

Automobiles, Farm Machinery and Farm Motors.

Transportation at Toronto Exhibition.

To the casual observer the exhibits in the Transportation building at the National Exhibition in Toronto were as excellent in every respect this year as they were in 1917. Experienced motorists, however, recognized the fact that the new models, which usually attracted much attention, were conspicuous by their absence. This condition was due to a number of reasons, the principle one of which can be set down as the war. It is safe to say that the new models for the 1919 season will eventually be produced, but in all probability their appearance will not be earlier than the latter part of October or the first week in November. The United States control automobile steel and when they put into effect priority regulations, Canada is of course, vitally affected.

Being anxious to give visitors as much advanced information as possible the motor car companies made certain changes on their models and also announced in a general way the alterations and improvements that would be put into effect for 1919. Perhaps the greatest alteration concerns tops, which every year past have contained windows made of a celluloid composition. They now replace the celluloid with plain or bevelled glass. The effect produced is not only beautiful but of a more serviceable nature. Celluloid compositions are hard to keep clean, but glass can always be polished with little trouble or inconvenience. The backs of some cars have two circular or oval windows, while others confine themselves to one large opening. It is interesting to note that a big majority of the tops now possess what is known as the gypsy type. This not only goes across the back, but toward the front of the car along the line of the last bows. The idea is not only attractive but has the benefit of keeping the dust of the rear wheels from the passengers. In a great many cars the curtains at the side, and immediately in front of the gypsy pattern, contain oval and round glass windows, which will enable passengers to get a clear view without, as previously, pulling the curtains apart. Top materials last year were either black or fawn but they now include a silver grey type that has already found considerable favor. Some manufacturers showed

envelopes for colored tops that were made of striped material in dark shades and one or two cars carried tire covers of similar material. This novelty is simply a matter of refinement.

Bodies of cars shown at the exhibition do not vary a particle from those of last year and the prediction is that next year's production will not contain any radical changes. Practically every machine has either a streamline or a straightline in its construction. One machine introduced a novelty in a way of a top holder, which is so simple that it should soon become popular with the public. Instead of containing a strap or a metal lock to hold the lowered top, it is grooved so that the inside bows rest in separate positions and the last one locks the whole series.

There will in all probability be a number of small changes in the power plants of the coming season. Usually timing gears have been made with steel, but it is the intention of a number of makers to get a more silent arrangement by introducing a fibre gear. One can readily understand that steel working on steel will produce more noise than fibre in contact with steel. A number of the 1919 engines are to be enclosed as it is thought that such action will protect the working parts from dust and dirt and to a certain extent add to the smoothness of operation. Fenders are not intended to show much change, although in some instances they will not be cut away in front but extend from the end of the frame. Wheels are to be standardized in accordance with the new regulations, making nine tire sizes the entire set allowed for equipment. This should not have any bad effect upon any model in existence and in some cases will sufficiently lower the body of the car to provide easier riding and better appearance.

There were a great many "specials" at the Fair. Of course you know that for sometime past manufacturers have turned out what they called their "standard" models and they always made "specials" of each type. These cars generally contained leather other than black, special instrument boards, striped bodies, light colored wheels and extra lighting. It seems to be the purpose of most manufacturers to next season turn out a special type of car for each standard model. The idea is to give the same body and chassis but provide more beauty and comfort in finish and design.

Some of the accessories about the car have been brought to such a high state of perfection that practically all trouble will henceforth be easily eliminated. A battery was shown at the Fair that contained a device by which the exact amount of distilled water can always be added no matter how inaccessible the opening may be. It is not necessary in this model to see the plates, for by pouring in water to a certain point and then releasing the air pressure, you are assured that the plates will be properly covered.

Let us close this article by stating that the transportation building at the fair is intended to represent "road, water and rail." As usual, however, over ninety per cent. of the building was taken up with automobiles and accessories. The balance was devoted to bicycles, which did not indicate any radical change. There was also a display of gas tank equipment, but nothing has been added to this line during the past year or two that in any way vitally affects its operation.

