systematic effort along this line, and that every municipality should feel its responsibility in this matter and that it has a duty to perform that should not be relinquished till every roadway in the province has been made the very best of its kind. To some this may seem an impossible task. But it is surprising what can be accomplished by concentrated effort, and if everyone who has to do with making the roadways of the province would do his utmost along this line in a few years we would have a splendid system of highways all over the country.

A couple of weeks ago we published a copy of a circular of instructions sent out by an eastern municipality to its pathmasters. We would again like to emphasize the importance of this. Every township council, if it has not already done so, should send out at once specific instructions to pathmasters telling them what their duties are and insisting that each performer of statute labor be required to do a lawful day's work, and coupled with this, if at all possible, send instructions as to how good roads may be obtained, and how the work performed may be utilized to the best advantage. By a definite systematic effort on the part of every one interested it is possible to have every roadway in the country of the best.

The Sub-Earth Duct for Curing-Rooms.

In our issue of May 3rd we drew attention to the importance of more attention being paid to the curing of cheese after it is made. If the factories have not yet done so they should begin at once to place the curing rooms in the best possible condition for curing the cheese properly. If dairymen fully realized the importance of this they would not hesitate a moment, but proceed forthwith to have all the unfavorable conditions in connection with the curing rooms removed. A good many of the curing rooms are almost beyond repair, and no matter how much repairing is put upon them they cannot be made fit for curing cheese properly. These should be replaced by new ones. Where the buildings are fairly good and have been built in recent years very little labor will improve the curing rooms and put them in a condition so that the temperature and moisture can be controlled.

A very good scheme for ventilating a curing-room is what is known as the sub earth duct. In *Hoard's Dairyman* of a few weeks ago a very good scheme of this kind is shown. It consists of an excavation, preferably twelve feet deep (although some are less), and 100 feet or more in length, and from five to six feet in width at the bottom. In this excavation are placed in continuous rows, common six-inch drain tile, six to eight rows on the bottom, and five to seven above. These tiles are usually separated somewhat by filling in loose soil, but in some cases they are laid close together, just as they are stacked up in a yard.

These rows of tile form the duct proper, and are connected at one end with the outside air, and at the other with the curing-room. For this purpose a circular or square pit or well is built up at either end with brick or stone, and into which the tile project. At the outer end an intake flue or pipe, which may be made of wood or iron, is erected, and which should reach well above any surrounding tins or buildings and be surmounted with a vane and cowl so as to catch every passing breeze. These may vary from thirty to seventy-five feet in height. By means of this shaft and weather-vane the air is sent down into the duct and thence up into the curing-room and out through the ventilating pipe.

The cost of putting in such a duct will vary much, according to the locality and the degree of finish and style. But where the patrons would turn out to do the excavating and the larger share of the work, one could be put in very cheaply, and would more than pay for itself in one single month in the improved quality of the cheese. Both the intake and ventilating shafts must be securely fastened. The most difficult feature in the construction is the vane and cowl, which should be made of galvanized iron and arranged to revolve easily.

Roots for Cattle-Feeding.

British exchanges are giving considerable attention just now to an experiment in cattle-feeding conducted by the Royal Agricultural Society. In this experiment was involved the feeding of roots to cattle and the quantities which give the best results. The feeding of roots to cattle has been practised for ages, but the practice, in many cases, has been to give them an unlimited supply; which practice, in the case of turnips, especially, is wasteful, inasmuch as it leads the cattle to take into their bodies an undue and undesirable quantity of water. In England, where root feeding is largely practised, the question of the right quantities to be fed to get the best results is a very important one.

It was to try to find out the proper quantity to use that the above experiment was carried on. In 1895-96 an experiment was carried on at the same place in which one lot of bullocks got 50 lbs. and another lot 35 lbs. of turnips daily. The result was that after taking into account the prices obtained for the cattle (dead weight), the cost of the feeding, and the value of the manure left, there was nothing left to choose from between the two systems. In the late experiment the animals selected were sixteen Irish Shorthorn bullocks, and were purchased on November 14th and fed alike till December 4th. They were divided into two lots and each lot sub divided and a careful record kept of the diet of each. Each set got the same kind and quantity of concentrated food, chaff, etc., other than turnips. Of the latter, one lot got as many as they could eat, which never exceeded 64 lbs. per day, while the turnips (swedes in each case) allowed to the other lot were limited to 35 lbs. daily. The rich food allowed to each was 6 lbs. daily at first, but after a short interval this was increased to 9 lbs, which consisted of 3 lbs. of linseed cake, 3 lbs. "dicorticated" cotton cake and 3 lbs. barley (gritted). Each bullock was given all the water he would drink, and an exact record of the quantity made. The heavy root feeding lot consumed on an average about 56.6 lbs. per head daily of turnips, 14.3 lbs. of chaff, and an average of 39 2 lbs. of water. The light root feeding lot consumed 35 lbs. of turnips, 16.2 lbs. of chaff, and the average pounds of water taken by each daily was 57.7 lbs. or 18.5 lbs. more than the other lot. On the assumption of the turnips containing 90 per cent. of water, the total moisture taken in water by itself and in the turnips was 90.2 lbs. for the heavy root feeding lot, and 88.9 lbs. for the light feeding lot. The weight of dry matter consumed with the turnips and chaff was almost the same, being 19 9 lbs in the first mentioned lot and 19.6 in the second. The results of the experiment are summed up by the *Scottish Farmer* as follows:

