

vail, will submit to having such germ-breeding grounds at their very doors.

In addition to all this, there is the effect that such conditions will have upon the cheese or butter while being manufactured or after it is manufactured. Many factorymen wonder why their cheese or butter is not as fine-flavored as that made in a neighboring factory, the quality of the milk being practically the same at both places. Often such lack of the really fine flavor which a prime quality of cheese or butter should have is traceable directly to the unsanitary conditions in and about the factory.

The question, then, is an important one, and concerns everyone interested in the cheese trade, from the patron to the consumer. There is no reason why any factory in these days should be in an unsanitary condition, and it is the duty of everyone concerned to do his utmost to have a change brought about. We do not for a moment contend that all our factories need attention in this regard; far from it. But there are always some delinquents to be found in every locality, and for these stringent methods are needed. A maker who keeps himself and his factory dirty cannot expect good milk from his patrons.

A Decline in Wages and the Cost of Living.

According to the Massachusetts labor bureau the average of wages has slightly but steadily declined since 1872. The average wages of boot and shoe makers declined from \$12.71 to \$11.90. Other trades, such as machinists, have suffered more; wages declining from \$13.84 in 1872, and from \$16.48 in 1841 to \$10.80 in 1897. The wages of farm laborers per month with board declined from an average of \$23.09 in 1872 to \$18.50 in 1897.

The decline in wages, however, is equalized by a corresponding decrease in the price of staple goods. Sugar, flour, butter, cloth, boots and shoes are all much cheaper. One dollar in 1872 would buy 3.63 yards of cotton flannel; it will now buy 10 yards. In 1872 one dollar would buy 18.18 lbs. of flour; in 1881, 19.76 lbs. and in 1897, 30.30 lbs. of the same quality. In the case of tea, one dollar in 1872 would buy 1.45 lbs.; in 1881, 1.72 lbs. and in 1897, 2.16 lbs. Of granulated sugar one dollar in 1872 would buy 8.33 lbs.; in 1881, 9.09 lbs. and in 1897, 17.86 lbs. In 1872 one dollar would purchase 5.26 lbs. of roast beef; in 1881, 5.88 lbs. and in 1897, 6.85 lbs. Of butter one dollar would buy 2.55 lbs. in 1872; 2.88 lbs. in 1881 and 4.13 lbs. in 1897. Of milk it would buy 12.56 quarts in 1872; 16.66 quarts in 1881 and 17.86 quarts in 1897.

These are the average prices for the New England States, and, though in many cases higher than in Canada, illustrate very well the cost of living today as compared with twenty-five years ago. Though the decline in wages for the mechanic has been met by a corresponding decline in the cost of staple articles, the decline in the cost of farm labor has been more than met as far as the farmer is concerned by the decline in the price of farm products. The decline in the prices obtainable for the products of the farm has been greater than that of farm labor, and consequently the farmer is not in as good position as he was in 1872, though the cost of production is somewhat reduced.

The Inter-Provincial Fruit Trade.

During an interview at Winnipeg recently Prof. Robertson made the following reply to the question: "How is it all Ontario fruit arrives here in bad condition?"

"If you had a good service of refrigerator cars there is no reason why you should not have the best fruit of Ontario laid down here in better condition than you get it from California. The difficulty in the past has been that the fruit was put on the cars warm, and, instead of being cooled in the cars, it only melted the ice. Fruit growers are recognizing this, and several of the large fruit growers in the Niagara and Essex peninsula are erecting cold storage rooms to chill the fruit before putting it on the cars."

The question and its answer bear directly upon a matter of vital importance to the fruit growers of Ontario, as well as the consumers of Manitoba. Is it not a fact that in the Niagara and Essex and other sections of the province there is fruit galore, while our great western country, where no fruit can be grown, is deprived of this luxury owing to poor transportation facilities and excessive freight rates? We are bending our energies to develop the export trade in fruits with Great Britain, a very necessary line of policy indeed, but why should not a special effort be made to supply our own people living in the outlying sections of the Dominion with the fruit that can be grown in Ontario and other eastern provinces so easily?

There is no reason whatsoever why Manitoba and the West should have to purchase any fruit outside of Canada that can be grown here. Ontario is nearer Winnipeg than California is and, if our fruit growers had the proper refrigerator and cold storage facilities and reasonable freight rates, the Manitobans could be supplied with as good fruit and as cheaply from this section of country as from the Pacific slope. The great drawback to inter-provincial trade in this country, especially in commodities such as fruit, is the long distances and excessive freight rates. With these successfully overcome trade between the outlying sections of the Dominion would develop rapidly and be of mutual advantage to the producer and the consumer. Take for instance the strawberry trade this season. The supply was excessively large yet we venture to say that, even in some outlying sections of Ontario, strawberries were too high a price to admit of their purchase largely by the poorer classes, all because the freight rates between local points in this country are excessive. At a point a few hundred miles from the fruit regions the freight is often higher than the actual cost of the fruit itself.

