Applying Bone Dust.

The amount of bone or phosphate to be applied to wheat, will depend on the condition of the land. If in good heart or fair condition, 150 to 250 pounds to the acre will give good results. If the land is fair, use 250 to 300 pounds to the acre, and if the land is so poor or exhausted that you fear young grass will not make a good catch, then apply 300 to 400 pounds to the acre. The above amounts are for fine-ground raw bone and the best class of phosphates. If the bone is coarse or the phosphate poor, then much larger amounts must be used to obtain the same results. We get a fine, pure, clean raw bone fertilizer here that is all we can ask or desire. We get the best results from this bone by drilling in with the seed, for a small application. But if you want to make a heavy application, of say 300 pounds, we drill a portion of the bone dust separate, and then go over the same way finishing with the bone and wheat mixed in the drill together. We used to get phosphates in the East which were made of bones, but now some of them seem to have very little bone in them. We value them more for a quick start of the crop; but when we want a fertilizer that will give good present, and at the same time, long-continued results, we want either bone or else a phosphate that is made out of bone. In our former discussions here, over our experience in using fertilizers, we have settled down to about this conclusion—that the farmer who is settled on his own land had better use the best raw material he can get to put into his land, and let the elements in his land do the manufacturing of his phosphate or superphosphate, as you prefer to call it.

In conclusion I would say to my brother farmers—buy good goods only, and there will be less disappointment. My observation is that the fertilizers which are sold at the lowest price per ton, are in fact the poorest bargain. For my part I don't want to encourage adulteration in fertilizers by buying articles which are offered at less price than pure honest goods can be furnished at. We had better buy a little of what we really need than large amounts of something our land or crops can not use. I should have said that if bone is applied broadcast it should be sown on the rough land before harrowing, so when harrowed the bone would be as deep in the soil as possible. If sown after first harrowing, the effect would be to push the grass more than the wheat.—*W. H. C. Ohio Farmer.*

The Farmer of the West.

Some of our young Canadian farmers, believing the stories that are told by railway land agents and others, act as the little boy of the story book, who cried "Make me a bannock and roast me a scallop, till I go and seek my fortune." Did those discontented young men but hear the doleful stories told by many Western farmers of their hardships and misfortunes, they would be less anxious to exchange a quiet Canadian home for the risks attending a migration to the West. A Western farmer, R. W. Woods, of O'Brien County, Iowa, thus describes the condition of the farmers in that place:—

It is certainly true that some crops have been entirely destroyed. We have seen large fields with nothing but stalks an inch or so above the ground, and when we saw other fields, where the grain was so heavy that it seemed as if it must lodge, as we passed it in the morning, and when in the evening it was all aflame with the red grasshoppers, we could but feel that it was only a question of time with those fields also.

But the grasshoppers are rapidly getting wings, and coming and going with the winds. What direction they will take when they go out on their grand foraging expedition is yet a question; we can only hope they will sweep out of and not over Iowa. When a few days ago they swept the grain from the fields in the county south of us so completely, the farmers here were panic-stricken: they lost all hope at once. "We must get away from here," some said. Others said "But where can we go?" Ah! that was the question: where could they go? When the crops were taken last year, there were many who sacrificed everything they had gained by their years of toil, and went in search of a place where they could find some reward for their labor. To every point of the compass they went, while those who stayed home only waited for thousands of others to follow them, should the crops fail this year again. But from the east and the west, from the north and the south, there comes in substance the same sorrowful story: "Times are hard here; there is no money to be got for anything; nothing to do; every kind of business is overdone. Stay where you are." But in spite of all that, some men have been so unwise as to throw away their farms. There passed our house an hour ago a very inferior looking cow, worth perhaps $20. That cow was the price paid for a farm of 160 acres of land, more than half under plow, with grove, a small house, and some other improvements. The purchaser assumed the mortgage of $500, due in four years. You can read the story between the lines—the hard working man was not able to pay the interest on the borrowed money.

The Seventeen-Year Locusts.

The Troy, N. Y., *Times* says the locusts have appeared in large numbers in the vicinity of Greenbush in that State. They come out of the ground in the shape of large grubs, but soon after their wings are developed and they take to flight. They are not destructive to crops, but feed upon trees and shrubbery, in some instances completely removing the foliage from a large tract of country. Although their appearance has only been reported in one locality, there is no doubt they can be found in this section. When full grown they are about an inch and a half in length, and they make a loud humming noise while flying through the air. A singularity regarding their emergence from the earth is, that they all come out backwards. They are called the "seventeen-year locusts" from the fact that they only appear every seventeenth year. In 1860 they were numerous, and this was the first time of their appearance since 1843. In 1826 they were so plentiful that the trees were covered with them, and they could be gathered by the bushel with little trouble.

Wheat in the North-western States.

The figures compiled by several of the leading American papers, with respect to the quantity of wheat grown and gathered this year in the most important wheat-growing States of the Union are important and interesting.

We select the Chicago *Tribune's* estimate, by which it appears that there have been secured about, in round numbers, as under:—

	1875. Bushels.	1876. Bushels.	1877. Bushels.
Minnesota	27,000,000	16,000,000	35,000,000
Iowa	29,000,000	18,000,000	39,000,000
Wisconsin	25,000,000	15,000,000	25,000,000
Kansas	12,000,000	12,000,000	20,000,000
Total	93,000,000	61,000,000	117,000,000

Showing that the four States above mentioned will have say 56,000,000 bushels more wheat to sell than they had last year.

