

Any person who takes the paper...

### THE FARMER'S BOY.

I know my face and hands are brown,  
But I am strong and very;  
You can not find in all the town  
A happier boy than I.  
With health, with hearty appetite,  
With nothing to annoy,  
It is a sweet and true delight  
To be a farmer's boy.  
My pants are patched, my cap is torn,  
There's smut upon my nose;  
My muddy shoes are badly worn—  
They laugh at both the toes.  
My mother makes a soil for me  
That I can soon destroy;  
But it is always fun to be  
A lively farmer's boy!  
I love the mountains grand and steep,  
They make me think of God;  
The hillsides pasture, where the sheep  
Browse on the fresh, green sod;  
The spreading hedges and maple trees,  
The squirrel, cute and coy,  
The birds, the butterflies, the bees—  
I am a farmer's boy!

### A NOVEL PROPOSAL.

#### A Young Lady Has One Furnished to Order.

When I first declared to Miss Laura Marvin the inflammatory state of my feelings toward her that young lady eyed me from head to foot with an air of mingled pity and amusement, and then exclaimed: "How conventional!" Being wholly unprepared for this piece of criticism, I was not a little confused by it. I had gone over the performance several times in my own room before the looking-glass until I flattered myself that I could do it very neatly indeed. I would go down on my knees (first spreading out a handkerchief on the floor) and, clasping my hands over the left breast pocket of my Prince Albert, exclaim to an empty rocking-chair: "Miss Marvin—Laura—I love you. I have loved you with a passion which mocks the feeble power of words. I can not live an hour longer without you. Will you be mine?" At this point she was to fall into my arms with a sob and reply articulately: "O, Henry!"—or words to that effect.

When, therefore, instead of carrying out her part of the programme, she flung the wet blanket of her scorn on the hot flame of my affection, I felt, as I have said, confused, and not only confused, but hurt, and not only hurt, but actually resentful. It seemed to me as though I could live a whole century without her.

"Well," said I, somewhat angrily, as I got up and dusted my eyes with my handkerchief, "that is the only style of proposal I'm dealing in just at present. You can get your samples in other lines if you insist on it."

Miss Marvin laughed, she looked prettier when she laughed than any other way, and there is reason to believe that she was aware of the fact. "I like you better, now," she said. "When you men aren't witty or cynical you are generally silly."

"Unlike women," I snapped. "You are always silly, you women." She went on. "I accept this as a compliment, for it shows that you are trying to please me by affecting the cynic. Come, be sensible. I like you well enough. Only don't try to propose to me in that ridiculous old-fashioned manner."

With that she went down on her knees and prettily mimicked my little performance with exaggerating gestures and the most absurd grimaces. Then she laughed heartily. I think I have said she was pretty when she laughed.

shall probably have but one opportunity in my life to accept a proposal. Am I wrong in wishing that it should be an experience worth remembering—that it should not be commonplace? Do you suppose I didn't know as soon as you entered the room this evening that you intended to make a jumping-jack of yourself?"

I rose to my feet. "That's enough, Miss Marvin," said I. "The mere fact that you can treat the subject so lightly shows that you do not care a snap of your finger for me and never will."  
So saying I strode from the room, snatched my hat and overcoat savagely from the rack in the hall, and rushed out of the house.  
My feelings as I stalked away from the Marvin house that night were decidedly mixed.

"She had no right to treat me in that way," was my first reflection. It was humiliating, it was unkind.  
"But then," I continued to myself, turning the question the other side up, "no doubt I was very awkward and stilted about my proposal, and as for Laura, she is just bubbling over with fun. How her eyes danced in spite of herself as she rolled them solemnly up at me and said: 'I can not live an hour longer without you.'"

"Still," I went on, "how absurd for her to talk about being tired of proposals. She spoke of them as calmly as though they were so many invitations to tea. I'll wager she never had one before in her life. No; I take that back. I'm sure Will Harden proposed to her, and Hank Burton—and Lester Herbert, too, if his elongated face meant anything when I met him coming out of the house last Saturday evening. Suppose she gave them all the—"

I stopped stock-still in the middle of the sidewalk at the thought.  
"Suppose she gave them all the same answer she gave me! She was ready, she said, to fall into the arms of the first man that invented some novel method of proposing."  
Distressing thought! What if one of my precursors should even now be springing his invention upon her! The mental picture of Miss Marvin falling into the arms of either Will Harden or Hank Burton was execratable, while the thought of Lester Herbert, who lisped and wore bangs, was fairly maddening. I was seized with an insane longing to return and waylay any one of the trio who might be prowling around with his original method concealed about his person.

