

Hen Manure.—Please let me know what crop hen manure is best suited for.—G. S., Mimico, Ont.

[It is more proper to ask what soil a manure or fertilizer is best suited for than what crop. Hen manure may be used just the same as barnyard manure; but it contains about three times as much fertilizing matter, and one-third of the quantity will therefore do; that is, if your soil needs 15 loads of barnyard manure per acre, 5 loads of hen manure will produce about the same effect. Large quantities of these manures should not be applied to soil that contains much vegetable matter; phosphates and ashes should therefore be added.]

Commercial Fertilisers—Strawberries—Melons—Forcing Vegetables for Prizes.—I have read your paper for 12 years and am glad to see that it is improving very much every year. If you would answer a few questions you would oblige me very much. 1. What is the best artificial fertilizer for a light clay loam soil, and will it pay to use it for root crops? 2. Are there any made in London, or whose would you advise me to use? 3. What kind of strawberries are the best for a farmer's garden for his own use? Is the spring or fall the best time to plant? 4. What kind of soil is the best suited for strawberries and other small fruits? I have wood ashes, stable and hen manure; which would be the best for a garden, or are fertilizers better? 5. What are the best varieties of water melons for this part of Ontario, and how should they be cultivated? Do you think it is fair to force vegetables or roots of any kind for an exhibition, or should the largest take first place, no matter how they are grown?—T. H. L., Bruce Co., Ont.

[1. Nobody can exactly say, even by examining the soil, as much depends upon your system of farming; your best plan is to make tests, or use a fertilizer which contains ammonia, phosphoric acid and potash. For roots get a fertilizer which analyzes a high percentage of phosphoric acid. 2. Read the advertisements in our advertising columns. Get catalogues from all the advertisers you can find. All those are reliable who advertise in the ADVOCATE. 3. Read our March issue; it gives you all the information you require on this subject. Plant early in the spring; but the fall will also do. 4. A sandy or clay loam. Any potash fertilizer is good, unleached wood-ashes being the best, using also some stable manure, especially if the land is somewhat stiff. Hen manure, like barnyard manure, is a general fertilizer, and may be used just like barnyard manure, but only about one-third of the quantity should be used, as it is richer and more concentrated. 5. Black Spanish, Cuban Queen, Peerless, and the Boss, are all good varieties. Plant in well manured hills about 8 feet apart each way, placing 4 or 5 seeds in each hill. Forcing vegetables or roots for exhibitions is one of the greatest humbugs of the age.]

Values of Bran, Shorts and Oats—Oil Cake and Linseed Meal.—1. On renewing my subscription for 1887, I wish you would give the value of shorts or middlings for feed, as compared with oats or bran; I am feeding it to pigs and horses, but do not know whether it is as profitable as oats or not. Would it be safe food for milch cows? 2. Is there much difference in the value of oil-cake meal and linseed meal?—C. W. K., Oil City, Ont.

[1. Bran is better than shorts or oats for milk production and for growth in young stock, as it possesses more flesh, bone and milk forming material. Oats are preferable to bran or shorts for putting on fat. Bran is good for working horses, for what develops muscle also develops strength, but oats should also be given. Shorts are a sort of general purpose food. In all cases of feeding, a change of ration is desirable. 2. Yes. Oilcake, or oil-cake meal, is like bran in its feeding properties, and linseed or linseed meal (not extracted) is like oats or corn, but has much more fat in it; both should be fed in small quantities.]

Wild Oats.—Please let me know in the next issue of your valuable paper the best way to kill wild oats?—N. M., Hartley, Ont.

[Prevent their going to seed as much as possible, but if any ripen and fall on the ground, keep the surface of the soil stirred with harrow or cultivator, so as to give the oats a chance to germinate; they can then be plowed under, and will cause no further trouble. But if the soil is full of seed to a good depth, the ground should be summer-fallowed, or some green crop grown so as to choke them, clover being best. If you take the business in hand in time, not letting the oats get deep into the ground, you will have little trouble with them.]

