a little of this and that, and a constant exercise in procuring it. Some tell us to make them scratch for their feed; a more correct way to say it would be to let them scratch for their feed—they would rather do it than not; besides, it does away with gorging and encouraging a lazy lummox disposition.

Corn exclusively—or, in fact, wheat or millet—is too heavy and too rich; something to make bulk must be added. I know of nothing better than wheat bran to balance up a heavy rich feed—it's so common that it is hardly popular. Bran makes bulk; not only bulk, but it clears the passages and keeps the digestive organs in condition. Bran alone would be too light for an exclusive feed; besides, it would not be in line with nature to feed nothing else. The craw is a grinding mill and we must keep it at work.

The different grains would not be a perfect feed alone; grass, insects, and dozens of things we hardly think of, go towards supplying the natural wants. Fowls on free range usually find these extra knickknacks, but penned-up fowls, or fowls in winter, must have their equivalent in some form, or they cannot do the very best. Cut clover or alfalfa, cut vegetables, green cut bone and meat scraps help to make summer out of winter, as near as it would be possible. All these things are within our reach, and the time required to procure them would return a nice profit.

Nebraska. M. M. JOHNSON.

Roup.

Prof. Harrison and Dr. Streit, of the Ontario Agricultural College, have just issued in bulletin from the results of their work with "roupy" fowl. Their work has been very carefully and accurately done, about 300 birds having been examined and treated. By some authorities it has been claimed that roup in fowl is identical with diphtheria in man, but the experiments at the college have entirely disproved this contention.

The general condition of roupy birds is thus described in the bulletin: "After the first symptom of the disease, which is usually a putrid catarrh from the nostrils, the affected fowl is generally restless, separates from other members of the flock, becomes dull, cowers or mopes in the corner of the pen, with its head drawn close to its body and often covered with its wings. If there is a severe discharge from the nostrils or eyes, then the feathers upon the wings or back are likely to be smeared with it, stick together, and after some time fall out; and the eyes are often shut, the lids being glued together by a sticky discharge from them. An affected fowl frequently rouses itself, takes food, and especially water, and then returns to the apathetic condition.

"As the disease progresses, tumors or cheesy masses may be formed about the eyes, or in the nasal passages, and in the mouth or throat there are frequently greyish yellow exudations. Whether the disease is characterized by offensive discharge, cheesy masses, or false membrane in the throat, the cause is always the same."

After a great many attempts, Prof. Harrison and Dr. Streit succeeded in isolating a germ which causes roup. They also set up the disease in healthy fowl by inoculating them with the ordinary green pus germ; hence it would seem that roup is a complex suppurative process.

Treatment of the disease is only recommended when the birds are valuable. In such cases the nostrils are pressed between the thumb and forefinger in the direction of the beak, two or three times. Pressure should also be applied between nostrils and eyes in an upward direction. This massage helps to loosen the discharge in the nostrils and eyes. The bird's head is then plunged into a two per cent. solution of permanganate of potash for twenty or thirty seconds, or as long as the bird can tolerate it. This treatment should be given twice a day, and continued until all symptoms have disappeared.

Egg Industry.

Surely the scarcity of eggs, which was made manifest so early this winter, and the high price prevailing, will convey a lesson to the prudent farmer. Winter egg production is a science which requires considerable study. It also requires the expenditure of a small outlay in the building of a proper poultry house. The breed of hens used has also a great deal to do with the successful production of winter eggs. Information on all the important points, such as proper breed of fowls, properly designed poultry houses, and proper method of feeding and caring for the hens, is easily procured. Any good poultry journal furnishes its readers with lavish and up-to-date instructions. There is good money in poultry for the Manitoba farmer if he goes into it intelligently. It will supply him with employment and ready cash all through the long winter months.—[Russell Banner.

Horticulture and Forestry.

San Jose Scale in Manitoba.

At the last annual meeting of the Western Horticultural Society, the San Jose scale, and the regulations which govern the fumigation of nursery stock, came in for a good deal of discussion, during which a number expressed a doubt, and, in fact, no one present seemed prepared to prove that it could exist in our climate. No experiments have so far been undertaken in an official way to settle this question, which is one of considerable importance to horticulturists in this Province. If it be true that this pernicious scale cannot live in the winter temperature of Western Canada, the present restrictions on nursery stock coming in from the Northern States are a gigantic humbug, hindering the purchase of varieties most suitable to our latitude, and as such ought to be removed without delay.

