DECEMBER 1, 1894

FARMER'S ADVOCATE. THE

THE FARMER'S ADVOCATE & HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

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Wheat Reports from Rothamstead.

Rothamstead Experiment Station is one of the oldest, and stands, perhaps, the highest in repute of any in the world. Sir John B. Lawes, in reporting the results of this year's experiments in wheat, shows that 1894 has only been surpassed once in yield at that station since it commenced in 1844; that year being 1863, in which the average yield per acre, under all conditions, was 401 bushels, as against 38 bushels this year. Last year the aggregate wheat crop of the country was the worst in point of quantity since 1879, and worst in point of value in the present century. Bad wheat crops are generally grown in England in wet years, but the low yield of 1893 was the direct result of continued drouth. It is fully recognized that the weather has a very important influence on crops in England, as is the case elsewhere. As the Rothamstead experimental wheat field is cultivated, as nearly as possible, in the same way every year; the seed sown as nearly as possible at the same time, and the same manures are applied to the same plots year after year, the results afford a measurement of the influence of the weather of each year which cannot be obtained un-der other conditions. We give the produce on the selected experimental plots in 1894 and 1893, and for further comparison, the produce on the same plots in 1854, 1863 and 1864, which were the three years of greatest produce since the commencement of the experiment in 1844 :--

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Comparing first the produce of 1894 with that of 1893, it is seen that the unmanured plot gives very nearly twice as much grain in 1894 as in 1893; namely, 18 busels per acre, against only 93 bushels in 1893. The yields secured from the unmanured plots is a striking commentary on the results that may is a striking commentary on the results that may be obtained from good cultivation alone. The farm-yard manure plot has given $45\frac{1}{2}$ bushels this year, against only $34\frac{3}{4}$ in 1893. It is worthy of remark that, contrary to what is usually the case, the farmyard manure crop was laid earlier, and more com pletely, than that of any of the other plots. The farmyard manure gives, as a rule, more even produce, and is less influenced by good or bad seasons, This was especially than the artificial manures. This was especially noticeable in 1863, which was the year of the highest produce of grain yet obtained in the experi-mental field, and of the highest produce of straw, excepting that of the present year, 1894. In 1863 the farmyard manure plot gave 44 bushels, whilst the three artificially manured plots gave respec-tively 53^3 , 55^3 and 55^4 bushels. In 1893 the same three artificially manured plots gave only $20_{4,214}^{3}$ and 195 bushels, whilst this year they have given considerably more than twice as much, namely, 483, 49 and 47 bushels. It will be noticed that the quantity of straw produced in 1893 was little more than onefifth that of the present season's crop; the difference due, no doubt, to the difference in the season's moisture. Owing to the drought and high temperature of 1893, much of the otherwise available fertility of the soil was locked up and useless for the crops of that year. The results in the experimental wheat field afford an interesting illustration on that point. Not only were some of the spring-spread manures observed on the surface of the ground at harvest, but the drainage water collected from the various plots after the harvest of 1893, and before the sowmoisture. plots after the harvest of 1893, and before the sow ing of the greater part of the artificial nitrogenous futilizers, early in 1894, was considerably richer in nitrates than usual at that period; and it was, doubtless, in great part, owing to the large amount of nitrates in the soil that the wheat crops showed luxuriant winter growth. It is impossible to say how much the crops of the country, generally, have this year benefited by such accumulations of unused fertility; but it is reasonable to suppose that they have done so to a considerable extent, as hay, grain beans, and even roots, have all shown very good growth. It has abundantly been proved that not only on the average of years, but in a very great majority of the individual seasons, from 1852 up to the present time, the calculated average produce of the selected plots in the experimental wheat field has very closely indicated the average yield per acre of
 the United Kingdom at large.