Tying Cattle—Saving the Manure.—1. I would like to know which is the best way to tie cattle in a barn, with chains or stanchions? 2. Does it injure manure to be outside of a building, or should it be under cover in winter?—H. D., Doaktown, N. B.

[All depends. Many stockmen would have no stanchions under any circumstances, but others favor them for cows. They are better than chains for stables which have deep gutters behind the stock. When stanchions are used the stock should be groomed every day, so that they need not lick themselves, and the animals should be free from lice. For ordinary purposes, chains are preferable, and they should be so attached to the post that they will slip up and down freely. 2. Manure is usually better under cover, or left in the box-stalls; but those who understand the caring of manure do not need to keep it under cover, as they can keep it fermenting all winter in the open yard without loss, and it will be ready for use early in spring.]

Relative Value of Different Food for Stock.

—Please print in your next paper the relative value of different food for stock, especially wheat bran as compared to a good timothy hay. Would it pay any farmer to sell good timothy hay at \$8 per ton and sell bran at \$12 per ton? I would like for you to print the within closed table and add bran to it.—W. V. B., Belleville.

[The following is the clipping sent by the above correspondent: "One hundred lbs. of good hay for stock are equal to 669 lbs. of beets (White Silesia), 469 of turnips, 429 of rye straw, 373 of clover (red green), 371 of carrots, 368½ of mangolds, 350 of potatoes (kept in pit), 367 of oat straw, 360 of potatoes, 135 of carrot leaves (tops), 89 of clover (red dry), 78½ of buckwheat, 62½ of corn, 59 of oats, 58 of barley, 53½ of rye, 44½ of wheat, 43 of oil cake, linseed, 37½ of peas (dry), and 28 of beans." He asks us to add bran to the above list, but it is very hard to do so, as bran possesses a feeding value which can be attributed to few other foods. In the preparation of all such tables only the albuminoids, fat and carbohydrates are taken into the valuation, but bran and oil-cake have large percentages of mineral matter which has a high feeding value for some purposes—such as growth, milk production, and muscular development. According to the American standard, the albuminoids of the food (flesh-forming constituents) are valued at 4.5 cents per pound; fat at 3.84 cents, and the carbo-hydrates (heat-forming constituents) .95 cents, the mineral matter not being reckoned, it being usually abundant enough in all foods, but when the other portion of the ration is of poor quality, the mineral matter is quite a consideration. The values given to these foods can only be followed when proper rations are fed, and then they are only approximate, as the composition of the foods varies with the character and richness of the soil; the richer the soil, the richer the food grown on it, and then there are also great differences in the individual characteristics of the animals. According to the American standard of valuation, bran is placed at 3 cents per hundred pounds higher than oats, but for milk, growth, and muscle, we would place the feeding value of bran as being little inferior to peas or beans (pound for pound) making oil-cake the best of the lot. Oats and corn are best adapted for fattening. The best results will be obtained from bran and oil-cake when fed with coarse, bulky foods; while oats or barley may be fed with good hay, or the less bulky foods. According to the standard, there is very little difference between good hay at \$8 per ton, and bran at \$12; but if you have much bulky food, you had better sell some and buy bran.]

Monopolies and Frauds—The Salt Question—The Advocate.—Times being hard and money scarce, I had concluded to give up some of the papers which I had been receiving, but I cannot afford to close my door against the ADVOCATE, which I consider the farmers' counsellor and friend. I have been pleased with the part you have taken against monopolies and fraudulent proceedings. Your monthly prize essays are highly instructive to the farmer, and are carefully read and discussed in this section of country. Great interest is taken in the salt question, and we hope yet to learn, through the columns of the ADVOCATE, the manufacturer of No. 10. I learn you are surprised that you do not hear from farmers on this important question. Well, sir, farmers, as a rule, are slow to rush into print. Many know that the salt they have used did not do its work satisfactorily, but not being analysts, are unable to detect the adulteration before using. We look to others for light. Speaking for myself, I am not in favor of a government inspector. No doubt this question will be discussed by the various farmers' institutes, and this salty (or lack of salt) question solved.—A. K., Brampton, Ont.

