life. The agricultural colleges are the natural source of information for the solution of farm problems and they have done a great work. New and better varieties of grains and seeds have been created, crop yields have been increased by selection and plant breeding, improved systems of feeding have been worked out, the chemistry of soil and plants has been studied, heavy laying strains of poultry have been built up, types of buildings have been experimented with, and every problem of the dairy from stable to finished product has been studied. Time has been given to the study of fruits, bacteriology, weed seeds, etc., and the deductions have been scattered broadcast by means of the press, lecturers, and students of the college. However, only a small majority of the farm boys could spare the time to take a complete course, and getting the knowledge second hand failed to inspire the youths of the land to acquire needed information for the carrying on of their occupation in the most efficient manner. This is no fault of the colleges nor yet can the boys be blamed. There are oftentimes almost insurmountable difficulties lying between the farm and the college halls. Of late years these difficulties of acquiring an agricultural education have been partially overcome. The agricultural college is in a sense brought to the farmers' doors, through the agency of its graduates.

A District Representative has been established in most counties of Ontario, and among his many duties is the holding of a four to six-weeks agricultural course in some part of his county during the winter season. This work has been going on for several years and thousands of young men have seized the opportunity to further their knowledge of agriculture by attending these courses regularly. Seldom is a course held in the same locality two years in succession. By going to a different locality each winter, some representatives have conducted a course within reach of every young man in the county.

We know of young men who ridiculed their chums for rising earlier than usual on the cold winter mornings in order that they might finish their chores and be in time for the morning lectures. They would sooner take an extra nap and then sit dozing by the kitchen stove, after the morning chores were finished, than drive several miles in the cold and then listen to lectures and discussions on farm topics all day. But, now the laugh is the other way. The young men who made a sacrifice to learn the why and wherefore of farming are becoming leaders in their communities; they are debating and speaking on public questions; they conduct crop and feeding competitions; some have won honor in stock judging competitions, others have been selected as official judges at fall fairs. They are making a success of their work, and their opinions are sought after by even the older heads in the community. The short course may not be responsible for all the advancement, but it has in most cases awakened a new interest in farm work. It has led many young men to decide in favor of the farm. We have yet to hear a young man say that he regretted having attended the course; most of them are planning to attend again if a course is held in their neighborhood. In many counties short courses and special agricultural meetings will be held this winter. Are you planning to attend?

By attending a short course the student can acquire a working knowledge of the principles of agriculture. A series of lectures are given by the District Representa-

tive, assisted by specialists, on such subjects as crop production and rotations, farm operations, principles of breeding, feeds and feeding, compiling rations, dairy practices, poultry, horticulture, weeds, weed seeds, insects, under-drainage, etc. Demonstrations are held and the students are given practice in stock judging, milk testing, grain judging, weed identification, public speaking, etc. If a man applies himself it is surprising the amount of useful information that can be acquired in a short time, and that without having to leave the community. The course is held at a time when work on the farm is least pressing. The hours for lectures are such as to enable the student to assist with the chores night and morning. If a short course is held within eight or ten miles of your home, you miss an opportunity if you fail to attend. Consult your District Representative regarding the place of meeting and course of lectures to be given in your county.

Feed Consumed by a Litter of Pigs.

EDITOR "THE FARMER'S ADVOCATE":

On April 29 last my sow farrowed a litter of ten pigs. The following is an account of the meal fed and the selling price. The hogs were fed some mangels, the weight of which I am unable to give. They also received a quantity of skim-milk twice a day. The feed bill is as follows: 4,495 pounds mixed chop at \$2.50 per cwt.; 500 pounds of shorts at \$2.25, and 200 pounds of shorts at \$2.40 per cwt., making a total cost for grain of \$128.36. On October 31 I sold nine of the hogs at \$15.50 per cwt. They weighed 1,780 pounds. The other pig was killed on November 15 and dressed 170 pounds. Dressed pork was selling at \$24 per cwt.; thus the total receipts were \$316.70, leaving a profit over the cost of grain of \$188.34. Taking mangels, skim-milk and labor into consideration, I consider there would be about \$100 net profit.

Halton Co., Ont.

W. J.

THE DAIRY.

Oxford County Holstein Breeders' Club Had a Good Sale.

The Oxford District Holstein Breeders' Club again had a very successful sale, when sixty-one head were auctioned off for a total of \$12,055, which would make the average close to \$200. This Club holds two sales a year and has gained the reputation of always consigning high-quality stock and has thereby won the confidence of the public which resulted in a large crowd of Holstein breeders turning out at this sale. Bidding was brisk for practically every animal, the sixty-one head going under the hammer in a little over three hours. Daisy De Kol, consigned by Walburn Rivers, Ingersoll, and purchased by C. P. Wilcox, of Chatham, was the highest-priced animal at the sale. Four hundred and twenty dollars were paid for her. Sir, Segis Walker Korndyke, consigned by W. E. Thomson, was the highest priced bull. He was purchased by Wm. Pullen, of Woodstock for \$365. The sale was conducted by auctioneers Moore and Dean.