As regards the supply of wheat needed from outside sources to feed the population of the United Kingdom, the area under wheat in Great Britain and Ireland was rather less than two million acres. This, at 33 bushels per acre, would yield a home crop of rather more than eight million quarters, and deducting from this, two bushels per acre for seed, would leave seven and three-quarter million quar-ters for home consumption The estimated total requirements for the year is about twenty-nine and one-quarter million quarters, which leaves the esti-mated requirements from stocks and imports to be about twenty one and a-half million quarters. And taking into consideration the likelihood of a good deal being fed to stock, the demand from abroad will therefore be just so much increased. According to official estimates, the stocks in warehouses at the commencement of the harvest year were about one million quarters less than at the same period in 1893 Upon the whole, the evidence points to the conclusion that probably more than twenty-two million quarters will be required to be provided from stocks and imports within the current year.

British Columbia. (Continued.)

The City of Victoria is most beautifully situated, and has within it considerable wealth, many evidences of which are most apparent even to the casual observer. The erection of the new Provincial Government Buildings adds much to the city as a whole, and when fully complete will be a most pleasing combination of beauty and usefulness. THE VICTORIA FAIR,

which was held June 2nd to 6th of October, was the 18th annual exhibition of this Association, and was unquestionably a success, and had many features worthy of commendation. Among these, we mention the very manifest interest taken in the Exhibition by a number of leading merchants and manufacturers, which resulted in making the Main Building one of interest, and of which the city might well be proud. There seems, however, to have been a lack of that unity of action so desirable in matters of this kind, between the Fair Board, Street Railway, and citizens. The admission was the same as at the World's Fair grounds, 50c., or twice as much as it is to the Toronto Industrial. Car fare to city limits, 5c.; an additional 5c. was charged for a few rods to the terminus of the line, from which point you were permitted to walk, free of charge, to the entrance gate. Had the Street Railway extended their line to the gateway and charged a 5c. fare, the Fair Board reduced the admission to 25c., and the citizens contributed as many articles about what was on exhibition, and the city press used as much ink to increase the attendance, as they did about the double fares to the grounds, a result would have been obtained over which Street Railway, Fair Board and citizens would have had united cause for rejoicing.

It was regretted that so little stock was shown in the cattle classes. This, no doubt, was due largely to the reports of disease among the bovines, while in other kinds of stock, probably lack of interest would account for it.

Horses were fairly well represented, and several splendid animals were out. That magnificent Clydesdale stallion, McRaw, an importation of Robt. Beith, Bowmanville, Ont.,

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The two combined 12 pages)	40
The two combined	50
Toronto Weekly Globe (12 pages) 1 Toronto Weekly Empire 1 London Free Press, weekly edition 1 Weekly Method 1	75
London Free Press, weekly card	70
London Free Press, weekly entrimined 1 London Advertiser, weekly	60
Montreal Weekly Witness	

representative in his class, carrying off first. The Tolmie Estate exhibit of horses added much to the Show, and with such splendid ones as Midyard (Standard-bred), and Lollard (Carriage class), nothing less than first could be reasonably expected. Space will not permit mention of many other ex-bibits of merit. The Shorthorns from the Tolmie Estate comprised nearly the whole exhibit in this class, and contained some fine specimens. Dairy cattle were few in number, Jerseys predominating. cattle were few in number, Jerseys predominating. In sheep, the best represented breeds were Leices-ters and Southdowns, the former mostly the property of the Tolmie Estate, the latter that of J. T. Wilkinson. Shropshires where shown by G. Heatherbell, who captured nearly all the prizes, and Oxford Downs by Deans Bros., who were also winners. In Berkshire pigs, the breed by far most numerous, J. D. Bryant was the owner of all the winners, some of which were very fine. The Fruit and Vegetable display was good, some of the specimens being of enormous size, one apple

of the specimens being of enormous size, one apple (variety, Warner's King) grown at the Experi-mental Farm, at Agassiz, measuring nearly 16 inches in circumference, while the display as a whole, of cereals, fruit and vegetables, made by Superintendent Sharp, attracted much attention, and reflected credit on the Institution of which he has charge.

(TO BE CONTINUED.)

M. Gosseaux, of Louvain, Belgium, has a model piggery—ranges of sties are situated in green fields. He breeds and fattens some 2,000 hogs annually; race, the Yorkshire; they consume 500 tons of meal alone per annum. The sheds are lit by the electric light. A veterinary surgeon visits the stock daily, and there is an infirmary for ailing animals. The floors are daily flushed, and the sties weekly whitewashed.