Although it was a very ridiculous thing to do, I immediately turned about and slowly walked back.  
There was light in Laura's room which glared at me indignantly for a moment and then shrank to a tiny speck of flame, as though it had retreated behind a door and was watching me suspiciously through the keyhole. As I stood on the sidewalk looking across at the house a thick-set man with a slouch hat pulled over his eyes materialized from the shadow of a tree not far away and approached me.

"O, it's you, is it?" said he, in a low tone.  
"Yes, I—I think so," I replied, somewhat doubtfully.  
The thick-set man gave a low whistle, and two other men slouched out of the shadow and came up.  
"All right; it's Preston," said the one who had addressed me.  
I knew then they had mistaken me for a servant of Judge Marvin, who had been discharged the week before on account of some petty theft. Unquestionably some precious piece of villainy was on foot. A sudden ambition to "foul the villain's" nose within me, followed by another to take to my heels. As the fence was behind me and the three men in front, I gave up the number one all the encouragement possible.

"You're sure it's Preston?" said one of the men.  
"Of course it's Preston," I replied, in an injured tone. "Suppose I lied, in an injured tone?"  
"We thought from your second letter that you were going to weaken," said the thick-set man.  
"O, that letter was a blind," I replied, not knowing what else to say.  
"Well, see that you don't weaken," said the first speaker, "unless you want the roof of your head blown off."  
This was reassuring. I hastily resolved not to weaken, and said as much.

The thick-set man then leading the way, we crossed the street, climbed the fence at one corner of the lot, and lay down in the grape-arbor. I was given a long, black mask, which I put on. The others masked likewise. From that position which ensued I learned that I—in the person of Preston—had arranged the catch on the shutter of one of the windows so that it could be operated from the outside. My emotions when I discovered that I had been tampering with the shutter of Miss Marvin's own room can better be imagined than put on paper.  
We lay in the arbor for something over an hour. It was very still. I could distinguish five separate snores in the adjoining house. Once a little child turned over in its cradle, wet its lips, gave vent to a plaintive cry of "Mamma," and slept again.  
A policeman sauntered down the sidewalk within three feet of us, looked at his watch under the lamplight, and passed on. As soon as he was out of sight the leader of the party arose and led the way to the porch in front of the house.  
It was getting very pokerish for me. The men seemed to suspect that I was "weakening," and formed a hollow triangle with me in the center.  
"You climb this porch right after me," said the leader.  
I managed to do so, though my hands were rather unsteady. The porch was an open-work affair—a temptation to any industrious sneak-thief.

"Open that shutter," said the leader, when we two stood on the roof of the porch.  
Now this was the point at which I had intended to be heroic. But, very much to my surprise, I was not. I proceeded very quietly and expeditiously to open that shutter. The window proved to be up, leaving a space of about twelve inches between sash and sill. Though this aperture I crawled into the room in obedience to a suggestion on the part of my "pal." I trust I shall never again in my life feel so sneaking, low-lived and contemptible as I did when I stood within that room. It seemed to me that I was profaning a temple.

A star of the smallest magnitude burned at the tip of the gas-jet, and by its dim light I could see that Miss Marvin had lain down on the bed without undressing and had fallen asleep.  
"Help me in," said the other thief.  
He had thrust his head through the open place and was reaching out one hand to grasp some means of support. With sudden determination I raised one foot and planted square in his face a kick in which I gave expression to my loathing for the man as well as my self-contempt and disgust at my own situation. The result was gratifying. With a muffled cry of pain the burglar rolled off the porch and went plunging to the ground.  
The noise awoke Miss Marvin, who rubbed her eyes sleepily, turned over, and then sat up, looking at me at first wonderingly and then terrified. I had turned the gas up, knowing that this would frighten away the thieves as effectively as a discharge of gas-shot.  
"Miss Marvin," said I, "please do not scream. Please don't!"