These figures are compiled mainly from the estimates and reports of the Agricultural Bureau of the U. S., and the acreage known to be under wheat has added in the calculation. In 1875, for example, Minnesota had an acreage of 1,764,000, in 1876, 1,874,000, and in 1877, 1,990,000 acres, and so great is the average yield as compared with last year, the *Tribune* considers 35,000,000 bush. against a little over half that quantity last year, as a safe calculation. The N. Y. *Bulletin* considers that the wheat crop in California this year will fall short of last year by perhaps 12,000,000 bushels, but the aggregate crop of Kentucky, Tennessee, Ohio, Indiana and Michigan will exceed last year's by 35,000,000 to 40,000,000 bushels. The conclusion drawn from these figures, and from the assumption that wheat will be freely sold by farmers at say 90 cents, is that the farmers of the United States will receive nearly fifty millions more for their crop of wheat this year than they did last.

WHEAT GROWING.—Wheat growing has nearly ruined one section of Wisconsin. It has destroyed the fertility of one of the best soils that ever the sun shone on. It has indroduced a vast army of insects which now stand ready to destroy other crops. Worse than all, it has struck the farmer himself with a mental blight. Like intemperance, it steals away his brains, making him totally oblivious to his own folly. The culture of grass and corn, and rasing of beef, pork, butter and cheese is the remedy for our impoverished farms and farmers. Dairymen are getting rich, grain-raisers are getting poorer every year. The profits that come from grass culture are not excessive, but they are sure, and besides, the farmer is not selling out his farm by the bushel.

S. Van Norman, at a recent meeting of the Elmira Farmers' Club, in a discussion on ploughing deep or shallow, said: "I had a case which showed very plainly the benefits of deep ploughing. Last year I came into possession of a fallow, which, in the spring, I plowed. When my man had the work started I noticed he was skimming it, so I asked why he did not go deeper. He said 'it is so hard I can't get the plow down.' I could not satisfy myself with the work, so I said it must go down. I will beam it and pay whatever may be required for the increased labor of the team. We put it down by pressure to nine inches of depth. My neighbor had a garden close by plowed as mine was started. three or four inches deep. I am sure I had twice as much produce from my garden as he had from his. Last spring there was a like difference in the ploughing and my advantages in the yield show as plainly as before."

The grasshoppers have so far destroyed the feed in some pastures near St. Albans, Vt., that the farmers have been obliged to commence feeding their cattle with hay. Several are mowing their oat crops for fodder or drying it for winter use. Corn stalks are eaten off by the pests, and, unless wet weather sets in, it seems inevitable that they will destroy most of the unharvested crops and the fall feed.

The Boulder (Colorado) *News* says: "Benj. Long has contrived the simplest, least expensive and best grasshopper machine we have yet seen. It is a V-shaped pan about six feet apart at the points, the pan being about two inches deep, with little partitions about a foot apart. In the centre where the pans come together is the axle, upon which the machine is supported by two wheels, say two feet in diameter. To keep the pan from fouling, a little elevator skims from the surface of the oil and water the dead 'hoppers and deposits them on the ground behind. The machine is pushed from behind, is nicely balanced and easily run over rocks and rough ground. At the back of the pans, extending upwards is a wire screen about eighteen inches high, to prevent the 'hoppers from hopping over. This is all there is of it, any boy can run it and its cost will not exceed $20. Mr. Long has applied for a patent for his machine, and will furnish them in any quantity for $20 each. Persons interested can see at this office, a full half-bushel of 'hoppers caught in four hours' work, on about a half-acre of ground, at Mr. L's. place, north of this town. The lot weighed 35 pounds, or about 70 pounds to the bushel. If the celebrated grasshopper commission would spend a little of their funds as bounty money, many ingenious minds would be at work, devising means for the extirmination of the pests."

My observation in regard to clover and clover-seed raising has been greater than that of many on account of having followed threshing from my youth, and many seasons have run four machines. I have always noticed that whenever we found a job where there was a large yield, that it was where seed had been sown one bushel to five or six acres, mown the last days of June, and plastered after the first crop had been taken off. I have seen a field when one-half had been mown and got off before July 1st, and the balance of the field not till two weeks later, and the seed that was started first yielded three and one-half bushels per acre, and the balance one-half bushel per acre; the difference three bushels. This you see was quite a loss to the raiser; the hay first mown was equally as good as that which was mown last. I have raised seed myself that went four and one-half to the acre. I have also taken clover from the field in three different conditions, and laid away in the dry, for the purpose of knowing when was the best time to cut seed clover. The first state was then dead ripe; second, when handsomely brown; and third, still greener, and, when thoroughly dry, rubbed out the seed and put the three piles on a plate and could seen no difference. That which was cut the greenest was just as plump seed as that which was dead ripe. This shows that the head receives enough sustenance from the stalk after it is cut to mature the seed, and, when cut a little greener, you can save almost every seed. Always turn when the dew is on, so that the bolls will not rattle off.—[Clover Leaf.

The N. Y. *Times*, in speaking of the present unsatisfactory and unprofitable condition of farming, and admitting that half of the farms of the country are ready to be sold if, buyers would only appear, suggests that the remedy will be found in concentrating the lands in the hands of the wealthy men, who will rent farms to tenants on long leases.