

to the liquor traffic. We occupy the same position to-day.

A long step in advance was taken in 1916 when the Ontario Temperance Act abolished the open bar and closed up the liquor shops throughout the Province of Ontario. It would be a retrograd step indeed were that Act to be repealed and the conditions which accompanied the open bar again established in Ontario. As a result of the Ontario Temperance Act jails have been emptied, homes have been made happier and more comfortable, drunkenness on the streets has been almost eliminated, and laborers addicted to the drink habit have become more punctual, regular and efficient in their work. The Ontario Temperance Act should be sustained. This is the big question in the referendum; the other three clauses are dependent on it, and electors should mark their ballots "No". Practically the same arguments used in the case of clauses 2 and 3 which if a majority of yeas be obtained, permit amendments to the Ontario Temperance Act so beer of 5.46 per cent. proof spirits can be dispensed. Here, too, prohibitionists have an opportunity to consolidate and strengthen good legislation by voting "No".

Clause 4 may give rise to differences of opinion even among honest prohibitionists who desire the most effective legislation. The Act might be improved in certain regards if the Government retained control of spirituous and malt liquors in the Province and dispensed them itself under strict regulations to people with ailments or householders entitled to keep such in their homes. Some physicians will not issue permits at all and doctors generally object to being bartenders for the Government. In our opinion one can take a tolerant view of this clause without being rightfully branded as anti-prohibitionist. Many broad-minded temperate people would like to see the Act amended in this regard and honestly believe that the temperance cause would be furthered thereby.

In any case the Ontario Temperance Act should be sustained and the liquor interests should never again be allowed to have any say or hand in the sale of intoxicants.

Our Scottish Letter.

After a stretch of exceptionally warm weather, lasting in some areas all through the months of May, June, July and August, the temperature has almost suddenly fallen, and at the date of writing fires have been re-kindled in sitting-rooms. It is well that they can be re-kindled. If reports speak truly there is likelihood of something approaching a coal famine during the ensuing winter. To avert such a disaster it is needful that miners work and produce what is required to keep the home fires burning. All classes of the community must work and work their hardest, else we are face to face, so men in authority tell us, with national bankruptcy. Houses are sorely needed, and one sensible leader of Labor has observed that they can never be built by men going idle. A spirited lead in the same direction of commonsense has been given by the leaders of the Associated Society of Engineers, and of the railway men—both men of sane, well-balanced judgment—who have shown themselves to be true patriots. One result of the long spell of drought has been an unusually early and irregular harvest. Grain cutting is being done in patches—the crop ripening very irregularly. A secondary result of this has been to call into requisition men who can swing the scythe. Such men are much in demand. They are stalwarts and greatly to be admired.

Harvest is irregular in another sense. In some parts of the country crops are good. The wheat crop is the crop of the year. One reason for this is the fact that wheat is usually sown only on good deep land. It is a deep-rooting plant—and hence it does not fear when drought cometh. The oat crop is unequal and generally light. It is expected, however, that it will thresh out better than its appearance would indicate. Meantime, the weather in the West of Scotland is broken and not too favorable for harvesting. It will, however, do something for the turnip and swede crop, and indeed it may help materially to improve the prospects for the lamb sales, which are now in full swing. The flock-master's revenues will be much less this year than last. He had a short crop of lambs to begin with, and now with prices much reduced, as compared with those of last year, he may be anxious to keep correct accounts, lest by paying Income Tax on double his annual rent he may be doing himself an injury.

There are echoes of the Great War, and perhaps I may be forgiven for introducing one of a somewhat personal nature. The Scottish Farmer Ambulance Fleet Fund was opened in the spring of 1916 to afford a medium whereby readers of the journal named might be enabled to contribute to the transport of wounded men. The Fund proved a great success, and became increasingly popular. When it was closed in the end of July, 1919, the sum of £9,644 10s. had been raised. This was expended first in providing twelve motor ambulance cars, one of the twelve going to the Scottish Women's Hospitals in Serbia, the other eleven to the Scottish Branch of the Red Cross Society at Rouen. This absorbed £5,393; an X-ray motor hospital car cost £1,307, and hutments for attendants, garage, etc., £1,507. In addition £1,147 were raised for the General work of the Red Cross Society, and £289 for the Wounded Horses Fund. The whole scheme proved extremely popular, and the directors of the Red Cross Society (Scottish Branch) have been profuse in their expressions of gratitude.