When I said this I assumed an expression of the most tender devotion, which could not fail, I thought, to soothe and reassure her.  
"Who are you?" she answered tremulously.  
"Don't you know me?" I said, throwing still more tenderness into my expression.  
Then I laughed, for, accidentally putting my hand to my face as I spoke, I discovered that I still wore the black mask which my "pal" had given me. No wonder my facial contortions had been ineffectual. This incident at once restored my equanimity and brought with it a sudden flash of something like jealousy. For a moment I felt that I could enjoy the situation and even take advantage of it.

"Miss Marvin," I said, "I beg of you not to be frightened. I dropped in partly to do a little thieving and partly to ask you a very important question. As I lay concealed under the sofa in the parlor this evening I heard you remark that you were ready to marry any man who would conceive of some original method of popping the question. Don't you think this situation has the charm of novelty about it? Can you lay your hand on your heart and say there is nothing more romantic, unhackneyed, spontaneous or romantic about this form of proposal? Will you, O, will you be mine?"

Miss Marvin looked at me with a mixture of expressions which it would be hopeless to attempt to analyze.  
"What is your name?" she gasped.  
"I am your servant Preston," said I, with a low bow.  
"Preston?" exclaimed Miss Marvin. "Are you Preston?"  
Then to my great astonishment, Miss Marvin arose from the bed, calmly walked up to where I stood, took me by the ear and led me to the window.

"You great, ever-croaking booby!" said she. "If I ever catch you inside this house again I'll scratch your eyes out. Now crawl through that hole."  
I crawled.  
I was impersoning Preston, and I am sure he would have crawled had he been there.

I told my wife the last half of this story yesterday—she was already acquainted with the first half—and her only remark was that if she had suspected the identity of the pseudo-Preston the night of the house-breaking she would have retained the ear as a memento of his impudence. The emery with which she said this caused me to postpone some rather pointed remarks about novelties in proposing, with which I intended to conclude my story, and the reader will have to draw the moral for himself.—Chicago Tribune.

### BY MANAGEMENT.

#### The Tact Which Should Be Displayed by Every Mother.

The way to keep the baby from becoming "spoiled" is to let it cry as little as possible. It will gain strength of mind to endure its necessary ills all the sooner if it is allowed to suffer as little as possible from ills that can be avoided. Its wants should be anticipated, its sources of discomfort should be removed as soon as they arise, without waiting for it to cry; it should be prevented in every way from forming the habit of crying. Study its expression; when it is tired of playing on the floor take it up and dance it about the room, and let it look out of the window for a few minutes. In a little while it will be glad to go back and play on the floor again. If it is necessary to resort to discipline, be careful to seize the right moment for it. If you want the baby to learn to go to sleep without being rocked, choose a day when it has been unusually bright and happy all the morning, wait until twenty minutes or so after the regular hour for its nap, then give it a cup of milk particularly sweet and warm and nice, make it little bed soft and cozy, lay it down gently and soothe it with a little kissing and patting, and, if it is not already too much spoiled, it will only be too happy to close its eyes in the sweetest kind of sleep. If it does not, a bit of crying will be almost as wise as, and as little injurious as it can be.—Babyhood.

### GUNPOWDER.

How the ingredients necessary to its manufacture are prepared.

Gunpowder is composed of three materials—sulphur, saltpeter and charcoal. But these materials together any way do not make gunpowder by any means. There is a method, and it is a somewhat complicated one. That process is as follows: The sulphur comes chiefly from Bengal and other provinces in India, where it is found mixed with the soil and as an incrustation on the ground. It is boiled and crystallized by evaporation. Before it is used at the factory it is purified by a process which acts on the principle that hot water will receive in the solution more of the saltpeter than the impurities mixed with it. So the saltpeter is boiled in water, the resulting solution filtered and cooled in large vats, at the bottom of which the pure saltpeter is deposited in fine crystals. It is then washed, dried and stored in bins, care being taken that no sand or gritty particles are introduced as under pressure they might produce an explosion.

