

### An Amalgamation Proposed.

SIR,—I take the liberty of addressing you a line or two upon a subject that has not been ventilated to any great extent, although many breeders of farm stock and fowls are deeply interested, and would, I believe, hail with pleasure a move to further the end which this letter is intended to promote. I write this to you merely to open up a discussion, and I hope abler pens than mine may follow upon what some people would call it—my hobby. Many of us farmers would like to see the fat stock show and the poultry show combined, the combined show held at the same place and time. The annual meeting could be held at the same time, and then people, who wish for it, could get instruction in attending the convention. The cost of separate shows could be reduced; prizes need not be reduced; adopt some central point, say Toronto, and then many of us farmers and breeders could attend both shows. Many are now deterred from so doing on account of the extra cost. I hope, sir, that others will express their views on this subject through your journal; that in the near future we may obtain the amalgamation of these shows in one grand affair that shall be intellectually instructive—not only to the classes, but to the masses as well. Trusting this may not be unfavorably received, I have the honor to be, sir,

Your obedient servant,  
CAPT. A. W. YOUNG.

### A Note from Scotland.

SIR,—I see by my label that the subscription to the ADVOCATE is again due, and enclose amount for another year's subscription. It comes to me with the utmost regularity, and always brings something new. Many of my neighbors interested in the cattle trade are waiting for the restrictions being cancelled, and would gladly know if Canadian stores might be expected again if the embargo were removed, as the country is at present short of cattle.

Slydie Clung, by Sanchen,  
Aberdeen, Scotland.

JOHN ALLAN.

[NOTE.—British authorities show little or no disposition to recognize the justice of the Canadian contention in this matter, and we notice that not long ago Mr. Gardner, in the House, undertook to bolster up their position by citing an alleged "discovery" of "pleuro" in cattle from Canada, made by the Belgian government authorities, about which he was "endeavoring to obtain, through the Foreign Office, further information," all of which looks very much like a pretext for delay. With regard to the other point raised by our Scottish friend, we might say that the "stocker" trade would probably revive in time, but good store cattle are not now plentiful in Canada, the demand for beefs of all kinds being keen this spring. For ourselves, we believe in finishing the cattle here as a general policy, but that is no excuse for charging us wrongfully with having pleuro-pneumonia.—EDITOR.]

## FARM.

### Bean Growing in Kent Co., Ont.

BY W. A. M'G.

Since the downfall of prices in wheat, bean growing has been pushed with vigor, until at the present time there is hardly a farmer in the county but raises between ten and twenty acres each; and numbers grow from fifty to seventy-five acres. And yet, owing to the fact that there is but a small tract of country adapted to the growth of this crop, the market remains firm and the demand strong. The average price paid to growers in this locality for the last six years has been about \$1.25 per bushel. Quite an inducement to grow more beans and less wheat, is it not?

Although some risk is incurred of losing the crop by frost, by having a well-enriched soil, with early planting and proper cultivation, the crop can be rushed on to early maturity, and this danger reduced to a minimum. Sod is always preferable for beans, although several farmers in this vicinity follow another plan, which is to plough up their oat-stubble immediately after harvest and seed it to rye, which is pastured during the fall. It is ploughed under the following spring at least a week or ten days before planting-time. This both enriches and, in rotting, warms the soil, thus giving them a grand start. When a sod field is used it should be ploughed late in the fall, or in early spring. Fall ploughing is preferable for the reason that it makes a splendid place to haul manure upon during the winter, instead of allowing it to waste in the barnyard. Cultivation can then commence as soon as spring opens.

If the manure is long, the first working should be done with an implement that will turn it under (with the double object of rotting the manure and sprouting any weed seed it may contain) and still not tear up any sod. For this work we have found the disk harrow an excellent article. To get the soil in the best possible condition, it should be worked over every week or ten days, always leaving it rolled after each working, to hold moisture.

The planting-time varies from about 20th of May to second week in June, according to the season. They are drilled in at the rate of three pecks per acre, with an ordinary grain drill or regular bean planter. The latter has the advantage of the former, in that it drops the beans in hills and also rides the earth over the row, thus making it easier hoeing them, and shedding heavy rains which settle and form a crust in the drill's mark. The

principal varieties grown are the Medium and the Pea. The latter is of late introduction, but has proved itself more than a peer to Medium. It has the advantages of ripening from one week to ten days earlier, stands the drought and yields better, and commands from five to ten cents per bushel more in the market.