The Apple Tree Borer.—I noticed an item in one of your horticultural notes recommending a stiff wire for probing apple trees infested with borers. This will not reach the case very often, owing to the crooked way in which they travel. I see others telling their readers to cut them out; this is clumsy and ruins the tree. If a man wants to be successful in fruit growing he must never let them get in, and it takes less time to go over a tree with a blunt knife or a coarse brush and remove the eggs in summer before they hatch, than it does to cut them out after. If any should get in, take a piece of steel pianoforte wire and make a barb point like a fish hook; this will follow the winding hole and bring the borer out without damaging the tree. I used one for years, and never failed to get them out.—G. A., Lynch Lake, Muskoka.

Ayrshire Herd Books.—I have much pleasure in being able to send you the first volume of the Canada Herd Record, published under the direction of the "Ayrshire Importers and Breeders' Association of Canada," which we will be pleased to have you place on record in the library of your valuable paper, as a book of reference. To this work I have devoted much time, attention, travelling, searches, correspondence and expense. The volume contains the pedigrees only of pure-bred imported Ayrshires and their produce. Our list of members and organization you will find in the book. We have nine members in Ontario, several in eastern Canada, and a few in the United States, whose herds were of Canadian importations and breeding; in all, 54, and we soon hope to number 100, from all parts of the Dominion, that will form part of our association, as they are cordially invited to do. The standing of our list of membership so far should be some guarantee of the wisdom there would be in joining us in the good work; instead of undertaking detached provincial organizations that tend rather to weaken the union of Ayrshire men, as is the case where there is competition that may lead smaller local societies to accept pedigrees with less discrimination to secure more entries and fees to officials, as has been the case in the office at Toronto of the Ontario Ayrshire Record, in which there are a large number of false and imperfect pedigrees, evidently imperfectly investigated before entry. You are perhaps aware that four or five persons met in Toronto this month and elected officers, without having procured—in advance of their doing so—a list of qualified members to an association, which they there and then called the "Dominion Ayrshire Breeders' Association," and at that small meeting worked with the organization; while, at the same time, correspondence was going on, and they named a committee to meet a committee from our association to confer on amalgamation, thus creating a rival association, and placed it in the hands of Mr. Wade to press it upon the attention of Ayrshire breeders; while all the pressing that was necessary was to join our association, and go on with the work of entering their good and throwing out their bad pedigrees. We, however, will wait the result of their interview. If you consider our work fair and desirable for Ayrshire men to join, rather than have it split up by local, personal or Governmental influences, then our members will be pleased to receive a favorable notice from you.—W. RODDEN, Plantagenet, Ont.

Notices.

On the 7th of this month we intend being in Waterford, in the county of Simcoe. At the latter part of this month or beginning of next we purpose being in Ottawa.

Mr. Daniel H. Nash, of Millington, N. J., manufacturer of the Acme Pulverizing Harrow, informs us he has appointed Mr. F. G. Bowley, of Napperton, Ont., his agent for the counties of Middlesex and Lambton.

We would direct the attention of our readers to the advertisement of Ashton's Salt, which appears in this issue. To produce highly flavored and good keeping butter or cheese it is necessary to use the best quality of salt. Mr. Ashton's is favorably known all over the world.

The Chicago, Burlington & Quincy R. R. Co. has published a pronouncing dictionary containing 320 pages, 32,000 words and 670 engravings. It teaches everybody how to pronounce correctly. Send sixteen cents in stamps to PAUL MORTON, G. P. and T. A., C. B. & Q. R. R., Chicago, Ill., and get a copy of the dictionary—the cheapest book issued.

Foul weeds are one of the many drawbacks farmers have to contend against, and a first class fanning mill is one of the most important implements on the farm. We believe the mill manufactured by Manson Campbell, of Chatham, Ont., is equal to any mill made in America. His sales last season were over 2,000.

TREES AND VINES.—We have a quantity of young walnut trees for mailing, and a few Amelopsis Veitchii; also a number of alder or ash-leaf maple. One of the walnut and Amelopsis Veitchii and three of the latter will be sent to all who send in one new subscriber, accompanied with one dollar in cash.