Another war phase now rapidly passing away was the organization of visits by parties of overseas soldiers to leading herds and studs throughout Scotland. Special

classes for such men were formed at Aberdeen and Edinburgh, and numerous visits were paid. Everywhere Canadian, American and Australian soldiers were received with cordiality and good will, and they were not slow to express their appreciation of the care which was expended on them. The latest tour was made in July through the northern counties of Scotland, including Ross and Cromarty, Sutherland and Caithness. The organization of this tour was almost ideally perfect. The visitors were agreeably surprised to find such good farming, and such high-class Shorthorns and Aberdeen-Angus cattle, and Clydesdale horses in these northern latitudes. The live stock in Caithness has been greatly improved during the past 30 years, and in these northern parts are to be found exceptionally high-class Cheviot sheep. The transference of Cheviots from their grazings on the Borders to the northern counties of Scotland, and the Western Isles took place in the close of the eighteenth and the first quarter of the nineteenth centuries. The story has many aspects, and one at least has left a heritage of trouble not easily removed. In order to convert the territories into sheep grazings, vast tracts of fertile glens were depopulated, and the crofters were compelled to emigrate. In some cases their houses were burned over their heads, and the story of the Sutherland clearances is one of the sad chapters in the social history of Scotland. It ranks in pathos with the political tragedy known as the Massacre of Glencoe. Both tragedies have left their mark on Scottish history, and it would sometimes seem as if the stain could never be wiped out.

One of the most striking groups of overseas soldiers visited South Hillington farm, Cardonald, (Mr. James Gardner) a fortnight ago. The group consisted of Indian soldiers who have served on the Western front in the great conflict. They numbered about 150 or more, and were representative of most every race and religion in India. A large proportion of them were Mahomedans, and all of them were men engaged in agriculture, and deeply interested in what they saw. Mr. Gardner is an up-to-date farmer. His holding extends to about 500 acres, and he crops on the intensive system. His farm carries no stock of any kind except the horses required to work the holding, and it may be in autumn a flying stock of hogs to clean up the stubbles. He manures heavily and grows great crops of hay, potatoes, wheat and oats. He is one of the most extensive growers of potatoes in the West of Scotland. These visits of overseas men to farms in Great Britain have proved of incalculable benefit to all concerned. They have done much to cement the bonds of empire, to foster a feeling of imperial brotherhood, and to make known to men well qualified to appreciate them the good qualities of British live stock.

I notice that the United States Senate has vetoed the Summer Time Act. It is announced here that this means that there will be no more alteration of time during the summer months, at least under the Government of the Stars and Stripes. I presume Canada will take a similar course. Here agricultural opinion is almost universally opposed to so-called Summer Time. It operates cruelly against dairy farmers, and in harvest time it is a great handicap shortening the working day to almost a dangerous degree. There was, however, no opposition in the House of Commons to the enactment of the statute, a significant indication of the weakness of the agricultural vote in this country. The alternative suggested by farmers is that the month of September should not be included in the period during which so-called "summer time" holds sway. The result of this would be that the day would not be so far advanced as it now is before anything can be done in the way of carrying home the sheaves. Whether a concession of this kind can be secured remains to be seen.

A Royal Commission has been appointed to consider the present condition of agriculture with a view to the recommendation of a government policy. It is a curiously constituted body, and farmers are by no means enthusiastic about it. In fact, it has been suggested at quite a number of agricultural meetings that the Commission should be boycotted. On it there is no representative of the land-owning interest, and this is most unfair. On the other hand, there is a strong representation of Labor, and no representative tenant farmer from Scotland. Who is to blame for the constitution of the Commission is not publicly known, but whoever it be they have little to be proud of. The terms of reference to the Commission are severely limited. What is wanted chiefly would seem to be accurate figures relative to the costs of production in agriculture. These are none too easily discovered, and farmers who keep accounts are not plentiful. On the other hand, many of those who do are not eager to present them to a Commission constituted as the present Royal Commission is. The general attitude of farmers is that if the body does no good it may do no harm. Meanwhile, the Prime Minister has declared his resolution that agriculture is not to be allowed to slip back into the slough whence it was slowly emerging when war broke out. There is little danger of that at the present time. A chief danger is that many will abandon dairy farming to the manifest detriment of the health of the community—especially of the young. The announcement has just been made that during the ensuing winter the controlled price of milk to the consumer will not be less than 1s. per quart or 4s. per gallon. The pre-war price in Glasgow was 1s. 4d. per gallon.

