

great market now established in the prairie provinces. Ten years ago the writer remembers when the stock ranges to the west of the Upper Columbia lakes were teeming with horses, mostly "cayuses" of a worthless kind it is true, but vivid evidence of the capability of the valley to support horses without winter feeding. A huge area of land, estimated in the Upper Columbia lakes district alone at some 200,000 acres, is to-day untenanted, save by a few wild cayuses, a few cattle, and the ubiquitous blacktail and whitetail deer. These lands are for the most part unfitted for agriculture, being hilly, broken by deep ravines, and incapable of irrigation, yet they are the ideal of the practical horse rancher. The steep hillsides trim the young horses' feet and develop his shoulders, test his wind, his sinews, and his bone as no prairie bred is ever tested, while the malformed, or crippled colt which may grow to a four-year-old monstrosity on the plains, becomes coyotes' meat when the first snow fall finds him on some steep hillside. When the grass is at its best in the East Kootenay valley, it is equal or superior to the famous Oregon bunch grass. Horses are often taken off the grass and put into hard work with little sign of the softness so noticeable when the same is done on the prairies.

Why has some one not realized that the conditions are almost ideal for raising the class of horse so much in demand on the prairie? It seems incredible that these wide pasturages have been so long overlooked, and even now, the Bulkeley valley, remote from market until the G. T. P. arrives there, is taking up greater attention than its climate seems to warrant to those who know of 'fairer lands and tempered winds' to the south.

From the Upper Columbia lakes to Banff is but four days easy packing over a well used pass of the Rockies. Bands of horses, with mares having colts at foot are driven over this route constantly through the spring and summer months.

The market advantage alluded to above also places the horse rancher beyond any anxiety as to the advent of the railway now building from Golden, while the nature of the country can never allow large areas of it to be adversely effected for ranching, on the building of a railroad through it. It is now old history how the great horse ranches of Calgary have become fertile homesteads for the farmers who have flocked there. This, greatly to the advantage of the prairie provinces, has sometimes spelt ruination to the large ranchers who were only protected by annual leases for the greater portion of their grazing lands. These leases the Dominion Government very properly refused to renew, as the demand for small holdings became greater.

East Kootenay, B. C.

W. P. EVANS,

Wire Worm Prevention.

Professor Roberts of the Cornell College of Agriculture is authority for the statement that late fall plowing will destroy many of them.

STOCK

Farm and Range Stock Compared.

Frequent inspections of the cattle that come into the stock yards at Winnipeg convinces us that greater improvement has been made in the type of cattle raised on the ranges than in those grown on the smaller farms farther east. This is not what we would have expected, since the general average of the bulls used in the grain belt is better than upon the ranges. The circumstance may be accounted for upon two reasons; the calves on the range make a better start upon their mother's milk than their pail fed brothers of the grain belt, and the range grass is more plentiful and luxuriant. These are things that make cattle. Improvement in the range stock is particularly noticeable in the carload lots of cows that are marketed. Dry cows, of course, have every opportunity to look well in the fall but in addition to this there are a lot of cows coming forward that have a very superior conformation for beef production. Most of them have two or three crosses of Shorthorn or Hereford blood and the extent to which the characteristics of these breeds are stamped upon them is really remarkable. It raises the conjecture, why, apart from the feed these cattle receive, should there be so much more evidence of breeding in the range cattle with only two or three crosses than in lots of other stock with perhaps four or five crosses? The theoretical answer is that the original stock upon which the purebred bulls were used was of such mixed breeding that the prepotency of the pure blood had ample opportunity to assert itself. The question then arises, will the continued use of purebred bulls have a proportionately beneficial effect upon the stock? Both experience and theory teach that it does not and this is the great stumbling block in breeding. In all lines of endeavor it is much easier to attain to the average than to rise above it. In stock breeding the explanation lies in the fact that as the females become purer in blood their characteristics become more fixed and are consequently less easily modified by the use of purebred bulls. This is not an argument against the continued use of well bred bulls but a reason why as a herd becomes of higher grade greater care should be exercised in selecting bulls that have good pedigrees, that are nearer perfection as individuals, and that have lots of character and prepotency about them.

The greatest example of the immediate effects of using purebred bulls upon common mixed stock is in the operations of the Argentines. So great has been the improvement of their cattle by the first and second cross of purebred bulls that the value to that country of pure blood is far and away beyond what it is to countries which have considerable breeding in their herds. Consequently we see the Argentine buyers paying what looks to us as fabulous prices for bulls but at the same time it is a good in-

vestment, for the good these bulls are doing is in proportion to their cost.

Different conditions however, are in store for the Argentine and the British breeders. When the average cow of the Argentine ranches be comes half or three-quarters purebred there will not be the proportionate improvement in her offspring that there is to-day and purebred bulls will not command the prices they do at present. Not but what they should, but because there will not be the same apparent obvious value in them.

