

to guard against insect pests of the various kinds of fruit, and many other practical topics were dwelt on, and a multitude of questions answered.

We had a second paper from Mr. Shaw on "The Construction of Barns," especially with a view to cattle feeding and dairying. The writer also gave a second paper on scientific dairy practice, mainly bearing on the production of a better quality of butter. In the course of the discussions that arose on these papers, the winter water supply for stock was prominent. Several gave their experience as to the use of ice-cold and warmer water. The necessity of some provision whereby cattle could have water of moderate temperature without exposure to cold winds was made clearly apparent, and various devices to this end were specified. Mr. Symons insisted strongly on giving stock daily exercise in sheltered barn-yards, and his views obtained general concurrence. A farmer who had studied up the creamery subject, read a paper in relation thereto, which led to a full and free interchange of opinion. The importance of greater attention to dairy products, both in a private way and by the establishment of cheese factories and creameries was generally recognized.

On the evening of the first day a social entertainment was held in a very nice hall, which was filled by a large audience, partly from the village and partly from the surrounding country. The good people of Exeter, who evidently possess an unusual share of musical ability and taste, are to be commended for the successful efforts they made to render this entertainment enjoyable. A brass band, a chorus club of eight members, a cornet, harmonica and guitar, together with solos and duets, accompanied by an excellent reed organ well played, combined to make an admirable musical concert. Brief speeches were sandwiched in between the vocal and instrumental performances. The affair was free of charge, and was highly appreciated by all present. It was a model entertainment of its kind, and I have the pleasure in holding it up as an example well worthy of imitation.

I CANNOT but think that these Farmers' Institutes are destined to do much good as local schools of agriculture, and it is particularly gratifying to me that they seem to be taking root in the country, because in my report on which the Ontario Agricultural College was based, I pointed this out as one of the ways in which the professors might do great good in the winter season, when the farmers are able to assemble in conventions of this kind. These Institutes appear more adapted to the circumstances and convenience of the agricultural community than either Farmers' Clubs or Granges. It is difficult to maintain the interest in meetings held so often as once a month or once a fortnight. They almost invariably die out in summer, and even in the winter are apt to flag. But a two or three days' meeting in the winter time, for which special preparation can be made both by speakers and attendants, only needs to be energetically managed, as it was in this

case by the president, Mr. Smiley, and the secretary, Mr. McMurdie, aided by a working committee, to secure the most desirable results.

By no means the least interesting part of the Institute was the intercourse had out of doors and between whiles. There were "walks and talks," consultations and caucuses, during the intervals of the sessions, about which I meant to say something in this article, but it has already exceeded its due bounds. Pleasant acquaintances were formed or renewed, and more of that social feeling fostered which so much needs to be increased among the farming population. Cowper concludes his poem on John Gilpin by saying:

And when he next doth ride abroad  
May I be there to see,

And I close by expressing the hope that when the South Huron Farmers' Institute next assembles, I may be there to participate in the pleasure and profit of the occasion.

W. F. C.

#### VALUE OF MANURE.

The following useful tables, showing the most valuable fertilizing properties to be found in ordinary manures, together with their present commercial values, were made use of by Prof. C. C. James, of the Ontario Agricultural College, in his address delivered at several of the recently held Farmers' Institutes:

Solids.	Water.	Nitric acid 17 cents.	Phosphoric acid.	Potash.	Lime.	Value.
Horse. ....	15.14	8.8	7.0	7.0	3.0	\$2.27
Cattle. ....	16.76	5.8	3.4	2.0	6.8	1.29
Sheep. ....	13.10	11.0	6.2	3.0	9.2	2.39
Swine. ....	16.40	12.0	8.2	5.0	1.8	2.67
Average. ....	15.35	9.4	6.2	4.4	5.2	2.17
Hen. ....	11.20	32.6	30.8	17.0	4.8	7.24
Human. ...	15.44	20.0	21.8	5.0	12.4	4.96

  

Liquids.		10½ cts.	8	5½		
Horse. ....	18.02	31.0	.....	30.0	9.0	\$7.39
Cattle. ....	18.76	11.6	.....	9.8	0.2	2.67
Sheep. ....	17.44	39.0	0.2	45.2	3.2	9.71
Swine. ....	19.34	8.6	1.4	16.6	.....	2.61
Average. ....	18.39	22.6	0.4	25.4	3.1	5.61
Human. ...	19.26	12.0	3.4	0.4	0.4	2.74

  

Mixed with litter.						
Horse. ....	14.26	11.6	5.6	10.6	4.2	\$2.98
Cattle. ....	15.50	6.8	3.2	8.0	6.2	1.83
Sheep. ....	12.92	16.6	4.6	13.4	6.6	3.92
Swine. ....	14.48	9.0	3.8	12.0	1.6	2.46
{ Barnyard common.	14.20	9.0	4.2	10.4	11.4	2.41
{ Well rotted	15.80	11.6	6.0	10.0	17.6	3.19
{ Drainage from yard.	19.64	3.0	0.2	9.8	0.6	1.07

The above are known as Wolf's tables, but the professor has re-arranged the values to suit the present times.

It will be seen that hen manure is the most valuable of the solids, yet how few of our farmers take the precaution of saving it by itself? This can be easily done,