If our Heavenly Father had not given to the sun, the rain and the air, almost endless resources to keep our farms fertile in spite of bad management, a good many of us would have been closed out by the sheriff long ago. How many of us know how much a pound of pork or beef costs us, we may know how much a pound costs at the experimental station, but how much does it cost us? I think I may say that the Institutes will compel one farmer in Wisconsin to manage that he will know what a pound of pork will cost him.

One thing more, even that chairman calls "time." We men have always arrogated to ourselves the right to run the farms. That may be, and probably is all right, so far as the planning and work is concerned. That home, that house, the center of the farm, is a field broad enough for the wife and mother to cultivate, but she has a right to cultivate that field with all the appliances which the farm can yield her, with all the tools, all the conveniences, all the help which her own mind, not her husband's, tells her she needs. These women in times past, have been little heard of out of their own households. But those of us who attended the Institutes soon found out that they had thoughts of their own, and could express them just as clearly and forcibly, and with the same good commonsense as the men. And while they expressed their views freely, they pictured to us woman in her best state, as far removed on the one hand from the poetical ideal woman, the dear creature who only lives to be petted—an imaginary being to be sure—as she is from the coarse, masculine, strong-minded woman, equally imaginary, on the other. We found out that they could write as men would have their mothers, wives and daughters write, nay, as the men would write themselves if they only could. We learned that they, too, wanted better methods, better methods in the house, they claimed that men had planned for them in building houses, in contriving parlors and kitchens, in digging wells and fixing wood piles from a man's standpoint, now they would like to see this done from a woman's standpoint; that it was about as wise for a man to arrange all these things for a woman's comfort, as it would be to arrange her dress. A woman of necessity knows better what she wants for her own comfort and convenience than any man can.

They asked for better methods in the surroundings of the house, the dooryard, the garden, better methods in everything which tended to improve the looks of the place, giving it a light, a brightness, they pleaded for everything which would add one ray of joy to the family within doors, which would lighten the burdens of the household, books, papers, not the things which would directly bring in the dollars, but for the things which would bring in lighter hearts, joyous intercourse with each other, those thousand unnameable things, beautiful things which go to make a happy home. Well, the women are on the right track, as they always are, and I think some of our ears will burn, and our heads ache, if we do not give them what they ask. An Irishman was telling one of his countrymen what a phrenologist was. "Indade, he is one of them fellows who can tell what sort of a man ye are, by feelin' the bumps on your head." "Arrah, Pat, I don't believe that same, but I believe he could tell what sort of a man my wife is by feelin' the bumps on my head." I am afraid the heads of some farmers may indicate in the not distant future, the near approach of their wife's hands if their demands are not granted.

The Young Man on the Farm.

I have chosen this theme to trespass a little upon your time, because the object of these Institutes is to encourage better methods in farming. I have chosen to talk to young men, because we old farmers are too old, too stiff, too rigid to take pleasantly to new methods, even when we believe they are better than the old.

To begin at the beginning, the question comes to me, if you were young again, with full power to choose a profession for life, knowing what you do of a farmer's life after thirty-five years work on a farm, what profession would you choose? Hold your breath young men, while I say I would choose farming every time. What, with all its drudgery, its continued, constant application, its slow way of making money, its want of society, its lack of political distinction? Yes, with all these, I would choose farming, not that I think that these things are necessary concomitants of farming, but that with them farming is a higher profession, a happier profession, a healthier, a more independent, a broader profession, a profession with
more spare time to cultivate the mind. And if there are any other adjectives you may add them. Do you tell me to halt, I think I know what I say. I know a gentleman who began a business, no matter where or what, thirty-five years ago. Of necessity he saw more of the world than one on a thousand farms can. He retired from business say ten years ago, reputed to be worth $75,000. He has a brother who had farmed about the same time, but worth say $8,000 to $10,000. As I look at the two, so far as grinding care, narrow views, a cramped life, harrassing fears of loss of money, unimproved intellect, commend me to the farmer, and save me from the business man. And these are not extreme cases either—I don't mean to say that all farmers are good men, or free from care, or intelligent men, any more than other business men. But there is something in the independence of a farmer's life, something in his intercourse with God's earth, and sun, and rain, and free air which tends to make him a better man, a safer man, a man surer of a fair competency than the average man of other business. Mind you I say "the average man." You may look into your nearest city, if you will, you will find the store keepers, the merchants, the mechanics more showy, more talkative, with more push about them, but ask them about books, about the principles which underlay politics, or theology, about the last political crisis in England, about any subject outside of their business or city, and you will not find them one bit ahead of the average farmer. It is the show part, the external which gives the glitter, and cause you young men to lay for city life. But when you find out the shams of cities, the endless and oftentimes fruitless efforts to keep above water, the unceasing application to business (and they don't get off with ten hours a day either), the competition between the different stores. When you see all this and more too, I think you will say that the farm is a haven of rest. A merchant in Janesville, on Thanksgiving Day, when I told him I was spending the day in the city, broke out with "that's just the way with you farmers, you have a day whenever you want it, but we can never leave our store." Don't understand that I mean to disparage these people in cities and large towns. The battle of life is for everyone, you as well as others, only I prefer the farm as the place on which to fight my battle.

