

THE FARMERS ADVOCATE AND HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL
IN THE DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

JOHN WELD, MANAGER.

Agents for "The Farmer's Advocate and Home Journal,"
Winnipeg, Man.

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The wool these sheep produced was fully counted for, which is regarded as a most important matter. These fleeces were displayed, for comparative purposes. The Lincoln-merino cross showed excellent length of staple, good character, and lustre. The Leicester-merino cross was somewhat finer than the Lincoln, but was lighter. Past experiments have proved the unsuitableness of the short wool or Down breeds mated with the merino for the maintenance of a profitable fleece. These breeds are in consequence not being used, except as a second cross for the production of early maturing lambs for the export carcass trade.

Reliable official reports are now available in regard to the dry farming tests conducted last season by the Department of Agriculture. They prove conclusively the benefit of tillage to conserve moisture. Some of the up-to-date farmers secured infinitely better returns on a four-inch rainfall than others who farmed in the old style, who had double the quantity of rain. On one experimental plot, supervised by the Government, a 24-bushel crop was gathered though the rain which fell while it was growing was only 5 inches. On another the return was 14 bushels though the fall was only 3½ inches. The best returns were noticeable where the fallowed land was left with a loose surface mulch.

In a quiet fashion there has spread amongst a great number of pastoralists and farmers in Australia the conviction that there is more than mere superstition or necromancy in water divination. Ten years ago there were few who had any faith in it. The great majority dismissed the idea as an old woman's story, or the theory of a quack. But convincing proof has been so freely displayed that there are few of the pastoral districts which do not appeal to the dowser when they decide to put down a well or a bore in one of the paddocks. Some of the methods by the finder may be inexplicable, but that does not seem to affect his ability to mark the right spot. Rather remarkable are the results which have been obtained from the use of a piece of limp copper wire, for the search by this agency invariably resulted in salt water being located. The best results with the copper wire have been obtained when exploiting around wells to test the chances of increasing the supply by driving. One Queensland grazier said recently that it was possible for the user of a diving rod to neutralise salt response by such instruments of divination as a forked twig, copper wire, etc., by carrying enough salt in the palm of the hand, holding the twig as will insulate it. Though many of the scientific men place no faith in the use of the rod in water finding, it will come as a boon to many

practical men in Australia to know that there is a way of avoiding salt water results. In some parts of Queensland, known as the cotton bush country, the rod responds readily enough to the dowser, but with monotonous regularity the well-sinker strikes salt water.

For years past a great feature of the Sydney Easter Show has been the District Exhibits. They entail a great deal of work on the part of the compilers, and take pretty well the whole year to organize. This year there were five of them, and a truly wonderful number of excellent items were gathered together. Besides being a genuine surprise to the average visitor, they in some cases surprised residents of the districts whence they came. The Society takes special care to get these collections together. Last year when the work of compiling had begun the secretary of the Royal visited the different centres and spurred on the local people to translate their enthusiasm into genuine practice. If four districts enter, the prize amounts to £400, and if five, to £500. An allowance of £50 is made to each competing district. The South Coast and Tablelands district again won this year. The trouble with these collections is that there are such a lot of secondary industries represented, but it is really difficult to exclude them as so many articles are manufactured in these days upon an up-to-date farm. There is a good deal of show about these exhibits as they are really not within the range of practical agriculture, but if these articles are not produced on a practical basis the exhibition of them proves possibilities, and some day they may be pushed further forward in the category of Australian industries. The Minister of Agriculture decided at the show to buy the best of these districts collections, and send them to Great Britain to advertise the state. The pity is that only the unperishable products can be handled.

The Australian states just experienced the worst season since the big drought of 1902. Many of the pastoral districts suffered severely, as sheep and cattle died in thousands every week. The improvident were forcefully reminded once more of their profligacy in not storing and stacking feed during the good years when millions of acres was like a wheat field and there were no stock to eat it down. Most of them reckon that if they get one good year in three, they can stand the reverses, but all the same there is no reason why enough food could not be put into pits to tide every hoof over the scarce time. During the bad time there were a number of farmers from Western America spying out the irrigation areas, and they all expressed astonishment at the happy-go-lucky plan which the vast majority of the farmers and graziers follow. Not that there are no exceptions, as large mobs of cattle and sheep were fed on silage. Rain just fell in the nick of time to get the wheat planted. Prospects were good for the season.

It is expected that the exhaustive inquiry now being conducted into the bitter pit disease in apples and pears will throw considerable light on the trouble, which has for so long baffled all the scientific men of the world. Professor McCallum's first report is due shortly, though the tests will last three years yet. One orchardist has found great benefit from the simple plan of twining several strands of wire around the trunks of the trees, so as to prevent the overflow of the sap. The Northern Spy stocks are by far the worst affected. This orchardist's trees were much freer from the disease than formerly.