"This heavy root feeding lot made 2.05 lb. of average live weight gain per day, as compared with 1.82 lb. for the light root feeding lot. This is a difference of about 11 to 12½ per cent. The percentage of carcase weight to the fasted live weight was 59.60 in the light root feeding lot, and 59.14 in the heavy lot. At the different times of weighing the average gain made by the former was always a degree greater than by the latter. The one lot consumed 1 ton 17 lb. more swedes—valued at 7s.—than the others, but the light root feeding lot consumes 13s. 1¼d. more cake, chaff, etc., than the others, so that there is a balance of 6s. 1¼d. in favor of the heavier consumer of roots, which, when added to 1s. 3¾d. of increased price per head got for them over the others, brings the total balance in favor of the heavier root feeding lot to 7s. 5d. per head. However, this falls to be reduced by 1s. 4d., being the estimated manurial value of the extra cake, etc., consumed by the light root feeding set, making a net difference of 6s. 1d. We only add that, when the cost of food and attendance is deducted from the selling price, it is found that a profit of £1 6s. 2½d. was made on the heavy root feeding lot. This leaves out of account on the one hand the cost of the litter, and on the other the value of manure produced."

Canada's Agricultural Resources Arousing Interest in Great Britain.

The interest in Canada and Canadian agriculture on the part of the people of Great Britain is becoming greater every year. Beginning with the Queen's Jubilee, Canada has entered upon a new era in regard to its relations with the Mother Country. Since then some of the important newspapers of the United Kingdom have been sending out special correspondents and artists to give their impressions of the country, and this, coupled with the efforts our own people are making, is having the effect of making Canada known as she was never known before in Great Britain and of diverting a better class of emigrants to our shores.

Last week two representatives of the English press from Lincolnshire in the persons of Mr. Joseph Wilson and Mr. Ernest T. Waring, who are visiting Canada, were interviewed by the Montreal *Witness*. It is the intention of these parties to write a series of articles upon the country and its prospects for the immigrant. In this connection their efforts will be confined to Ontario, where a great number of Lincolnshire people are located. These will be visited and their condition reported upon with the object of inducing others at home to follow their example. In the judgment of Mr. Wilson, who is now making his second visit, Canada offers more advantages to the emigrant than any of the other colonies of the Empire. He believes that as compared with Australia Canada, aside from its greater nearness, offers a greater certainty of getting on quicker to the emigrant.

In England, as in Canada, the cities have a great attraction for the country people, with the result that the population of the small English villages is gradually decreasing and the number of small farmers is every year growing less. The farmer with capital, taking advantage of these conditions, enlarges his farm, and, with the aid of improved farm machinery and a small amount of labor, tills great stretches of country which were formerly occupied by men who were content with small farms. Considerable legislation has been enacted to counteract this tendency, such as the Parish Councils Act, but the general movement towards the large centres still continues. However, while many of the small farmers have been wiped out, the condition of the farm laborer has greatly improved. By the provisions of a County Act tracts of land are purchased and rented to farm laborers, with the result that, while the laborer still works for the gentleman farmer, he is able, at the same time, to till his own ten acres of land with the help of his family, and thus make a fairly good living. All the farm laborers, however, have not this extra ten acres to till. The wages received amount to about thirteen shillings a week, and how a laborer is able to bring up a family on this is somewhat of a mystery.

It is men of this stamp, or the better class of farm laborers, who, Mr. Wilson thinks, would make admirable settlers for Canada. We are of that opinion also, and believe a man who is experienced with the work on the English farms would do exceptionally well on the unsettled lands of Ontario, Manitoba, and the Northwest Territories. The difficulty is that these laborers have not the means to emigrate. They are, however, the class from which good agriculturists can be made, and if they can be induced to locate in Canada every effort should be made on the part of those in authority to enable them to do so.

Social Life on the Farm.

In a recent issue of the Toronto *Saturday Night* the editor, in his characteristic style, in endeavoring to solve the problem why farming is not more popular than it is, makes out that it is because of the lack of social life on the farm. In a large measure this is true, but if farming could be made to pay, and if it were looked upon as a money-making concern, it would soon become popular enough. Nevertheless, there is a great deal in the contention that the social life on the farm has considerable to do with its unpopularity.

But how this is to be remedied is the question. It is pointed out in the above journal that if farm-houses had bath-rooms and hot-air furnaces, good cellars and ice-houses, telephones, postal delivery, good roads, and all that sort of thing, farming would be a much more agreeable occupation than