AUTO.

When Piston Rings Leak.

Explosion—The piston rings must hold the terrific pressure of the explosion so that the maximum power can be obtained. If the rings leak, power is lost and hot gas escapes into the crank case, causing excessive heating and deterioration of the oil.

Compression—Leaky piston rings allow part of the gas to escape, thus reducing compression. The result is a weak explosion and the gas that escapes by the rings condenses in the crank case and seriously diminishes the lubricating quality of the oil.

Exhaust—Good rings are necessary to thoroughly scavenge the cylinder on the exhaust stroke so that the combustion chamber can be completely filled with a new clean charge on the intake stroke.

Intake—Poor rings allow air and oil to be sucked up into the combustion chamber. This leakage of air varies the mixture and makes the charges not uniform. The excess oil burns in the cylinder, causing smoky exhausts and carbon-fouled spark plugs, valve trouble and oil wastage.

THE DAIRY.

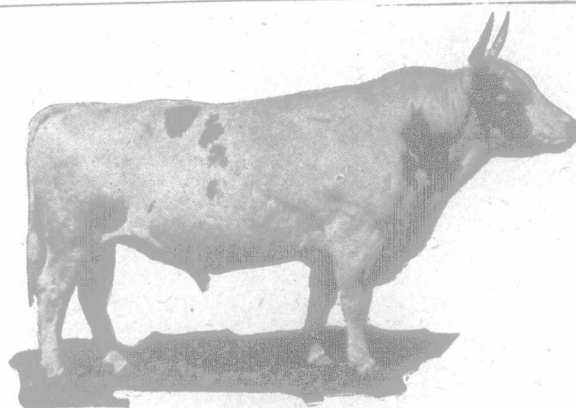
Selling Butter by Parcel Post.

Parcel post shipment of farm products is not practiced to a very large extent in Canada, although in the United States the subject has been given considerable attention, and products such as butter, poultry, fruits and vegetables, honey and various other products of the farm are shipped to considerable distances by persons endeavoring to work up private trade with a special class of customers. The Bureau of Markets, of the United States Department of Agriculture, has conducted some investigations into the practicability of shipping butter by parcel post and have shipped, altogether, more than 10,000 pounds, under various conditions and in packages carrying from one to ten pounds. These packages have been shipped over long and short distances and under various methods of packing. They have also been shipped during the summer-time and at other seasons of the year. From April to October, out of 222 shipments made, only 1.8 per cent. were received in unsatisfactory condition. During August and September, out of 61 packages only 1.6 per cent. were received in unsatisfactory condition. During June and July, out of 82 packages 11 per cent. were unsatisfactory, while earlier in the year out of 89 packages all of them were received in satisfactory condition. A total of 454 shipments were thus made by the Bureau of Markets, involving 2,022 pounds of butter, and only 14 packages or 3.1 per cent. were unsatisfactory. They were shipped at varying distances from 187 to 536 miles, and were from eighteen to sixty hours in transit.

The excellent results secured are attributed, to the care exercised in properly packing the butter in suitable containers, and the additional fact that the butter was thoroughly hardened at the creamery before shipping. Butter which had softened in transit from the creamery would not stand reshipping, because the grain, in most cases, had been injured. Generally speaking, the results of these shipments indicated that butter may be marketed satisfactorily by parcel post if it is well made, thoroughly cooled before shipping, and packed in proper parcels, but, naturally, extremely high temperatures dare not become involved.

Precautions Necessary.