The same precautions are taken with regard to the production of the sulphur and charcoal. The best sulphur comes from Sicily. It is purified by a distilling process, which brings it out in handsome yellow crystals. Then it is pulverized by being ground under iron runners and sifted in a kind of revolving cylindrical sieve called a "slope reel." Alder and willow are planted near the factories, and the charcoal from these is used for common powder, and black dogwood is used for fine rifle powder. The charcoal is not prepared in pits, but the wood is saved into short lengths and packed into iron cylinders, called slips, which are placed on a small carriage and run into a retort like that used in gas works. Here the cylinders are exposed to the flames for a period of two and a half or three and a half hours, the gas issuing from the wood being utilized for fuel. The charcoal, when taken out, is ground in a machine like a giant coffee-mill, and then sifted like the sulphur.

The next process is mixing the ingredients. The proportions vary in different countries. For English Government powder of every kind it is sulphur, seventy-five parts, saltpeter, thirty-five, and the charcoal, fifteen. The sulphur being reduced almost to a minimum, as its chief use is to ignite the charge and hasten its motion. The ingredients being weighed for a charge of fifty pounds, are poured into a "churn," which is a revolving drum placed horizontally, and having within it an axis revolving in a different direction from the drum, and furnished with eight spokes of projecting arms. So rapid is the action of this machine that three minutes is sufficient to mix the ingredients. It is then called the "green charge," and is ready for the incorporating mills, where the object is to make the mixture so intimate that a new substance is created, namely, gunpowder.

The incorporating house of Waltham have thirty-two separate mills. Each mill consists of a pair of runners coupled together by a strong axle. This axle rests in the socket of an upright shaft, which, passing down through the mill-bed, is connected by bevel wheels with a revolving horizontal shaft driven by steam or water-power. The runners are of Derbyshire limestone and iron, and weigh from three and one-half to four tons. The size of the iron ones is from three and a half to seven feet in diameter. The mill-bed is a circular vat with flat bottom and sloping sides, is of stone or metal. On this bed fifty pounds of the green charge is spread and moistened with water, and the mill is set going. Common powder is left under the mill three hours, rifle powder five hours.

On leaving the mill, the gunpowder is in the form of a soft cake which easily breaks up into dust. This is pressed in layers between plates of copper or ginnetal to increase its hardness or density, and then made into the required form by machinery.—Manufactures Commercial Bulletin.

### TRADE REPORTS.

#### A Blasted Dry-Goods Dealer Who Is Accumulating a Fortune.

Some dry-goods stores where they are offering ten yards standard prints for twenty-five cents.  
First lady—Let me see some of that calico you advertise twenty yards for twenty-five cents.  
Check—We haven't any twenty yards for twenty-five cents.  
First lady—What did you advertise it for?  
Check—I guess you are mistaken.  
First lady—No, I ain't; it's that way in my paper.  
Check—Here is some ten yards for twenty-five cents.  
First lady—That's too high; if I can't get it twenty yards for twenty-five cents, as it is advertised, I don't want it.  
[Exit first lady grumbling.]  
Second lady—Let me see some dress goods.  
Check—What kind?  
Second lady—Let me see your calicoes.  
[Is shown calicoes.]  
Second lady—Are these the best you have?  
Check—Yes, they are strictly standard.  
Second lady—Will it fade?  
Check—These colors are all good.  
Second lady—Will this piece fade?  
Check—No, it's all the same brand.  
Second lady—Here is a better piece.  
Check—It's all the same goods.  
Second lady—This is the best piece, the other has starch in it.  
Check—Let me see your pattern of that piece, then.  
Second lady—I don't like the figures. Show me some other pieces.  
[Check shows other pieces.]  
Second lady—I like this pattern, but

### IT'S NOT AS GOOD QUALITY AS THAT OTHER PIECE.

Clerk—I assure you, ma'am, it came from the same case.  
Second lady—Are you certain it won't fade?  
Clerk—We guarantee the colors fast.  
Second lady—What do you sell it for?  
Clerk—Ten yards for twenty-five cents.  
Second lady—I thought you advertised it fifteen yards for twenty-five cents?  
Clerk—No, ma'am, ten yards for twenty-five cents.  
Second lady—If I were to take three pieces, couldn't you let me have fifteen yards for twenty-five cents?  
Clerk—No'm.  
Second lady—You didn't say it wouldn't fade, did you?  
Clerk—No, ma'am, well, I believe it will fade. Give me a sample.  
[Exit second lady.]