But having the farm what next: First you ought to find out very soon that hard "bone labor," that buckling yourself to unceasing drudgery is at a discount now. Such are the appliances of farm machinery that almost every department of the farm calls for thoughtful, skilled labor. I wish you young men could follow McCormick's reaper for twelve hours as we cut and harvested our wheat in the '50's and '60's. If you ever raked greenish grain, or tangled grain off that reaper a single day, you would know what "bone labor" meant. The farm machinery then didn't save hard work, but enabled us, by hard work, to gather our harvests. To-day farm machinery means you may ride when you plow, ride when you plant, ride when you till, you may ride when you cut your hay, ride when you rake it, ride when you stir it, and they say ride when you load it. Altho' I have not tried that yet. But we have all stood by while the horse has carried the hay up into the barn, and switchet it away on the mow where it is wanted. A single man goes into the harvest field, and riding, cuts and binds your grain, and you scarcely trouble yourself about it. Your labor is but little more than the work of the factory, with variety enough to take off the edge of weariness. But you need more skill in your work now, and a good deal more brain in making that work pay. Look, a little while ago McCormick's reaper took one man to drive, one to rake off, and five to bind. To-day a single man takes a self-binder, and does the work of these seven, but do you remember that the machine is almost an intelligent creature, and has to be handled with care, with skill. Your five binders might have been dull plodders, and no loss, but now you cannot be dull, you cannot be careless or unskilled with that self-binder, or the loss may be great. A little while ago the farms of Wisconsin yielded crops with their virgin bounty, now the highest skill and intelligence is needed in the use of manures, the rotation of crops, the handling of your live stock as machines for fertilizing, to plan for years ahead to keep the fertility of the soil up to the best standards. Do you see why the young farmer ought to be educated in this contest of skill, for the skillful will win every time. Don't understand
me that you need not work, you have got to work if you would accomplish anything in this world. Surely you have got to work if you reach that other world in triumph. There is no great hardship in work, the hardship is in making work a drudgery.

Another thing, I think we have come to the point in farming when a young man can say truthfully, that he has done a good day's work when he shall have worked ten hours. In other days the story was from sun to sun for a farmer's day's work. I remember once of boasting, with a kind of pride, that I had made seventeen faithful hours in harvest in six days of the week, and closed up Saturday night with binding timothy until 9 o'clock. I don't mean the hired help. I wouldn't like to call myself a fool (although I had rather do that than have Pres. Chamberlain say it). But the whole operation was exceedingly foolish. I am ashamed of myself for encouraging such dissipation. Such work is a draught upon the vital energy, upon the reserved forces of the body, which ought never to be made unless under an emergency. Man as well as beast can do so much work in the course of his life. You can do it all in ten years, and then take your rest a broken old man or you can distribute the work evenly and healthfully during twenty-five years, and have a happy peaceful age. From something which was said last winter on the subject at one of the institutes, we thought we would test the matter on the farm this summer. My two sons, young men in the vigor of life, have carried on the farm themselves, hiring, up to husking time, not over two months' work of a single man. They have put in and tilled 69 acres of corn, 58 acres of small grain, 2 acres of onions and potatoes, cut and taken care of 61 acres of heavy hay, 180 acres in all. The average work done was scarcely ten hours a day. Ten hours was the rule. It is fair to say that I helped along more than I wanted to in cutting and raking the hay. I believe there is no need of grinding out fifteen hours a day in those hot days of summer you lose in the long run. I know that for the sake of hurrying up matters in summer, we wish to push, to accomplish the most we can in a day. But my experience is that so many hours a day of good work are enough, don't look for more. A young girl engaged to a young fellow with a good deal of work in him, but little money in his pocket, made up her mind to put off the marriage until Jack could secure a competence. She told him they had better wait until they had saved say $10,000. Jack made a wry face (I would anyhow) but submitted as best he could. He laid by every penny he could earn. After three or four months of waiting, it was about four years to Jack, I'll leave it to the girls how long it seemed to the sweet heart. After three or four months, his lady love asked him how he succeeded. "Oh, first rate. I have laid up $18,72.