The Agricultural Department at Washington to be Utilized for Post-Graduate Work in Agriculture.

Before long the various divisions of the Department of Agriculture at Washington will be utilized for supplying the graduates of the various agricultural colleges in the States with an opportunity for doing extensive post-graduate work in agriculture. The plan is a suggestion of Secretary Wilson's, and is certainly a very commendable one. There are in the department sixteen scientific divisions, the finest apparatus money can buy, the best illustrating material obtainable, and the finest library, where everything in the line of progressive agriculture is secured as soon as published.

It would not be necessary for Congress to appropriate a single dollar in the way of appliances, grounds, etc., for this post-graduate work. The facilities for giving practical instruction are all in use in connection with the department. Graduates of the colleges going to Washington would be assigned to congenial work, and instructions given to the heads of divisions to oversee, direct and encourage their studies. It is not determined yet whether special degrees will be granted for this work or not.

There cannot be any doubt that such a scheme would be of immense advantage in welding together the scientific instruction given in the United States by bringing the Department of Agriculture into useful relations with the agricultural colleges to a greater extent, and by making an additional bond of sympathy between the Federal Government and the states of the union.

Intensive Farming.

This subject has been given considerable attention in *FARMING* during the last month or two. In last week's issue Mr. D. M. MacPherson takes up the question in reply to an article previously written by Mr. T. C. Wallace. In this issue Mr. Wallace again discusses the subject and takes issue with Mr. MacPherson on some vital points. The whole question is a very important one and

we trust that the various phases of the subject brought out by these two writers have been and will be of practical value to every farmer. The vital question in all lines of farming to day is that of profit. What the farmer desires to know is the line of farming that will return him the most profit and at the same time maintain the fertility of the land.

One of the important points upon which Mr. MacPherson and Mr. Wallace differ is as to whether it is better for the farmer to buy his feeding stock or cows when grown or to raise them on his own farm. There is considerable room for argument on both sides of this question and we would like very much to hear from other feeders and breeders on this point. While it may be of advantage to many farmers to buy their feeding stock and milch cows when grown, we are inclined to the opinion that the average farmer should grow as large a portion of his stock on his own farm as possible, otherwise how can he get perfection in his herd of cows. It is an education and a training for the farmer to develop and grow his own herd.

The Royal Agricultural Show.

The Royal Show was held at Birmingham the latter part of June, beginning on the 24th. The show, all through, must be considered a great success, and, according to recent English exchanges, far above the average. There were on exhibition 709 horses, 792 cattle, 624 sheep, and 198 pigs, making a total of 2,323, as compared with 2,688 at Manchester last year. The total live stock exhibits at Leicester, 1896, was 1,883; at Darlington, in 1895, 1,703; and at Cambridge, in 1894, 1,864; so that this year's exhibits are greatly in excess of the average. The attendance of visitors this year is not up to that of last year.

All the various breeds of horses, cattle, sheep, and swine, were well represented. There was an unusually large exhibit of hackney and shire horses, showing that these two breeds are growing in favor in England as elsewhere. Among the beef-cattle the Shorthorns, Herefords and Polled Angus were out in the greatest numbers. The Jerseys and Ayrshires exhibits were of a high order, and in the milking test the former figured very prominently. The sheep exhibit is always an important one, and this year was no exception to the rule. Though the numbers were not as large as last year the quality is reported to have been very much better. The large whites and Berkshires made the best representations in the swine classes. The Royal Show is the greatest exhibit of purebred live stock in the world, and British breeders prize very highly the awards won there.

A Uniform Apple Barrel.

The following circular has been sent out by the National Apple Shippers' Association, and which has been largely signed by shippers and buyers all over the United States:

"A large crop of apples is expected this season. To realize a fair price we will necessarily export a large amount, and, as we shall have to compete with Canada, we must have good coöperation and a standard barrel. The National Apple Shippers' Association and the National League of Commission Merchants have already adopted the following dimensions: Head, 17 $\frac{3}{4}$ inches; stave, 28 $\frac{1}{2}$ inches between crozins; bulge, not less than 64 inches outside circumference. The above are the measurements of the Minneapolis flour barrel.

"Believing it for the interest of the buyer, shipper and grower to bring about this much needed reform, we, the undersigned buyers and shippers, agree that we will not purchase apples packed in barrels that hold less than the above."

The object to be attained by means of this circular is a very laudable one indeed. If Canadian shippers and fruit growers have not already done so it would be well to come to a similar understanding in regard to a uniform and standard apple barrel. The Canadian apple crop is likely to be a very large one this year, and every effort should be made to get it to the consumer in the best possible shape.