Colored lady—Gimme one of your two-bit dresses.  
Check—How would this piece suit you?  
Colored lady—That'll fade; gimme that piece with the red flower.  
[Clerk cuts off piece with red flower and proceeds to wrap it up.]  
Colored lady—Don't you throw in thread and buttons?  
Clerk—No.  
Colored lady—Don't throw in thread and buttons! They throw in thread and buttons next door.  
Clerk—They make more profit on their goods than we do.  
Colored lady—Why, I give you what you asked for?  
Clerk—This calico costs five and a half cents and we sell it for two and a half cents; how much profit do we make?

Colored lady—I ain't good at figures, but I knows you make a plenty.—Detroit Free Press.

### RUBY MINES.

The Product of the Diggins at Kyatpen, in Mandalay.

"Diggins" are situated at Kyatpen, about seventy miles to the northeast of Mandalay, and cover an area of a hundred square miles. The system of mining at present employed is extremely crude. Square pits are dug in the ground until the gravel bed is reached in which the gems occur and from which they are extracted by a rough and ready mode of washing. Besides the gravel yields sapphires, Oriental topaz, Oriental emerald, transparent corundum, spinel and zircon. The rubies are generally small and are very commonly disfigured by flaws. The sapphires found are for the most part larger than the rubies and are more perfect. From the only returns which it has been found possible to compile it appears that the annual value of the rubies of all kinds taken from these mines is from about \$12,500 to \$15,000. Rubies and sapphires also occur at the Sagen Hills diggings, sixteen miles from Mandalay, but they are of an inferior quality. It is quite possible that the ignorance of miners is mainly accountable for the small returns secured from these mines, and that, by the aid of European skill and machinery, their yield might be vastly increased, but, judging from the actual condition of the workings, their practical value falls very far short of the expectation formed about it on the Paris Bourse. In the estimation of Orientals the jade quarries in the Moguang district, to the northwest of Bamoo, are of greater value than the ruby mines. Though no so productive as the Karakash quarries in Turkestan, the Moguang workings yield equally good, if not finer kinds of the mineral. The apple-green species, which is considered the most valuable, is met with in considerable quantities and commands a ready market at high prices, both in China and at Burmah.—Blackwood's Magazine.

### NOT WANTED.

The Reporter Was Smart, But Was Compelled to Vacate His Seat.

Dr. Buckley says that this story was told him by Mr. Curtis Guild, of the Boston Commercial Bulletin. In conversation about the power of the press, he told a story the good to be kept. A number of years ago the manufacturers of a large city, not very far from Boston, undertook to hold a meeting to which all manufacturers, but many manufacturers only, were invited, to consider some matter of commercial interest. The Bulletin sent a very smart reporter to get all the facts he could about what was done or proposed at the meeting. He boldly went in and sat down among the factory owners. After some conversation there came a little whispering, and the chairman said: "Is the gentleman near the door a manufacturer?"  
"I am," said the reporter, with dignity.  
The proceedings continued for a short time, when the chairman said: "Will the gentleman near the door kindly inform the meeting what he manufactures?"  
To this the reporter answered, with even greater dignity than before: "I am a manufacturer of public opinion."  
"Ah," said the chairman, "excuse me—you are the only kind of a manufacturer not wanted here today."  
It was Greek meeting Greek, so far as wit was concerned, and the manufacturer had the inside track, and the reporter withdrew.—Chicago Union.

It is well known that birds are very sensitive to tones of the voice, and are terrified at any loud or grating work. A lady who wished to make a bobolink stop singing, at last resorted to a loud voice, and then took a saw and shook it in rebuke at the bird. In a moment the bird was silent, and a short time after made a fluttering about the cage. Its owner turned to the bird and was shocked to see it fall dead. Unkind words had done it.—Chicago Times.

### HENS FOR FARMERS.

The Most Valuable Birds for Furnishing Fresh and Eggs.