"How long," with a pang, "will it take Jack? "Say forty or fifty years." "Don't you think $18 is near enough? 

The point is, if you don't see it, that ten hours is enough for me. I remember an incident in a harvest field twenty-five years ago, seven young fellows were binding and stacking grain. They had been at it for weeks. It was Thursday night and the harvesting wanted to be finished that week. The grain was over-ripe. The hands began to grumble; they said it could not be finished by that time. But by a little gift of gab, wisely expended, they agreed to try. That night a nice shower came so that they could not work until Friday noon. The half day was lost, but that half day's rest so refreshed the weary hands that they closed up the work without special effort, early Saturday afternoon. I do believe in ten hours a day, but with Mr. Beecher, I do not believe in ten hour men, who demand fifteen hour wives.

Nor do I believe in that farmer's success, who cannot, in an emergency, work twelve or fourteen or even fifteen hours a day, if his work calls for it.

I think I need throw out no hints as to the carrying out of a grain farm. Animal farming as real object, and raising grain only as it promotes that object, seems to be the Wisconsin farmer's hope. In the first place, the freight on all bulky produce like grain, in moving it to Eastern cities, takes from the profits of the crop to such an extent that little profit is left for the farmer. In the next place when these bulky crops are sold, you have kept back no part of them to replenish your fields exhausted by their growth. It is a well known fact that the growth of a field of grain up to the point when it begins to form its seed vessels, and produce the seeds, has drawn but little, if any, upon
the fertility of the soil. It is the formation, growth and perfection of the seed which exhausts the farm, and it is this seed, containing these fertilizing elements, which you sell. By concentration of these grains in the growth of your animals, you save a large amount of freight and you give back to the soil, through the manures, a good portion of the elements of which you have robbed it. There are two crops, corn and clover which are essential to animal farmings, and which, strange to say, form a large part in fertilizing the land. It is highly probable, perhaps not to be demonstrated, that corn with its large broad leaves draws from the air a large part of the elements which go to make up its growth. Corn has been grown nearly 100 years on the Miami flats in Ohio, with scarcely a diminution of product, you can account for this surprising continuation of good crops only on the theory that a good share of the elements of growth is absorbed by the leaves from the air and given to the soil—clover, equally essential in animal farming, certainly draws largely from sources other than the soil the fertilizing qualities of this crop, we might rightly name it the farmers' friend. Here then are the three crops which go to make up good farming and tend to make good farming profitable. Good corn makes good stock, good stock makes your fields rich for clover. Clover makes good corn, and around you go again.

Again what kind of animals do you want on the farm? Every young man ought to make up his mind what branch of farming he will undertake. After he shall have made up his mind what stock he needs, he needs of the best. If he needs a cow, let the cow be of good pedigree. Ah, but such a cow costs, yes and brings in money too. One or two good cows with good pedigrees, and with care and judicious selections, will stock your farm in a few years with cattle of which you may be proud. You have not the same excuse which we old stayers had when we began farming. Then a short horn with a fair pedigree was scarcely ever under $1,000. Now you can get them reasonably cheap. I shall never forget a reply a Walworth County stock raiser made to me twenty-five years ago, when I asked him if he was not afraid his notes, taken for such high priced stock, would not be paid. "Men who buy such stock always pay their notes," he said. What is true of cattle, is true of other stock. What you want is the best you can get. Let me drop here a word on the debt question. It may not be orthodox but I shall venture. A debt contracted for good stock which is improving all the time more than enough to pay the interest, is not a debt to be feared, not a debt such as store debts, or other debts made for articles consumed. "There, I have gone and went and said it."