Among the consigners were: M. H. Haley, A. E. Dunn, M. L. Haley, J. G. Currie & Son, W. E. Thomson, G. Oliver, T. J. Lammiman & Sons, C. N. Hilliker, F. I. Heeney, A. T. Walker, B. D. Smith, T. G. Grevy,

G. R. McCombs, R. W. Newton, Walburn Rivers, F. Rowe, M. McDowell, W. C. Prouse, McGhee Bros., A. Groves, W. B. Poole, O. Wallace. Following is a list of the animals selling for \$100 or over, together with the names and addresses of the purchasers:

Daisy Fayne 2nd, Geo. de Montmorency, Woodstock	\$350
Miss B. B. de Boer, W. C. Houck, Chippewa	230
Baron Korndyke Segis, A. Dunn, Ingersoll	315
Gretequi Keyes Lyons, W. B. Poole, Ingersoll	400
Faforit Tehee Walker, F. B. Shaver, Copetown	215
Korndyke Baron Segis, R. G. Boxall, Mossley	175
Baroness Johanna Fayne, G. E. Brown, Copetown	155
Lady Fayne Beets, N. R. McArthur, Thamesford	205
Grace Fayne Homewood, M. J. Bain, Thamesford	275
Lady Grace Fayne, G. E. Brown	235
King Midnight Ormsby, J. W. Innes, Woodstock	245
May Posch Calamity, Jas. Liddle, Copetown	180
Sir Segis Walker Korndyke, W. Pullen, Woodstock	365
Bonnie De Kol Posch 2nd, G. T. Hewitt, Bright	195
Mercena De Kol Segis, A. S. Downham, Thamesford	195
Sir Zorra Walker, G. Bishop, Norwich	145
Victoria De Kol Beauty, J. J. Fox, Guelph	225
Princess Netherland De Kol, Jas. Liddle	155
Bessie's Claressa, W. J. Fraser, Streetsville	250
Irene Dewdrop De Kol, Jas. Liddle	200
Winnie Dewdrop Keyes, T. H. Dent, Woodstock	200
Jennie Posch Countess, W. J. Fraser	220
Pauline Countess, W. Bolton, St. Marys	195
Tidy Jean Colantha, G. Hart & Son, Woodstock	130
Rebecky Winnie Colantha, G. Forrester, Mitchell	115
Pearl Butter Baroness, P. Jaques, Hickson	145
Cherry Butter Baroness, H. Matthews, Putnam	180

Josie De Kol Butter Baroness, W. Bolton	135
Millicent Walker, T. Wilcox, Smithville	280
Aunt Mary, T. Wilcox	200
Winnifred Walker, T. Wilcox	230
Daisy Queen Calton, Jas. Liddle	205
Excelsior Lady De Kol, L. Wilson & Son, Caledonia	220
Adelaide Springbank Schuiling, G. P. Adams, Bronte	175
Maple Grove Beauty Colantha, G. Hart & Son	195
Daisy De Kol, C. P. Wilcox, Chatham	420
Pioneer Mechthilde A. Hartog, J. E. Casler, Norwich	195
Colantha Mercena De Kol, J. W. Innes, Woodstock	165
Dutchland Mercena, G. Hart & Son	165
Charlotte Ormsby Segis, W. C. Houck	200
Centre View Walker Segis, C. Hoyle, Woodstock	130
Centre View Ormsby Lad, F. Hilliker, Norwich	150
Netherland Aaggie Bell, G. de Montmorency	210
Dixie Belle De Kol, Jas. Liddle	190
Finderne Valdesso Ormsby Fayne, A. Duff, Corinth	270
Sir Randolph, M. Armstrong, Tillsonburg	150
Jennie Calamity Posch, J. A. Bryden, Galt	275
Queen Posch Wayne De Kol, J. P. Griffin, Burlington	215
Alice De Kol Mercena, A. S. Downham	180
Aileen Daisy Pietertje, Walter Wilson, Salford	255
Sir Ormsby Hartog Mercedes, T. J. Lammiman & Son, Curries	225
Heimke Ina Triton, Biggar Bros., Oakville	205
Heimke Canary Faforit, Jas. Liddle	195
Ina Mercedes Pontiac, J. J. Fox, Guelph	160
Heimke Pontiac, J. J. Fox	165
Canary Ina Clothilde, Sheriff McGhee, Woodstock	225