If a farmer keeps a hen for the purpose of supplying his own table with meat and eggs, he will do well to raise birds that belong to one of the large breeds. The choice will lie between the Brahmas, the Cochins and the Plymouth Rocks. There are no objections against any of these breeds. The light Brahmas have been most favorably known for over thirty years, and for general merit they are not surpassed by any of the other breeds. The light Brahma fowl meets every requirement of the farmer. It is a very handsome bird, and is especially valuable for its eggs. It is a contented, home-loving bird, not inclined to wander about and get into mischief. It is a large bird, and furnishes fine roasts. If its flesh is not quite as tender or delicious as that of some of the French fowls, it is at least very good. A Brahma fowl is easily dressed, and when plucked presents a fine appearance. The eggs of the Brahma are large and well formed. Though they bring no more in the market than small eggs, they are of much greater value, as their size and weight indicate. Brahma hens of suitable age, if they have warm quarters, will lay during the entire winter. They are patient and good mothers. They are not so greatly addicted to scratching and pecking havoc in the garden as fowls belonging to the smaller and more active breeds. Being heavy, they never attempt to make long flights. They can, if desired, be kept in an ordinary barnyard without making any addition to the fence. They do not suffer when kept in partial confinement. They will thrive, gain in weight and produce eggs when kept in a yard or building, provided they are supplied with suitable food, water and materials for forming the shells of eggs.

If Brahma fowls are not the favorite breeders, the cause may be found in the circumstance that they are no longer novelties. Breeders, like nurserymen, prefer to raise and sell new things. They can obtain higher prices for them, as they are desired by amateurs, while they have little competition. Light Brahma fowls are now well distributed throughout the country. Birds of pure strain or third eggs can be obtained at comparatively low prices. It is to the advantage of farmers who have nothing but mongrels on their places to obtain a supply of them. Many farmers think that they can not afford to keep animals of pure blood. They acknowledge their superior value, but they have not the money to purchase them. Very few farmers are so short of means that they can not raise a few more. From the only returns which it has been found possible to compile it appears that the annual value of the rubies of all kinds taken from these mines is from about \$12,500 to \$15,000. Rubies and sapphires also occur at the Sagen Hills diggings, sixteen miles from Mandalay, but they are of an inferior quality. It is quite possible that the ignorance of miners is mainly accountable for the small returns secured from these mines, and that, by the aid of European skill and machinery, their yield might be vastly increased, but, judging from the actual condition of the workings, their practical value falls very far short of the expectation formed about it on the Paris Bourse. In the estimation of Orientals the jade quarries in the Moguang district, to the northwest of Bamoo, are of greater value than the ruby mines. Though no so productive as the Karakash quarries in Turkestan, the Moguang workings yield equally good, if not finer kinds of the mineral. The apple-green species, which is considered the most valuable, is met with in considerable quantities and commands a ready market at high prices, both in China and at Burmah.—Blackwood's Magazine.

### THREE NUISANCES.

How the Careful Housekeeper Can Remove Them with Ease.

All housekeepers know with what pertinacity the flavor of onions clings to the utensils in which they were cooked, even after the most persistent boiling off and scouring out. Therefore, if you have a kettle with a notch broke out, or a skillet with half the handle broken off, do not relegate it to the garret or woodshed, but keep it expressly for soaking onions and nothing else.

Flat-irons that show a disposition to rust, may, while yet a trifle warm be rubbed on the edges and face with fat lard; when next put to heat, they should, as soon as warm, have the tallow wiped off with an old cloth, when they will be found bright and smooth. At least that has been my experience, and they rusted so badly as sometimes to necessitate taking them to the grindstone to get them smooth. They were kept in different places, coated with beeswax, turpentine, coal oil, etc., but nothing answered until I chose to try tallow.

Chain dish-rags are as efficacious in scouring the molding-board and cleaning the pantry-shelf as they are in cleaning a kettle. The best way, when hot grease has been spilled, is to dash cold water over it, so as to harden it quickly, and prevent it seeping into the boards. If this precaution has been neglected, and you have faithfully scoured up a large grease spot one morning, only to behold it grinning up at you the next, it will give way to soap rubbed in with the chain dish-rag. If your hands are tender, a few folds of oil cloth placed between the chain and hand will protect them.—Country Gentleman.