Another point, the young man on the farm ought to experiment on the costs of his different products. How much will your beef and pork cost, 22, 23 or 32 cents per pound. If by careful experiment, by skillful handling and feeding you can reduce the cost of raising your beef or pork one cent a pound, it amounts to the same thing as though you sold it for an advance of one cent. So of crops, if by careful manipulation, by early seeding, by a wise rotation you can secure a little increase or a smaller result, you have gained so much. On my own farm we have found out by years of experience, that corn on good clover and timothy sod, plowed under in the fall is a sure crop, so sure that we have never had a bad failure. This year is probably as poor as any, yet the average is a good one-half crop, fifty bushels of ears to the acre. There are several points which I would like to talk to you about, but your chairman would forbid. One thing which we do not often think of, the wish for cleaning up land in our state, in all new states, is a thoughtless one. Thousands of acres have been cleared off, denuded of timber growing on them, which ought never to have been touched. I don't mean in the pinery either, but on our own farms. We have had the idea that tillable land is worth so much, and that timber does not bring us anything. There are parts of almost every farm where timber is of great advantage, on slopes, in ravines, on broken land where the ground washes bad and no remedy for it. In all these places timber ought to grow, and where it has been cut off it ought to be replaced. I hail Arbor day as a beginning of better times. The denuding of such vast tracts of land of timber, may not cause a smaller rainfall, though this is likely to be true. But it seems almost certain that the sudden storms, the quick descent of heavy rainfalls, the cyclones, are, in part, if not in great part, due to this.
The surface of the land exposed to the fierce effects of the summer sun must of necessity dry up the moisture quickly, and the atmosphere, charged with so much moisture, must give it back to the earth as quickly, and hence the ravages of our storms in late years. And her comes in the admonition to young farmers, begin to put out forest trees and keep putting them out. There are a plenty of trees which will do well in Wisconsin, and which in time will pay a good dividend. The walnuts, the ash, the hard maple for profit, the elm for beauty. The time will come, and is now, when a grove of black walnuts will pay more than anything on the farm. I knew of a black walnut in New Jersey which was sold ten years ago for $196 to be used in finishing a house. So that the money question comes in as well as your safety. The Legislature ought to be appealed to to begin the good work.

One other matter, what relation are you going to bear to the public? As a matter of course you will belong to some party. What part will you take in that party? Will you lead, will you follow? Will you obey the commands of the machine or will you with your fellow farmers issue the commands and have the machine do your bidding? It makes all the difference in the world from which end of the party the commands come. When the people issue the commands it is because of some high, moral purpose; a loyal demand that the government shall be carried on for the good of the people. When the machine governs, it is for the benefit of the machine, for the hoolie. Young men, you and your fellows ought to govern, and you can if you will. To do this, activity in the caucus, activity in politics in general, intelligence, being posted in matters of state and the general government. A high moral purpose are what you need. The tendency of the farm is to keep you isolated, but you must not allow it. No voice can be heard farther than the voice of the farmer when he tries, only let his voice be uttered with an honest purpose, intelligent good sense, and a determination to be heard.

I wanted to say something about the household, your own household, about the sunshine that you, and that girl of yours should bring into it. You may have a thirty days, a honey moon of sunshine if you will, or you may have a lifetime of sunshine. I cannot go into this now. Only in regard to getting a girl, I would give you the same advise as the man in the New York asylum used to give. She would walk to and fro always preaching this sermon. "That every man should go and hang himself, and that right speedily, and prove it too, by the Bible in his hands." She would turn to one passage and read "Judas went out and hanged himself," then turn to another and read "go thou and do likewise," and then to a third, "what thou dost do quickly." I don't want you to hang yourselves though some folks do say that getting married is like it. But get you a girl, honest, simple, with good sense, not afraid of saving, who will give you her love for like traits in you, go you and do this; and do it quickly. Are these hints worth your thoughts, young men? If so think of them, weigh them, and make up your minds whether they are worth carrying out into practice. Quite a sharp Yankee bachelor, very bashful, made up his mind that it was time for him to get married, but how should he address a girl. He knew the one he wanted, but one look of her eyes made him choke over every word he wanted to say. Again and again the poor bashful, blundering fellow determined to speak and know the worst, till one day walking by her side, he saw a man tying a horse to a hitching post. The inspiration came. "Sally, let's hitch." If these few ideas of mine are in harmony with yours, young man, "let's hitch" and try and make farming such a success that we may be proud of it.

_Clover._

[D. G. Cheever, Clinton.]

In my short talk about clover I shall confine myself mainly to the one leading variety "Red Clover," and let others look after the other fifty eight varieties. In doing this I will condense my thoughts in the good old orthodox way under three heads, mainly: How to grow it, how to harvest, how to use.

To get the best possible result in growth it should be sown early in a rich mellow seed bed. As it is a biennial plant with perennial qualities a year's time is saved by sowing it with any of the cereal crops. Clover lands intended for meadows should not be fed in the spring, as it seldom regains its full vigor during the after part of the season; neither should they be fed or mowed.