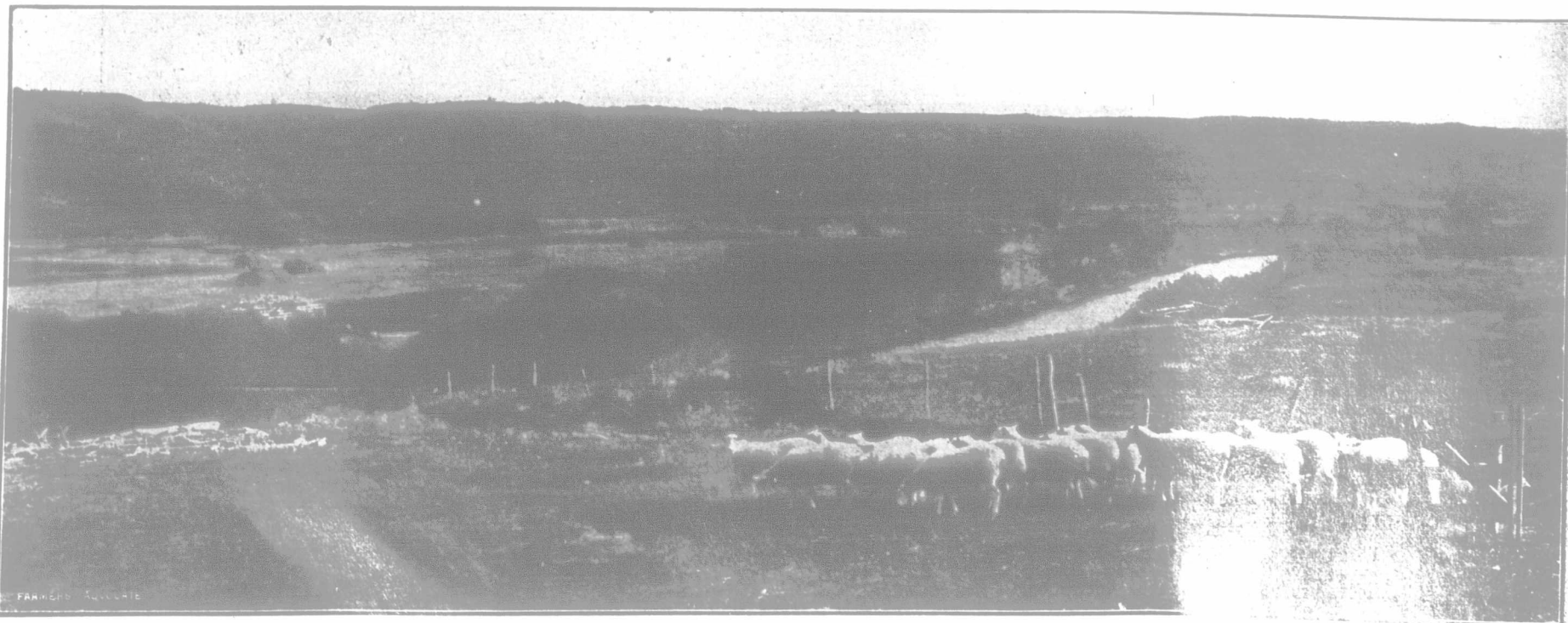
The Chicago Scare : Its Effect and Lessons.

It has been frequently stated that the prejudicial effects on trade of the Chicago packing-house exposures would soon blow over, because the public has a short memory. This view is not shared by a good many careful students of the situation in Great Britain. It was a violent shock to the consuming population, and once an idea of that sort becomes firmly implanted in the mind of the Englishman, it is extremely difficult to eradicate. Furthermore, "the FARMER'S ADVOCATE" has been assured by some of the best-posted men in the Liverpool meat trade that for about three years past the consumption of tinned meats has been steadily declining in Great Britain, while other trades show an increase. Nor is this unreasonable, when we come to consider the speedy and excellent conditions under which the live-cattle and dressed meat trades (both chilled and frozen) are conducted, bringing various grades of reliable fresh meats within reach of the people. The consumption of bacon, fruit, cheese, etc., is also most remarkable in England, and it is therefore not to be wondered if the nails which Upton Sinclair and President Roosevelt drove into the coffin of the products of Packing-town should be of a decidedly tenacious character, particularly in so far as canned meats are concerned. Eating is a large item in the daily programme of the Englishman, and he is properly very particular about the character of what is on his bill of fare, whether in the palace or on the workman's bench. The authorities are responsive to this characteristic, and extremely vigilant as to the healthfulness of foods, whether for private individuals or the army and navy. In fact, this is one of the noticeable features of the public administration and law-court procedure in England. Under such conditions, it is obvious that the Chicago revelations could not be otherwise than a severe blow to United States animal products, and if Canada is wise she will heed the lessons: first, cleanliness and purity in all that pertains to food production, and, second, cattle and other animals of the very best meat type, properly finished. They bring the most money, and cost no more to carry or to sell.

Open-Air Treatment for the Tuberculous Cattle.

(OTTAWA CORRESPONDENCE.)

Under the superintendence of the Dominion Veterinary Director-General and Live-stock Commissioner, Dr. J. G. Rutherford, a practical experiment in the treatment of tuberculous cattle is being carried on, on a farm a short distance



THE GOLDEN HOOF IN THE NEW NORTHERN COUNTRY.