Farms are schools, the best of all in which to learn much that concerns farming. They are the only schools worth attending, so far as acquiring practical knowledge in farming is concerned. Teaching by object lessons is effective. The things we see, the things we do, are better remembered and better understood than the things we hear or read about. Learn the practice of farming on a good farm.—S. F. Tribune.

### FACTS FOR FARMERS.

Gypsum is known as plaster of Paris or as land plaster. In one hundred pounds there are forty-six pounds of sulphuric acid, thirty-three pounds of lime and twenty-one pounds of water of crystallization.—Troy Times.

Carlyle has said: "Our grand business is not to see what lies dimly at a distance, but to do what lies clearly at hand." This truth is eloquent in agriculture. The man who sees clearly what to do and does it is prosperous.—Chicago Tribune.

It will not do to run a spire through an orchard, as the roots of the trees may be cut and braked to pieces as greatly as to do injury. A light skeleton may be of service, however, as by its use weeds and grasses may be kept down.—Boston Herald.

Dead limbs on the trunk or other trees should be promptly removed. The cutting should be below any diseased part, or it will spread the infection. The saw used should not be applied to healthy trees unless first washed with carbolic acid and water.—Boston Herald.

Depend mainly on the barn for your manure supply. Stable manure do double or triple duty, they not only supplant plant food, but they have a mechanical or chemical action that brings out the fertilizing qualities of the soil, a very important item.—S. F. Tribune.

The problem of farming consists in making the soil increasingly fertile. Manure is the farmer's savings bank, and if more of them would have large heaps of it every spring to spread upon their lands instead of money at interest, they would prosper better in the end.—S. F. Tribune.

Experiments made at the New York State Agricultural Station to ascertain the difference in the yield between seed potatoes taken from the most and least productive hills, developed the fact that the former exceeded the latter as seven to two. Hence, it appears that it pays to select seed from the most productive hills.—Chicago Journal.

There appears to be a great deal of lumber mixed up with the idea of silk culture. The flanking advertisements and paid articles in the newspapers are very delusive. We know of two young ladies who had husbands especially anxious to probe the matter to the bottom, and found there was no profit in it in any form yet pronounced.—S. F. Tribune.

E. Satterthwaite, of Pennsylvania, who has had extensive experience in fruit raising, has no trouble in preventing the ravages of the borer, although the insect is abundant with him. He kills the earth about the tree two or three times a year, or before the time for the fruit, which is about the middle of June. A careful examination in August shows if any have gained possession, when they are followed up and destroyed with a knife. The trees are gone over again in a month. A good plan will know at a glance if any are present, and a thousand trees are gone over by him in a day.—S. F. Tribune.

### STONE DRAINS.

How to Construct Many Objectionable Ponds in Their Construction.

The ordinary and most practical method of constructing stone drains, is to lay the stones in ordinary solid stone walls, with a space in the ditch, then lay the stones across, resting on these side walls, forming an opening or water-course beneath the flat stones; the ditch is filled in with cold-water stone, to a depth of two or three feet, and a drain constructed in this manner, which was put in twenty-five years ago, was taken up and replaced with drain the last fall, in this country. About one hundred feet in the central part of this ditch was, however, laid with tile at the time. The drain was, both above and below the tile, completely clogged, the top part remaining open and in good condition. This goes to show that stone drains, as they are ordinarily made, are liable to become clogged and to become useless.

Some of the reasons for this are: such drains being made of stone, a stone drain of that kind is clogged, fitting enough to exclude sand, gravel or dirt from entering the surface water percolating through the earth, has a tendency to carry with it more or less earth on its way to the drain. A drain of this kind having considerable fall and carrying a large amount of water together with the action of the six, will naturally fill the bottom of the ditch. Even the most rigid hardpan will eventually be influenced and the stream of water, by the loosened earth and gravel, will stream, undermining the stone side walls, causing them to be displaced and eventually clog the ditch, or at least in the narrow or more small level part of the ditch, this earth and gravel, sand is liable to find lodgment. To impede the progress of the water.