and also got my pullets too fat to lay as they did not get sufficient exercise. The floors being earth I am able to clean out the straw and turn them over with a spade now and again, thus keeping all fresh and sweet. I clean out the droppings daily and store it in barrels for future use on garden, etc. Clean water is given twice daily and a supply of oyster shell, etc., kept constantly before them.

## MR. J. C. HARRIS,

Venango, Penn., remarks: "The request from you to write my experience on the above head reached me in the midst of a 'young winter.' storm came on rather unlooked for and raged quite severely for some days, covering the ground with a white carpet in early November. Hardly any one was prepared for it and the chickens themselves were much taken aback and had hardly courage enough to push out of their comfortable houses, that is those which had such provided them. As winter is the critical, or as we might say, 'crucial' season of domestic poultry, the questions of proper care and feeding press themselves upon us more than at any other season. The snow-covered ground and the storms prevailing with out preclude the out-door exercise, and promiscuous 'pickings' which our feathered pets have indulged in during the summer and early fall months, and we are driven back on our resources to supply all their necessary wants, in the way of feed and care. Good water must also be well provided for them, as this is as necessary to chickens as it is to human beings. The feed during the warm and genial months of summer is not of such importance as during winter. Chickens have to be housed up and confined in small quarters during winter, while in summer they are given more or less liberty. Hence the winter feed must be more varied, and especially should there be more animal and vegetable food provided for them to supply the lack of insects, worms and growing vegetables which they encounter in feel secure through the downcoming of warm and well ventilated. I do not

foraging expeditions while at liberty to roam. Every person keeping chickens should be well supplied with vegetables such as are desirable to supply them during the winter months, as cabbage, potatoes, celery, and such like, and meat scraps should also be occasionally provided, say once or twice a week.

The question of grain is the great one, and we think a change from the summer diet is desirable. While corn is not best to be fed in summer very largely, yet in winter it seems to be quite a necessary article of diet.

For winter feed we should lay down the following as being a very good bill of fair: - Breakfast. Boiling water to which meat scraps have been added, with a little salt (and ground cayenne pepper twice a week) thickened well with good unbolted fresh corn meal. Dinner. Oats and wheat screenings to be given so as to keep the fowls at work well to gather them up during the middle of the day. Supper. Corn partly whole and cracked, mixed occasionally with whole wheat, to be given an hour or so before dark.

One of the most essential problems as to feeding is how to proportion and give variety necessary to keep up the growth and integrity of the living tissues of the fowl. As vegetables are not always to be had in winter, I have been thinking that they might he preserved in a dried or dessicated state and used when wanted. There is an abundance, of cabbage, lettuce, and other garden vegetables that might be preserved and pressed in casks, the same as meat scraps, and used mornings as basis of a soupy liquid in which to cook the corn meal for breakfast. It must not be forgotten that a box of crushed oyster shells with a small quantity of granulated bone should always be kept within easy access. The poultryman thus equipped for the winter, and with generous and

the fiercest blizzard and lowest mercurial temperature, and enjoy liberal returns in the way of eggs and meat from his feathered pets, and be assured that vermin with their attendant evils will not compass him, and that the disgust. ing crimes of egg-eating and feather plucking will not be likely to obtain among them.

MR. J. H. PIERCE'S PLAN

is as follows: "In the morning I give them a small feed composed of ground corn bran or shorts, etc., mixed very dry, and warm, seasoned with salt and pepper; during the day I give them grain scattered among chaff, straw or leaves and make them work for their living, this keeps them warm, gives them exercise, and prevents them from pulling out each others feathers, as they never have time for any such tricks. At noon I give them green feed, potatoes, turnips, cabbage, they can be given either raw or boiled, boiled preferred. Every other day at noon give them a little meat, scraps from the table are very good, add to this ground bone and ovster shells, which should be placed in boxes where the birds can have free access to it at any time; they should also have gravel, old mortar and charcoal, and the last thing at night give all the grain they can eat. In fact, to make a long story short, you want to imitate summer as nearly as possible. Would be pleased to hear some of the other fanciers' ideas on the above subject."

A hint from such an experienced fancier as

## WM. SANDERSON

must be of value. He says: "You ask for my ideas on the winter feeding of poultry, and as I have of late years been in the habit of feeding for breeding only, my practice may not be of such use as if I was feeding for table poultry and eggs also. However, I will give you the system I think best, and practice as nearly as I can. In the first place I comfortable quarters for his fowls, can take for granted a poultry house is both