An interesting experiment has been carried out by one of the state farms to show the value of treating the dairy cows gently. One cow's yield fell in one day from 32 lbs. of 5.2 per cent milk to 18.5 lbs. of 3.2 milk because she was irregularly milked. In another test two cows were milked as usual at the same time, morning and evening by the usual hands. Strange hands were put on next day and these purposely knocked the animals about. The result was a falling off by 10 per cent of the milk, while the fat percentage was 1 per cent lower. The old hands were restored and the cows' yield was brought back to the former rate.

Wheat growers will be interested in a calculation showing what it costs to raise grain per acre under the most modern conditions. Plowing, 6 inches deep, 74 pence per acre; two skim plowing, 4 inches deep, 91 pence; drilling, 21 pence; seed 36 pence; manure, 8 pence; cutting with binder, 29½ pence; twine, 13½ pence; stooking, 14 pence; carting and staking, 64 pence; threshing, 161 pence; bags, 44 pence; cartage, 13 pence; rent, 100 pence; depreciation and interest, 82½ pence. A 26 bushel crop at 42 pence, and 14½ cwt. of straw at 23 shillings and 10 pence, would leave a profit of 47 shillings per acre.

Departmental tests have shown that any solution of bluestone stronger than 11 per cent is likely to seriously affect the germination of the grain. Even when 11 per cent was used it was shown that dipping in lime water was advisable. The lime water recommended is a mixture of 1 pound of lime to 20 gallons of water.

As a winter fodder crop the coastal dairymen find that there is nothing better than Thew wheat. While crops of barley and oats planted at the

same time only stood a foot high, the wheat was 36 inches and ready for use. J. S. DUNNET.
Sydney, Australia.

HORSES.

High ceilings are advisable in the horse stable. Horses do not require an over warm stable, but must have plenty of light and sufficient ventilation.

Kindness and good treatment are the best means of inspiring confidence in the nervous animal. Educate the colts in this way rather than by "pounding" it into them.

To leave the stallion in a box stall for months with an occasional walk for exercise can hardly keep up the vigor that is required to produce even an average percentage of strong colts.

During the month of July 93,352 horses quenched their thirst at the eleven summer hydrant stations in Boston. These stations are maintained by the Massachusetts Society for the Prevention of Cruelty to Animals. One station relieved the thirst of 872 horses in a single day.

In dealing with characteristics which may or may not be inherited, the horse breeder in selecting breeding stock is always safe if he concludes that every fault may be transmitted to the progeny. Unsoundnesses are so prevalent and constitute such a loss to the horse-breeding industry that they should not be tolerated in breeding stock.

Regularity in working hours, feeding hours, and hours of rest, means a longer period of usefulness with the hard-worked horse. Working fifteen hours one day and five the next is not the same to the animal as two regular ten-hour days. The extra five hours is a severe strain on the animal's staying power, and if such is continued cannot do other than shorten the animals working life.

Idleness may well be termed the bane of horse breeding. It is not conducive to muscular development and general healthy growth in young animals. Idle or unexercised colts seldom mature into the highest quality of utility animals. Lack of exercise is ruinous in breeding stock, both male and female, and an idle horse must be fed and at a loss, for he is doing nothing to pay for it. Colts, young horses, breeding mares and stallions, and work horses never can be profitably kept idle for any length of time.

Endurance is one of the prime requisites of the draft horse. It is not that endurance which enables the animal to exert a maximum of energy over a short space of time, such as is demanded of the race horse, but ability to do heavy work, pull heavy loads every day in the year, not at great speed but steadily. A horse's capacity for endurance may be estimated to some extent from his conformation and general appearance. A horse with a strong head and clear eyes upon a well carried neck, having a sloping shoulder and a short strong back, from which well arched ribs spring, giving him a good middle in which food material may be manufactured into energy; the whole operated by a well developed muscular system, and carried upon legs with clearly marked tendons and hard flat flinty bone, ending in big feet of the best quality, is the right type to stand the strain.

Figures on British Horse Affairs.

In June, 1911, the official returns show that there were fewer horses on agricultural holdings in Great Britain than in any year since 1891, when the number kept for agricultural purposes and unbroken horses was 1,488,400. In 1905 the number had increased to 1,572,400, but in June last year the number was only 1,480,575. A writer in the Live Stock Journal, from which these figures are taken, attributes the reduction of 37,112 in the number of horses imported into the United Kingdom from foreign countries and British possessions in the year 1910, as compared with 1900, when 51,786 head came in, as due in a great measure to the substitution of motor power for horse power. In the twelve months which ended May 31st, 1911, there were 10,240 fewer horses exported from Ireland than for the same period in 1900, a decrease of 24 per cent. A wholesome feature of this is that the decrease is not due to decreased breeding, for in June, 1911, there were nearly 40,000, or 32.7 per cent., more unbroken horses in Ireland than in June, 1900. The decrease in the number of horses exported from Ireland is due to the marked improvement that has taken place in all the most important industries in that country.