Ram sales are now in vogue. So far Lincolns hold the record for price—a shearing ram having lately been sold for £1,600. Of course, it is the Argentine demand which makes Lincoln sheep so valuable. A popular crossing breed is the Oxford Down. The

highest price record for a ram of this breed is £165. T. A. Buttar, Coupar, Angus, keeps the Shropshire flag flying in Scotland. At his annual sale this week he had a top figure of £115 10s., and an average of £19 10s. for 42. Mr. Buttar's sheep are well and favorably known in Canada and the United States. Mr. Buttar is also a successful breeder of Shorthorns. He has an excellent herd of sound good sorts, and this year his crop of bull calves is quite promising. Of all sheep breeds the Suffolk is making most headway in popular favor. At the Ipswich sales Scottish flocks made their mark, some of the highest prices being given for rams offered by G. B. Shields, Dolphinstone, East Lothian, and I. P. Ross Taylor, Dunns, Berwickshire. Next week the Scots' sales begin with Cheviots at Lockerbie, where old time record prices for beautiful rams were made. In the following week the great sales of Blackfaces and Border Leicesters take place. It is difficult to forecast prices this year. The irregularity of the lamb sales may be reflected in the trade in rams.

Dublin Horse Show has been held this week. It has been an amazing event. Over 900 horses were shown, and of these almost 900 were Thoroughbreds and Hunters. A Scottish landowner, Wentworth Hope Johnstone, M.F.H., of Rachills, Lockerbie, who has a stable in England, won all the champion honors and the reserve for Hunters. The driving classes were filled almost wholly with exhibits from this side of the channel and Belfast. The honors were going to the produce of the famous Mathias, which died in the beginning of this summer after a very long career at stud at Thornhome, Carlisle. The jumping championships were won by ladies. SCOTLAND YET.

AUTOMOBILES, FARM MACHINERY AND FARM MOTORS.

Belts and Pulleys.

A threshing machine or any other machine cannot be expected to do good work unless the belting and pulleys are kept in good condition. The speed at which the different parts should run and the power required to drive them are carefully calculated.

The pulleys must be kept in line so that the entire surface of the belt will run on them, if all the power is to be transmitted. Also the strain on a belt is much greater if it is allowed to project over one side of a pulley and thus be pulled across the rim. A belt will not stay on the pulleys unless the shafts are parallel. If a belt is too loose, there will be a constant tendency for it to slip on the pulleys and the parts which it drives will not have their proper speed. Such a belt also tends to run off the pulleys and wear out the belt and the pulley facings. On the other hand, a belt should not be too tight. The strain of a tight belt is transmitted to the journals and boxes, causing undue friction and wear, and possibly heating, and requires more power to run the machine.

Whenever the lagging comes off a pulley, it should be replaced immediately. Covered iron pulleys have considerably more adhesion than uncovered ones of the same size with the same belt tension. The important thing in covering a pulley is to get the leather or other lagging as tight as possible. Otherwise it will soon pull off again. Obviously, the nails or rivets should not be left projecting above the surface to injure the belt.

All leather belts should be run with the grain or hair side next to the pulley. The outside of a belt must stretch a little everytime it goes over a pulley, and as the flesh side is more elastic than the hair side, the belt will last longer if run in this manner. Also the grain side is smoother and will transmit more power because it brings more surface into actual contact with the face of the pulley. A leather belt which has become dry and hard can be made soft and pliable again by cleaning it thoroughly and applying nea's-foot oil, castor oil, or other reliable belt dressing.

Rubber belts should be run with the seam side away from the pulley. These belts work best and last longest when kept clean and free from dressings. Nearly all oils injure rubber belting and greatly reduce its wearing qualities. If any sticky substance gets on one, it should be cleaned immediately, as otherwise there will be a tendency to pull the outer surface off the belt as it travels around the pulleys. Some manufacturers recommend moistening the pulley side of a rubber belt slightly with pure linseed oil if it is slipping on account of dust or dirt, but unless applied lightly and at long intervals it is bound to be injurious.

Canvas belting must be kept clean and have rather frequent applications of oil or prepared dressing if it is to remain pliable and capable of transmitting the maximum of power. Castor oil and linseed oil are both recommended, and an application of laundry soap may help if no other dressing is available. A canvas belt is sometimes given a coat of linseed oil paint, but such a belt becomes stiff and is likely to crack when the paint is dry.

Rosin or mixtures containing enough rosin to leave the surface of the belt in a sticky condition should not be used to keep the belts from slipping. They will make the belts more adhesive for a short time, but it will soon become glazed and slip more than before the rosin was applied. Lubricating oil is injurious to all kinds of belting, which should be kept as nearly free as possible from this substance. A leather belt that has become saturated with oil can be restored in a large measure by scraping it as clean as possible and packing it in dry sawdust for three or four days. Sponging the belt with gasoline, or even dipping it, will remove the