Cultivation should continue as soon as the beans are large enough, and if the field has been well-worked before planting, and good cultivation is given afterwards, very little hoeing will be required; but what is needed should not be slighted, as there is nothing worse to harvest than a weedy field of beans. Harvesting is one of the most important parts of bean raising; for unless they are pulled at the right stage of ripening, and handled with care while turning, loading, etc., there is great loss from shelling.

The pulling is done with a bean-harvester or plow, or by hand; the latter plan is resorted to where but very small acreage is planted. The proper time to pull them, when done with horse machinery, is before they have all ripened, and the field presents a rather green appearance. Of course, where pulled by hand they may be allowed to ripen more fully, as there is less danger of shelling them. Very few will be shelled in pulling them, if done while they are damp. For this reason, mornings and evenings are best suited for cutting. Before mowing away, they should be thoroughly dried, if not, they will heat and mould. An experienced person can tell when they are fit to haul, by the "rattle" of them—a sound made by the dry pods when handled. If the crop has been properly cultivated, it will take very little working to put the land in fine order for wheat, which generally succeeds beans (when the price is right).

By following the plan outlined above, we raise from 25 to 35 bushels of choice beans per acre, and this is usually followed by a good crop of wheat.

It requires grand land, with heavy manuring, to stand the strain of raising beans and wheat; but for such land, the "Garden of Ontario" (Kent) is justly noted.

### Road Making.

The season of the year is about at hand for the annual statute labor to be performed upon the public highways. It is a pity that, in many parts of the country, so much of the work done during the entire year is begun and finished within ten days or two weeks. (Work should be done when required.) The results are too well known to need repeating. Such is the system, and until a better is substituted therefor, let us make the best of it. Surely all the Good Roads Association literature that has been circulated, and all the Institute talking on road improvement that has been done, will help to arouse a more lively interest and a more thoughtful execution of the annual roadwork.

One of the first and most important duties in the construction of a road is to secure proper drainage. Unless the water gets away from the road-bed before it becomes "worked up" by travelling, it is impossible to keep a highway in anything like good condition, except in a dry time, when even the fields would do to travel upon. The amount of drainage required by a road will depend upon the soil and surroundings. One thing is certain: there need be no fear of getting the water away too quickly. The road-bed should be so graded that the surface water will readily run off, and in case of a low clay or "springy" soil, it will require tile drainage besides, with frequent discharges into the side drains, which, if made of tile, will obviate the necessity for deep, abrupt ditches, a fruitful source of municipal litigation. The great point is to secure a rapid removal of all water from the road-bed and the sides as well. On clay roads the frequent use of plank levellers [see ADVOCATE, May 15th, 1894, for illustration] are very beneficial in smoothing down ruts, and allowing water to run off.

Road machines are already working a great reform in many places. It has been the custom to grade the road piece by piece, year after year, with plows and scrapers. As it takes several years to get over a beat in this way, it seemed necessary to raise the centre very much higher than the sides, so that it would not become hollow before its turn came for another grading. Now that many beats have access to a road machine, which will grade a mile or more in a day, so that a whole beat can be gone over each year if necessary, it is not wise to raise the centre so much above the sides: just a nice rounding top, which, if given a coat of gravel, will make ordinary country roads much better than we now find them in many places.

Gravelling has been very carelessly and thoughtlessly done in many instances before a proper grade was formed. Another common mistake has been that of patching roads, by putting down loads and half loads of gravel here and there to fill up depressions. This fills the depression too full, very often making two depressions—one at either end—before three months. It is a much better plan to perfect a certain distance each year, paying careful attention to spreading the gravel. Another misdirected piece of work has been that of hauling upon the roads huge stones along with the gravel, and allowing them to be stumbled and driven over most of the summer before they are gathered together and broken. Roads repaired (?) in this way economize labor on the start, and discourage travelling; but there is not much economy to those who must use them, as it only requires a little of such

travel to rack a vehicle and lame many horses, and as for easy draught, or comfort in driving, such things are out of the question. When the bulk of the work is done, a fine finish can be given by adding a light coat of fine, sharp gravel, which will work in among and bind the other materials together, leaving a smooth, hard and gritty surface.