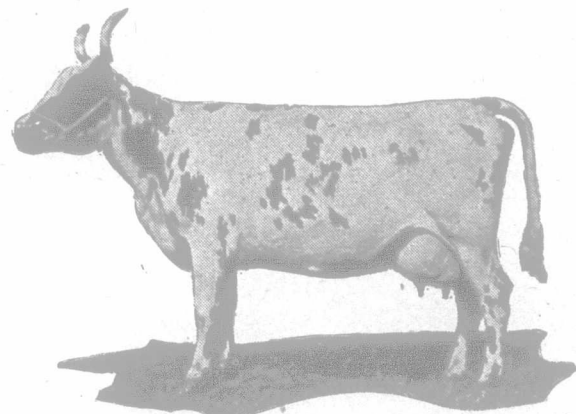
When butter does not melt or when it is maintained in at least a semi-firm condition, the shipment of butter by parcel post may be generally successful according to the investigations of the Bureau of Markets, but during hot weather shipments may frequently arrive in an oily condition, due to the fact that they are subjected to conditions which cannot help but injure the quality of the butter. Precautions, therefore, are absolutely essential to maintain the highest possible standard of quality at the time of shipping; and this is particularly true of farm butter. Cleanly conditions in the stable and other places where milk, cream or butter are produced should be considered of the greatest importance



Springfield's Prince.

Champion Ayrshire bull at Calgary. Owned by Haycock & McDonald, Calgary, Alta.

because these products absorb odors and spoil quickly. The avoidance of high temperatures is equally essential, since heated cream or butter means a soft, oily product which is undesirable. It has been found that parcel post shipments of farm butter were frequently unsatisfactory because good quality and fine condition of the butter were not ensured before shipping. Uniformity is very important for a special trade of this sort. One-pound prints are perhaps most satisfactory for shipping butter by parcel post. These are in common use, and



Borrow Mass Primrose 2nd.

Champion Ayrshire cow at Calgary and Edmonton. Owned by Rowland Ness, Dewinton, Alta.

can easily be obtained. It is also an excellent practice to use a good grade of butter parchment or paper for wrapping. A second thickness of paper has been found to add very considerably to the carrying quality of the butter, especially if this second thickness be of waxed paper. A very neat package is secured when the print is then enclosed in a heavy manilla box, dipped in paraffin. These paraffined cartons can be obtained from paper box companies and should cost in the neigh-

borhood of perhaps one-half cent each, with a little extra charge for printing. A number of such cartons can be enclosed in corrugated fibreboard containers of whatever shape or design is thought desirable. These containers furnish a great deal of protection against heat, especially if the whole is enclosed in stout wrapping paper.

Shipping the Butter.

Of course, it is not necessary to purchase ready-made containers of this kind. Butter can be shipped in improvised packages made from clean, discarded paper-board cartons which have been used for other purposes, and these may often be obtained from a grocer for very slight cost. Butter which is shipped in homemade containers can be carried very successfully if it is thoroughly wrapped in several thicknesses of newspaper and thoroughly chilled before being made, provided, however, that it is not in transit over twenty-four to thirty-six hours. Some creameries in the United States have themselves developed extensive parcel post business. One large creamery is said to be marketing almost its entire product direct to consumers in this manner; others send out weekly price-lists. It should, of course, be remembered that parcel post packages should be very carefully addressed, with the name and address of the sender plainly legible in the upper left-hand corner. It has been found much more satisfactory to write the address on the parcel than to attach a tag, which may become lost. It will also be found helpful in securing careful handling, if the packages are labelled with a request to keep away from heating apparatus. It is, perhaps, needless to add also that before undertaking to ship butter to any point, one should make enquiries as to whether the service is rapid enough to carry the butter to its destination without spoiling. Night mail service is preferable if it is available, since the cooler temperature will mean a greater carrying power and a more satisfactory product. The rates on parcel postage can be obtained from any post office, and for any distance.

A Dairyman's Creed.

I will not kill a productive dairy cow or her promising female offspring.

My country needs food and fat. The dairy cow supplies both in great abundance. She is a natural food-making machine.

I shall bring my heifers to maturity. It is my duty to my country. And it pays.

A fair dairy cow has the earning capacity of \$1,000 securely invested at 5 per cent. It is folly to sell for \$125 or less a machine which equals the earning capacity of 1,000 gold dollars.

I will not permit a scrub bull in my herd. I resolve to breed up, not down, to the end that every generation of my herd shall be a vast improvement on the preceding generation.

I believe in intelligent feeding. I know that it will