Before this could be done it would, of course, be necessary to demonstrate clearly that there is no danger, and the "Farmer's Advocate" would suggest that steps be taken at once by the Horticultural Society to settle this matter. Specimens of scale can easily be secured from the South, and the probability is that there will yet be weather this winter sufficiently severe to make a test. Upon the approach of spring the twigs or branches bearing the insect could be confined within glass, and their movements, if any, watched from without. It would probably not be wise to reach conclusions as the result of experiments carried on during one winter, and hence the necessity for beginning the investigation at once. What say our readers who are interested in horticulture?

PEKIN DUCKS AND SUNFLOWERS.
In the poultry yards of J. F. C. Menlove, Virden, Manitoba.

Large Buildings.

At the next World's Fair, which will be held in St. Louis in 1904, the building devoted to horticulture will cover six and the agricultural hall twenty acres. Surrounding these two buildings will be forty acres, devoted to the growth of various plants, shrubs and trees.

Moving Barbed Wire.

What is the best method of removing barbed wire from one fence to another, about half a mile apart? W. H. T.

Melita.

Ans.—Loosen from posts, one wire only at a time, and draw it to wherever required by hitching your easiest going horse or team to it. Drive as much as possible over snow-covered ground, at a slow pace, and in this way the barbs will not be destroyed. If the fence you are removing has been but recently put up, there will be a tendency for the wire to curl: should this be the case, attach a very light weight to the end of the wire, which will entirely overcome the difficulty.

As Represented.

Many thanks for knife premium received yesterday; found it quite as represented. Wishing you continued prosperity. J. ANDERSON.

Questions and Answers.

1st.—Questions asked by bona-fide subscribers to the "Farmer's Advocate" are answered in this department free.

2nd.—Our purpose is to give help in real difficulties; therefore, we reserve the right to discard enquiries not of general interest, or which appear to be asked out of mere curiosity.

3rd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer, as a guarantee of good faith, though the name is not necessarily for publication.

4th.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

Veterinary.

[Answered by our Veterinary Editor.]

LAME MARE.

I have a mare about nine years old that has been lame off and on since last September. She broke through and fell into a badger hole while on the binder, the next morning she was a little lame, but it appeared only to be stiffness, as it wore off after about half an hour, and then she seemed all right till next morning. I kept her in for several days and then turned her out to pasture for three weeks during stacking, when I took her out to plow. The lameness came back again, so I consulted a Vet., who said he thought from my description of her symptoms it was a sprain. I followed his directions carefully, and although she improved it did not cure her; then I was advised to use some stronger liniment, which I did. This blistered her leg and allayed the inflammation and strengthened the joint. I have also kept the foot and leg bandaged up to the hock. After oiling the leg well, and wrapping it up again for three days, she seemed to be all right, but she broke loose and got out of stable and hurt her foot again. Sometimes she does not limp at all, and then she will stand off the left hind foot again. The tendon is swollen up to the hock, and on left side of her leg, just above fetlock joint, there is a small puffy swelling; lameness appears to be in the joint, but I am sure there is nothing in the foot. Mare is fat and in good health. I am feeding her oat sheaves that were cut before the oats filled. She has not been having any grain. Please advise me how to treat her in your paper. H. T.

Prosperity, Assa.

Ans.—Your description of the case, although fairly clear, does not warrant me in locating the exact seat of the lameness. Would advise you to apply the following blister to the fetlock joint, and along the course of the tendons on each side: Biniodide of mercury, three drams; cantharides (pulv.), four drams; vaseline, four ounces. Mix, cut the hair closely from the parts, wash skin well with warm soft water and soap; dry off well with coarse cloth; rub ointment well in with fingers for ten minutes; let it remain for forty-eight hours; wash off and apply vaseline to the blistered surface. Repeat blister in three weeks.

RHEUMATISM IN SOW.

I have a sow about nine months old that appears to have rheumatism in her hind legs. She takes it in spells; sometimes she can hardly walk, and then she will be better for a day or two. She feeds well, even when she is hardly able to stand. Am feeding frozen wheat meal and plenty of good well water. She is in a nice warm house. Please advise me as to treatment?

2. Is she edible?

3. If she recovers will she be fit for breeding?

Prosperity, N.-W.T. H. J. T.

Ans.—1. The trouble is no doubt rheumatism, but its origin in this case cannot be traced without fuller particulars. It is usually due to damp or ill ventilated pens, exposure to storms, or sudden changes from poor to rich food. As a method of treatment, it will be necessary to cease feeding an exclusive diet of frozen wheat meal and give such foods as ground oats, barley, shorts or bran instead; say to the extent of half the ration. From two to three ounces Epsom salts should also be given once every day in the food, until the trouble disappears.

2. There would be no objection to the meat for food.

3. Should she recover, the only objection to using her as a brood sow would be that her progeny might be predisposed to the same trouble.