Where gravel contains stones larger than will pass through a two-inch ring, it should either be screened, or men should be employed as soon as it is put upon the road to rake the stones into the wheel tracks or the centre of the road, and break them with a hammer. They will then become set into the new gravel in a very short time, and make a better road than if they were not there.

Another needed change is that of putting more dispatch into the work. The opinion seems to have become prevalent that the work is done for "the Queen," and that the more easily it can be gone through with the better, since Her Majesty won't object so long as the statutory time is put in. Surely a moment's reflection upon the subject will convince any sensible person who has to haul milk, or grain, or fruit, or drive for pleasure upon the roads, that "shirking" work, or simply "putting in time," is nothing more or less than short-sighted folly. Once we get hold of the idea that we are really working for ourselves, we will not be so anxious to get the start of the Queen or the State by shirking our roadwork.

Many of our old gravel roads are also badly mismanaged. In the first place they do not receive anything like regular attention, so that small holes soon become dangerous ruts much more costly in the end to repair. Sand or clay gradually works from the driveway, forming a ridge, actually sodded over on the sides, thus holding the rainfall on the roadway with the most deplorable results. Wherever there is a hill or decline, the water actually forms a current down the centre of the road after every shower, washing away the sand, leaving huge rough stones exposed to destroy rigs and horses' feet, and make the life of the teamster a burden. The grader or road machine, with a little subsequent hand labor, is most efficacious in removing these edges, and giving the road a gentle slope toward the ditch.

### Better Ventilation.

The question of ventilation should be well weighed by every prospective builder of a stock-barn. There is no doubt but that much of the tuberculosis among cattle, and coughs and distemper among horses, is made more prevalent and is even fostered by the contaminating influence of bad air. When we think of the "holes" of stables with plank floors covering cesspools of filth, and no more ventilation than the occasionally opened doors and a few dirty windows (generally nailed up and covered with cobwebs) afford, is it any wonder that trouble has arisen from time to time in many herds and studs? Even yet many owners of stock consider that they have perfectly healthy stables when they are warm enough in winter to keep the animals comfortable. Comfort is all right; but when any beast breathes the same air over and over again, surely we are all sufficiently enlightened to realize that the animal is being slowly poisoned. Something more than warmth or "comfort" is needed. We do not wish to infer that tuberculosis or distemper are the direct result of poisoning by impure air; but we do say that an animal—human or otherwise—whose blood is not continually oxidized by pure air, through the medium of the lungs, is in a very susceptible condition to become a prey to disease germs.

We hear it said that every cow or horse or pig or hen should have so many cubic feet of air space. Before getting down to rules of this sort, let us ask why it is necessary to have so much air space? Is it not so that the atmosphere of the stables should not become foul—chiefly during the night? Now, if this can be supplied to the smaller capacity by any cheaper method, why not adopt it, and do with the smaller building? We have given several good methods of ventilation at different times in the ADVOCATE, to which we would refer those who need more ventilation than they have (which will include about four-fifths of those who own modern basement barns). In the November 1st (1894) issue, Mr. E. D. Tilson's method of supplying fresh air through an underground pipe, and bringing it to the head of every stall, was explained; and in the April 1st (1895) number, Mr. Thos. Irwin's plan was described. Both these gentlemen have given the subject intelligent consideration, and, after a fair trial, believe they have secured ideal ventilation. Mr. Irwin informs us that he is going to make over another barn this season, having still more capacity for the escape of foul air. At the top of the side walls of the basement, or stables, is to be an opening about five inches wide, into flues the same width, which extend along the whole side of the stable between the studs, continuing up to the plate. These are to be provided with lids hung on hinges, so that they can be closed if desired.

We hear of others having the flues extend down almost to the floor of the stable, having registers at the bottom to open or close, as desired. These extend up along the wall to the roof, where the air is conducted to cupolas by boarding up the space between two rafters. Where two rows of cattle stand facing a feed-alley, the feed-chutes from above or other means of exit provide for the natural ascent of the air heated from the bodies of